National Association of County Agricultural Agents

Proceedings

109th Annual Meeting and
Professional Improvement Conference

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2023-2024 NACAA Report to the Membership

President Keith Mickler Georgia

My, my, how fast the year has flown by. In fact, it's hard to believe that 24 years of attending every AM/PIC have come and gone. NACAA has had a productive year, though not without its challenges. Since we left Des Moines last August, the NACAA board has worked diligently to manage our responsibilities efficiently.

Our primary focus has been managing within our budget and seeking ways to expand professional improvement opportunities for our members, which remains our greatest challenge. Participation in our various programs offering recognition, awards, and presentation opportunities has been average. The 109th NACAA AM/PIC in Dallas is shaping up to be a memorable and educational experience.

Serving as President has been a great honor, but I only guided the ship. It was the Officers and Directors, council chairs, committee chairs and vice-chairs, and the Texas Association who made things happen. They deserve all the credit, and I thank each of you for the time and effort you put into helping NACAA fulfill its purpose of providing professional development and networking opportunities to our members. This training and networking help us become better Extension agents, serving the people in our states and counties. Additionally, acknowledging the excellent programming you provide back home through awards such as communication, poster, and Search for Excellence, assists you in your promotion process.

While your National Board sets the AM/PIC format, it is the committees that make the meeting function. Committees bring many new ideas to the Board for consideration. As we look for ways to improve, we need your involvement, your thoughts, and individuals willing to step up and provide committee leadership.

During the spring board meeting, we certified our membership level at 3,269, marking a notable increase of 2.6% or 98 members since 2023. Curious about who led the charge with the largest membership growth? Join me at the General Session on Wednesday, where we'll unveil the winners of this increase!

On Sunday evening, in addition to our traditional agenda, we will honor the 2024 Service to American/World Agriculture Award recipient, Dr. Derrell Peel, a professor in Agricultural Economics holding the Charles Breedlove Professorship of Agribusiness in the Department of Agricultural Economics at Oklahoma State University.

I would like to request that you attend both of the general sessions, one on Monday morning and the other on Wednesday morning. We have a great lineup of speakers for both sessions that you will not want to miss, along with several awards to be presented.

As president, writing the Report to Membership has been the most challenging report I've written. Unlike my previous roles as council chair or committee chair, where the reporting duties were clear and specific, the role of president encompasses the entire organization. My goal was to provide meaningful insights without overwhelming you with unnecessary details, and I hope I have met that goal.

One important note is the exceptional service of our executive director, Scott Hawbaker. My first duty as president, during our DSA banquet, was recognizing Scott for 25 years of dedicated service. My second duty was signing a new five-year contract securing Scott as our executive director after the 2023 AM/PIC. Scott's unwavering dedication to NACAA is invaluable, as many past presidents can attest. He is always there for the organization, even answering my call during a hunting expedition, a moment captured in a photo taken by his son, Spencer.

Thank you for your continued support and dedication to NACAA. Together, we continue to grow and achieve our mission.

I wish to extend my heartfelt gratitude to my Georgia Association of County Agricultural Agents for having the confidence and faith in supporting my journey to become president of the National Association of County Agricultural

Agents. It has been an honor and a career milestone to serve as president of the best Extension Association, NACAA. I hope I have served you well.

Thank you for this incredible opportunity.

President-Elect
Scott Jensen
Idaho

It has been an honor to serve as NACAA President-elect over the past year! One of the main responsibilities of the president-elect is to help secure donors and sponsors for our awards programs and national meeting expenses. Fortunately for me and our association, most of the heavy lifting is done by our Executive Director Scott Hawbaker. While the president-elect changes annually, Scott Hawbaker has provided continuity and developed great relationships with many of our sponsors.

We owe a debt of gratitude to our sponsors and donors. If not for their support, we would not be able to recognize and provide awards for our members. In addition to that, the many hours of professional development available at our AM/PIC would not be possible.

SARE, Farm Credit, Bayer Crop Science, Pipeline Ag Safety Alliance, Explorations by Thor, American Income Life, the National Pork Board, Barenbrug, and National Crop Insurance Services have all be long-term sponsors of NACAA. Last year and again this year Merck Animal Health has stepped up as a sponsor. TruTerra has joined us for the first time this year. I urge you to take time to visit with our sponsors at the trade show, educational luncheons, awards functions, and any other opportunity that may arise. We simply could not do all that we do without their generous support!

You, as a NACAA member, have a role to play with donor development; there could be a potential corporate donor found in the county in which you work or live! I challenge you to find individuals in your community with whom you might develop a donor relationship on behalf of NACAA. Think creatively when it comes to donors/sponsors. To encourage members who recruit prospective donors, NACAA has an incentive program to reward those who nurture fruitful partnerships between new sponsors and NACAA. Members who recruit new sponsors contributing $2,000 to $4,999 have their AM/PIC registration fee reimbursed. Members who secure sponsors contributing $5,000 and $9,999 are rewarded with registration reimbursement and $500 to attend the AM/PIC. If a member helps NACAA partner with a donor contributing $10,000 or more, they receive the registration reimbursement and $1,000 for travel to the AM/PIC. These benefits make the effort to help recruit new sponsors truly rewarding for members.

In addition to seeking sponsors, the president-elect works with the Early Career Development Committee to host the First-Timers Orientation held on Sunday afternoon and the First-Timers Luncheon held on Monday. We are planning to follow the precedence set last year and host the Sunday afternoon event off-site at a local restaurant called the Rodeo Goat. It is a very short walk from the conference hotel. The First-Timers orientation will be held on Sunday, July 14, from 3:00 to 4:30 pm. Ashley Wright (chair of the Early Career Development Committee) and the vice-chairs have a fun-filled program for all the First Timers in attendance. You do not want to miss it!

I appreciate the opportunity to serve as NACAA President-Elect this past year. It has been a great experience and I hope that I have served you well. I look forward to serving as NACAA president and working with the outstanding Montana agents to provide a memorable 2025 AM/PIC in Billings with some true western flavor. I am truly honored by the opportunity serve you and our association. Please feel free to reach out to me if I can be of any help or assistance. I look forward to seeing you all in Dallas, Texas.

Vice-President
JJ Jones
Oklahoma

Serving as Vice President for the National Association of County Agricultural Agents (NACAA) has been an incredibly impactful experience. This past year has felt like a whirlwind, moving rapidly like a tornado. It brings to mind a quote from the famous tornado movie Twister: “In the heart of a tornado, nature’s most violent storm, nothing is stronger than the power of the human spirit.” This perfectly describes the county agent. Regardless of the challenges we face, our spirit and determination remain stronger than ever.

Throughout this past year, I had the privilege of overseeing the seventeen NACAA committees with their national chairs and regional vice-chairs along with the three council chairs, all dedicated to advancing the professional development opportunities for our members. These committees are the backbone of our organization and without them our AMPIC would not be the shining example of the professional development that it is today.

The council chairs, national chairs and regional vice chairs invest significant hours coordinating and communicating for the purpose of administering NACAA's numerous awards programs, opportunities to present a professional presentation and/or poster during the annual meeting, along with other numerous functions. At this year's AMPIC over 200 members will be bestowed some form of recognition and 109 members will be giving professional presentations. None of this would be possible without the tireless work of these committee members. Words cannot fully convey my deep appreciation for their diligent efforts in fulfilling their responsibilities.

Belonging to an NACAA committee is crucial for fostering collaboration and professional growth. It provides members with opportunities to influence decision-making, contribute to impactful projects, and expand their networks. Committee involvement also enhances personal development by allowing members to gain new skills and insights while actively supporting the organization's mission. If you are interested in being on a committee, I encourage you to let your regional director or vice director know, or even better just put in your application. To apply just go to the NACAA website and choose Leadership Application on the Dashboard. Applications are due by March 15.

Sherry Beaty-Sullivan will be retiring as Professional Improvement Council Chair where she has performed beautifully. Brian Beer from South Carolina will be taking her spot. We look forward to welcoming Brian and his years of NACAA experience to the position.

I would like to extend my gratitude to the Oklahoma Association of Extension Agricultural Agents (OAEAA) for supporting my campaign and allowing me to represent them. I also appreciate the Oklahoma Extension administration for permitting me the time to serve on the NACAA board and be away from the office. Most importantly, I am thankful to the membership for placing their trust in me through their votes. With the strength of the county agent spirit, I eagerly anticipate the opportunities the next three years will bring.

Secretary
Donna Beliech
Mississippi

This is my second year as your secretary, and I'm still lost! The NACAA board meetings are held by ZOOM the first Wednesday of each month. The exceptions this year were the in-person Winter (Dec.) and Spring (Apr.) board meetings held in Dallas, TX and Charleston, NC, respectively. I've gotten better at getting meeting minutes typed up, proofed and on the NACAA website in a timely manner. If you want to know more about what is going on within NACAA at any given time, visit https://www.nacaa.com/board-minutes .

Another one of my duties is to contact state presidents to obtain names of their states 'Voting Delegates.' A state's membership number determines their Voting Delegate number. This year the Northeast Region has 242 members (12 delegates), the Western Region has 373 members (16 delegates), the North Central Region has 674 members (24 delegates), and the Southern Region has 1,980 members (70 delegates). In total, the 2024 NACAA certified membership is 3,269 agents from forty-nine states, which are represented by the 122 Voting Delegates. What do Voting Delegates do, you ask? They meet at the AMPIC to receive updates on pertinent National Board issues. In 2023, the key issues were (1) if an 'Associate' membership category for non-Extension personal should be an option, (2) can states with smaller membership and without officers join an adjacent state, and (3) should a late fee penalty be added to membership dues? What came from last year's Voting Delegate session was an easy, fillable template for states to use to become an established association. This resolves the need for an 'out of state' associate membership option. Also in 2025, a late fee of $10 will be charged per person to those missing the annual dues deadline. New hires are exempt.

Other secretarial duties are ordering new NACAA name badges and recognition plaques for outgoing Officers, Directors/Vice Directors, and Council Chairs.

Treasurer
Melody Rose
Tennessee

Greetings from Tennessee, y'all! What an honor and pleasure it is to serve you as treasurer of NACAA. Special thanks are extended to TAAA&S, University of Tennessee administrators (especially, Dr. Justin Rhinehart), Big Spring Master Gardeners of Greene County, and the Greene County-Tennessee Extension staff for their continued support serving in this capacity. As your treasurer, I am happy to report NACAA remains in a sound financial position. Throughout the past year, the board of directors has worked to continually evaluate our investments, budgets, and sponsorships to better serve the needs of our entire NACAA membership. We have implemented the option for using the Automated Clearing House (ACH)-AKA Direct Deposit) for reimbursing expense vouchers FY24. This gives

our membership the option of being reimbursed within 48 hours of approved vouchers from the NACAA President. In addition, one of my favorite duties as treasurer is signing the checks (or ACHing) to formally recognize our award winners who are so worthy of recognition due to their passion(s) serving in their Extension capacities. I look forward to seeing many of you in Dallas. Thank you for an outstanding year as NACAA treasurer!

Past President

Phil Durst

Michigan

In Des Moines, where we had a great professional improvement conference, I joined the ranks of the cowboy-hatted fraternity of past presidents of NACAA. Thank you Oklahoma Agents!

The Iowa conference was the great result of a state cooperatively working together with NACAA committees and board to serve our members by providing outstanding education, tremendous experiences and wonderful networking. It was my joy to have Extension professionals from 47 states and as well as Puerto Rico and American Samoa join together. Thank you Iowa Agents!

One of the responsibilities and absolute privileges of the role of Past President is to serve as a judge of the National Outstanding Young Farmers. It begins with the submitted applications from many states. You, our members, are often the ones who work with young farmers to encourage and help them fill out their application. Thank you members! Last fall, I received more than 20 applications and needed to score each one as several other judges were also doing. Reading through the applications I learned of the involvement of whole families, the commitment they have to the land, animals and quality production and the real progress that farmers have made, especially considering some who have encountered severe difficulties.

The top 10 were then invited to the annual meeting of the Outstanding Farmers of America Conference held this year in Ferndale, WA. At that conference the judges met for the first time and we were introduced to the semi-finalists. We had interview time with them and got to see them and get to know them over the course of several days together. Though it could have been any of the couples there, four finalists were chosen. However, the real story is not that it was narrowed down to these four couples, but that 10 couples got to know one another and understand and appreciate the OFA organization. I loved being a part of this and try to maintain contact with those 10 couples.

Another role, not just of the past president of NACAA, but of the President-elect and President of our association, as well as from the six other professional Extension associations, is to serve on the board of the Joint Council of Extension Professionals (JCEP). In April, I was installed as President of that Board for a one-year term in which I currently serve.

Think of JCEP as the organization that promotes Extension in all of the hats it wears and provides professional development on advocacy and leadership. For as great as Extension is throughout this country and territories, the reality of federal funding is that there are few champions for Extension and a constant battle to be recognized for the impact that we have in communities, states and territories. I believe in the work of Extension and the founding purposes of the land grant institutions, 1862, 1890 and 1994. I've seen families, businesses and counties strengthened and changed by the work of you and our peers throughout Extension. We need to continue to advocate for it and tell the story of impacts from our work.

Now my time on the NACAA Board is coming to an end. It has been my privilege to serve with fellow board members committed to a better association that serves all of our members. I commend our board for their leadership and know that even as I go off the board, that you are in good hands as we look forward.

I want to challenge you to get more involved with your state association and with NACAA. None of us had spare time, none of us was underemployed, yet leaders make the time, rearrange their schedules and work extra in order to accomplish the important. Each of you is a leader whether locally or broader, and your perspectives and ideas can be valuable for NACAA. When the call goes out for committee leadership, step up and submit your name. When the opportunity arises for regional or board positions, talk with your state association and let them know your willingness to serve your fellow members. It is time to be counted.

Thank you for the opportunity to serve you and this great association. It has been a career highlight for me. I'll see you in Dallas and I'll be wearing my cowboy hat!

North Central Region Director

Scott Gabbard

Indiana

I remember my first AM/PIC. It was San Antonio, beautiful place. It still warms my heart when I recall the smile of my wife

and the little giggle that accompanied it when the mariachi band accosted us and sang to her when we stepped off the escalator. It was a warm welcoming and a memory imprinted.

At the same time, I still get a pang when I saw what was not on the tour but still a stark reality to their grain farmers that year. I noticed a tractor in the distance plowing down their standing corn. Texas had an awful drought that year and the corn had was ridden with aflatoxin. Yes, I watch the new but not everything can be caught on the camera. Once I understood what I was seeing, I witnessed plumes of diesel smoke in every direction as we rolled down the highway. In 2012, the apex of our multiyear drought, I knew at the time it would be hard but that we would persevere. Texas did.

I remember pieces of every AM/PIC I attended. I am blessed for the well-wishes in 2019 when I could not attend. From General Hugh Shelton's opening speech in North Carolina to the State's Night Out in South Dakota, I have created and been provided with memories to cherish.

This is why I consider NACAA my extended family. Early-on in my career I heard older members explain this and frankly I thought they were crazy. Over the years, I have begun to appreciate this more and more.

When we took the kids on the vacation, I didn't call the visitors bureau. I looked up the county agent and called them. Florida, Alabama, Colorado, you name it; they always gave me an insight that the local Visitor's Bureau just cannot deliver. More than once, I'd come back to site with the family for R&R. Charleston is a family favourite.

This past year has nothing but re-affirmed this as I travel around the North Central Region. I have been blessed with a warm welcome, hot food and comradery wherever my shadow has fallen. I've always wanted to stay longer than time and responsibilities would allow.

This weekend, we will welcome home my wife's cousin from California. We'll reminisce, share some experience and wished it could have been longer. Soon, I will be having a Missouri Outreach & Extension homecoming. My Land Grant extended family, it's a thing.

We have different administrative setups, work requirement and clientele. We all have the same mission: to use science-based information to better the lives and livelihoods of those we serve.

So, to my extended family of the north central region, national board and the rest of NACAA, please accept my thanks and appreciation. Through all times, good and bad, it is family and faith that give us the strength to create a better future for those we serve.

A Texas-sized "Thanks" to all our Northeast colleagues for your support and encouragement during my first year as your Regional Director and your voice on the National Board of NACAA. Andy Kness of Maryland is currently serving as your Regional Vice Director and will be stepping into the role of Director following next year's AM/PIC in Montana.

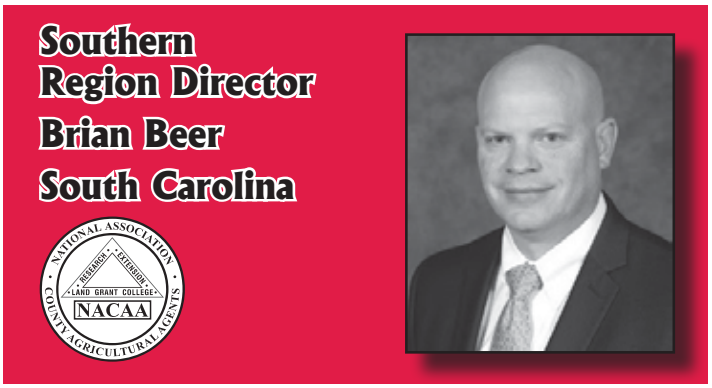
I have thoroughly enjoyed getting to know more about the region through the eyes of state chapter and association meetings, mostly on Zoom but luckily more are returning to in-person multiple day professional develop tours and meetings. I very much look forward to attending as many as I can. Granted the Northeast is not that large geographically, but as we take on these volunteer leadership roles for NACAA, planning with dates and locations well in advance of the state meeting or event would be greatly appreciated. I am already slated to attend the PACAA's JCEP event in Boalsburg, PA on November 12 and 13, and would love to add other state association's meetings and events to my calendar as soon as you know the details. I've previously attended Zoom association meetings for PA, NY, and ME, met in person for NJ (of course), and drove down to Maryland's eastern shore earlier this summer to enjoy their hospitality, farm tours, and connect with their membership.

At each of these meetings, I shared the newest updates from the National Board, including updates from the Scholarship Committee, requested interest in the NE for vacancies on national committees, congratulated national award winners, shared timelines and rotation schedules for selecting our next NE Region Vice Director, and encouraged folks to participate at the national level. More importantly, I have reminded states that the Northeast is slated to host an AM/PIC (yes, once again) in 2029, and if we are to do so, a presentation to NACAA would be needed at the 2025 meeting in Montana. We will also be looking for a National Vice President nominee from the Northeast to be presented at the 2026 meeting in Denver in anticipation of serving as NACAA President in 2029 when the AM/PIC would be in the region. Please make sure to attend the Northeast Regional Meeting in Dallas to be part of these critical discussions – and bring ideas from your state membership to share with the rest. Larry Hull will also be leading a Life Member Spotlight at the Regional meeting, highlighting the career and accomplishments of Charles Dupras of NJ – with special thanks to Rick VanVranken of NJ for creating the spotlight presentation.

Regarding the 2029 AM/PIC discussion and future national office nominations, following our regional meeting at the AM/PIC in Dallas, I will be calling a Zoom meeting for all NE State Presidents and Committee Vice Chairs, and any other interested regional members for a more in-depth and definitive discussion on these important topics.

Congratulations to all of our regional DSA and AA award winners, and for the spectacular Extension careers, outreach, and mentorship impacts you have shown over your careers. Please make sure to attend your award events, especially the banquet which is held specifically to honor the DSA awardees. Thank you to all of our Northeast members who stepped up and are, or will be serving, as our regional Vice Chairs and representatives – and especially to PACAA members who sit as incoming Regional Vice Chairs on 12 of the 17 national committees. You Are…Penn State!

Please don't hesitate to reach out to me or Andy at the Dallas AM/PIC or anytime throughout the year with any suggestions for how to increase NACAA's value and connection to all our members. It has been noted that communication linkages may be lacking at times. In addition to the planning meeting mentioned above, I will also be hosting a Zoom meeting this fall and again in the spring of 2025, inviting all the Northeast Regional Vice Chairs across all our committees to attend and facilitate better communication and sharing of ideas and events for our membership and recruitment of new leadership at all levels. Hope to see y'all in Texas!



Over the past year, I had the privilege to visit with many members from the Southern Region. I attended state meetings in Mississippi, Georgia, Virginia, Arkansas, Kentucky, Oklahoma, and my home state of South Carolina. I appreciated the hospitality and the chance to discuss the challenges and opportunities facing your state and national organization. It was great to renew old acquaintances and create new friendships in these states.

The state association meetings I attended this year were excellent meetings. The quality of professional development offered by your state organizations shows a commitment to the goal of making your state and the national association meetings premier professional development opportunities for agriculture extension agents and educators. Each state uses a different format, but the end goal is the same: to have a professional development opportunity that benefits all members and recognizes the achievements of our peers. Award winners from the states I visited showed the quality of educational programs offered to citizens in your state. Congratulations to all state, regional, and national finalists, and award winners.

I would be negligent if I didn't take a moment to thank the Southern Region Directors and Vice Directors who have helped ensure there was NACAA representation at all the Southern Region state meetings this year. Thank you to Paula Burke, Junior Southern Region Director, and to Vice Directors Sherri Sanders and Jennifer Pelham. The Southern Region leadership is in good hands. The Southern Region nominates one Vice Director each year. After two years, they become Regional Directors and a voting member of the NACAA Board. At the upcoming annual meeting in Dallas, Texas will nominate a Southern Region Vice Director. The rotation has North Carolina selecting in 2025 and Kentucky selecting in 2026. It is not too early for North Carolina and Kentucky to begin the search.

As I conclude my time on the NACAA Board as Southern Region Director, I will always appreciate the opportunity to represent the membership and serve as your voice. Serving as a regional director is a once-in-a-career opportunity. Thank you to my fellow Clemson Cooperative Extension Agents for nominating me as Southern Region Vice Director four years ago. It has been my privilege to represent South Carolina and the Southern Region on the National Board.

I look forward to seeing everyone in Dallas.

It's been an honor to serve as Southern Region Director this past year and represent Georgia on the NACAA Board of Directors. Little did I know in 2012 when I started working for UGA Extension that I would have the great honor of representing Georgia on a National board. I had been a long-time NACAA member and participant, a past NACAA National Chair and Vice-chair, and even a NACAA First Lady. I have been enjoying the opportunity to represent the South as your Southern Region Director.

They tell you that the best part of the director position is traveling to all of the 13 Southern states and they were right!

I have had the opportunity to travel and visit with fellow NACAA members in Mississippi, Kentucky, South Carolina, Alabama, and North Carolina so far. I am looking forward to visiting Florida later this summer and visiting as many as possible of the other states in my last year as director.

Your state meetings are a highlight of the year celebrating one's awards, successes, retirements, and extraordinary work. I am always impressed how each state plans their own unique meeting but at the same time the agenda is very familiar. The great work in your Extension programs is amazing and I am so honored to get a quick glimpse while visiting your state. We have many similar ways of programming but I always come back home to Georgia with new ideas to share.

At a recent meeting, someone thanked me for being a "whole participant" at their state meeting. The comment struck me as I never even thought about not wholly participating while at a state meeting. I think President Mickler would have something to say about it! While in your state, I want to immerse myself in the experience and learn as much as I can about you and your state association. I feel it's my duty as a representative from the Board to be present, available, and share in the celebration of your accomplishments. Thank you for giving me that opportunity to do so.

Thank you to Southern Region Director Brian Beer and former Southern Region Director, now Treasurer, Melody Rose for mentoring me in my role. Colleagues whom I have known for years feel more like friends than ever before. You have set the bar high and are always a great example of professionalism and leadership. Thank you to Southern Region Vice Directors Sherri Sanders and Jennifer Pelham for your dedication to attending monthly board meetings via Zoom and attending state meetings when your directors are unable to do so. We greatly appreciate you and having you as part of our team.

UGA Extension Agents and Administration, thank you for your support and for choosing me to serve in this role. It's been an honor and a great responsibility I take seriously. I look forward to making you proud for another year.

And lastly, but not least, thank you to the NACAA Past President, Henry Dorough. If it were not for him, I would probably still be in New York working with Cornell Cooperative Extension and may have never had the opportunities that I have been able to have these past 13 years in Georgia. Thank you for always supporting and believing in me.

I look forward to seeing many of you in July at our Texas meeting or a at future state meeting. When we meet, let's talk about our great organization, the wonderful work you are doing, and how you too can be a part of this national leadership team in the near future.

Western Region Director Linden Greenhalgh Utah

Another year has flown by, and I mean "flown-by". I have never flown as much as I have in the past year. To visit all the states in the western region is a tall order for sure. I flew to Bozeman, Montana last October. Soon after I landed it started snowing. I did enjoy my time with the Montana agents even though Scott Jensen and I lost out in the cornhole tournament. I made it to Laramie in November, Winter Board Meeting in Dallas in December, Las Cruces, New Mexico in January, Extension Leadership Conference in Tampa, Florida in February, Spring Board Meeting in Charleston, South Carolina as well as Oahu, Hawaii in April, Spokane, Washington in May and Anchorage, Alaska in June. I'm sorry I was unable to make it to the remaining states but did attend the California Association meeting via ZOOM and Aaron Esser our Vice Director visited with the Oregon Association meeting in April.

I am excited to have Montana and Colorado host the next two AM/PICs. They are going to be great meetings so you all should plan to be in Billings and Denver in the coming two years. Both are great cities with a lot of amazing history and a lot of big-time agriculture to see and experience.

I am also looking forward to seeing everyone at the AM/PIC in Dallas. I am grateful for the friendships I have been able to make and strengthen not just as the Western Region Director but as a member of this national association. These personal associations are to me the most important aspect of our association. I feel like it is as much personal improvement as it is professional improvement. I have enjoyed hammering out problems and solutions for the upcoming AM/PIC's with other board members and if you are ever stranded on a fishing boat with a bunch of county agents do not worry, there is not a better bunch to be stranded with. It might actually be more fun than fishing; just don't drop that cotter pin.

Extension Development Council Chair Colt Knight Maine

Greetings membership of NACAA, my name is Colt W. Knight from Maine, and this is my first year serving as Extension Development Council Chair. I am happy to report that the EDC has done some great work this year offering webinars, planning super seminars, hosting the Leadership Academy, and setting up the First Timers Social gathering at the Rodeo Goat restaurant across from the AM/PIC hotel. The Extension Development Council (EDC) strives to enhance the professionalism of our members by providing opportunities for strengthening their leadership and educational delivery skills. One common thread among NACAA members is the fact that we are all Extension agents/educators. Therefore, it is imperative that our organization strengthen and continue to offer training in the process of how to become better extension professionals.

The Extension Development Council is made up of 4 committees:

Teaching and Educational Technologies – chaired by David Yates of Tennessee

Early Career Development – chaired by Ashley Wright of Arizona

Leadership and Administrative Skills – chaired by Amanda Douridas of Ohio

Agricultural Issues – chaired by Connie Strunk of Ohio.

This year, the EDC solicited 39 presentation abstracts. Please check out these great presentations during the 2024 AM/PIC. As council chair, I would like to thank my committee chairs for their hard work and effort put forth to make this year's meeting in Dallas an excellent experience.

Agricultural Issues Chair

Connie Strunk South Dakota

The Agricultural Issues Committee is a small but mighty committee this year! Committee members include:

- Connie L. Strunk, National Committee Chair & North Central Region Vice-Chair, South Dakota
- MJ Fisher, Western Region Vice-Chair, Idaho
- Emily Fread, Northeast Region, Pennsylvania

Professional Development Sessions

Thank you to everyone who submitted an abstract for consideration. We are thrilled to offer high quality presentations on Tuesday with topics ranging from consumer trust in agricultural products, urban soil health assessment, Farm Stress Counseling Voucher Program, best management practices in agricultural for water quality restoration, educating about public land grazing, a social media campaign highlighting women in agriculture, developing long term relationships with sponsors, meeting underserved audiences by reviving women in agriculture programming, and having kitchen table conversations. As you can see there is much to be learned from these presenters during the Ag Issues sessions at this year's AM/PIC. Agricultural Issues topics can come from any Extension program area. If you did not submit an abstract this year, please consider submitting one for next year's AM/PIC and sharing your exceptional work with colleagues. All NACAA members are welcome to propose presentations of the results of their impactful projects and programs at the next AM/PIC.

Super Seminar

Our committee joined forces with the Early Career Development Committee to offer the super seminar "How to Obtain Grant Funding". We have lined up some excellent speakers addressing the following topics: obtaining the project idea, grant opportunities, writing the grant, and evaluating the project/grant. We will wrap up our seminar with a panel which will include our session presenters and fellow Extension Agents who have been successful in obtaining grants. Our hope is everyone will be able to get their questions answered by our group of experts. Door prizes will be given out to lucky session attendees. Both committees (Ag Issues & Early Career) are looking forward to providing this educational super seminar to NACAA members this year in Dallas.

Thank You

My personal thank you is extended to both the Ag Issues Committee (MJ Fisher and Emily Fread) and the Early Career Development Committee (Ashley Wright, Rachel Bearden, Timothy Waller, and Amanda Bennett) for all their time, effort, leadership, guidance, and hard work they put into organizing the Grant Funding Super Seminar…without them I would have severely struggled! I want to thank all the presenters in the Ag Issues professional development sessions for sharing their projects and programs with us. I would also like to thank all NACAA members for addressing issues in agricultural that impact the sustainability of agriculture operations in your area. The work you are doing is important! I am looking forward to seeing everyone in Dallas. Travel safe!!

The Early Career committee is working diligently to provide professional development opportunities for agents during their early years with extension.

The 2024 committee:

- National Chair/Western Region Vice-Chair – Ashley Wright, Arizona
- Northeast Region Vice-Chair – Timothy Waller, New Jersey
- Southern Region Vice-Chair – Rachel Bearden, Arkansas
- North Central Region Vice-Chair – Amanda Bennett, Ohio

At the conclusion of this AM/PIC, we will transition from a 4-person committee with one of the Regional Vice-Chairs serving as National Chair, to a 5-person committee with a dedicated National Chair and one Regional Vice-Chair for each region.

This year, the committee has collaborated with the Agricultural Issues committee to host a super seminar on Grant Writing. This seminar will include a slate of speakers focused on finding grant opportunities, creating your project, writing the grant, and evaluation for grants. Speakers come from a range of backgrounds, including granting agencies and extension services. The program concludes with a speaker panel, so come prepared with your grant related questions!

We also have a slate of fantastic member-submitted oral presentations. Each of the 8 presentations selected this year have a focus on topics that can help early career agents acquire new skills as they develop and grow their own extension program. These topics include ideas for different types of program delivery, working with outside organizations such as schools, battling burnout, and improving the visibility and engagement of your programs with your stakeholders through tabling events (plus many more!). Learn from seasoned agents what tips they have to help you and your programs be as successful as possible.

Finally, we have been working with the Texas first timers committee to host a first timers' reception on Sunday, July 14 at 3pm. Hosted off-site at Rodeo Goat (about a 10-minute walk from the conference center), this event is an opportunity to meet other first timers working in your field or geographic region. Come network with your new colleagues, enjoy some light snacks and refreshments, and leave with some new friends and collaboration opportunities.

Leadership and Administrative Skills- We are wrapping up our first Leadership Academy cohort and kicking off our second here at AM/PIC. It has been a great year of diving into leadership topics each month, learning more about the NACAA leadership structure and developing presentations on new leadership topics. The Academy graduates will give their final presentations during the afternoon session of the LAS professional presentations. Topics include providing and receiving feedback, leading from the middle, leading through change and whether leaders are born or bred.

Our 2023-2024 graduates are: Jose Arocho, Amanda Bennett, Thomas Brewer, Blake Carter, Anitha Chirumamilla, Tyrone Fisher, Mackenzie Gunn, Linda Heineman, Donna Hoffman, Nathan Hulinksy, Heather Jennings, Matthew Lollar, Sofia Macchiavelli GirÓn, Ed Olsen, Suzkia Pagán Riestra, Connie Strunk, and Ashley Wright. If you see them, congratulate them on their dedication to improving their leadership skills!

We will initiate the 2024-25 cohort during AM/PIC and are excited to welcome another strong class of current and future leaders. The committee has worked hard to put together two awesome years of leadership and administrative skills education for NACAA members.

Teaching & Educational Technologies Chair
David Yates
Tennessee

Members – David Yates, University of Tennessee; Melanie Barkley, Pennsylvania State University; Scott Duggan, Oregon State University; Kelly McGowan, University of Missouri

The Teaching and Educational Technologies committee strives to provide members new and innovate ways of using technologies and tools in teaching/reaching our Extension audiences.

The TET committee hosted 12 presentations over two sessions during the 2023 AMPIC that covered a wide range of technology use within Extension programs. In addition, the committee conducted a well-attended Super Seminar entitled "How to Document Impact of Video and Social Media Content Beyond View Counts". Discussion centered on how staff produced videos and social media posts can add to the annual performance review process and promotion and tenure process.

On May 22, committee members Kelly McGowan and David Yates conducted a NACAA 365 seminar titled Maximize PowerPoint for Presentations with 40 registered participants. Utilizing new features in PowerPoint Live for audience engagement and PowerPoints basics were covered.

The Teaching and Educational Technology Committee would like to invite you to view our oral on Tuesday morning, July 16 of the AMPIC. All members are invited to submit an abstract for the next meeting in 2025.

Professional Improvement Council Chair
Sherry Beaty-Sullivan
Arkansas

The Professional Improvement Council (PIC) is one of three Councils under our NACAA committee structure. Our mission is to provide subject-matter professional development opportunities for our members. The Professional Improvement Council consists of seven committees:

- 4-H & Youth, chaired by Heather Jennings from MIssissippi
- Agriculture Economic & Community Development, chaired by Madeline Schultz from Iowa
- Agronomy & Pest Management, chaired by Micheal Rethwisch from California
- Animal Science, chaired by Mark Nelson from Utah
- Horticulture & Turfgrass, chaired by Cyndi Lauderdale from North Carolina
- Sustainable Agriculture, chaired by Heather Schlesser from Wisconsin
- Natural Resources & Aquaculture, chaired by Jody Gale from Utah

These committees have been busy this year planning Super Seminars, pre-conference tours and professional development opportunities for our members who plan to attend AM/PIC. The Professional Improvement Council received a total of 131 presentations for consideration, with 73 of them being accepted.

Our council has been hard at work planning pre-conference tours as well in the subject areas of Animal Science, Horticulture & Turfgrass and this year, and new this year Agriculture Economics and Community Development are offering pre-conference tours. Be on the lookout for Super Seminars, available to our membership, and PIC is hosting half of them. I am super proud of the hard work these committees have dedicated to providing a multitude of opportunities for our membership to garner professional development and networking opportunities for our membership.

I just want to say a huge thank you to my committee chairs and regional vice chairs for all of their hard work. I look forward to seeing old friends and meeting new ones in Dallas, TX!!

4-H & Youth Programming Chair
Heather Jennings
Mississippi

4-H & Youth Programming Committee

Heather Jennings, Mississippi, National Committee Chair
Randall Violett, Wyoming, Western Regional Vice Chair
Shannon Dill, Maryland, Northeast Regional Vice Chair
Kevin Camm, Florida, Southern Regional Vice Chair
Kendra Graham, Missouri, North Central Regional Vice Chair

The NACAA 4-H & Youth Programming Committee is excited for this year's AM/PIC in Dallas, Texas! We look forward to hosting a variety of 4-H and youth presentations that all members can find applicable. This committee spotlights educational programs that our colleagues are doing with youth and 4-H. We will have presentations Tuesday, July 16th through Wednesday, July 17th. This year we had eighteen great submissions and will be hosting twelve of those presentations at AM/PIC. We are excited to have all regions represented! Presentation topics include Beef Cattle Clinic, Revitalizing a 4-H Program, Emotional Wellness, Developing 360-Degree Videos, Coop to Plate, Farm To Table, Building a Livestock Judging Program, Botany Lab, Workforce Development, Horse Ambassadors, Eggsploring Science and more!

I would like to thank our hardworking Regional Vice Chairs for their work on our committee and their commitment to youth and 4-H programming. This committee would not be possible without them!

We look forward to many great submissions for the 2025 AM/PIC!

Ag Economics and Community Development Chair Madeline Schultz Iowa

Leadership:

- Madeline Schultz (IA) National Committee Chair
- Blake Carter (GA), Southern Regional Vice-Chair
- Samantha Gehrett (PA), Northeast Regional Vice-Chair
- Jacob Hadfield (UT), Western Regional Vice-Chair
- Chris Zoller (OH), North Central Regional Vice-Chair

Activities:

For the 2024 AM-PIC, the committee is hosting a pre-conference tour. The one-day tour features McLennan County agriculture and the City of Waco in the heart of Texas. The site hosts will share their passion for economic development and show us around their neighborhoods and farms. Site hosts include Russell Pecans, a fifth-generation orchard that created unique markets; a Waco tradition, Tony DeMaria's BBQ restaurant; Mission Waco which is devoted to lifting people out of poverty through educational and community events, and a greenhouse, grocery, fairtrade store, and café; Texas Ranger Hall of Fame and Museum; Silos at Magnolia, developed by Chip and Joanna Gaines, of 'Fixer Upper' fame; and Country Spring Vineyards, a thriving sunsetter business. Through the generous sponsorships of National Crop Insurance Services, Texas and McLennan County Farm Bureau, and NACAA; we were able to offer the tour for a very reasonable $50.

We are excited to offer 12 Professional Improvement Council Seminars at the AM-PIC that have been selected from many strong proposals. The presentations represent all four regions and include wide-ranging topics from kitchen table conversations for farm women to leveling up beekeepers. Presenters include Roberta Severson (NY), Ashley Stonecipher (FL), Samantha Gehrett (PA), Amy Vu (FL), Nanette Neal (OH), Karen Stauderman (FL), Katie Wantoch (WI), Brittany Council-Morton (FL), Melissa Fery (OR), Matthew March (TX), and Luis Rodriguez (FL).

We have been working on ideas to involve more NACAA members in the committee. At the committee meeting just prior to the AM-PIC, we will discuss cross-state collaboration, mentoring, as well as more purposeful sharing of expertise and programs.

It has been a pleasure to work with such a dedicated and enthusiastic leadership team. Together, we look forward to confirming the incoming leadership. Congratulations to Blake Carter (GA) our new National Chair, and to Nathan Hulinsky (MN) the new North Central Vice Chair, and Robyn Stewart (GA) the new Southern Vice Chair.

Agronomy & Pest Management Chair Michael Rethwisch California

Committee Members

Travis Harper (Missouri), North Central Committee Vice Chair

Stephen Komar (New Jersey), Northeast Committee Vice-Chair

Christopher Grimes (Arkansas), Southern Committee Vice-Chair

Hung Doan (California), Western Committee Vice-Chair

Michael Rethwisch (California), National Committee Chair

The Agronomy & Pest Management Committee received multiple presentation abstracts for consideration for this

year's AM/PIC, which the committee reviewed and scored. Unfortunately there are limited presentations for this area in 2024 and thus not all abstracts received approval for actual presentations this year.

At the 2024 NACAA AM/PIC, the agronomy related topic presentations are scheduled for Tuesday morning July 16, pest management presentations on Tuesday afternoon, with one additional presentation on Wednesday morning July 17. The topic/title for each presentations can be found in the conference program.

A new aspect for the 2024 AM/PIC is the availability of Certified Crop Advisor (CCA) continuing education units (CEUs) for the individual agronomy/pest management presentations. This has been undertaken to provide additional value by NACAA to our members attending these sessions.

Another change for this year is that the agronomy/pest management committee meeting typically held on Monday afternoon for those in attendance was held prior to AM/PIC (as was true for most committees). This allowed more individuals the opportunity to be involved and provide input to guide future committee activities and decisions.

Additional agronomy/pest management related activities (although not a specific charge of this committee) during the 2024 AM/PIC include the Bayer CropScience breakfast at 6:30 Monday morning July 15 (tickets required), and the Search for Excellence in Crop Production recognition luncheon on Monday at 11:45 a.m. where one of our committee members will be presenting and being recognized (tickets required). There are also a number of agronomy and pest management posters that provide valuable information for members to take back to their constituents for local impact.

I would like to thank the Vice-Chairs (Stephen, Travis, Chris and Hung) for their efforts, inputs and decisions this past year. If you as an NACAA member see them during the meetings, especially during the agronomy/pest management presentations, make sure to thank them as well.

National Chair: Mark Nelson, Utah

North Central Region Vice-Chair: Garth Ruff

North East Region Vice-Chair: Cassie Yost, Pennsylvania

Southern Region Vice-Chair: Kyle Sanders, Arkansaw

Western Region Vice-Chair, Betsy Green, Arizona

I would like to begin by thanking the Animal Science Committee Vice Chairs for all their hard work and support during this past year. They have done an excellent job planning the animal science pre tour and finding sponsors to help pay for the tour. The Animal Science committee is very much looking forward to working with the Texas Agricultural Agents on the annual Animal Science Pre-tour and AM/PIC. I would like to thank Karl Hoppe, North Dakota Livestock Specialist, for his help putting together the pre tour.

The 2024 Animal Science Pre-AM/PIC Tour will take an in-depth look at the immense animal agriculture in the panhandle of Texas. The tour will begin in Amarillo, Friday morning and proceed through Lubbock, Texas and down to Dallas.

Stops on Friday include a large livestock auction just outside of Amarillo. A 35,000 head beef feedlot in Herford, Texas and a tour and dinner at the National Ranching Heritage center in Lubbock, TX. Saturday visits include the 6666 Ranch in Guthrie, TX, and the R. A. Brown Ranch in Throckmorton. Lunch on Saturday will be the Chuck Wagon Dinner from the Wagon. In the afternoon we will stop at a modern Texas hair sheep operation on our way down to Dallas.

I would like to extend a special thanks to Jason Cleere and Jason Smith, Texas AgriLife Beef Specialists, for all their help putting together the tour.

The professional Development presentations are always one of the highlights of each AM/PIC. This year the Animal Science Committee will be hosting 10 outstanding presentations submitted by NACAA members. Looking forward to seeing everyone in Texas in July.

Committee Members:

Cyndi Lauderdale, Committee Chair;

Linda Chalker-Scott (Washington), Western Region Committee Vice Chair;

Heather Neikirk (Ohio), North Central Region Committee Vice-Chair;

Ginny Rosenkranz (Maryland), Northeastern Region Committee Vice-Chair; and

Danny Lauderdale (North Carolina), Southern Region Committee Vice Chair;

I would like to thank the Horticulture and Turfgrass Committee members for all the time, effort, and support over the past year. The Horticulture and Turfgrass professional improvement committee is pleased to present this report to the membership, as we reflect on 2023-2024 and the upcoming 2024 NACAA AM/PIC.

We hosted a national professional development 365 webinar, focusing on how to apply for the Horticulture and Turfgrass pre-tour. We decided this would be a good topic after the NACAA board mentioned that AM-PIC topics had the most membership attendance. We believe this has increased our numbers on the 2024 pre-tour. We will also host this fall a Landscaping for Climate Change. The committee plans to continue professional development webinars and wants to host How to Write a Horticulture Abstract.

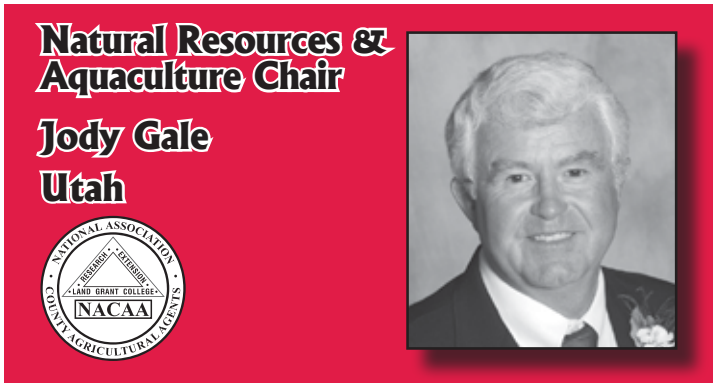
We are looking forward to an excellent program of professional development and fellowship at the 2024 AM/PIC. Much of the committee activity in 2023-2024 was focused on planning for the 2024 AM/PIC pre-conference tour. We are very excited to have Bayer CropScience as a sponsor of our tour this year. The tour begins on Friday, July 12 in Dallas, Texas. Our tour will be highlighting McKinney and Dallas, Texas to minimize travel time between tour spots. We will see McKinney Crape Myrtle World Collection Park, The Star, Allen Heritage Village featuring Earth-Kind Landscaping, TUPPS Brewery (converted cotton mill) and finish by having dinner at Hutchins BBQ rated the best North Texas BBQ in the Dallas/Fort Worth area. Saturday will start with North Haven Garden Center and lunch at their cafe, we will have plenty of time to explore the Dallas Arboretum & Botanical Gardens before touring Fair Park, Texas Discovery Gardens and Big Tex Urban Farms. After dinner we will arrive back to the hotel. If you didn't get enough of the Horticulture group we will meet informally to go to the Farmer's Market Sunday morning.

We will offer our Super Seminar titled "Dealing with Drought in Gardens and Landscapes" which is on Wednesday, July 17.

The Horticulture and Turfgrass PIC committee received 22 abstracts for 10 presentation openings. We lobbied to get an additional 3 presentation slots. Our committee receives more abstracts than any other committee so we are very diligent to develop the best horticulture and turfgrass oral presentation program for the 2024 AM/PIC. We encourage the presenters to carefully review the rubric and use the total word limit to submit the highest quality abstract. The committee evaluated the abstracts, organized the sessions, maintained close contact with speakers, and moderated the sessions. Our thanks to the NACAA leadership team that successfully coordinates the oral sessions at the conference, which will include a wide range of horticultural topics from research, volunteer management, and innovative new programs. Our thanks to the NACAA members who plan to share such impactful programming.

The Horticulture and Turfgrass PIC committee annual meeting is on Monday, June 24 at 3 pm via Zoom. Incoming and outgoing regional vice chairs will be in attendance, and the meeting is open to the NACAA membership. We will discuss the 2025 AM/PIC, scheduled for June 29-July 2, 2025 in Billings, Montana. Among agenda items are a pre-conference tour, a super seminar, and ongoing professional development opportunities during the upcoming year.

Again, I want to thank the regional committee vice chairs and the state committee chairs for your support during my third year as Chair. As national committee chair, I want to encourage NACAA members to share ideas with the Horticulture and Turfgrass Committee. In particular, we need ideas related to the upcoming pre-conference tour, potential super seminars, and professional development activities. Feel free to reach out to your committee regional vice chair that represents your state. The committee meets virtually quarterly or as needed, and members are welcome to join our meetings. If any member is interested in a leadership opportunity with the committee or the abstract application process information is available on the NACAA website. Please reach out to the committee, we would love to hear from you.



Committee Members

Jody A. Gale, Committee Chair, Utah

Katie Pekarek, North Central Region Vice-Chair, Nebraska

Madeline Flahive DiNardo, Northeast Region Vice-Chair, New Jersey

Shannon Williams, Western Region Vice-Chair, Idaho

Open, Southern Region Vice-Chair

The NACAA Natural Resources Aquaculture Committee is excited for this year's AM/PIC. We are very much looking forward to meeting together and seeing everyone in Dallas. We are providing Natural Resource and Aquaculture related subject matter breakout sessions at the conference on Tuesday, July 16th, 8:30-11:30 am and 1:30-3:30 pm. Members previously submitted abstracts describing their outstanding Extension programs have been peer reviewed and seven authors have been selected for publication and presentation.

Please join us to learn more about how successful extension agents are responding to local natural resource and aquaculture needs and implementing successful, impactful programs. Abbreviated presentation titles include, Waters and Watering Systems for Livestock Producers, Cultivating Conservation for Underserved Farmers, Citizen Science Academy, Weed Wranglers for Invasive Species, Conservation for Generations, Utah Small Farms Water Quality Grants, and Virtual Fencing in the Canyonlands.

On September 11, 2024 our committee will provide an NACAA 365 Webinar. It will feature Utah's annual Congressional Briefing Tour "Co-Del" provided by eleven of Utah's twenty-nine counties comprising two Associations of Governments. Utah State University Extension helps plan, sponsor, host and provide this experiential three-day tour of natural resource related issues in Utah for the US Congress. Travel scholarships are provided for up to twenty staff members of the US Congress House and Senate natural resources related committees and staff to respective committee's members to attend this awesome event. Join us to learn how this educational tour is impacting and educating those in positions in Congress to make changes and provide funding for significant natural resource issues in the West. Other 365 Webinars are being considered.

We appreciate our regional and state chairs for their hard work to provide our committees programs. We invite you to attend, get involved or to serve NACAA at the state or national level. We welcome suggestions, feedback and encourage anyone interested in learning more about natural resources, aquaculture and our committees' programs to attend our annual committee pre AMPIC meeting on July 9th via Zoom. Watch for more information from NACAA for the time and link or contact Jody A. Gale, NACAA NR/Aqua Committee Chairman, jody.gale@usu.edu or (435) 893-0470.

The Sustainable Agriculture Committee has worked to identify several Pre-Tour locations for this year's Annual meeting and professional development conference in Dallas Texas. Along with the Pre-Tour locations we also identified a Reading The Farm location for the Wednesday Super Seminar and Thursday tour. These activities included submitting a grant to Nation SARE, booking a room and lunch for the participants of the Thursday Reading the Farm Tour. We also reviewed submissions for presentations at this year's Annual Meeting. Lastly we organized a short NACAA 365 seminar on our Pre-Tour locations in an attempt to increase interest and registrations in the tour.

The Program Recognition Council (PRC) contains six committees that administer award-based programs that have been a traditional part of NACAA. These committees serve as the way for the association to recognize the efforts of our members for their professionalism, performance, creative works, and outreach.

The six committees which make up this council are:

- Communications Committee chaired by Brittany A. Council-Morton from Florida.
- Professional Excellence Committee chaired by Nicholas Simmons from Florida.
- Public Relations & Ag Awareness Committee chaired by Tyrone Fisher from North Carolina.
- Recognition & Awards Committee chaired by Ed Lentz from Ohio.
- Scholarship Committee chaired by Stephen Hadcock from New York
- Search for Excellence Committee chaired by Linda McClanahan from Kentucky.

Each year the committees review hundreds of entries to determine state, regional and national winners. Committees worked hard to recognize NACAA members for their outstanding efforts.

Due to our gracious sponsors and the hard work of our committee members, PRC will award over $35,000 to members this year.

Thank you to the National Chairs, Vice-Chairs and State Chairs of all the PRC committees for your dedication to the awards program; it wouldn't have happened without you. I also wish to extend my appreciation to the entire National Board, my fellow council chairs Sherry Beaty-Sullivan and Colt Knight, and Scott Hawbaker for their support and dedication to our organization.

Communications Chair

Brittany Council-Morton
Florida

The Communications Awards competition provides a way for NACAA members to be recognized for their efforts to reach the general public. Congratulations to all our members for excellent Extension programming around the nation. The caliber of award entries was outstanding

A total of 670 applications were completed for 2024 from across the nation. The Southern Region led the way with 378 entries submitted, followed by the North Central Region with 156 entries, the Northeast Region with 90, and the Western Region with 46.

The national winners will be announced at the Awards luncheon. The Communication Awards and poster Awards luncheon will be held together.

The NACAA Communications Awards Committee is very appreciative of the NACAA Board for continued funding of this program. A hearty thanks to the Communications Awards state chairs and regional vice-chairs for their hard work in making this awards program successful. The NACAA Communications Awards Regional Vice-Chairs for 2024 are: North Central Region Vice-Chair – Aerica Bjurstrom (Wisconsin), Northeast Region Vice-Chair – Laura McDermott (New York), Southern Region Vice-Chair – Daniel Leonard (Florida) and Western Region Vice-Chair – Iris Mayes (Idaho). Without the state chairs and regional vice-chairs this program would not be possible.

Professional Excellence Chair

Nicholas Simmons
Florida

The Professional Excellence Committee is responsible for organizing and conducting the poster session before and during the AM/PIC. It took a lot of dedication and work to make this happen, and without the regional vice-chairs, state chairs, and volunteer judges, the poster session would not be possible. Current regional vice-chairs are: North Central Region, Heather Gessner (SD); Northeast Region, Megan Muehlbauer (NJ); Southern Region, Brian Haller (AR); and Western Region, Philip Waisen (CA). Regional Vice-Chairs are responsible for connecting with state chairs throughout the year and assisting with the judging portion at the regional level. Presenting a poster is an excellent way for members to showcase their work in Extension Education or Applied Research, generate discussion during and after the conference, and publish their abstract in the conference proceedings.

This year we had an excellent number of accepted posters displayed at the AM/PIC, with a total of 123 (37 Applied Research and 86 Extension Education). In 2024, we will have the national poster contest in Dallas, TX, and we are excited to showcase the great work that our Extension colleagues have been doing to reach audiences.

The committee used independent pre-AM/PIC regional judging of state winners to select the 20 National Finalist posters. Judges from the four regions will evaluate the finalists on Monday, July 15th, to determine the National 1st, 2nd, and 3rd place award winners. Judging criteria are found on the NACAA website and can be reviewed to prepare for next year's posters.

All posters are displayed in the trade show area during the AM/PIC. Posters are to be in place no later than 6:00 p.m. on Sunday, July 14th, and stay through 3 p.m. Tuesday, July 16th. There will be a "Meet the Author's Poster Session" from 10:15 a.m. – 10:45 a.m. during the break on Monday. National winners and finalists will be formally recognized during the Communications/Professional Excellence awards luncheon on Tuesday, July 16th. Congratulations to all of our winners.

Public Relations & Ag Awareness Chair

Tyrone Fisher
North Carolina

The Public Relations and Agricultural Awareness Committee is in charge of organizing the Agriculture Awareness and Appreciation Awards (A4) program. The A4 program is a great way for NACAA members to spotlight educational programs that demonstrate the public relations component of Extension work. It is also an opportunity to showcase how Extension agents and educators enrich and inform the public's understanding of agriculture in their communities. This year the A4 program had 10 programs of prominent public relations work representing every region of NACAA, this is the most applications since the pandemic. There is an impressive amount of great Extension work that many educators and

agents are doing and this outreach makes an excellent way to share their success in the A4 program.

Congratulations to Jacci Smith from Ohio. She is the Agricultural Awareness and Appreciation Award National Winner for 2024. Her topic will be "Promotion of Agriculture: An Immersive Experience". Congratulations also go to our National Finalists Matthew Smith from Florida, presenting on "We're Not in New England Anymore", Wendy Becker from Montana presenting on "Beekeeping and Pollinator Education", and Karen Cox from West Virginia, presenting on "Extension Calling".

State winners include Blake Carter from Georgia, Miranda Rudolph from Kentucky, Andrew Baucom from North Carolina, Justin Ballew from South Carolina, Andrew Garnett from New Mexico, and Jake Hadfield from Utah.

I want to send a whole-hearted thank you to all of the hard-working judges, Public Relations and Agricultural Awareness Committee Regional Vice-Chairs and the State Chairs for their commitment to the challenging work of judging the excellent entries this year.

The Public Relations and Agricultural Awareness Committee appreciated having entries from "ALL" four regions in 2024, which is am increase from 2023. We challenge every state in NACAA to submit an entry in one of the NACAA awards programs, especially in the A4 program in 2025. Let Extension shine in all the communities we serve!

As always, we would like to send an earnest and special thank you Jim Hruskoci of Bayer Crop Science for sponsoring the Agriculture Awareness and Appreciation Award this year. It has been my pleasure to serve as the National Chair. I have enjoyed working with our Regional Vice Chairs and reviewing all the great programming our Extension agents and educators are doing across the country on behalf of the agricultural industry. I have completed my terms as National Chair and you will have new leadership in Montana!

NACAA looks forward in 2025 to hearing all the unique ways of reaching and educating audiences!

Recognition and Awards Committee Members:

North Central Vice-Chair – Cade Rensink (Kansas)

Northeast Vice-Chair – Diane Diffenderfer (Pennsylvania)

Southern Vice-Chair – Jennifer Caraway (Arkansas)

Western Vice-Chair – Victoria Xiong (Utah)

The Recognition and Awards committee would like to congratulate the 2024 Hall of Fame, Distinguished Service Award, and Achievement Award recipients. The committee was diligent in their efforts to recognize outstanding agriculture agents and educators. The chair would like to thank the regional vice-chairs and state chairs for their time and commitment required to successfully complete the duties of this committee.

The 2024 Hall of Fame recipients include Gregory J. Endres (North Dakota), Richard J. Brzozowski (Maine), Kenneth G. White (Texas), and Charles Cheyney (Idaho). They will receive their awards at the AMPIC's banquet. Recipients of this award are recognized for a career of outstanding work as an Extension Agent or Educator and continued engagement in community service. They have provided leadership to their profession, religious communities, and humanitarian organizations. This is the 19th year of this prestigious award.

Sixty-one recipients will be honored at the 2024 AMPIC Achievement Award breakfast ceremony. This is the 50th year that NACAA has presented this award, and this year's recipients will be joining 2,555 fellow Achievement Award winners. These recipients have demonstrated their ability to conduct high-quality educational programs and have gained the respect of co-workers in less than ten years of service.

Fifty-seven individuals who have been chosen by agents and educators in their respective states will receive the Distinguished Service Award. These recipients have been engaged in Extension and university activities for more than ten years. Their clientele and co-workers recognize them for their leadership skills and outstanding educational programs. The recipients will be recognized during the 2024 AMPIC Banquet. This is the 86th year for this prestigious award and this year's recipients will be joining 7,702 fellow Distinguished Service Award winners.

The committee expresses our appreciation for the continued support of the Achievement Award breakfast by the American Income Life Insurance Company (Special Risk Division). They have sponsored the ceremony for 50 years and various other NACAA programs for 69 years. The committee also recognizes and thanks the Pipeline Ag Safety Alliance for their continued financial support for the Hall of Fame awards.

Scholarship Chair
Stephen Hadcock
New York

I thank North Central Region Vice Jennifer Lutes, Western Region Vice Chair Stephen Brown, Southern Vice Chair Carole Henry, and Northeast Vice Chair Bill Sciarappa for their support and hard work this year.

Thanks to Past President Phil Durst, another donation was secured for the Territory Grant Program this year. Five NACAA members have received grants to assist them in attending this year's AM/PIC.

The generous donations by NACAA members help to make the task of awarding of scholarships to members easier. For a defined 2023-24 period (May 16, 2023 – May 15, 2024), donations to the Education Foundation totaled $27,391.00. You have got to be in it to win it! A NACAA member can donate to the NACAA Education Foundation in various ways.

What do NACAA members use their scholarships for? I am glad you asked! I encourage you to look at the June 2024 copy of "The County Agent." In this edition, you can learn firsthand how your colleagues from across the country have used the scholarships they have received for professional development.

Scholarships awarded:

Fourteen scholarship applications were received by June 1, 2023. National committee members reviewed the applications and were awarded $33,660. Twelve individual applications and two group applications were received.

For the inaugural December 1 round of accepting scholarship applications, fifteen applications were approved to receive a scholarship. The total amount awarded was $16,340. All the applications were individual applications.

The live and silent auction, a highlight of the AM/PIC, will occur Monday night in Dallas, Texas. Your participation is crucial to its success. Whether you are attending in person or not, consider using this link https://cornell.ca1.qualtrics.com/jfe/form/SV_e2QH6m9odLxP25w to submit a donation. You are responsible for getting the donated item to Dallas, whether you bring it yourself or have a colleague bring it. Your contribution can make a difference.

Search for Excellence Chair
Linda Mcclanahan
Kentucky

The current Search for Excellence (SFE) committee is comprised of four regional vice chairs and myself. The regional vice chairs include Katie Wantoch from Wisconsin, Jesse Fulbright from Montana, Leslie Rose from North Carolina and David Handley from Maine.

The committee held an organizational meeting by Zoom/conference call in January 2024. We discussed procedures for promoting SFE entry submissions and for scoring the entries to be received. We reviewed plans for the upcoming AM/PIC and discussed duties of regional vice chairs as well as state chairs. During the conference call, we also confirmed the division of responsibilities regarding the SFE categories that each would lead and preside over at the 2024 NACAA AM/PIC. They were as follows:

Consumer or Commercial Horticulture- David Handley

Crop Production- Katie Wantoch

Environmental Quality, Forestry, and Natural Resources- Linda McClanahan

4H and Youth Programming- Jesse Fulbright

Farm & Ranch Business Management- Leslie Rose

Livestock Production – Linda McClanahan

Sustainable Agriculture- David Handley

Young, Beginning, or Small Rancher/Farmer – Katie Wantoch

Each regional vice chair was responsible for organizing a team of judges for each respective category, judging the entries and reporting the results to me. National finalists and winners were notified of their placing by May 6th.

There were a total of 126 entries, 83 being judged at the national level. The entries per category was as follows:

Consumer or Commercial Horticulture- 20 entries, 13 states

Crop Production- 12 entries, 8 states

Environmental Quality, Forestry and Natural Resources- 13 entries, 8 states

Farm and Ranch Business Management- 6 entries, 6 states

4H and Youth Programming- 31 entries, 15 states

Livestock Production- 22 entries, 15 states

Sustainable Agriculture – 7 entries, 7 states

Young, Beginning or Small Farmers/Ranchers- 15 entries, 11 states

The total number of entries judged at national level was down 12 from last year. There are a lot of opportunities for members to participate by submitting entries in SFE. The entries are easy to prepare and submit, and the program provides an excellent opportunity for individual and team recognition.

Our 2024 winners and finalists will be recognized during their respective SFE luncheon sessions at the upcoming NACAA AM/PIC. The committee will continue to promote the SFE awards program and encourage more applications next year. For those interested in learning more about the SFE Committee or learning more about their duties as state chair, the SFE committee held their meeting on June 25 via Zoom prior to AM/PIC.

Thank you to each state chair for their efforts in promoting SFE to their membership and judging/selecting state winners. I owe a huge thank you to each regional vice chair for all their efforts to facilitate the judging of the entries and other associated tasks of the committee. It's been a great honor to serve as National Chair of this committee over the past year. Thanks to Program Recognition Council Chair, Joni Harper, for her assistance and support during the year. I appreciate the continued support NACAA Board provides for the Search for Excellence program. Finally, many thanks to NACAA Executive Director, Scott Hawbaker for his support and assistance.

Life Member Chair

John Campbell

Tennessee

The purpose of the Life Member Committee is to serve as a liaison between Life Members and members of NACAA and the Board of Directors; actively seek resources for the Scholarship Fund and encourage state program committees to develop programs that will enhance the Cooperative Extension Service. General responsibilities include:

- Promote Life Membership
- Encourage Life Members to support the Scholarship Fund
- Identify and solicit agribusinesses to become contributors to the Scholarship Fund
- Develop Life Member program for AM/PIC
- Motivate State Life Member Committee Chairs to develop significant programs that will improve the image of County Agents

All Life Members are invited to the Life Member and Spouse Welcome and Orientation at 2:00 pm on Sunday, July 14. The Texas Life Member and Spouse Committee will inform us of the activities planned for the week. The Life Member Breakfast is scheduled for 7:30 am on Monday, July 15. The Life Member Business follows after the general session at 10:30 am. All Life Members are encouraged to attend both of these activities.

It is tradition at the business meeting for the Life Members to hold a memorial remembrance recognizing the members who passed during the previous year. Last year, Glenn Rogers, the 2023 Northeast Life Member Vice Chair, suggested that we try to obtain pictures of those who passed. We were able find pictures of most. Scott Hawbaker then compiled a computer-generated presentation that was very well received. Scott also provided a memorial list with pictures. Plans are to do the same this year. Last year's memorial list can be found on the Life Member web page.

Region Vice Chairs obtain the names of deceased Life Members from the state Life Member chairs in their respective regions. Thank you to all state chairs for supplying this information.

States are encouraged to pay the Life Member dues for their retiring members. The one-time fee is $50.00. The County Agent magazine is available for all members online. A hard copy can be obtained for an additional fee. Follow this link on the NACAA website https://www.nacaa.com/uploads/userfiles/files/lifepostcard2020.pdf or contact Scott Hawbaker.

Many thanks go to the Region Vice Chairs for their efforts: Larry Howard North Central Region, Larry Hulle Northeastern Region, Janet Schmidt Western Region, and Fred Miller Southern Region. Larry and Janet rotate off the committee this year. Chuck Otte comes on the committee as North Central Vice Chair and Mark Nelson comes on as Western Region Vice Chair. The Southern and Northeastern Regions will elect Vice Chairs for the 2025-2027 term. I am completing my two-year term as National Chair. I appreciate the opportunity to serve on behalf of all Life Members. Steven Munk, North Central Region, will become chair at the close of the AM/PIC.

The Life Member Committee and all the Life Members want to thank the National Board for their support of Life Members. Thank you Texas Association for your efforts in planning this year's activities.

Journal of NACAA Chair

Linda Chalker-Scott

Washington

Our members continue to provide timely articles of interest to their NACAA colleagues as well as a national audience. Many NACAA members have stepped up to offer their services as peer-reviewers; I currently have a list of 176 volunteers who have been crucial in providing constructive feedback to authors. One of my goals as editor is to eventually have every submission in a publishable state. I believe that every member of NACAA has interesting and important information to share about their work and our journal should function to do that.

Peer reviewers and authors both like the new rubric for reviewing manuscripts (attached with this report). Peer reviewers can focus on parts of the manuscript that need their expertise, and authors have a better sense of what they need to revise before resubmission.

The June 2024 issue of the Journal of NACAA [17(1)] contains 18 articles with an initial acceptance rate of 44%. The acceptance rate used for the journal is based on the industry standard, where all initial reviews are either "accept" or "minor revision." Rejected submissions are those ranked as "major revision" or "start over" are counted as rejections and are returned to the author for revision. In addition to the 18 published articles, there were 6 other submissions:

- One was in error (the author intended to submit an abstract for the AM/PIC)
- Two were rejected for lack of sufficient data
- Three are being held over for further revision and publication in the December issue

When manuscripts initially receive at least one score of "major revision," "start over," or "reject," the reasons fall into these general categories:

- Manuscripts are poorly written
- Manuscripts do not contain sufficient detail
- Author guidelines are not followed (writing and formatting guidelines are available on the NACAA website)
- Peer reviewers are not familiar with publication criteria for the Journal of NACAA

I am addressing many of these issues in my 2024 AM/PIC presentation (Tips for Successful Submissions to the Journal of the NACAA). I will also develop an overview for peer reviewers who are conversant with scientific journal reviewing but may not understand how to evaluate the broad range of manuscripts that the Journal of NACAA encourages.

Here are some of the other accomplishments for the 2023-2024 period:

- December 2023 issue – 26 published articles
- June 2024 issue – 18 published articles
- Implementing revised rubric for peer reviewers
- Super Seminar workshop on scientific writing for Early Career Development PIC (it was not selected)

Criteria for Peer Review (implemented in December 2023)

1) Is the title concise, accurate, and informative?

2) Does the abstract include:

   a. the purpose of the article?

   b. all major findings?

   c. conclusions drawn from the results?

   d. practical significance, especially as related to a national audience?

3) Are the methods clearly described and detailed, so that the work could be accurately repeated elsewhere?

4) Are the experimental design and statistical analyses sound?

5) Are all results discussed objectively and without conflating correlation to the level of causation?

6) Do the conclusions accurately include all results without bias?

7) Are limitations and alternative explanations discussed?

8) Is the literature cited complete and current?

9) Is the article of interest to a regional or national audience?

10) What is your recommendation for this article?

Publish, Minor Revision, Major Revision, Start Over

11) Would you like to see any revisions to the manuscript before it is accepted?

Outstanding Young Farmer Liaison

Amber Yutzy

Pennsylvania

My name is Amber Yutzy, and I serve as the NACAA liaison to the National Outstanding Young Farmers of America. I had the privilege of attending the 2024 National Outstanding Young Farmers Congress, held at the Silver Reef Casino and Hotel in Bellingham, Washington, from February 15-18. Experiencing the congress firsthand was incredible. I witnessed ten couples forming lifelong friendships while competing, making it an unforgettable experience. Notably, NACAA members submitted over 70% of the applications for 2024, with finalists emerging from Pennsylvania, Arkansas, and Alabama. Congratulations to the members who nominated these remarkable individuals.

The Outstanding Young Farmers of America (OYF) comprises past Outstanding Young Farmer Program nominees. This group promotes the exchange of ideas and fosters friendships, encouraging excellence and active involvement in agriculture and community at local, state, and national levels. With approximately 1,500 members nationwide, the OFA leverages robust networking to support farmers and highlight the importance of America's farming community.

The OYF program aims to bridge the urban-rural divide by fostering a deeper understanding of farmers' efforts, appreciating their contributions and achievements, and raising awareness within the agribusiness community about farmers' vital role in America's economy.

As the farming business evolves, so does farmers' community involvement. Modern farmers are active citizens, participating in local and state governments, civic groups, and charitable organizations. Honoring farmers for their contributions and achievements is not only appropriate but essential. This award recognizes outstanding achievements in agriculture and community involvement.

I am pleased to recognize our 2024 National Outstanding Young Farmers:

- Bethany & Travis Dixon of Missouri
- Karen & Byron Dubois of New Jersey
- Carolyn & Brody Stapel of Wisconsin
- Lauren & Brandon Martin of Arkansas

It's time to nominate young farmers for the 2025 awards. The NOYF program offers an excellent opportunity for county extension agents to acknowledge outstanding young farmers in their communities. I encourage you to nominate deserving individuals for this prestigious award. Detailed information and application forms are available on the National Outstanding Young Farmer website at www.outstandingfarmers.com. Please consider who in your county or state would be a worthy candidate. Applications are due by September 1, 2024. If your nominee becomes a top 10 finalist, NACAA will provide a stipend for you to attend the 2025 NOYF Awards Congress in Des Moines, IA. For assistance with the application process, feel free to contact me. NOYF representatives and I will also be present at the NACAA AM/PIC. Please visit the trade show area to speak with past winners about their experiences.

Extension Journal Inc.

Jason de Koff

Tennessee

I started in my role this year with big shoes to fill left by my fellow Tennessee colleague, Melody Rose. I appreciate her guidance and mentorship as I learn how best to fulfill my role as the liaison to NACAA for Extension Journal, Inc. (Journal of Extension). I also appreciate the NACAA officers and board for this opportunity to serve.

A little about me….

I am a statewide specialist in the area of agronomy and soil science and an Extension Program Leader with Tennessee State University. I've been in Extension for 14 years and have developed and implemented programming related to bioenergy, soil health, and drone technology.

More about the Journal of Extension (JOE)…

The Journal of Extension is an open-access, quarterly journal that provides an opportunity for Extension professionals to share their programs and ideas with each other. There are a number of ways that this can be done, either as a Feature Article (up to 5000 words), a Research in Brief article (up to 3000 words), Ideas at Work (up to 2000 words), Tools of the Trade (up to 1250 words), or as a Commentary (up to 1500 words). To find out more about these options, please visit the website: https://tigerprints.clemson.edu/joe/. There is also a Job Bank available at: https://jobs.joe.org/. The Journal of Extension is always looking for reviewers which can provide professional development opportunities to both the reviewer

and the authors they review. If you are interested in serving in this way or would like to find out more, please email: JournalofExtension@clemson.edu

In March 2024, the Editorial Board, led by President Lori Greiner (Virginia Tech), met in person and engaged in strategic planning to identify action steps for the next two years that fit within the Journal's priorities of providing a high-quality Journal, supporting author development, developing and implementing a sustainable editorial model, increasing visibility, expanding and enriching partnerships, collaboration, and communications, and maintaining financial stability. As part of this plan, JOE will be launching a stakeholder survey, developing new marketing plans, and engaging in a feasibility study to identify new opportunities. The Journal of Extension is also working to renew and update its MOU with publisher Clemson University Press.

Policy Chair
Cynthia Gregg
Virginia

As Policy Chair, you work with the NACAA Board, NACAA Policy Committee, and NACAA Membership. It is important that the Policy Chair is available for the Board to help with an understanding of the NACAA Policy. The Policy is the guiding document of NACAA. The Policy Chair is responsible for safeguarding the Policy, By-Laws, intent, and standards of NACAA. This is a very important job and must be taken seriously. NACAA Policy is important to our Association. Maintaining them is paramount.

The Policy Committee is made up of the Policy Chair and the nine other past presidents, active and life, members. If there are questions then the sitting Policy Chair can utilize their expertise and knowledge to come to the appropriate interpterion of the NACAA Policy. The Policy Committee Members are Bill Burdine, Henry Dorough, Phil Durst, Richard Fechter, Alan Galloway, Mike Hogan, Gene McAvoy, Mark Nelson, and J. Craig Williams. The Policy Chair, according to Policy, must be an active NACAA Past President. The Policy Chair serves for two years and is has a lot of responsibility.

The Policy Chair reviews a section of the NACAA Policy that must be reviewed annually to ensure they are current and up to date. In 2024 the section to review is the Duties of Officers and Directors, as well as looking over the entire document for any additional edits. The Policy Chair works with the Board to ensure that any business such as changes to By-Laws is sent and presented correctly to the Voting Delegates during the Business Meeting at the AMPIC.

It has been an honor and privilege to work with the current NACAA Board. Your Board has been diligent and thoughtful in the business of NACAA. They have done several updates to the Policy and these are in the process of being added to NACAA Policy. There are portions of the Policy that refer to the NACAA Handbooks that pertain to State Officers, Committees, and Annual Meeting and Professional Improvement Conference. Please make sure if you are interested in leadership positions, you not only look at the NACAA Policy Manual but also refer to the handbooks for more complete information.

These documents can help you with YOUR leadership development in NACAA.

As Texas rolls out the welcome mat for the 2024 NACAA AMPIC. They have the opportunity to share Texas agriculture, cultural wonders, and traditions, to us their colleagues from across the country. I know we will network, learn, connect, reconnect, and more in Dallas as NACAA Members. This week be sure to support and learn from your colleagues from across the country, and take home some great information to help your clientele in your home county, parish, state or region.

I look forward to seeing you in Dallas.

Thank you again for all you do! Safe travels.

NACAA Executive Director
Scott Hawbaker
Illinois

The 2023/2024 NACAA year commenced with a heartwarming recognition in Des Moines, marking my 25 years of service to the NACAA. I am deeply grateful to the NACAA Past Presidents and the Board of Directors for their unwavering support and for allowing me to grow alongside this remarkable organization. I could never have imagined this would become my career path, but it has been an incredible journey serving the NACAA membership with wholehearted dedication.

Working with this year's Board of Directors has been a pleasure, especially maintaining close and frequent communication with President Keith Mickler (often multiple times a day!). My ongoing responsibilities include assisting with dues management, coordinating and registering for the AM/PIC, updating the website, managing donor relations, producing our magazine, and maintaining member communications, among other areas of service.

If you ever have any questions or concerns about the association or need assistance, please do not hesitate to reach out. I am always here to help in any way I can.

109th Annual Meeting and Professional Improvement Conference
July 14-18, 2024

National Association of County Agricultural Agents

2024 NACAA ANNUAL MEETING AND PROFESSIONAL IMPROVEMENT CONFERENCE

REGISTRATION
Hilton Anatole

Saturday:	3:00 pm - 6:00 pm
Sunday:	8:00 am - 7:00 pm
Monday:	8:00 am - 5:00 pm
Tuesday:	8:00 am - 2:00 pm
Wednesday:	8:00 am - 2:00 pm
Thursday:	NOT OPEN - TOUR DAY

COMMERCIAL AND EDUCATION EXHIBITS
Trinity Exhibit Hall

Sunday:	9:00 am - 1:00 pm (Set-up)
Sunday:	1:00 pm - 6:30 pm
Monday:	9:00 am - 4:30 pm
Tuesday:	9:00 am - 3:30 pm
Tuesday:	3:30 pm -5:00 pm (Take-down)

AWARDS, RECOGNITION & EDUCATIONAL DISPLAYS
POSTER DISPLAY
Trinity Exhibit Hall

Sunday:	9:00 am - 1:00 pm (Set-up)
Sunday:	1:00 pm - 6:30 pm (Open)
Monday:	8:00 am - 10:00 am (Poster Judging)
Monday:	9:00 am - 3:30 pm (Open)
Monday:	10:15 am -10:45 am (Meet the Authors)
Tuesday:	9:00 am - 3:30 pm (Open)

ANNUAL MEETING RIBBON COLOR GUIDE

National Board	Dark Blue
National Council Chair	White
National Committee Vice Chair	Orange
National Vice Director	Tan
State President	Red
Past National President	Purple
Past National Secretary	Gold
Past National Treasurer	Dark Green
Life Member	Brown
Donor	Black
Guest	White/Gold
First Timer	Maroon
Hall of Fame	Gray

Welcome to the 109th Annual Meeting and Professional Improvement Conference

National Association of County Agricultural Agents

NAME BADGES ARE REQUIRED.
PLEASE WEAR YOUR NAME BADGE AT ALL TIMES. YOU WILL NEED IT TO BE ADMITTED TO ALL FUNCTIONS INCLUDING MEALS

TABLE OF CONTENTS

Keith Mickler
President

Welcome to the Big D!

Welcome to Dallas, Texas, for the 109th National Association of County Agricultural Agents Annual Meeting and Professional Improvement Conference. We are thrilled to have you join us in celebrating Tradition, Heritage, and Agriculture along with everything NACAA stands for.

Please take a few moments to review this program book. With numerous choices available, you may want to compare notes with others to ensure you don't miss any important sessions. Pay close attention, as there are a few changes this year. One notable change is the Monday evening "Welcome to Texas" dinner, where we will all board buses to head to the Fort Worth Stock Show and Rodeo for a state pictures dinner and the world-renowned scholarship auction.

The week is filled with tremendous opportunities, from special speakers to colleagues sharing successful programs, Super Seminars, and fantastic tours! On Sunday evening we look forward to presenting the 2024 Service to American/World Ag Award to Dr. Derrell Peel from Oklahoma and to receiving a big Texas welcome from Texas A&M Extension Director Dr. Rick Avery. Our evening will be topped off by Texas A&M University Chancellor John Sharp.

On Monday morning, we will start with a look back at our time in Iowa with the Happy Faces video. Past President J. Craig Williams from Pennsylvania will present the Dan Kluchinski Memorial Scholarship. We will welcome Keynote speaker Dr. Jeffrey Savell, Vice-Chancellor, to the stage along with Tiffany Dowell Lashmet and Extension Specialist in agricultural law.

During Wednesday's general session, we have three speakers to close out the session. I am excited to have my friend and colleague Kevin Camm from Florida introduce a friend and leader in urban agriculture, Dr. Julie Fox from The Ohio State University, who will bring us a message on Urban Ag opportunities. Following Dr. Fox will be an update from our friend and leader of NIFA, Dr. Manjit Misra, who was with us in Iowa and agreed to join us in Dallas, TX. Our final guest speaker will be Donnell Brown from RA Brown Ranch, known worldwide for cattle and quarter horses.

When you have questions, reach out to someone nearby. Be sure to spend time in the Trade Show area and visit our sponsors and donors who provide funding for many of our awards and programs. Visit their booths, learn what they offer, and thank them for supporting NACAA. I challenge you to invite them to join your state for States Night out on Tuesday. Don't forget the poster session, where you can gather ideas from fellow agents to become a better Extension agent.

A big thank you to everyone who sacrificed their time to make this conference possible. I know how much time and effort it takes, so offer a thank you to Texas and to the National Committee Chairs and Vice-Chairs for their leadership in the AM/PIC program. Many of you may have heard the children's song "The Wheels on the Bus." Those big wheels need a strong engine to keep them turning, and without that engine, well, you get the picture. Our engine has been with us for almost 26 years, and his dedication to this organization is paramount. So, thank you, Scott Hawbaker, our NACAA Executive Director and friend, for the countless hours of work preparing for this 109th Annual Meeting and Professional Improvement Conference. Thank you to the university administrators who joined us this week and to all who supported their members attending. Prove to them how much your attendance meant by going home energized with new ideas to serve your clients.

Again, welcome to Dallas, where Tradition, Heritage, and Agriculture are celebrated in a big way.

Welcome to Texas

Jo Smith
Co-Chair

Jamie Sugg
Co-Chair

Welcome to Texas for the NACAA AM/PIC! We're thrilled to host agriculture agents from across the United States for a week filled with warmth, hospitality, and invaluable insights into Texas agriculture.

From Sunday's kickoff dinner to Thursday's showcase tours and special activities for sons and daughters, life members, and spouses; attendees are in for an unforgettable experience that embodies the spirit of Texan hospitality.

Sunday night sets the tone for the week with a true Texan-style meal, welcoming attendees with open arms. Chancellor John Sharp's keynote address adds a touch of wisdom and vision, setting the stage for the days ahead. In addition, an ice cream social featuring Blue Bell ice cream adds a sweet touch to the evening. It's a fitting start, showcasing the hospitality and warmth that Texas is known for.

Monday is a day of recognition and exhibits leading to the iconic Fort Worth Stock Show grounds. There, attendees will be greeted with an authentic Texas meal, prepared with love by Texas agents. It's a chance to savor the flavors of the region while soaking in the vibrant atmosphere of one of Texas' most celebrated events including the NACAA Scholarship Auction.

Tuesday is dedicated to learning and growth, with educational sessions designed to enrich attendees' knowledge and skills. The diversity of topics ensures there's something for everyone, from the latest trends in agriculture to practical tips for success. In the evening, States Night Out offers a chance to immerse oneself in the vibrant cultures of Dallas and Fort Worth, further showcasing the rich tapestry of Texas.

Wednesday promises to be memorable, with Donnell Brown from the renowned RA Brown Ranch sharing his expertise. His insights are sure to inspire and educate, providing attendees with valuable takeaways to apply in their own work. The day concludes with the annual awards banquet, a time to celebrate excellence in the field and honor those who have made significant contributions.

Thursday brings a showcase of the diverse facets of Texas agriculture through engaging tours. From livestock operations to crop production, attendees will gain firsthand insights into the challenges and opportunities facing the industry. To cap off the week, a special "Thanks for Coming" meal at the State Fair of Texas serves as a token of appreciation for attendees' participation and contribution.

But the festivities aren't just for attendees—special workshops and activities ensure that agents and guests are equally included in the experience. It's a testament to the inclusive spirit of the event, ensuring that everyone feels welcomed and valued.

Throughout the week, the spirit of camaraderie will be palpable as attendees come together to learn, share, and celebrate their shared passion for agriculture. Whether it's forging new connections, gaining insights from industry experts, or simply enjoying the warmth and hospitality of Texas, there's something for everyone to enjoy.

In summary, the NACAA national meeting in Texas promises a week filled with learning, networking, and unforgettable experiences. From the mouthwatering meals to the insightful sessions and engaging tours, attendees are sure to come away inspired and energized, ready to make a positive impact in their own communities.

Welcome to Texas—where the spirit of agriculture thrives!

NACAA BOARD OF DIRECTORS

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Keith Mickler
Georgia

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Scott Jensen
Idaho

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Scott Gabbard
Indiana

Western Region Director
Linden Greenhalgh
Utah

Association Policy Chair
Cynthia Gregg
Virginia

COMMITTEE CHAIRS

Program Recognition Council:	Joni Harper, MO
Communications:	Brittany Council-Morton, FL
Professional Excellence:	Nick Simmons, FL
Public Relations & Agricultural Awareness	Tyrone Fisher, NC
Recognition and Awards:	Edwin Lentz, OH
Scholarship:	Stephen Hadcock, NY
Search for Excellence:	Linda McClanahan, KY
Professional Improvement Council:	Sherry Beaty-Sulllivan, AR
4-H and Youth Programming:	Heather Jennings, MS
Ag. Economics & Community Development:	Madeline Schultz, IA
Agronomy & Pest Management:	Michael Rethwisch, CA
Animal Science:	Mark Nelson, UT
Horticulture & Turfgrass:	Cyndi Lauderdale, NC
Natural Resources/Aquaculture:	Jody Gale, UT
Sustainable Agriculture:	Heather Schlesser, WI
Extension Development Council:	Colt Knight, ME
Agricultural Issues	Connie Strunk, SD
Early Career Development:	Ashley Wright, AZ
Leadership & Administrative Skills:	Amanda Douridas, OH
Teaching and Educational Technologies:	David Yates, TN

OTHER CHAIR POSITIONS

Annual Meeting:	Jo Smith & Jamie Sugg, TX
Association Policy:	Cynthia Gregg, VA
Life Members:	John Campbell, TN

NACAA SPECIAL ASSIGNMENTS

Executive Director; Publisher, The County Agent:	Scott Hawbaker, IL
Journal of Extension:	Jason de Koff, TN
Journal of NACAA:	Linda Chalker-Scott, WA
Outstanding Young Farmer:	Amber Yutzy, PA

VICE DIRECTORS

North Central Region:	Jennifer Bentley, IA
Northeastern Region:	Andrew Kness, MD
Western Region:	Aaron Esser, WA
Southern Region:	Sherri Sanders, AR
Southern Region:	Jennifer Pellham, FL

109th ANNUAL MEETING
and
PROFESSIONAL IMPROVEMENT CONFERENCE
of the
NATIONAL ASSOCIATION OF
COUNTY AGRICULTURAL AGENTS
Dallas, Texas
July 14-18, 2024

MEMBER

FRIDAY, JULY 12

8:00 am - **HORTICULTURE COMMITTEE PRE-TOUR, ANIMAL SCIENCE PRE-TOUR**

8:00 am - **NACAA BOARD MEETING,**
5:00 pm Desota A

SATURDAY, JULY 13

7:00 am **HORTICULTURE COMMITTEE PRE-TOUR, ANIMAL SCIENCE PRE-TOUR, AG ECON PRE-TOUR**

8:00 am - **NACAA BOARD MEETING**
5:00 pm Desota A

3:00 pm - **REGISTRATION**
6:00 pm Peacock Foyer

3:00 pm - **SCHOLARSHIP AUCTION ITEM DROP-OFF**
6:00 pm Peacock Foyer
Registration Bag Courtesy: Creative Awards, TCAAA Agents

SUNDAY, JULY 14

MEMBER

8:00 am- **REGISTRATION & SCHOLARSHIP AUCTION**
7:00 pm **DROP OFF**
Peacock Foyer
Registration Bag Courtesy: Creative Awards, TCAAA Agents

9:00 am - **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, & NACAA POSTER SESSION SETUP**
1:00 pm Trinity Exhibit Hall
Coordinator: Nick Simmons (FL), Professional Excellence Committee Chair

9:00 am - **SCHOLARSHIP SELECTION COMMITTEE**
5:00 pm Manchester
Presiding: Stephen Hadcock (NY), Scholarship Committee Chair

12:00 pm - **PAST NATIONAL OFFICERS &**
2:00 pm **BOARD LUNCHEON,** Ming
Presiding: Phli Durst (MI), Past President

1:00 pm - **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, & NACAA POSTER SESSION DISPLAY - OPEN**
6:30 pm Trinity Exhibit Hall

2:00 pm - **FIRST LADY'S RECEPTION**
4:00 pm Hilton Presidential Suite Room 2472
(Invitation Only)

2:00 pm - **LIFE/SPOUSE ORIENTATION,** Monet
2:45 pm Presiding: Brian Yanta (TX),
Anthony Netardus (TX)

2:00 pm - **NACAA EDUCATIONAL FOUNDATION**
5:00 pm **ANNUAL MEETING & BOARD OF DIRECTORS MEETING,** Madrid
Presiding: Cynthia Gregg (VA), NACAA Educational Foundation President

1:30 pm - **STATE OFFICERS WORKSHOP**
3:00 pm Miro
Presiding: Brian Beer (SC) Southern Region Dir

3:00 pm - **FIRST TIMER ORIENTATION**
4:30 pm Rodeo Goat (Offsite location) - meeting in Atrium II near indoor water pond to walk together
Presiding: Scott Jensen (ID), President- Elect

SUNDAY, JULY 14

MEMBER

4:30 pm - **WELCOME TO TEXAS DINNER**
6:30 pm Trinity Exhibit Hall- (Ticket Required)
Courtesy: NACAA/ John Sharp, Chancellor, Texas A&M University System

5:30 pm - **STATE PRESIDENT REHEARSAL FOR FLAG**
6:00 pm **CEREMONY,** Trinity Ballroom
Presiding: Keith Mickler (GA), NACAA President

6:00 pm - **PARENTS ORIENTATION FOR SONS AND**
6:45 pm **DAUGHTERS PROGRAM,** Desota A
Presiding: Callie Zoeller (TX),
Steven Baringer (TX)

7:00 pm - **OPENING SESSION & INSPIRATIONAL**
9:00 pm **PROGRAM,** Trinity Ballroom
- Welcome & Comments – Keith Mickler, NACAA President
- Posting of Colors –Ross Volunteers, Texas Aggie Corps of Cadets
- National Anthem & Pledge of Allegiance performed by: Mary Clare Foley, Texas 4-H Member
- God Bless America, 4-H Pledge, and Texas Pledge performed by: Lauryl Freeze, Texas 4-H Member
- Presentation of State Flags - Narrated by Tommy Phillips
- Service to American/World Ag Award – JJ Jones, NACAA Vice President and Keith Mickler, NACAA President
- Derrell Peel – Oklahoma State University
- Introduction of Speakers – by TCAAA State President Tommy Phillips
- -Welcome by Dr. Rick Avery – Texas A&M AgriLife Extension Director
- Keynote Speaker – Chancellor John Sharp, Texas A&M University System
- Closing Announcements –Jo Smith and Jamie Sugg, AM/PIC Co-Chairs

9:00 pm **ICE CREAM SOCIAL**
Trinity Exhibit Hall
Courtesy: Blue Bell Ice Cream

9:15 pm - **HOSPITALITY ROOMS**
10:30 pm See registration area for room listings

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

MONDAY, JULY 15

MEMBER

6:30 am - **BAYER CROPSCIENCE BREAKFAST -**
7:45 am **CROP PROTECTION INNOVATION - WHERE DOES IT BEGIN?**
Coronado A (Ticket Required)
Presiding: Michael Rethwisch (CA), Chair - Agronomy & Pest Management
Courtesy: Bayer CropScience LP
Speaker: Shaun Selness, Head of Emerging Technologies, Bayer CropScience

6:45 am - **VOTING DELEGATES BREAKFAST**
8:00 am Metropolitan (Invitation only)
Presiding: Donna Beliech (MS), NACAA Secretary
Courtesy: NACAA

8:00 am - **REGISTRATION & SCHOLARSHIP AUCTION**
5:00 pm **DROP OFF (AUCTION ITEM DROP OFF CONCLUDES AT 12:00 NOON)**
Peacock Foyer

6:45 am - **LIFE MEMBER BREAKFST (**Tickets Required)
7:45 am Parkview

8:00 am - **NACAA POSTER JUDGING**
10:00 am Trinity Exhibit Hall

8:00 am - **GENERAL SESSION**
10:15 am Trinity Ballroom
Presiding: Keith MIckler, NACAA President
- Call to Order & Welcome - Keith Mickler, NACAA President
- Happy Faces Video 2023
- Recognition of Donors, Scott Jensen, President-Elect
- Dan Kluchinski Memorial Scholarship Award, J. Craig Williams, NACAA Past President
- 2028 AM/PIC Hosting State Presentation (Georgia) - Justin Shealey
- Report to the Membership, Keith Mickler, NACAA President
- Intro Keynote speaker – Dr. Rick Avery – Texas A&M AgriLife Extension Director
- Keynote Speaker - Dr. Jeffrey W. Savell, Vice Chancellor and Dean for Agricultural and Life Sciences, Texas A&M University
- Intro Capstone Speaker -Dr. Dan Hale Associate Director for Ag and Natural Resources, Texas A&M AgriLife Extension Service
- Ag Law Hot Topics, Tiffany Dowell Lashmet, JD, Associate Professor & Extension Specialist Ag Law, Texas A&M AgriLife Extension
- Announcements - Jo Smith & Jamie Sugg, 2024 AM/PIC Co-Chairs

MONDAY, JULY 15

MEMBER

9:00 am - **COMMERCIAL EXHIBIT TRADE SHOW,**
4:30 pm **EDUCATIONAL EXHIBITS, & NACAA POSTER SESSION DISPLAY - OPEN**
Trinity Exhibit Hall

10:15 am - **BREAK AND MEET THE AUTHORS POSTER**
10:45 am **SESSION,** Trinity Exhibit Hall
Courtesy: Texas A&M College of Agriculture & Life Sciences, TCAAA Foundation

10:30 am - **LIFE MEMBERS BUSINESS MEETING**
11:45 am Madrid
Presiding: John Campbell (TN), National Chair

11:45 am - **AGRICULTURE AWARENESS &**
1:15 pm **APPRECIATION AWARD LUNCHEON**
Coronado D (Ticket Required)
Presiding: Tyrone Fisher (NC), Public Relations & Agricultural Awareness National Committee Chair
Presenter: Jacci Smith (OH) - Nat. Winner
Topic: Promotion of Agriculture: An Immersive Experience
Presenter: Matthew Smith (FL) - Nat. Finalist
Topic: We're Not in New England Anymore
Presenter: Wendy Becker (MT) - Nat. Finalist
Topic: Beekeeping and Pollinator Education
Presenter: Karen Cox (WV)
Topic: Extension Calling
Courtesy: Bayer CropScience

11:45 am **FIRST TIME ATTENDEE LUNCHEON**
1:15 pm Monet (Ticket Required)
Presiding: Scott Jensen (ID), President- Elect
Speakers: J. Craig Williams (PA), Sherry Beaty-Sullivan (AR)
Courtesy: NACAA

11:45 am - **PROFESSIONAL IMPROVEMENT &**
1:15 pm **SEARCH FOR EXCELLENCE LUNCHEONS**

CROP PRODUCTION
Metropolitan (Ticket Required)
Presiding: Katie Wantoch (WI), SFE Vice-Chair
Presenter: Stephen Komar (NJ) – Nat. Winner
Topic: Programming in hemp production.
Presenter: Wayne Ohnesorg, (NE) – Nat. Finalist
Topic: Wester Bean Cutworm Resistance Update (WBCRU) program

MONDAY, JULY 15

MEMBER

Presenter: Shannon Dill, (MD) - Nat. Finalist
Topic: UMD Extension Winter Meetings 2023
Presenter: Morgan Watts – (NC) – Nat. Finalist
Topic: Piedmont Winter Grains Meeting
Courtesy: Truterra

SEARCH FOR EXCELLENCE IN 4-H AND YOUTH PROGRAMMING LUNCHEON,
Location: Shelborne (Ticket Required)
Presiding: Leslie Rose (NC), SFE Vice-Chair
Presenter: Liz Joseph (NC), - Nat. Winner
Topic: Regional Chicken Project
Presenter: Genevieve Christ (PA), - Nat. Finalist
Topic: Youth Environmental Education
Presenter: Bill Burdine, (MS), Nat. Finalist
Topic: Recruiting Youth to Plant Science Careers
Presenter: Scott Stinnett (C0), - Nat. Finalist
Topic: Colorado Beef Quality Assurance (BQA) for Youth program
Courtesy: NACAA

11:45 am - **EDUCATIONAL LUNCHEON – LATEST ON**
1:15 pm **CATTLE HEALTH AND HOW PRODUCERS CAN ADVANCE THEIR HERD HEALTH AND PRODUCTIVITY THROUGH TECHNOLOGY AND PHARMACEUTICAL SOLUTIONS - MERCK ANIMAL HEALTH**
Location: Coronado A & B (Ticket Required)
Presiding: Brian Beer (SC)
Presenting: John Hutcheson, Ph.D., Director of Beef Technical Services, Merck Animal Health

1:30 pm - **TRADE TALK CONCURRENT SESSIONS:**
2:30 pm **OPEN TO ALL MEMBERS**
(See page 34-35 for Topic Descriptions)

FORAGE/TURF, SAFETY, FINANCIAL
Coranado B
Participants: Barenbrug, Pipeline Ag Safety Alliance, Farm Credit

ANIMAL SCIENCE, CROP SCIENCE
Coranado C
Participants: Merck Animal Health, Bayer Crop Science, Truterra,

MONDAY, JULY 15

MEMBER

3:00 pm - **REGIONAL MEETINGS & CANDIDATE**
5:00 pm **PRESENTATIONS**
SOUTHERN Region, Cortez A & B
NORTH CENTRAL Region, Cortez C & D
NORTHEAST Region, Desota B
WESTERN Region, Desota A

5:00 pm - **MONDAY TEXAS DINNER** - Fort Worth
Livestock Show & Rodeo
LOAD BUSES AT 5:00 P.M.
Courtesy: Fort Worth Livestock Show & Rodeo, TCAAA Agents

5:00 pm **STATE PICTURES**
9:00 pm Fort Worth Livestock Show & Rodeo
(See back of program of State Order)

6:30 pm **NACAA SCHOLARSHIP SILENT AND LIVE AUCTION PREVIEW,** Fort Worth Livestock Show & Rodeo

7:30 pm **NACAA SCHOLARSHIP LIVE AUCTION**
Fort Worth Livestock Show & Rodeo

9:30 pm - **HOSPITALITY ROOMS**
10:30 pm Hilton Anatole
See Registration area for room listings

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

TUESDAY, JULY 16

7:00 am - **ACHIEVEMENT AWARD RECOGNITION**
8:30 am **BREAKFAST,** Coronado A
Presiding: Ed Lentz (OH), Recognition & Awards Committee Chair
Courtesy: American Income Life Insurance Company (Invitation Only)

8:00 am - **REGISTRATION**
2:00 pm Peacock Foyer

TUESDAY, JULY 16

MEMBER

8:30 am - 11:30 am **DELEGATE SESSION**
Wedgewood & Foyer
- Presiding: Keith Mickler, NACAA President
- Inspirational Thoughts – Alan Galloway (TN) Past President
- Delegate Roll Call
- Adoption of Agenda
- Appointment of Parliamentarian
- 2023 Delegate Session Minutes
- Nominating Committee Report
- Election of Officers
- Selection of 2028 AM/PIC Site
- Scholarship Committee Report
- NACAA Educational Foundation Report
- Treasurer's Report
- Adoption of 2025 Budget
- Confirmation of Committee Appointments
- New Business
- Confirmation of Directors/Vice Directors
- Recognition of Retiring Officers
- Installation of Incoming Officers, Directors, and Vice Directors
- Remarks: Scott Jensen, President-Elect

8:30 am - 11:30 am **EXTENSION DEVELOPMENT COUNCIL SEMINARS**

9:00 am - 11:30 am **EARLY CAREER DEVELOPMENT SEMINARS,**
Desota A
Presiding: Amanda Bennett (OH), Tim Waller (NJ)

9:00 - 9:30 am
Table those Great Resources – Leveraging Industry Events and Tradeshows
Presenters: Timothy Waller (NJ)

9:30 - 10:00 am
You Need Boundaries: Protection from Extension Burnout
Presenter: Kati Lawson (FL)

10:30 - 11:00 am
Tips for Successful Submissions to the Journal of the NACAA
Presenter: Linda Chalker-Scott (WA)

11:00 - 11:30 am
Effectively Promoting Your Extension Program
Presenter: Jenny Carleo (NC)

TUESDAY, JULY 16

MEMBER

8:30 am - 11:00 am **TEACHING & EDUCATIONAL TECHNOLOGIES SEMINARS**
Desota B
Presiding: David Yates (TN)

8:30 - 9:00 am
Stakeholder Engagement and Extension Teaching with Crop Management Contests
Presenters: Kevin Athearn (FL)

9:00 - 9:30 am
Conducting a Survey at a National Trade Show vs. Social Media: The Good, The bad and the QR Code
Presenter: Kayln Waters (FL)

9:30 - 10:00 am
From Words to Weeds: Breaking Language Barriers for Sustainable Landscapes in Florida
Presenter: Morgan Pinkerton (FL)

10:30 - 11:00 am
Enhancing Extension Education: Exploring AI based image and video generators
Presenters: Rob Leeds (OH)

8:30 am - 11:30 am **AGRICULTURAL ISSUES SEMINARS**
Coronado D
Presiding: MJ Fisher (ID), Emily Fread (PA)

8:30 - 9:00 am
Urban Soil Health Assessment Popularization In Rural Utah
Presenters: Victoria Xiong (UT)
9:00 - 9:30 am
Washington State University Voucher Program
Presenter: Don McMoran (WA)

9:30 - 10:00 am
The Art of Developing Long Term Relationships with Sponsors
Presenter: Rob Leeds (OH)

10:30 - 11:00 am
An Extension Effort in Adoption of Best Management Practices in Agriculture for Water Quality Restoration in Suwannee Valley Region to Achieve Targets of Florida Basin

TUESDAY, JULY 16

MEMBER

Management Action Plan
Presenters: Shivendra Kumar (FL), Bob Hochmuth (FL), Mark Warren (FL), Emily Beach (FL)

11:00 - 11:30 am
Educating Public Land Grazing Permittees Through the Central Utah Grazing Expo
Presenters: Trent Wilde (UT)

8:30 am - 11:30 am **LEADERSHIP & ADMINISTRATIVE SKILLS SEMINARS**
Cortez C
Presiding: Amanda Douridas (OH)

8:30 - 9:00 am
What We've Learned from Our Transition to Administration
Presenters: Eric Barrett (OH), Chris Zoller (OH)

9:00 - 9:30 am
Building Organizational Capacity for Emergency Preparedness: A Team Approach to Serve the Community
Presenters: Maria Bowie (GA), Greg Pittman (GA), Amanda Tedrow (GA), Susan Moore (GA), Allie Griner (GA), Guy Hancock (GA), Virginia Brown (GA)

9:30 - 10:00 am
Cultivating Political Support to Grow Successful Programs
Presenter: Ethan Orr (AZ), Elizabeth Green (AZ)

10:30 - 11:00 am
Extension Employee Retention Analysis Through Stay Interviews
Presenters: Lee Beers (OH), Teresa McCoy (OH), Eric Barrett (OH), Diane Mashburn (OH)

11:00 - 11:30 am
Creating an Extension Internship Program
Presenters: Shannon Dill (MD), Nicole Fiorellino (MD), Andrea Franchini (MD), Amanda Grev (MD)

TUESDAY, JULY 16

MEMBER

8:30 am - 11:30 am **PROFESSIONAL IMPROVEMENT COUNCIL SEMINARS**

8:30 am - 11:30 am **4-H & YOUTH**
Miro
Presiding: Kevin Camm (FL) , Kendra Graham (MO)

8:30 - 9:00 am
Beef Cattle Clinic: Revamping the Youth Animal Project
Presenters: Cassidy Dossin (FL), Lizzie Whitehead (FL)

9:00 - 9:30 am
Starting from the Bottom: How to Revitalize and Grow an Inactive 4-H Program
Presenter: Daniel Leonard (FL), Claire Davis (FL)

9:30 - 10:00 am
4-H Grab and Go Emotional Wellness and Mindfullness Lessons for Youth
Presenter: Jami Dellifield (OH)

10:30 - 11:00 am
Building Better Bulldogs: A 4-H Partnership to Build a School Culture of Social Emotional Wellness
Presenter: Jami Dellifield (OH)

11:00 - 11:30 am
Developing 360-Degree Video to Educate Youth Audiences
Presenter: Rob Leeds (OH)

8:30 am - 11:30 am **AG ECONOMICS AND COMMUNITY DEVELOPMENT**
Cortez B
Presiding: Blake Carter (GA), Samantha Gehrett (PA)

8:30 - 9:00 am:
Need and financial feasibility of cooperatives to coordinate sheep grazing under solar arrays in the Northeast United States
Presenter: Roberta Severson (NY)

TUESDAY, JULY 16

MEMBER

9:00 - 9:30 am:
Bridging Communities: County Farm Tour
Presenter: Ashley Stonecipher (FL)

9:30 - 10:00 am:
Beginning Farmer Intensive: Land, Law, and Transition
Presenter: Samantha Gehrett (PA)

10:30 - 11:00 am:
Leveling Up Beekeepers to Improve Business Success
Presenter: Amy Vu (FL)

11:00 - 11:30 am:
Kitchen Table Conversations for Ohio Women in Agriculture
Presenter: Nanette Neal (OH)

8:30 am – 11:30 am **AGRONOMY AND PEST MANAGEMENT SEMINARS**
Cortez D
Presiding: Stephen Komar (NJ), Hung Doane (CA)

8:30 - 9:00 am:
Evaluating Winter Annual/Summer Annual Forage Rotation in NE Iowa
Presenter: Denise Schwab (IA)

9:00 - 9:30 am:
Enhancing Peanut Production in the Suwannee Valley: A Comprehensive Extension Program for Sustainability and Productivity
Presenter: Emily Beach (FL)

9:30 - 10:00 am:
The Florida Sugarcane Variety Census: A Tool for Documenting Adoption of New Sugarcane Varieties
Presenter: Matthew VanWeelden (FL)

10:30 - 11:00 am:
Determining Best Agronomic Practices of Teff Grass in Idaho
Presenter: Joseph Sagers (ID)

11:00 - 11:30 am:
Teaching the Good and Bad of Cover Crops
Presenter: Bill Burdine (MS)

TUESDAY, JULY 16

MEMBER

8:30 am – 11:30 am **ANIMAL SCIENCE SEMINARS**
Morocco
Presiding: Garth Ruff (OH), Cassie Yost (PA)

8:30 - 9:00 am:
Longhorned Ticks and Theileria can Change the Way We Graze Cattle in the United States
Presenter: Timothy McDermott (OH)

9:00 - 9:30 am:
Comparative Analysis of Bedding Sources Used in Composting Pen-Pack Cattle Manure
Presenter: Eric Richer (OH)

9:30 - 10:00 am:
Advanced Sheep and Goat Nutrition School
Presenter: Melanie Barkley (PA)

10:30 - 11:00 am:
Florida Bull Test
Presenter: Kalyn Waters (FL)

11:00 - 11:30 am:
Connection and Education: The Cattlemen's Roundtable
Presenter: Lauren Butler (FL)

8:30 am - **HORTICULTURE AND TURFGRASS SEMINARS**
Cortez A
Presiding: Ginny Rosenkranz (MD)

8:30 - 9:00 am
Are native plants always the best choice?
Presenter: Linda Chalker-Scott (WA)

9:00 - 9:30 am
Incorporating Bingo in Ag Programming
Presenter: Kate Kammler (MO)

9:30 - 10:00 am
Cultivating Recovery: Horticulture Therapy in Veterans Addiction Inpatient and Outpatient Programs
Presenter: M.L. Robinson (NV)

10:30 - 11:00 am
Gardening with Muscadines: Exploring learned Florida-Friendly Landscaping™ Principles and Sustainable Practices Across Plant Growth Cycles
Presenter: Claude Jean

TUESDAY, JULY 16

MEMBER

11:00 - 11:30 am
Grafted watermelons as a solution for Fusarium Wilt and optimizing spacing for yield
Presenter: Haley Sater (MD)

8:30 am - 11:30 am **NATURAL RESOURCES/AQUACULTURE SEMINARS**
Coronado B
Presiding: Jody A. Gale (UT),

8:30 - 9:00 am
Waterers and watering systems: a handbook for livestock producers and landowners
Presenter: Stacie Edgett-Minson (KS)

9:00 - 9:30 am
Cultivating conservation for Maryland and Delaware's historically underserved farmers
Presenter: Sarah Hirsh (MD)

9:30 - 10:00 am
Citizen Science Academy
Presenter: Brooklyne Wassel (GA)

10:30 - 11:00 am
Weed wrangles: community-driven solutions in action for invasive species management
Presenter: Bonnie Wells (FL)

11:00 - 11:30 am
Conservation for Generations
Presenter: Kalyn Waters (FL)

8:30 am - 11:30 am **SUSTAINABLE AGRICULTURE SEMINARS**
Coronado C
Presiding: Anna Hodgson (PA), Heather Schlesser (WI)

8:30 - 9:00 am
Demonstrating the advancements of automated irrigation technology for adopting in fruit and vegetable crops
Presenter: Tyler Pittman (FL)

9:00 - 9:30 am
Reducing Herbicide Inputs in Vegetable Production
Presenter: Dwayne Joseph (MD)

TUESDAY, JULY 16

MEMBER

9:30 - 10:00 am
Conservation Through Education, Demonstration, and Implementation
Presenter: Donna Gentry (LA)

10:30 - 11:00 am
Passion Fruit: an emerging crop in Florida
Presenter: Mark Bailey (GA)

11:00 - 11:30 am
Bridging the GAPs through "writing Your Farm Food Safety Plan" Training
Presenters: Karen Cox (WV), Doolarie Singh-Knights (WV)

9:00 am - 3:30 pm **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, AND NACAA POSTER SESSION DISPLAY - OPEN,**
Trinity Exhibit Hall

10:00 am - 10:30 am **BREAK - Coffee and Refreshments**
Trinity Exhibit Hall
Courtesy: Houston Livestock Show & Rodeo, San Antonio Livestock Exposition, TCAAA Agents

11:45 am - 1:15 pm **COMMUNICATION/POSTER AWARDS LUNCHEON,** Coronado A (Invitation Only)
Presiding: Brittany Council-Morton (FL), Communications Chair and Nicholas Simmons (FL), Professional Excellence Chair
Courtesy: NACAA

11:45 am - 1:15 pm **SEARCH FOR EXCELLENCE IN LIVESTOCK PRODUCTION PROGRAM LUNCHEON**
Shelborne (Ticket Required)
Presiding: Linda McClanahan (KY), SFE Chair
Presenter: Mike Metzger (MI) – Nat. Winner
Topic: Emergency Response to Accidents Involving Livestock (ERAIL)
Presenter: Denise Schwab (IA), - Nat. Finalist
Topic: Boots in the Barn
Presenter: Blake Carter (GA), - Nat. Finalist
Topic: Cattle and Pasture Health Initiative"
Presenter: Kennedy McCall (OK), - Nat. Finalist
Topic: OKAN Cattle Conference
Courtesy: National Pork Board

TUESDAY, JULY 16

MEMBER

11:45 am - 1:15 pm **SEARCH FOR EXCELLENCE IN YOUNG, BEGINNING OR SMALL FARMS/RANCHER PROGRAM LUNCHEON,**
Metropolitan (Ticket Required)
Presiding: Leslie Rose (NC), SFE Vice-Chair
Presenter: Jonathon LaPorte, (MI) – Nat. Winner
Topic: Developing and Educating Managers and New Decision-makers (DEMaND) Series
Presenter: Harli B. Willis (AL), - Nat. Finalist
Topic: Operation Grow (OG) Program
Presenter: Allison Williams (FL), - Nat. Finalist
Topic: Ranching Foundations: Navigating the Fundamentals of Cattle Management
Presenter: Kennedy McCall
Topic: Small Acreage, Big Possibilities
Courtesy: NACAA
Courtesy: Farm Credit

11:45 am - **SEARCH FOR EXCELLENCE IN CONSUMER & COMMERCIAL HORTICULATURE PROGRAM LUNCHEON,**
Manchester (Ticket Required)
Presiding: David Handley (ME), SFE Vice-Chair
Presenter: Ruth Benner (PA), - Nat. Winner
Topic: Green Industry Workforce Development Online Courses

Presenter: Heather Neikirk (OH), Nat. Finalist
Topic: Stark County Community Seed Bank
Presenter: Madeline Flahive DiNardo (NJ), Nat. Finalist
Topic: The Rutgers Online Master Gardener Training Program
Presenter: Alexis Sheffield (KY), Nat. Finalist
Topic: Empowering Kentucky Farmers to thrive in the cut flower industry
Courtesy: NACAA

11:45 am - 1:15 pm **SEARCH FOR EXCELLENCE IN FARM & RANCH BUSINESS MANAGEMENT LUNCHEON,**
Monet (Ticket Required)
Presiding: Katie Wantoch (WI), SFE Vice-Chair
Presenter: Glennis McClure (NE) – Nat. Winner
Topic: It's as Easy as ABC - Figuring Cost of Production Using the Agricultural Budget Calculator Program
Presenter: Katie Wantoch (WI) – Nat. Finalist
Topic: Farm Pulse: Financial Management and Analysis Program

TUESDAY, JULY 16

Presenter: Samantha Gehrett (PA) – Nat. Finalist
Topic: Dairy Business Management
Presenter: Blake Carter (GA) – Nat. Finalist
Topic: Master Agri-Manager Program
Courtesy: NACAA

MEMBER

2:00 pm - 3:30 pm **LEADERSHIP ACADEMY**
Wedgewood
Presiding: Amanda Douridas (OH) - Chair

1:30 pm - 5:00 pm **EXTENSION DEVELOPMENT COUNCIL SEMINARS**

2:00 pm - 5:00 pm **LEADERSHIP AND ADMINSTRATIVE SKILLS**
Cortez C
Presiding: Dalton Dockery (NC)

2:00 - 2:30 pm
Providing and Receiving Adequate Feedback
Presenters: Nathan Hulinksy (MN), Sofia Macciavelli Giron (PR), Donna Hoffman (WY), Connie Strunk (SD), Suzika Pagan (PR)

2:30 - 3:00 pm
Leading from the Middle
Presenters: Mackenzie Gunn (VA), Amanda Bennett (OH), Linda Hieneman(KY)
3:30 - 4:00 pm
Leading Through Change and Innovation
Presenters: Ashley Wright (AZ), Jose Arocho (PR), Tyrone Fisher (NC), Edward Olsen (VA)

4:00 - 4:30 pm
Are Leaders Born or Bred?
Presenters: Blake Carter (GA), Matt Lollar (FL), Anitha Chirumamilla (ND), Heather Jennings (MS)

4:30 - 5:00 pm
Using Office Culture Development to Strengthen Intraoffice Communication
Presenter: Robbie Jones (FL)

2:00 pm - 4:30 pm **AGRICULTURAL ISSUES**
Coronado D
Presiding: MJ Fisher (ID), Emily Fread (PA)

2:00 - 2:30 pm
The Impact of a Farm Tour on Consumer Trust in Food Source Agricultural Products
Presenting: Kendall Lovejoy (OH)

TUESDAY, JULY 16

MEMBER

2:30 - 3:00 pm
Reviving Women in Agriculture Programming in Your State to Meet Underserved Audiences
Presenter: Charlotte Maxwell (SC)

3:30 - 4:00 pm
AgricultHer: A Social Media Campaign Highlighting Women in Agriculture
Presenter: Sherri Sanders (AR)

4:00 - 4:30 pm
Kitchen Table Conversations
Presenter: Nanette Neal (OH)

2:00 pm - 4:30 pm **EARLY CAREER DEVELOPMENT,**
Desota A
Presiding: Amanda Bennett (OH), Tim Waller (NJ)

2:00 - 2:30 pm
Engaging Potential Extension Donors and Sponsors
Presenter: Kent Stanford (AL)

2:30 - 3:00 pm
Building Success Together: The Transformative Power of Peer Mentoring for Early Career Agents
Presenter: Elizabeth (Lizzie) Catherine Whitehead (FL)

3:30 - 4:00 pm
The Value of On-farm Demonstrations for Agent Growth
Presenter: Kalyn Waters (FL)

4:00 - 4:30 pm
Empowering Education: Implementing a Program in Schools in Your County
Presenter: Ashley Stonecipher (FL)

2:00 pm - 5:00 pm **PROFESSIONAL IMPROVEMENT COUNCIL SEMINARS,**

2:00 pm - 5:00 pm **4-H & YOUTH**
Miro
Presiding: Kevin Camm (FL), Shannon Dill (MD)

2:00 - 2:30 pm
Coop to Plate: Growing Youth & Chickens in the Same Mission
Presenter: Alicia Halbritter (FL)

TUESDAY, JULY 16

MEMBER

2:30 - 3:00 pm
Mustangs Grow Pumpkins: Farm to Table and Everything in Between
Presenter: Blake Carter (GA)

3:30 - 4:00 pm
Building a 4-H Livestock Judging Program From the Ground Up: Impacting 4-H Youth Through Learning Evaluation Skills and Public Speaking
Presenter: Sawyer Fonnesbeck (ID)

4:00 - 4:30 pm
Botany Lab: Hands-On Horticulture for 4-H Homeschooled Youth
Presenter: Clarissa Chairez (FL), Erin Reichel (FL)

4:30 - 5:00 pm
Older Youth Beef Day Experience
Presenter: Garth Ruff (OH)

2:00 pm - 5:00 pm **AG ECONOMICS AND COMMUNITY DEVELOPMENT**
Cortez B
Presiding: Madeline Schultz (IA), Jacob Hadfield (UT)

2:00 - 2:30 pm
Beyond the Midway: Building Partnerships while Exploring Educational Opportunities at County Fairs
Presenter: Ashley Stonecipher (FL)

2:30 - 3:00 pm
Navigating the Aftermath of Microburst in a Florida Fernery
Presenter: Karen Stauderman (FL)

3:30 - 4:00 pm
Farm Pulse: Crop Insurance and Grain Marketing - A hybrid Canvas course for Wisconsin farmers
Presenter: Katie Wantoch (WI)

4:00 - 4:30 pm
The Power of Effective Partnerships
Presenter: Brittany Council-Morton (FL)

4:30 - 5:00 pm
The Pearls and Pitfalls of Conducting an Agritourism Economic Impact Study
Presenter: Melissa Fery (OR)

TUESDAY, JULY 16

MEMBER

2:00 pm - 5:00 pm **AGRONOMY AND PEST MANAGEMENT**
Cortez D
Presiding: Chris Grimes (AR), Travis Harper (MO)

2:00 - 2:30 pm
Extension Enables the Expansion of a Lepidopteran Monitoring Network
Presenter: Beth Scheckelhoff (OH)

2:30 - 3:00 pm
Nematode Community and Plant Growth Response to Root Leachate Treatments on Fruiting Vegetables in Low Desert of California
Presenter: Philip Waisen (CA)

3:30 - 4:00 pm
Fountain Grass - Friend or Foe?
Presenter: Anthony Ohmes (MO)

4:00 - 4:30 pm
Deposition Results of Different Style Spray Tips at Varying Speeds and Altitudes from an Unmanned Aerial System
Presenter: Alan Leininger (OH)

4:30 - 5:00 pm
Fungicide Evaluation for White Mold Suppression in Ohio Soybeans
Presenter: Lee Beers (OH)

2:00 pm - 5:00 pm **ANIMAL SCIENCE**
Morroco
Presiding: Kyle Sanders(AR), Betsy Greene (AZ),

2:00 - 2:30 pm:
Improving Production Efficiency through Cattle Reproduction Workshops
Presenter: Melanie Heaton (UT)

2:30 - 3:00 pm
Smoking and Grilling Foods
Presenter: Scott Jensen (ID)

3:30 - 4:00 pm
Beef Cattle Series: 101 & 201 Educational Cattle Workshops for Beginning, Veteran, and Established Cattle Farmers
Presenter: Hailey Partain (GA)

TUESDAY, JULY 16

MEMBER

4:00 - 4:30 pm
Pregnancy Diagnosis Programming for Beef Cattle Producers
Presenter: Amy Byington (VA)

4:30 - 5:00 pm
Equipping Agencies for Livestock Welfare and Emergency Response through Extension Partnerships
Presenter: Robyn Stewart (GA)

2:00 pm - 5:00 pm **HORTICULTURE AND TURFGRASS**
Cortez A
Presiding: Kate Kammler (MO)

2:00 - 2:30 pm
Profiting from Cultural Diversity: Exploring Cut Marigold Flowers as a New Crop for Florida
Presenter: Karen Stauderman (FL)

2:30 - 3:00 pm
Using Master Gardener Phone Line Data to Determine Chapter Training Needs
Presenters: Linda Chalker-Scott (WA), Sylvia Hacker (WA)

3:30 - 4:00 pm
Rutgers Japanese Stiltgrass Project: Volunteer Science in Action
Presenter: Pete Nitzsche (NJ)
4:00 - 4:30 pm
Propagating Native Plants from Local Germplasm
Presenter: William Errickson (NJ)

4:30 - 5:00 pm
Efficacy of Turf Organic Herbicides
Presenter: Kelly Nichols (MD)

2:00 pm - 3:00 pm **NATURAL RESOURCES/AQUACULTURE I**
Coronado B
Presiding: Jody A. Gale (UT)

2:00 - 2:30 pm
Utah small farms water quality grant program
Presenter: Elizabeth Cohen (UT)

2:30 - 3:00 pm
Virtual fencing in the canyonlands
Presenter: Cory Farnsworth (UT)

TUESDAY, JULY 16

MEMBER

2:00 pm - 3:00 pm **SUSTAINABLE AGRICULTURE**
Coronado C
Presiding: Kate Kammler (MO)

2:00 - 2:30 pm
Montana Beekeeping and Pollinator Education
Presenters: Shelley Mills (MT), Wendy Becker (MT)

2:30 - 3:00 pm
Soil Health Small Support Groups
Presenter: Jennifer Rees (NE)

3:30 pm - 5:00 pm **COMMERCIAL EXHIBITS CLOSE AND TAKE DOWN,** Trinity Exhibit Hall

4:30 pm - 5:45 pm **VIP/DONOR RECEPTION**
Hilton Presidential Suite Room 2472
(Invitation Only)

6:00 pm **STATES NIGHT OUT**

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

WEDNESDAY, JULY 17

6:30 am - 8:00 am **NATIONAL COMMITTEE MEMBERS BREAKFAST**
Coronado A (Ticket Required)
(For all Present & Incoming Committee Members)
Recognition of Retiring Committee Chairs, Vice Chairs & Special Assignments
Presiding: JJ Jones (OK), NACAA Vice President, Courtesy: NACAA

8:00 am - 2:00 pm **REGISTRATION**
Peacock Foyer

8:15 am - 10:15 am **GENERAL SESSION**
Trinity Ballroom
Presiding: Keith Mickler, NACAA President
- Call to Order and Welcome
- State Membership Awards
- Introduction of Guest Speaker, Kevin Camm (FL)
- Urban Ag Opportunities for Extension Agents - Dr. Julie Fox
- Introduction of Guest Speaker, Phil Durst (MI) Past President
- Update from NIFA, Dr. Manjit Misra

WEDNESDAY, JULY 17

MEMBER

- Introduction of Capstone Speaker Josh Kouns, CEA Ag/NR, Baylor County Texas
- RA Brown Ranch - Donnell Brown
- President Remarks - Keith Mickler, NACAA President
- Oklahoma Hat Presentation
- President-Elect remarks, Scott Jensen, NACAA President-Elect
- Announcements: Jo Smith & Jamie Sugg, 2024 AM/PIC Co-Chairs

10:15 am - 10:30 am: **BREAK - Coffee and Refreshments,**
Trinity Prefunction Area
Courtesy: TCAAA Agents

10:30 am - 11:00 am **NACAA POLICY MEETING**
Coronado C
Presiding: Cynthia Gregg (VA) , NACAA Policy Chair

10:30 am - 11:30 am **PROFESSIONAL IMPROVEMENT COUNCIL SEMINARS**

10:30 am - 11:00 am **AGRONOMY**
Cortez D
Presiding: Michael Rethwisch (CA)

10:30 - 11:00 am
Artichoke Variety and Nutrient Trials for Florida Production
Presenter: Evelyn Fletcher (FL)

10:30 am - 11:30 am **HORTICULTURE AND TURFGRASS I**
Cortez A
Presiding: Heather Neikirk (OH)

10:30 - 11:00 am
Evaluation of Systemic Spray Programs to Reduce Onion Center Rot
Presenter: Aubrey Shirley (GA)

11:00 - 11:30 am
Nebraska Extension Special Garden Project
Presenter: Elizabeth Exstrom (NE)

WEDNESDAY, JULY 17

MEMBER

11:00 am - 11:30 am **HORTICULTURE AND TURFGRASS II**
Cortez D
Presiding: Ginny Rosenkranz (MD)

11:00 - 11:30 am
Season Extension of Day-neutral Strawberries in Western Oregon
Presenter: Erica Chernoh (OR)

10:30 am - 11:30 am **4-H & YOUTH**
Cortez B
Presiding: Heather Jennings (MS)

10:30 - 11:00 am
Utah 4-H Horse Ambassadors: True Youth Adult Partnerships
Presenter: Jessie Hadfield (UT)

11:00 - 11:30 am
Eggsploring Science: 4-H Embryology Program Igniting Learning in Schools
Presenter: Ashley Stonecipher (FL)

10:30 am - 11:30 am **AG ECONOMICS AND COMMUNITY DEVELOPMENT**
Cortez C
Presiding: Chris Zoller (OH)

10:30 - 11:00 am
Senior Citizen Center Community Garden and Lunch and Learn Series
Presenter: Matthew March (TX)

11:00 - 11:30 am
Farming is a Business: Proactive Education to Teach Florida Farmers How to Develop or Improve their Agricultural Operation
Presenter: Luis Rodriguez (FL)

11:45 am - 3:00 pm **ADMINISTRATIVE LEADERS LUNCHEON & MEETING,** Manchester (Ticket Required)
Presiding: Phil Durst (MI), Past President
Presenters: Dr. Manjit K. Misra USDA NIFA Director, Dr. Julie Fox, Director of Strategic Initiative and Urban Engagement, Department of Extension, The Ohio State University
Hosted by: USDA NIFA

WEDNESDAY, JULY 17

11:45 am - 1:15 pm **PIPELINE AG SAFETY ALLIANCE EDUCATIONAL LUNCHEON,**
Coronado A (Ticket Required)
Program: Protecting Our Nations Farms As Well As Our Pipeline Infrastructure
Moderator: JJ Jones (OK), NACAA Vice President
Sponsored by: Pipeline Ag Safety Alliance

MEMBER

11:45 am - 1:15 pm **PROFESSIONAL IMPROVEMENT & SEARCH FOR EXCELLENCE LUNCHEONS,**

SEARCH FOR EXCELLENCE IN ENVIRONMENTAL QUALITY, FORESTRY & NATURAL RESOURCES LUNCHEON
Metropolian (Ticket Required)
Presiding: Linda McClanahan (KY), SFE Chair
Presenter: Kalyn Waters (FL) – Nat. Winner
Topic: Conservation for Generations
Presenter: Tyler Caston (AR) – Nat. Finalist
Topic: Aquatic Weed Control and Pond Management

Presenter: Jessica Warren (GA) – Nat. Finalist
Topic: Georgia Green Landscape Stewards Program
Presenter: Sara Marta (NM) – Nat. Finalist
Topic: Pasture and Range Management Camp
Courtesy: NACAA

SEARCH FOR EXCELLENCE IN SUSTAINABLE AGRICULTURE LUNCHEON
Madrid (Ticket Required)
Presiding: David Handley (ME), SFE Vice-Chair
Presenter: Heidi Reed (PA) Nat. Winner
Topic: Improving Soil Health and Farm Profitability with Cover Crops
Presenter: Daniel Leonard, (FL) Nat. Finalist
Topic: BMPs in the Basin - An Educational Campaign to Preserve the Chipola Basin & Promote Conservation Agriculture
Presenter: Maria Bowie (GA), Nat. Finalist
Topic: EDEN Conference 2023: Building Extension's Capacity for Emergency Preparedness showcasing Georgia's coastal resiliency efforts
Presenter: Kendal Bowman
Topic: Navigating Kentucky's Heirs Property Training On A Regional Level, Train the Trainer
Courtesy: NACAA

WEDNESDAY, JULY 17

MEMBER

1:30 pm - 4:30 pm **SUPER SEMINAR – Reading the Farm - SARE**
Coronado C
Moderator: Heather Schlesser (WI), Sustainable Ag Committee Chair
Presenters - SARE Fellows
Sponsored by: SARE

1:30 pm - 4:30 pm **SUPER SEMINAR – A Changing Way of Life: Ambiguous loss and farming Facilitator Training**
Cortez C
Moderator: Emily Krekelberg (MN)
Presenters: Emily Krekelberg (MN), Dr. Jenifer McGuire (MN)

1:30 pm - 4:30 pm **SUPER SEMINAR – Dealing with Drought in Gardens and Landscapes**
Coronado B
Moderators/Presenters:
Linda Chalker Scott (WA), Steve George(TX)

1:30 pm - 4:30 pm **SUPER SEMINAR – Introduction to Beekeeping for the Cooperative Extension Agent**
Cortez A
Moderators: Keith Fielder (GA)
Presenters: Keith Fielder (GA) Amy Trang (FL), Mary Bammer (FL), Ana Heck (MI)

1:30 pm - 4:30 pm **SUPER SEMINAR – How to Obtain Grant Funding**
Cortez B
Moderators: Connie Strunk (SD)
Presenters: Emmanuel Byamukama (TX), Jo Ann Warner (WA)

4:00 pm - 5:30 pm **NACAA BOARD RECEPTION**
Presidential Suite (Invitation only)

4:30 pm - 6:30 pm **FORMAL PICTURE OPPORTUNITY**
Location: Trinity Ballroom Pre-Function Area

5:00 pm - 6:30 pm **DSA & AA RECIPIENTS, HALL OF FAME RECIPIENTS, NACAA BOARD MEMBERS, REGION DIRECTORS, PAST OFFICERS, SPECIAL ASSIGNMENTS, SPECIAL GUESTS, COUNCIL COMMITTEE CHAIRS AND VICE CHAIRS ASSEMBLE FOR BANQUET**
Location: Trinity Ballroom Pre-Function Area

WEDNESDAY, JULY 17

6:30 pm **ANNUAL BANQUET**
Trinity Ballroom (Ticket Required)

MEMBER

9:15 pm - 11:00 pm **PRESIDENT'S RECEPTION**
Location: Presidential Suite Room 2472
Courtesy: Georgia Association of County Agricultural Agents

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

THURSDAY, JULY 18

6:00 am - 8:00 am **BREAKFAST**
Grand Ballroom
Courtesy: NACAA & TCAAA

6:00 am - 9:00 am **ASSEMBLE FOR PROFESSIONAL IMPROVEMENT TOURS**
Hilton Atrium

6:30 am - 9:00 am **TOUR DEPARTURES**
check your ticket time

4:45 pm - **NON-TOUR PARTICIPANTS - SHUTTLE BUSES TO DINNER AT STATE FAIR OF TEXAS WILL DEPART FROM** Grand Entrance

5:00 pm - 7:00 pm **FAREWELL DINNER**
State Fair of Texas
Sponsored by: State Fair of Texas, TCAAA Agents

5:00 pm - 7:00 pm Buses will run from State Fair of Texas To Hilton with last departure from Fair at 7:00 pm

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

FRIDAY, JULY 19

7:00 am - 6:00 pm **NACAA BOARD MEETING**
De La Salle

TRADE TALK SESSION TOPICS:

(Concurrent Sessions held Monday afternoon, July 15, 2024)

FORAGE/TURF, SAFETY, FINANCIAL
Coronado B

Barenbrug

Got Grass? Want Grass? Barenbrug USA, a division of the Royal Barenbrug Group of the Netherlands, is one of the world's leading grass seed companies. Whether you need grass to feed livestock, grass for sports activities or grass for your personal greenspace we have the variety for you.

Barenbrug has business operations all over every continent of earth, with the exception of Antarctica. With our worldwide presence, we can research and introduce new species and varieties into the North American market that enhance the Barenbrug motto of Safe, Sustainable and Profitable.

Pipeline Ag Safety Alliance,
Farming Safely Around Utilities

Whether it's installing a new fence, planting a garden, or maintaining a firebreak, every ground disturbing activity has the potential to impact a utility. Join the Pipeline Ag Safety Alliance to learn best practices on preventing damage to buried utilities while keeping land and communities safe and productive. This will be a shortened version of the luncheon to follow on Wednesday. For more information visit PipelineAgSafetyAlliance.com.

Farm Credit
Changing Borrower Demands

Walker Dailey was raised on a peanut, hay and cattle ranch in Comanche County Texas. He has been with AgTrust for over 10 years having worked his way up as an intern/ office assistant to now being the VP Lending in Denton.

Walker has a long history with Farm Credit. The ranch he grew up on was financed by a Farm Credit association, and both his mother and brother work for Farm Credit banks. Walker considers it a blessing to be in a position to help folks afford an agricultural lifestyle.

ANIMAL SCIENCE/CROP SCIENCE
Coronado C

Merck Animal Health

John Hutcheson, Ph.D., director of beef technical services, Merck Animal Health, will highlight and answer questions about the world's largest database of fecal egg count reduction test (FECRT) results and what they mean in terms of developing a strategic deworming program. Merck Animal Health offers a free FECRT kit to producers to evaluate their deworming program.

Bayer CropScience
Reniform Nematode Management Systems in West Texas Cotton

Reniform nematodes are a key pest in West Texas cotton production. Left unchecked nematodes can reduce the yield by ½ - 1/3 of potential production levels. A multi-year study was conducted in 2020 and 2021 to evaluate a tailored solutions approach of cultural, varietal and chemical practices, to combat this pest.

Truterra

Climate-smart farming and carbon are quickly evolving as potential revenue opportunities for farmers. Join Truterra, the sustainability business of Land O'Lakes, to learn about their farmer-centered programs designed to enhance on-farm resilience while creating new income opportunities.

Former UNL extension educator (and NACAA member) John Porter, Truterra outreach and partnership liaison, will discuss financial and other opportunities for farmers available through the company's $90M USDA Partnerships for Climate Smart Commodities grant. He'll also discuss new opportunities for historically underserved producers including minority, beginning, limited-resource, and veteran farmers and the organizations that work with them.

2024 SERVICE TO AMERICAN/WORLD AGRICULTURE AWARD RECIPIENT

Dr. Derrell S. Peel
Extension Livestock Marketing Specialist in the Department of Agricultural Economics at Oklahoma State University

The Oklahoma Association of Extension Agriculture Agents is pleased to nominate Dr. Derrell S. Peel for the NACAA Service to American/ World Agriculture Award. Dr. Peel holds the Breedlove Professorship of Agribusiness and serves as an Extension Livestock Marketing Specialist in the Department of Agricultural Economics at Oklahoma State University. With over 35 years of experience at OSU, Dr. Peel has cultivated a distinguished Extension program, integrated with applied research and teaching initiatives, showcasing a deep-rooted dedication to advancing knowledge and fostering global perspectives in agricultural economics.

In his role as an Extension Livestock Marketing Specialist, Dr. Peel's primary responsibilities revolve around developing and implementing comprehensive extension education programs tailored to the livestock industry. His duties encompass a wide range of activities, including the creation of educational materials, providing market analysis and outlook information, and supporting Area and County Extension personnel in delivering impactful educational programs. Moreover, Dr. Peel engages in applied research to enhance the effectiveness of educational materials and ensure the relevance of information provided to stakeholders. His expertise spans various areas, including Livestock Market Analysis and Outlook, Livestock Marketing Education and Risk Management, and the Economics of Stocker Cattle Production and Marketing, among others.

A pivotal aspect of Dr. Peel's career trajectory is his profound understanding of international cattle and beef trade dynamics. In the early 1990s, Dr. Peel recognized that the advent of NAFTA, along with emerging trends in global cattle and meat trade would change livestock marketing in the U.S. dramatically. Dr. Peel traveled extensively in Mexico with universities, producer groups, and government agencies. Through numerous international presentations, workshops, and publications, Dr. Peel has become a respected authority on the Mexican cattle and beef industry, fostering collaborative relationships and knowledge exchange on a global scale. His reach extends to other countries as well. Dr. Peel has made more than 25 international presentations as an invited speaker and workshop presenter at academic and industry conferences in Mexico, Argentina, Brazil, Vietnam, Scotland and Canada. You would be hard pressed to find a room of cattlemen anywhere, including Mexico and Canada, where the name Derrell Peel is not recognized and respected.

Dr. Peel is a fluent Spanish speaker and one of his notable achievements is the development of the Spanish version of Oklahoma's Beef Cattle Manual, a testament to his inclusive approach to education and outreach. By spearheading the translation process and ensuring linguistic accuracy, he has facilitated access to vital resources for Spanish-speaking cattlemen, furthering the dissemination of knowledge and best practices in diverse domestic audiences and across borders.

Beyond extension, Dr. Peel has been active in both research and teaching. Derrell has not had a formal research appointment for most of his career, yet his scholarly output in applied research includes more than 60 refereed publications and more than 55 selected papers and published abstracts at professional meetings. Dr. Peel exemplifies the full research/ extension circle of identifying relevant questions through Extension, applying solid science, and then creating science based Extension programming. Approximately 10% of that output addresses questions with an international focus or international implications, often with graduate students as he mentors them, continuing to plant the seed that the world is larger than what is right in front of us and that we must be open to see the whole picture.

Dr. Peel brings Extension into the classroom and also brings the classroom out into the field. He has played a pivotal role in facilitating international experiences for college students, including organizing Study Abroad courses to Mexico and more recently Scotland and Ireland. He is also leading educational tours for students domestically, specifically recruiting students that are international or from other states. His class on Oklahoma Agriculture Experiences is a series of tours that take students out of the classroom and across the state to see and touch every part of the food supply chain. He organizes tours for Oklahoma Cattlemen's Association groups and visiting producer groups from other states, with a specific emphasis on beef cattle production. Additionally, his involvement in the China Agricultural University program underscores his dedication to fostering cross-cultural understanding and collaboration in agricultural education. Dr. Peel pivots quickly, adopting new ways of reaching audiences. He has a weekly RFD radio spot on cattle markets with an extensive following, and created the Farm to Market podcast series that reaches new and non-traditional audiences by telling the stories of agricultural history and current issues in his characteristic humor.

In summary, Dr. Derrell S. Peel embodies the essence of the Service to American/World Agriculture Award through his unwavering commitment to integrating global perspectives into Extension, research, and teaching. His multifaceted contributions have not only enriched the agricultural community in Oklahoma but have also fostered meaningful connections and collaborations worldwide. Dr. Peel's career stands as a shining example of excellence in global education, deserving of the highest recognition and appreciation.

2024 AM/PIC SPEAKER PROFILES

Dr. Rick Avery
Texas A&M AgriLife Extension Director

Rick Avery, Ph.D., is the director of Texas A&M AgriLife Extension Service. As director of the largest Extension agency in the nation, Avery oversees agency programming in agriculture and natural resources, Family and Community Health, 4-H and Youth Development, and Community Economic Development.

Avery has an extensive background in both government relations and in government. Avery's Capitol Hill experience includes serving as an assistant for U.S. Senator Lloyd Bentsen and U.S. Rep. Greg Laughlin. Most recently he served as deputy director of the Brazos Valley Council of Governments. Avery's career in government also includes serving as county relations officer for the Texas Association of Counties, where he worked with elected and appointed county officials in all 254 Texas counties, providing technical support, continuing education and resource guidance to government operations.

At Texas A&M AgriLife, Avery previously served as AgriLife Extension's V.G. Young Institute director and Extension specialist, to provide continuing education to approximately 1,500 county officials annually through Institute schools.

While at V.G. Young, Avery spearheaded curriculum development for the popular Commissioners Court Leadership Academy, a two-year program that enhances the leadership skills of participating court members through advanced training and travel to explore innovations in local, state and federal government.

He also led development of the Commissioners Court Advanced Curriculum, a certification between AgriLife Extension, the County Judges and Commissioners Association of Texas, and the Texas Association of Counties.

A native of Needville in Fort Bend County, Avery was active in 4-H, FFA, and athletics. He earned a bachelor's degree in political science from Austin College and a master's degree in political science and doctoral degree in higher education administration from Texas A&M University.

Chancellor John Sharp,
Texas A&M University

John Sharp was appointed Chancellor of The Texas A&M University System by the Board of Regents in 2011.

As chancellor, Sharp leads one of the largest systems in the country with an annual budget of $7.8 billion and an enrollment of more than 153,000 students at 11 System universities. Additionally, under the System umbrella, there are eight state agencies.

Sharp earned a bachelor's degree in political science from Texas A&M University in 1972, where he was a member of the Corps staff of the Corps of Cadets, a member of the 1972 rugby team, and he was elected student body president. Upon graduation, Sharp was commissioned as a second lieutenant in the United States Army Reserve.

In 2018, Sharp was recognized as a Distinguished Alumnus, an honor given to Aggies who have achieved excellence in their professions and made meaningful contributions to Texas A&M and the communities. It is the college's highest honor awarded to former students.

In 1976, Sharp received a master's degree in public administration from Southwest Texas State University while working full-time with the Legislative Budget Board in Austin. In 1978, he opened a one-man real estate firm in Victoria.

Chancellor Sharp brings with him more than three decades of public service. He was elected to the Texas House of Representatives in 1978, and in 1982, he won a seat in the Texas Senate. Four years later, he was elected to the Texas Railroad Commission, and he was elected state comptroller in 1990 and re-elected in 1994.

Sharp is married to Diana (Atchison) Sharp. They exchanged vows on May 5, 2023. Between them, they have five adult children and six grandchildren.

Tiffany Dowell Lashmet,
Associate Professor &
Extension Specialist
Agricultural Law

Tiffany Dowell Lashmet is an Associate Professor and Extension Specialist in Agricultural Law. She is located in the Department of Agricultural Economics at Texas A&M University. Tiffany grew up on a family farm and ranch in Northeastern New Mexico where her family raised sheep, cattle, alfalfa, wheat and milo. Tiffany has a B.S. in Agribusiness Farm and Ranch Management (summa cum laude) from Oklahoma State University and a Juris Doctor (summa cum laude) from the University of New Mexico School of Law. Prior to coming to Texas A&M, she was engaged in private practice, working at a complex litigation firm in Albuquerque, New Mexico.

Dr. Jeffrey W. Savell, Vice
Chancellor and Dean for
Agricultural and Life Sciences,
Texas A&M University

In June 2022, Jeffrey W. Savell, Ph.D., was named by the Board of Regents as the vice chancellor and dean for Agriculture and Life Sciences.
He is a University Distinguished Professor, Regents Professor and E.M. "Manny" Rosenthal Chairholder in the Department of Animal Science at Texas A&M University.

In his long and acclaimed career at Texas A&M, he has taught many thousands of students. He has taught the introductory course in meat science, ANSC 307, teaching over 12,000 Aggies since 1982. He has also taught an undergraduate livestock and meat marketing class, and a graduate course in carcass composition and quality. He team-teaches a graduate and undergraduate course in the principles of Hazard Analysis and Critical Control Point, HACCP, and a freshmen class on Texas Barbecue. Savell has chaired or co-chaired over 150 graduate students who have become leaders in academia, industry and government. Recognition of his teaching accomplishments include the Association of Former Students at Texas A&M and the American Meat Science Association.

Savell's research efforts have been recognized by receiving numerous university, regional and national awards for individual and team efforts to solve key issues in the livestock and meat industries. Savell is a past president of

the American Meat Science Association, serves on the JBS Advisory Team on Quality and Safety, is a member of the Meat Industry Hall of Fame, and was identified by Stanford University as among the top 2% of most-cited researchers in the world in 2021.

Savell earned his bachelor's, master's and doctoral degrees from Texas A&M in 1975, 1976 and 1978, respectively.

Julie Fox, Ph.D.: Director of Strategic Initiative and Urban Engagement, Department of Extension, The Ohio State University College of Food, Agricultural & Environmental Sciences

Fox joined Ohio State in 1998, developing Ohio's direct ag marketing team, and then joined the Ohio State Extension administrative cabinet in 2014. She was one of the first steering committee members for the National Urban Extension Leaders (NUEL) and a member of the Extension Journal Inc. Board of Directors. She is the principal investigator for Ohio State's Urban Ag initiative with the USDA Farm Service Agency. Her background includes working in Africa, Asia, Australia, and Europe. For fun, she managed her 200+ acre tree farm in the rolling hills of southern Ohio.

General Session:
URBAN AG OPPORTUNITIES FOR EXTENSION AGENTS

Expand your perspective on urban ag through an exploration of what we know and what we can do.

See how members of NACAA are uniquely positioned to make Extension and agriculture stronger along the urban-rural continuum.

Administrative Leaders Luncheon
URBAN AG INSIGHTS FOR ADMINISTRATIVE LEADERS

Gain insights on into what we know about the urban context of scale, diversity, complexity, and the urban-rural interface. Explore what we can do through urban strategies that focus on positioning, programs, personnel, and partners.

Dr. Manjit K. Misra
Director, USDA National
Institute of Food and
Agriculture

Dr. Manjit Misra is the director of the USDA National Institute of Food and Agriculture, USDA's extramural funding agency in the Research, Education and Economics Mission Area.

Dr. Misra is a world-renowned scientist who has had a transformational impact on food security through the application of engineering principles to seeds, the most vital and fundamental element of food security. Prior to joining NIFA, he was the director of the Seed Science Center at Iowa State University, a position he held from 1991 to 2023. He also was the Endowed Chair of Seed Science, Technology and Systems.

Dr. Misra was sworn in to a six-year appointment as director of the USDA National Institute of Food and Agriculture on May 8, 2023.

NIFA invests in research, education and Extension at universities, research organizations and other partner organizations to develop innovative solutions for food and agriculture challenges facing the nation and the world.

Donnell Brown,
RA Brown Ranch

Donnell Brown is the fifth generation to own and manage the R.A. Brown Ranch, a family business since 1895, in Throckmorton, Texas. They raise registered Angus, Red Angus and SimAngus cattle and sell 600 bulls each October.
Donnell is a graduate of Texas Tech University. Prior to that, he served as President of the Texas FFA & as the National FFA President. He has served in a Strategic Planning capacity for four different breed associations as well as the National Cattlemen's Beef Association.

He and his wife Kelli are blessed with sons: Tucker, and Lanham. Together they are living their dream of raising cows, kids and Quarter Horses.

LIFE MEMBER & SPOUSE PROGRAM 2024 NACAA ANNUAL MEETING

(Life Members & Spouses are welcome to attend General Sessions and Voting Delegate Session)

SATURDAY, JULY 13

3:00 pm - 6:00 pm **REGISTRATION**
Peacock Foyer

3:00 pm - 6:00 pm **SCHOLARSHIP AUCTION ITEM DROP-OFF**
Peacock Foyer

SUNDAY, JULY 14

8:00 am- 7:00 pm **REGISTRATION & SCHOLARSHIP AUCTION DROP OFF**
Peacock Foyer
Registration Bag Courtesy: Creative Awards, TCAAA Agents

8:00 am - 5:00 pm **LIFE MEMBER & SPOUSES HOSPITALITY ROOM**
(See Registration for Room Number)

9:00 am - 1:00 pm **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, & NACAA POSTER SESSION SETUP**
Trinity Exhibit Hall
Coordinator: Nick Simmons (FL), Professional Excellence Committee Chair

9:00 am - 5:00 pm **SCHOLARSHIP SELECTION COMMITTEE**
Manchester
Presiding: Stephen Hadcock (NY), Scholarship Committee Chair

12:00 pm - 2:00 pm **PAST NATIONAL OFFICERS & BOARD LUNCHEON,** Ming
Presiding: Phli Durst (MI), Past President

2:00 pm - 2:45 pm **LIFE/SPOUSE ORIENTATION,** Monet
Presiding: Anthony Netardus (TX) and Brian Yanta (TX), TX Life Member Committee Co-Chairs

2:00 pm - 4:00 pm **FIRST LADY'S RECEPTION**
Hilton Presidential Suite Room 2472 (Invitation Only)

LIFE MEMBER & SPOUSE

SUNDAY, JULY 14

2:30 pm - 3:00 pm **BREAK - Coffee and Refreshments,**
Trinity Exhibit Hall

4:30 pm - 6:30 pm **WELCOME TO TEXAS DINNER**
Trinity Exhibit Hall- (Ticket Required)
Courtesy: NACAA/ John Sharp, Chancellor, Texas A&M University System

6:00 pm - 6:45 pm **PARENTS ORIENTATION FOR SONS AND DAUGHTERS PROGRAM,** Desota A
Presiding: Callie Zoeller (TX), Steven Baringer (TX)

7:00 pm - 9:00 pm **OPENING SESSION & INSPIRATIONAL PROGRAM,** Trinity Ballroom
- Welcome & Comments – Keith Mickler, NACAA President
- Posting of Colors –Ross Volunteers, Texas Aggie Corps of Cadets
- National Anthem & Pledge of Allegiance performed by: Mary Clare Foley, Texas 4-H Member
- God Bless America, 4-H Pledge, and Texas Pledge performed by: Lauryl Freeze, Texas 4-H Member
- Presentation of State Flags - Narrated by Tommy Phillips
- Service to American/World Ag Award – JJ Jones, NACAA Vice President and Keith Mickler, NACAA President
- Derrell Peel – Oklahoma State University
- Introduction of Speakers – by TCAAA State President Tommy Phillips
- -Welcome by Dr. Rick Avery – Texas A&M AgriLife Extension Director
- Keynote Speaker – Chancellor John Sharp, Texas A&M University System
- Closing Announcements –Jo Smith and Jamie Sugg, AM/PIC Co-Chairs

9:00 pm **ICE CREAM SOCIAL**
Trinity Exhibit Hall
Courtesy: Blue Bell Ice Cream

9:15 pm - 10:30 pm **HOSPITALITY ROOMS**
See registration area for room listings

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

LIFE MEMBER & SPOUSE

MONDAY, JULY 15

6:30 am - **MORNING GROUP EXERCISE**
Jade Oval

7:00 am - 5:00 pm **LIFE MEMBER & SPOUSES HOSPITALITY ROOM**
Continental breakfast, grab & go items, drinks, snacks and other refreshments throughout the day (See Registration for Room Number)

8:00 am - 5:00 pm **REGISTRATION & SCHOLARSHIP AUCTION DROP OFF (AUCTION ITEM DROP OFF CONCLUDES AT 12:00 NOON)**
Peacock Foyer

8:00 am - 9:30 am **LIFE MEMBER BREAKFAST (**Tickets Required)
Parkview

8:00 am - 10:15 am **GENERAL SESSION**
Trinity Ballroom
Presiding: Keith MIckler, NACAA President
- Call to Order & Welcome - Keith Mickler, NACAA President
- Happy Faces Video 2023
- Recognition of Donors, Scott Jensen, President-Elect
- Dan Kluchinski Memorial Scholarship Award, J. Craig Williams, NACAA Past President
- 2028 AM/PIC Hosting State Presentation (Georgia) - Justin Shealey
- Report to the Membership, Keith Mickler, NACAA President
- Intro Keynote speaker – Dr. Rick Avery – Texas A&M AgriLife Extension Director
- Keynote Speaker - Dr. Jeffrey W. Savell, Vice Chancellor and Dean for Agricultural and Life Sciences, Texas A&M University
- Intro Capstone Speaker -Dr. Dan Hale Associate Director for Ag and Natural Resources, Texas A&M AgriLife Extension Service
- Ag Law Hot Topics, Tiffany Dowell Lashmet, JD, Associate Professor & Extension Specialist Ag Law, Texas A&M AgriLife Extension
- Announcements - Jo Smith & Jamie Sugg, 2024 AM/PIC Co-Chairs

LIFE MEMBER & SPOUSE

MONDAY, JULY 15

LIFE MEMBER & SPOUSE

9:00 am - 4:30 pm **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, & NACAA POSTER SESSION DISPLAY - OPEN**
Trinity Exhibit Hall

9:00 am - 11:00 am **SPOUSE WORKSHOPS**
WORKSHOP 1 - Healthy Texas
Morocco

10:15 am - 10:45 am **BREAK AND MEET THE AUTHORS POSTER SESSION,** Trinity Exhibit Hall
Courtesy: Texas A&M College of Agriculture & Life Sciences, TCAAA Foundation

10:30 am - 11:45 am **LIFE MEMBERS BUSINESS MEETING**
Madrid
Presiding: John Campbell (TN), National Chair

11:45 am - 1:00 pm **SPOUSE/GUEST LUNCHEON** (Ticket Required)
Parkview
Presiding: Jennifer Netardus (TX), Wendy Yanta (TX)
Guest Speaker:
President Sam Houston,
by Jack Edmondson

1:30 pm - 4:30 pm **LIFE MEMBER & SPOUSE ACTIVITIES**
Grand Entrance
Buses will begin loading at 1:15 pm for both Activity 1 and Activity 2 at the Grand Entrance. Arrive as soon as possible. Buses will depart at 1:30 pm

ACTIVITY 1 – JFK Memorial Plaza and Dealey Plaza

ACTIVITY 2 – Perot Museum and Pioneer Plaza

2:00 pm - 4:00 pm **LIFE MEMBER & SPOUSE WORKSHOP**
WORKSHOP 2 - Go Texan
Morocco

3:00 pm - 5:00 pm **REGIONAL MEETINGS & CANDIDATE PRESENTATIONS**
SOUTHERN Region, Cortez A & B
NORTH CENTRAL Region, Cortez C & D
NORTHEAST Region, Desota B
WESTERN Region, Desota A

5:00 pm - **WELCOME TO TEXAS DINNER** - Fort Worth Livestock Show & Rodeo
LOAD BUSES AT 5:00 P.M.
Courtesy: Fort Worth Livestock Show & Rodeo, TCAAA Agents

MONDAY, JULY 15

5:00 pm **STATE PICTURES**
9:00 pm Fort Worth Livestock Show & Rodeo
(See back of program of State Order)

6:30 pm **NACAA SCHOLARSHIP SILENT AND LIVE AUCTION PREVIEW,** Fort Worth Livestock Show & Rodeo

7:30 pm **NACAA SCHOLARSHIP LIVE AUCTION**
Fort Worth Livestock Show & Rodeo

9:30 pm - 10:30 pm **HOSPITALITY ROOMS**
Hilton Anatole
See Registration area for room listings

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

LIFE MEMBER & SPOUSE

TUESDAY, JULY 16

6:30 am - 5:00 pm **LIFE MEMBER & SPOUSES HOSPITALITY ROOM**
Continental breakfast, grab & go items, drinks, snacks and other refreshments throughout the day (See Registration for Room Number)

8:00 am - 2:00 pm **REGISTRATION**
Peacock Foyer

8:30 am - 11:30 am **DELEGATE SESSION**
Wedgewood & Foyer

7:00 am - 4:30 pm **SPOUSE ACTIVITIES**
ACTIVITY - Granbury Walking Wine Tour
Gather at Grand Entrance

Buses will begin loading at 6:45 am for Activity 1 at the Grand Entrance. Arrive as soon as possible. Buses will depart at 7:00 am

8:00 am - 4:30 pm **ACTIVITY - National Cowgirl Hall of Fame and Fort Worth Stockyards**

Gather at Grand Entrance

Buses will begin loading at 7:45 am for Activity 2 at the Grand Entrance. Arrive as soon as possible. Buses will depart at 8:00 am

TUESDAY, JULY 16

9:00 am - 3:30 pm **COMMERCIAL EXHIBIT TRADE SHOW, EDUCATIONAL EXHIBITS, AND NACAA POSTER SESSION DISPLAY - OPEN,**
Trinity Exhibit Hall

10:00 am - 10:30 am **BREAK - Coffee and Refreshments**
Trinity Exhibit Hall
Courtesy: Houston Livestock Show & Rodeo, San Antonio Livestock Exposition, TCAAA Agents

3:30 pm - 5:00 pm **COMMERCIAL EXHIBITS CLOSE AND TAKE DOWN,** Trinity Exhibit Hall

4:30 pm - 5:30 pm **VIP/DONOR RECEPTION** (Invitation Only)
Presidential Suite – Room 2472

6:00 pm **STATES NIGHT OUT**

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

LIFE MEMBER & SPOUSE

WEDNESDAY, JULY 17

6:30 am - **MORNING GROUP EXERCISE**
Jade Oval

6:30 am - 5:00 pm **LIFE MEMBER & SPOUSES HOSPITALITY ROOM**
Continental breakfast, grab & go items, drinks, snacks and other refreshments throughout the day (See Registration for Room Number)

8:00 am - 2:00 pm **REGISTRATION**
Peacock Foyer

8:15 am - 10:15 am **GENERAL SESSION**
Trinity Ballroom
Presiding: Keith Mickler, NACAA President
- Call to Order and Welcome
- State Membership Awards
- Introduction of Guest Speaker, Kevin Camm (FL)
- Urban Ag Opportunities for Extension Agents - Dr. Julie Fox
- Introduction of Guest Speaker, Phil Durst (MI) Past President
- Update from NIFA, Dr. Manjit Misra
- Introduction of Capstone Speaker Josh Kouns, CEA Ag/NR, Baylor County Texas
- RA Brown Ranch - Donnell Brown

WEDNESDAY, JULY 17

- President Remarks - Keith Mickler, NACAA President
- Oklahoma Hat Presentation
- President-Elect remarks, Scott Jensen, NACAA President-Elect
- Announcements: Jo Smith & Jamie Sugg, 2024 AM/PIC Co-Chairs

9:00 am - 1:30 pm **LIFE MEMBERS & SPOUSES ACTIVITIES** -
Grand Entrance

Buses will begin loading at 8:45 am for both Activity 1 and 2 at the Grand Entrance. Arrive as soon as possible. Buses will depart at 9:00 am

ACTIVITY 1: The Star
ACTIVITY 2: Legacy West

LIFE MEMBER & SPOUSE

10:15 am - 10:30 am: **BREAK - Coffee and Refreshments,**
Trinity Exhibit Hall
Courtesy: TCAAA Agents

2:00 pm - 3:00 pm **SPOUSE WORKSHOP**
Art at the Anatole
Morocco

3:00 pm - 4:00 pm **SPOUSE WORKSHOP**
Cuisine at the Anatole
Morocco

4:00 pm - 5:30 pm **NACAA BOARD RECEPTION**
Location: Presidential Suite Room 2472 (Invitation only)

4:30 pm - 6:30 pm **FORMAL PICTURE OPPORTUNITY**
Location: Trinity Ballroom Pre-Function Area

5:00 pm - 6:30 pm **DSA & AA RECIPIENTS, HALL OF FAME RECIPIENTS, NACAA BOARD MEMBERS, REGION DIRECTORS, PAST OFFICERS, SPECIAL ASSIGNMENTS, SPECIAL GUESTS, COUNCIL COMMITTEE CHAIRS AND VICE CHAIRS ASSEMBLE FOR BANQUET**
Location: Trinity Ballroom Pre-Function Area

6:30 pm **ANNUAL BANQUET**
Trinity Ballroom (Ticket Required)

WEDNESDAY, JULY 17

9:15 pm - 11:00 pm PRESIDENT'S RECEPTION
Location: Presidential Suite Room 2472
Courtesy: Georgia Association of County Agricultural Agents

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

THURSDAY, JULY 18

LIFE MEMBER & SPOUSE

6:00 am - 8:00 am **BREAKFAST**
Grand Ballroom
Courtesy: NACAA & TCAAA

6:00 am - 9:00 am **ASSEMBLE FOR PROFESSIONAL IMPROVEMENT TOURS**
Hilton Atrium

6:30 am - 9:00 am **TOUR DEPARTURES**
check your ticket time

4:45 pm - **NON-TOUR PARTICIPANTS - SHUTTLE BUSES TO DINNER AT STATE FAIR OF TEXAS WILL DEPART FROM** Grand Entrance

5:00 pm - 7:00 pm **FAREWELL DINNER**
State Fair of Texas
Sponsored by: State Fair of Texas, TCAAA Agents

5:00 pm - 7:00 pm Buses will run from State Fair of Texas To Hilton with last departure from Fair at 7:00 pm

10:00 pm **TEXAS AM/PIC COMMITTEE MEETING**
Wedgewood & Foyer

SONS & DAUGHTERS PROGRAM
2024 NACAA ANNUAL MEETING

SATURDAY, JULY 13

3:00 pm - 6:00 pm **REGISTRATION**
Peacock Foyer

SUNDAY, JULY 14

8:00 am- 7:00 pm **REGISTRATION & SCHOLARSHIP AUCTION DROP OFF**
Peacock Foyer
Registration Bag Courtesy: Creative Awards, TCAAA Agents

4:30 pm - 6:30 pm **WELCOME TO TEXAS DINNER**
Trinity Exhibit Hall- (Ticket Required)
Courtesy: NACAA/ John Sharp, Chancellor, Texas A&M University System

6:00 pm - 6:45 pm **PARENTS ORIENTATION FOR SONS AND DAUGHTERS PROGRAM,** Desota A
Presiding: Callie Zoeller (TX), Steven Baringer (TX)

7:00 pm - 9:00 pm **OPENING SESSION & INSPIRATIONAL PROGRAM,** Trinity Ballroom

9:00 pm **ICE CREAM SOCIAL**
Trinity Exhibit Hall
Courtesy: Blue Bell Ice Cream

SONS & DAUGHTERS

MONDAY, JULY 15

8:00 am - 5:00 pm **REGISTRATION & SCHOLARSHIP AUCTION DROP OFF (AUCTION ITEM DROP OFF CONCLUDES AT 12:00 NOON)**
Peacock Foyer

7:45 am **SONS & DAUGHTERS GATHER**
Ming

8:00 am **SONS & DAUGHTERS DEPART FOR**
Day with Dallas Cowboys

1:40 pm **SONS & DAUGHTERS RETURN**
2:00 pm Ming

2:00 pm **SONS & DAUGHTERS GAMES & ACTIVITIES**
5:00 pm Ming

MONDAY, JULY 15

5:00 pm - **WELCOME TO TEXAS DINNER** - Fort Worth Livestock Show & Rodeo
LOAD BUSES AT 5:00 P.M.
Courtesy: Fort Worth Livestock Show & Rodeo, TCAAA Agents

5:00 pm **STATE PICTURES**
9:00 pm Fort Worth Stockyard (See back of program of State Order)

6:30 pm **NACAA SCHOLARSHIP SILENT AND LIVE AUCTION PREVIEW,** Fort Worth Stockyard

7:30 pm **NACAA SCHOLARSHIP LIVE AUCTION**
Fort Worth Stockyard

TUESDAY, JULY 16

8:00 am - 2:00 pm **REGISTRATION**
Peacock Foyer

7:45 am **SONS & DAUGHTERS GATHER**
Ming

SONS & DAUGHTERS

8:00 am **SONS AND DAUGHTERS DEPART FOR**
Texas 4-H Day

2:00 pm **SONS & DAUGHTERS RETURN**
2:15 pm Ming

2:15 pm **SONS & DAUGHTERS GAMES & ACTIVITIES**
5:00 pm Ming

6:00 pm **STATES NIGHT OUT**

WEDNESDAY, JULY 17

8:00 am - 2:00 pm **REGISTRATION**
Peacock Foyer

7:45 am **SONS & DAUGHTERS GATHER**
Ming

8:00 am **SONS & DAUGHTERS DEPART FOR**
Fort Worth Science & History Museum

1:30 pm **SONS & DAUGHTERS RETURN**
Ming

WEDNESDAY, JULY 17

1:30 pm - 5:00 pm **SONS & DAUGHTERS GAMES & ACTIVITIES**
Ming

6:30 pm - 9:00 pm **SONS & DAUGHTERS FAREWELL PARTY**
Monet

THURSDAY, JULY 18

6:00 am - 8:00 am **BREAKFAST**
Grand Ballroom
Courtesy: NACAA & TCAAA

6:00 am - 9:00 am **ASSEMBLE FOR PROFESSIONAL IMPROVEMENT TOURS**
Hilton Atrium

6:30 am - 9:00 am **TOUR DEPARTURES**
check your ticket time

4:45 pm - **NON-TOUR PARTICIPANTS - SHUTTLE BUSES TO DINNER AT STATE FAIR OF TEXAS WILL DEPART FROM** Grand Entrance

5:00 pm - 7:00 pm **FAREWELL DINNER**
State Fair of Texas
Sponsored by: State Fair of Texas, TCAAA Agents

SONS & DAUGHTERS

5:00 pm - 7:00 pm Buses will run from State Fair of Texas To Hilton with last departure from Fair at 7:00 pm

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2024 TEXAS DONORS & SPONSORS

LONE STAR
TCAAA District's 1-12 Agriculture Agents
Texas A&M University System
Texas County Agriculture Agents Association Foundation

PLATINUM
Texas A&M AgriLife Extension

DIAMOND
Texas A&M University College of Agriculture and Life Sciences

GOLD
Fort Worth Livestock Show & Rodeo
State Fair of Texas

SILVER
Alabama County Agriculture Agents
Arkansas County Agriculture Agents
Creative Awards
Georgia County Agriculture Agents
Heritage Land Bank
Houston Livestock Show
Louisiana County Agriculture Agents
Mississippi County Agriculture Agents
Oklahoma County Agriculture Agents
South Carolina County Agriculture Agents
Texas Farm Bureau

BRONZE
Advanced Composting Technologies
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Denton County AgriLife Extension
ENVU
Texas & Southwestern Cattle Raisers Association
Texas Master Gardener Association

LONE STAR - $40,000
PLATINUM - $20,000
DIAMOND - $10,000
GOLD - $7,500
SILVER - $5,000
BRONZE - $2,500
SUPPORTER - $1,000
FRIEND OF EXTENSION - <$1,000

2024 TEXAS DONORS & SPONSORS

SUPPORTER
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Denton County Master Gardener Association
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Rozell Sprayer Manufacturing Co
San Antonio Stock Show & Rodeo
Southern Region SARE
Tarrant County Master Gardener Association
Texas Beef Council
Texas Chapter International Society of Arboriculture
Texas Department of Agriculture
Titus County Leadership Advisory Board

FRIEND OF EXTENSION
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NACAA Annual Meeting and Professional Improvement Conferences

Year	President	Location
1916-1919	Heaton, Ed	Chicago, IL
1920	Kennedy, C.N.	Chicago, IL
1920	A.J. Dexter	Chicago, IL
1921-1922	Mosher, ML	Chicago, IL
1923	Merrill, JW	Chicago, IL
1924	Perdue, Calvin	Chicago, IL
1925	Kirkpatrick, K A	Chicago, IL
1926	Hedge, J C	Chicago, IL
1927	Palm, A W	Chicago, IL
1928	Bucholz, A B	Chicago, IL
1929	Olda, R L	Chicago, IL
1930	McKay, Morgan	Chicago, IL
1931	Mayhew, Earl	Chicago, IL
1932	Whonsetler, J E	Chicago, IL
1933	Clough, R S	Chicago, IL
1934	Douglass, Ellwood	Chicago, IL
1935	Kerrigan, P N	Chicago, IL
1936	Abbott, H E	Chicago, IL
1937	McConnell, Bright	Chicago, IL
1938	Boyd, George W	Chicago, IL
1939	McCormick, Dewey Z	Chicago, IL
1940	Parker, J Ed Jr.	Chicago, IL
1941	Ryall, E V	Chicago, IL
1942	Keller, C C	Chicago, IL
1943	Toyne, L V	Chicago, IL
1944	Beck, E D	Chicago, IL
1945	MacDougall, Allister F	Chicago, IL
1946	Sill, Weber H	Chicago, IL
1947	Nichols, H M	Chicago, IL
1948	Sterling, Stuart	Chicago, IL
1949	Logan, John Henry	Denver, CO
1950	Carter, Rex	Chicago, IL
1951	Bay, Ed	Memphis, TN
1952	Hoar, Sherman	Chicago, IL
1953	Kerr, L J	Philadelphia, PA
1954	Brown, Joe T	Salt Lake City, UT
1955	Williams, E O	East Lansing, MI
1956	Farrington, Fletcher	N. Houston, TX
1957	McDougall, R H	Boston, MA
1958	Bunnell, Marion	Seattle, WA
1959	Walker, Orville F	Kansas City, MO
1960	Rose, Carl E	Miami, FL
1961	Campbell, Howard H	New York, NY
1962	Trierweiler, Bernard G	Las Cruces, NM
1963	Barger, Paul	Minneapolis, MN
1964	Cook, Elmo	New Orleans, LA
1965	Thurston, Joseph S	Pittsburgh, PA
1966	Hansen, N John	Honolulu, HI
1967	Kunau, G J	Omaha, NE
1968	Estess, Ansel	Lexington, KY
1969	Whipp, Roscoe N	Atlantic City, NJ

1970	Esplin, Grant M	Corvallis, OR
1971	Iverson, Larry	Columbus, OH
1972	Strohbehn, Douglas W	Atlanta, GA
1973	Hibbard, Russell E	Baltimore, MD
1974	Marek, Richard G	Tucson, AZ
1975	Goodwin, Norman J	Milwaukee, WI
1976	Kennedy, Thurman J	Richmond, VA
1977	Jones, Robert L	Hartford, CT
1978	Koester, Ed	Boise, ID
1979	Juchartz, Donald	Rapid City, SD
1980	Smith, James A	Oklahoma City, OK
1981	Firth, Leslie N	Cornell University, NY
1982	Roberts, Wayne	Billings, MT
1983	Merrick, A Daniel	Wichita, KS
1984	D'Armond, Reymond	New Orleans, LA
1985	Sorensen, Dave	Hershey, PA
1986	Dictson, Billy	Colorado Springs, CO
1987	Davis, Bob	Fargo, ND
1988	Witherspoon, William D. "Billy"	Charlotte, NC
1989	Curran, G. Richard	New Brunswick, NJ
1990	Phillips, Dave	Seattle, WA
1991	Hawbaker, Stuart	Peoria, IL
1992	Tatum, Hal	Little Rock, AR
1993	Kelly, William C	Baltimore, MD
1994	Warnock, Doug	Casper, WY
1995	Sifferath, Warren	Bloomington, MN
1996	Jenkins, Jamie	Nashville, TN
1997	Moramarco, Donna W	Burlington, VT
1998	Drost, Don	San Antonio, TX
1999	Gary Hall	Omaha, NE
2000	Curtis Grissom	Jackson, MS
2001	C. David McManus	Albuquerque, NM
2002	Eddie Holland	Savannah, GA
2003	Steven Munk	Green Bay, WI
2004	Frank FitzSimons	Orlando, FL
2005	Glenn Rogers	Buffalo, NY
2006	Mickey Cummings	Cincinnati, OH
2007	Chuck Otte	Grand Rapids, MI
2008	N. Fred Miller	Greensboro, NC
2009	Richard Gibson	Portland, OR
2010	Phil Pratt	Tulsa, OK
2011	Stan Moore	Overland Park, KS
2012	Paul D. Wigley	Charleston, SC
2013	Paul Craig	Pittsburgh, PA
2014	Henry D. Dorough	Mobile, AL
2015	Mike Hogan	Sioux Falls, SD
2016	Cynthia L. Gregg	Little Rock, AR
2017	R. Mark Nelson	Salt Lake City, UT
2018	Alan B. Galloway	Chattanooga, TN
2019	Richard H. Fechter	Fort Wayne, IN
2020	Gene McAvoy	Virginia Beach, VA (Virtual)
2021	J. Craig Williams	Philadelphia, PA (Virtual)
2022	Bill Burdine	West Palm Beach, FL
2023	Phil Durst	Des Moines, IA
2024	Keith Mickler	Dallas, TX

STATE PICTURE SCHEDULE
Guests are welcome to join their home state delegation,
State DSA and AA recipients
will NOT be photographed at this time
(taken during award ceremonies)
STATE PICTURES WILL BE TAKEN AS PART OF THE CONFERENCE MONDAY NIGHT AT THE FORT WORTH STOCK SHOW & RODEO

BE PROMPT AS THESE MOVE QUICKLY

Monday
5:00 pm - 9:00 pm

Pictures will be taken in no particular order. It is recommended that your states gather and ride together on the bus from the Hilton to the Fort Worth Stock Show & Rodeo Dinner location (Monday Night) - so that when you arrive - you can quickly get your picture taken and then enjoy the rest of the evening events. State signs will be available for your group to use to help in the gathering process (and should be used in your picture).

FUTURE ANNUAL MEETING AND PROFESSIONAL IMPROVEMENT CONFERENCE DATES

2025 - Billings, Montana
June 29 - July 2

2026 - Denver, Colorado
July 8 - July 12

2027 - St. Paul, Minnesota
September 12-17

Notes

Hilton Anatole Map

Poster Session

Applied Research

2024 NACAA

109th
Annual Meeting
and
Professional Improvement Conference

Dallas, Texas

2024 Poster Session
Applied Research

1st Place

DETECTION OF PHYTOPYTHIUM VEXANS IN NEW JERSEY CONIFER NURSERIES

Timothy Waller
Agriculture & Natural Resources County Agent III
Rutgers
Millville

Waller, T. [1], Errickson, W.[2]

[1] Agriculture & Natural Resources County Agent III, Rutgers Cooperative Extension, New Jersey, 08332-9776
[2] Agriculture and Natural Resources County Agent III, Rutgers Cooperative Extension, New Jersey, 07728-5033

Oomycete diseases impact and limit production of virtually every plant on the planet, yet we are continually discovering new pathogens and species, lifecycle information, pesticide management patterns, and unravelling genetic relationships. Here one aspect of a recent USDA Specialty Crop Block Grant (USDA-SCBG) is evaluated, the very much unexpected detection of Phytopythium vexans, in multiple crops, locations, and production systems within New Jersey conifer nurseries, nursery stocks, and Christmas tree farms which challenged the research hypothesis that numerous oomycete species, primarily Phytophthora spp., are causing root diseases in NJ conifer nurseries. The main objective of the overall project was to map the oomycete species causing root diseases in NJ conifer nurseries. The isolation techniques utilized to detect oomycetes from roots via selective media and unique aerated off-site 'bating/trapping' detection techniques utilized for soil and waterway samples are discussed. The phylogeny (based on internal transcriber spacer gene loci (ITS4,6)) of collected isolates revealed a large proportion of Pp. vexans in addition to expected P. cinnamomi and P. cryptogea/drechsleri complex, species known to cause disease in conifers as well as numerous Pythium species (worthy of future exploration). This is particularly important because Pp. vexans has an enormous host range and could be a severe pathogen that has been going undetected (Ghimire & Baysal-Gurel, 2023) for some time. Additionally, many of the host detections may constitute First-Reports – pending completion of Koch's Postulates and re-isolations from mapped sites. Although preliminary oomycide efficacy data is beyond the scope of this deliverable, it appears likely that Pp. vexans is considerably less responsive to many Phytophthora-centric oomycides, which may have profound impacts on current and future management strategies. This marks a huge leap forward in understanding the oomycete species impacting conifer nurseries in NJ and beyond.

2nd Place

FOUNTAIN GRASS - FRIEND OR FOE?

Anthony Ohmes
Field Specialist in Agronomy
University of Missouri Extension
Jackson

Ohmes, A.[1], Bradley, K.[2], Trinklein, D.[3]

[1] Field Specialist in Agronomy, University of Missouri Extension, Missouri, 63755
[2] State Extension Weed Specialist, University of Missouri, Missouri, 65211
[3] State Extension Specialist in Floriculture, University of Missouri, Missouri, 65211

Johnsongrass, sericea lespedeza, multiflora rose, and perilla mint are examples of plants introduced to Missouri for forage, erosion control, or as ornamentals that have become troublesome weeds for producers. In fall of 2016, a pasture field in Cape Girardeau County, Missouri, had an unidentified grass that cattle would not graze. Working with University of Missouri (MU) State Weed Specialist and MU State Horticulture Specialist, the grass was identified as Chinese fountain grass, Pennisetum alopecuroides. This was the first reported site of this ornamental in a Missouri field. In the fall of 2016, I wrote an article for the Mid-America Farmer Grower magazine to raise awareness of this potentially invasive ornamental to farmers and ranchers. In collaboration with MU State Weed Specialist, an on-farm herbicide efficacy trial was conducted, in 2017, to help identify management options. Treatments included seven herbicides, mowing, and an untreated check. Fountain grass control data was collected at 4, 10 and 21 weeks after application. Results indicated that glyphosate was the only effective control. Mowing was not a viable management option due to the plant's ability to produce seed close to the ground. In 2018 and 2019, a greenhouse study was conducted on seed viability after glyphosate treatments 1-month and 1-week before frost. Results indicated that glyphosate reduced germination to less than 1%, regardless of application timing. Subsequent educational efforts led to identification in four additional counties across southern Missouri. Ongoing educational efforts have included articles and presentations across the state. As of 2023, 10 Missouri counties have confirmed

fields of fountain grass. This invasive species has also been identified along roadsides. In 2023, I was contacted by a University of Arkansas Extension agent about management options of fountain grass in northeast Arkansas pastures. With the increasing number of locations, a more robust research project will be conducted by the MU State Weed Specialist in 2024.

3rd Place

OKLAHOMA BROOMSEDGE BLUESTEM PASTURE RECLAMATION RESEARCH

Jennifer Patterson
Ext Ed Ag/4H
Stilwell

Patterson, J.[1], Pugh, B.[2]

[1] Ext Ed Ag/4H, Oklahoma State University , Oklahoma, 74960
[2] OSU Extension Area Agronomy Specialist, Oklahoma State University , Oklahoma, 74401

Broomsedge Bluestem (Andropogon virginicus) is an opportunistic-indicator plant, colonizing areas where inherent soil nutrients or grazing management are less than ideal for desirable forages, such as Bermudagrass. OSU research has proven that Broomsedge can flourish in soils low in Phosphorus (P) and acidic soils low in pH. Nevertheless, in Eastern Oklahoma recent reports have indicated Broomsedge dominating properly managed pastureland with adequate pH and Phosphorus levels. Some reports have indicated Broomsedge infestations reaching 25-50% ground cover within the last few years. It is believed that stressful environmental conditions, and the resultant weakened stands of desirable forages over the last 12 years has caused this increase in Broomsedge populations. Traditional Broomsedge control recommendations involved correcting soil nutrient deficiencies, improving grazing management, and time. With this unexpected Broomsedge increase in properly managed areas, local producers needed a control method with a quicker turnaround. Through an OSU Extension working partnership with a local Adair County OK livestock producer, a field research trial was established in 2022. The study was flagged as 10 ft x 20 ft plots arranged in a randomized complete block design. Fertilizer, lime and herbicide treatments were applied on July 14, 2022. Visual control ratings were assessed at 35 and 70 days after treatment (DAT), and plots were also evaluated at 10 months after treatment (MAT) to determine Broomsedge population reduction and forage recovery. Results showed the most significant reduction in Broomsedge population occurred with the application of 12oz glyphosate. The addition of required N, P, K, and lime to this herbicide rate elicited a fast response from the Bermudagrass and other desirable forages, aiding in stand recovery and further competing against surviving Broomsedge plants. This study illustrates that in severe Broomsedge infestations (over 50%) or if immediate forage recovery is warranted, an application of glyphosate at 12oz/acre proved effective with minimal injury to Bermudagrass. Correcting nutrient deficiencies and utilizing sound grazing practices are still the first step to improve desired forages. Results from this study were shared at the annual Adair County Pasture Tour, Cattlemen's Association programs, as well as across the state with other Educators and Specialists.

National Finalists

OPTIMIZING NITROGEN FERTILIZER RATES FOR ANNUAL CEREAL FORAGE PRODUCTION

Joseph Sagers
Extension Educator
University of Idaho
Rigby

Sagers, J.[1]

[1] Extension Educator, University of Idaho, Idaho, 83442

Nitrogen fertilizer is essential for cereal forage production, providing significant returns but also significant costs. Understanding nitrogen requirements is crucial for maximizing yield, quality, and cost-effectiveness while minimizing environmental impact. Different annual cereal forage species and cultivars may exhibit varying responses to nitrogen availability. This study was to determine the optimal nitrogen fertilizer rate for three forage barley (Hordeum vulgare) varieties ('Hays', 'Haybet', 'Lavina') and three forage oat (Avena sativa) varieties ('Monida', 'Otana', 'Ajay'). The study was conducted at the University of Idaho Aberdeen Research and Extension Center and Brigham Young University – Idaho (BYUI), Rexburg in 2021 and only at BYUI in 2022. The experimental design was a split-plot design where nitrogen rates (0, 35, 70, 105, 140 lb/ac) and variety were the main effects. At the Rexburg site, nitrogen rates significantly influenced dry matter yield in 2021 but not at the Aberdeen site, where the residual soil nitrogen concentration at planting was 141 lb/ac. Nitrogen rates had a significant effect on crude protein at both sites, although the impact varied between years. Following the first harvest, only oat test varieties showed significant regrowth, with a general decline in forage quality observed post-harvest. The optimal nitrogen rate for maximizing economic returns, taking into account pre-planting residual

soil nitrogen across both locations, was determined to be between 140-175 lb/ac. Forage quality assessments showed that crude protein percentages were above 13%, indicating premium quality, while total digestible nutrients percentages were above 52%, reflecting average to good quality in 2021 but slightly declined in 2022. The optimal nitrogen rate for maximizing economic returns generally for all varieties was determined to be 175 lb/ac across both locations. The study concluded that Lavina and Haybet barley, as well as Monida and Otana oats, were the most viable options for maximizing yield. Ajay oats can be chosen if forage quality is prioritized due to their short stature and are less prone to lodging. The research highlights the importance of considering local climate, residual soil nitrogen before planting, and variety-specific responses to nitrogen fertilization when optimizing forage production strategies.

OPTIMIZING GRAFTED WATERMELONS SPACING FOR YIELD AND PREVENTING FUSARIUM WILT

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Fusarium wilt, caused by Fusarium oxysporum f. sp. Niveum, poses a significant threat to watermelon production in Maryland, with limited fungicide options available. Grafted seedless watermelons offer a promising solution. University of Maryland Extension conducted trials evaluating the performance of grafted watermelons under fusarium pressure, identifying Carolina Strongback as a resilient rootstock. However, grafted seedless plants cost significantly more than traditional seedless plants, but because they exhibit more vigor than traditional seedless plants they may not need to be planted at the same density. This study focuses on the impact of plant spacing on yield, using grafted seedless plants where Fascination was used as the scion and Carolina Strongback as the rootstock. Experiments were conducted in 2022 and 2023 in two Counties in Maryland, St. Mary's on the Western Shore, and Wicomico County on the Eastern Shore. For both sites, both years transplants were grown in plastic with drip in a RCBD design with 4 blocks. There were three treatment levels of spacing near, medium, and far. Results from 2022 showed at both sites the medium spacing treatment of 6' between plants yielded the highest. However, in 2023 no statistical differences in yield were observed between treatments at the Wicomico site and the closest spaced treatment yielded the highest at the St. Mary's site. Both years, it was found that the farther spaced treatments yielded more pounds of melon per plant because the melons were statistically larger than those in the closer spaced treatments. Additionally, we found that the farther spaced treatments were ready to harvest earlier than the closer spaced melons with higher population density.

ADDITION OF METHYLOBACTERIUM SYMBIOTICUM (BLUE-N™) TO TRANSFORM®WG INSECTICIDE HAS LITTLE EFFECT ON APHID CONTROL BUT DOES RESULT IN SLIGHTLY HIGHER ALFALFA QUALITY AND YIELDS

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Several new bacteria which fix nitrogen in plant leaves have recently become commercially available with one of these being Methylobacterium symbioticum, being marketed as BlueN and Utrisha N. Local data for product efficacy were not available, nor were data for interactions when added to insecticides for controlling aphids in alfalfa. Transform WG was applied to alfalfa at 1 oz./acre with and without the addition of 5 oz./acre of BlueN to determine if any interactions existed for insecticide efficacy and/or resultant alfalfa growth. Replicated treatments (3 replications) were compared with untreated alfalfa utilizing a randomized complete block design and were applied at each of three different dates/growth stages of alfalfa regrowth: 3.6, 6.0 and 9.0 inches. Aphids were collected via 10 sweeps per plot weekly, sorted and counted. Alfalfa yields and quality data were also collected. Aphid data (total numbers of aphids) indicated that while Transform WG insecticide reduced aphid numbers relative

to untreated alfalfa, the addition of BlueN did not affect insecticide efficacy. Addition of BlueN to Transform WG did result in numerical, but not statistical, increases in both yield and quality (relative feed value) from all three application dates, with greatest increases noted from the last (9-inch) application. Yield increases from the BlueN and Transform WG combination treatment were noted to be statistically significant when compared to untreated alfalfa for the application to 9-inch tall alfalfa and when all data were combined.

EVALUATING THE PERFORMANCE OF ARMILLARIA ROOT ROT RESISTANT ROOTSTOCK 'MP-29' FOR SUSTAINABLE PEACH PRODUCTION IN ALABAMA

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Armillaria root rot (ARR) disease caused by a soilborn fungus (Desarmillaria caespitosa) is the second leading cause of peach tree mortality in the southeastern United States with estimated production losses averaging more than $8 million annually. Currently available chemical controls are not considered to be cost effective. Guardian® is presently the dominant rootstock for the southeastern peach industry primarily due to its superior tolerance to peach tree short life (PTSL). However, Guardian® is highly susceptible to the ARR pathogen. 'MP-29' is a recently released interspecific peach rootstocks that provides superior resistance to the pathogen without the adverse effect on scion fruit size and productivity. 'MP-29' is also a semi-dwarf rootstock that provides tree size control. To compare rootstock tolerance to ARR disease and evaluate tree size, yield, and fruit quality of 'Julyprince' and 'Bounty' peach cultivars grafted on 'MP-29' and Guardian® rootstocks, a site with a documented ARR history was selected at the Chilton Research and Extension Center near Clanton, AL in 2019. The experimental design is a randomized complete block with 12 single tree replications. Our 2021-2022 data suggest both 'Julyprince' and 'Bounty' trees grafted on 'MP-29' grew smaller during the period of initial establishment, while yield and fruit quality were comparable to the trees on Guardian® demonstrating the advantage of producing excellent crop on smaller, more efficienly manageable trees . Studies will continue to complete in depth evaluation of the overall rootstock performance in ARR infested productioin sites and provide a management solution for improved economic and environmental sustainability in peach production in Alabama.

QUANTIFYING IMPACT OF SOIL MANAGEMENT ON MOISTURE AND TEMPERATURE

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Focus groups with farmers indicated concern over cover crops keeping soil temperature and moisture from reaching ideal planting conditions as early as conventional tillage. This perception has inhibited adoption of cover crops due to delayed planting fears. To quantify this concern, METER TEROS 11 sensors paired with the ZL6 data logger were placed in fields under three management conditions: conventional tillage, no-till, and no-till with a cover crop. These sensors monitored soil moisture and temperature every hour throughout the spring and into the growing season at depths of 3 inches and 6 inches. This two-year study found, on average, soil temperature was largely the same through planting with tilled fields running 1-2°F warmer through the rest of the season. Soil moisture varied by treatment, location and year. When averaged by month for both years, no-till and cover crops soils were 1-2% wetter in April. In May, the cover crop field peaked as the highest moisture at 34%, followed by no-till at 32.5% and tilled at 31.3%. Looking at the data by individual year and/or location showed variances in these trends. These differences did not impact planting dates revealing each management style can be managed to meet desired planting goals for a farm. Funding for this work was provided by SARE North Central Region Research and Education Grant. Thank you to our farm partners for your participation in this effort.

COMPARING THE EFFICACY OF NON-SELECTIVE ALTERNATIVE HERBICIDES IN NEW MEXICO AND WESTERN OREGON

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Suppressing weeds in an urban landscape is becoming more challenging for landscape managers who work in areas where pesticide restrictions occur, and established vegetation must be eradicated without the use of traditional herbicide chemistries. To remain in compliance with these restrictions, the use of non-selective alternative herbicide active ingredients has been utilized in these weed control programs; however, there is limited research evaluating the actual efficacy and feasibility of these alternative herbicides in real-world applications. In 2022, field studies were conducted in Las Cruces, NM and Corvallis, OR to evaluate the efficacy of repeated applications of 10 alternative contact herbicides that conform to current and proposed municipal legislation in New Mexico and Oregon to provide better-management information to stakeholders for the use of these products in landscape systems. Results of this research indicated that all herbicide treatments provided effective broadleaf weed control in both Las Cruces and Oregon locations, with the exception of 5% mint oil + 5% sodium lauryl sulfate + 5% potassium sorbate treatments. However, repeated applications of all treatments were necessary to maintain extended control beyond herbicide injury symptoms observed following the initial application. In Las Cruces, NM, herbicide treatment injury reduced the density of monocots (both turfgrass and grassy-weeds) with repeated applications of 70% d-limonene, 7.5% sodium chloride, and 57% pelargonic acid treatments only. However, bermudagrass, which was the primary turfgrass located within the research area in Las Cruces, fully recovered within a month of the final herbicide treatments. As a result, alternative herbicides may be a useful tool for weed control in landscape systems; however, IPM practices are still required for successful and sustainable weed management since both weeds and the turfgrass eventually recovered in both locations regardless of treatment.

IDENTIFYING DISEASE IN GEORGIA ALFALFA

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Alfalfa (Medicago sativa) production is economically and nutritionally important to livestock and equine, but the management of alfalfa is more intensive than other forages. Georgia soils are typically lower in pH, and alfalfa requires a minimum of 6.5 pH in order to establish, grow, and promote nutrient intake from phosphorous and potassium applications. Soils with lower pH are at risk of aluminum toxicity. However, with Georgia's higher humidity level than much of the rest of alfalfa production areas, disease is certainly a major concern. The three most popular varieties planted in Georgia are Bulldog 505, Bulldog 805, and Alfagraze 600RR. Bulldog 505 and Bulldog 805 exhibit resistance to Fusarium wilt and Phytophthora root rot. Alfagraze 600 RR exhibits resistance to nematodes, Phytophthora root rot, Fusarium wilt, Anthracnose, and Verticillium wilt.

Disease resistant varieties do alleviate some management to several major pathogens known to infect alfalfa. Three sites in Jones and Putnam County were scouted from September 2022 to March 2023. During this time, four diseases were observed and confirmed through microscopy which included common leaf spot (Pseudopeziza medicaginis), Stemphylium leaf spot (Stemphylium spp.), Rhizoctonia solani, and Leptosphaerulina leaf spot (Leptosphaerulina briosiana). Additionally, of the 1,339 plants evaluated during this period, 84% exhibited signs or symptoms of disease. Future research would include a comprehensive study of diseases in relation to alfalfa in Georgia in order to determine the feasibility or economic impact of control through chemical applications.

NORTH CENTRAL REGION ENTRIES:

CORN EMERGENCE DEMONSTRATION

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A corn emergence demonstration was established at the University of Missouri Graves Chapple Extension and Education Center. The objective was to show how emergence if delayed decreased corn yield. Corn emergence was marked using different color stakes and then individual corn plants were followed through the growing season. Plants were evaluated for stunting, lodging, death, barren stalks and individual ears kernel weights measured. Corn plants started emergence 10 days after planting. More than 70% of the corn plants emerged the first day and anther 25% emerged the second day. The last plants emerged 12 days later. Stunted plants occurred throughout the emergence dates, not just the late emergers. Kernel ear weight was measured for each of the emergence dates and emergence dates with lodged plants caused by a straight wind. Lodged plants had reduced kernel ear weight compared to standing plants within emergence dates.

EVALUATING THE IMPACTS OF SULFUR ON MIXED, COOL-SEASON FORAGES IN EASTERN OHIO

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Historically, eastern Ohio has had some of the highest sulfur (S) soil test levels in the state due to the impact of coal energy production and atmospheric deposition. Currently we have seen soil test S reflected in Mehlich 3 (M3) analyses often report low (<15 ppm). Literature suggests that an eight-inch soil test is insufficient to completely describe sulfur availability, but many laboratories report M3 results as an initial indicator. When amending the soil, elemental sulfur or sulfate are the two forms to add S. Elemental sulfur takes many months to react and will cause acidification. Sulfate is found in many fertilizers and is readily available for plant uptake. Fields from three counties in Eastern Ohio with mixed, cool-season grasses were chosen for the study to compare yield and quality response to application of common fertilizer sources. Soil test sulfur in Jefferson Co. was 7.7 ppm, Licking Co. 8.6 ppm, and Muskingum Co. 18 ppm. Urea applications were applied at the rate of 110 lb/A; Ammonium Sulfate (AMS) at 238 lb/A; while the control received no inputs. Fertilizer applications were applied on July 26, 2023. The average dry matter yields of the S deficient plots at harvest were: control-903 lb/A; Urea-1,617 lb/A; AMS-1,747 lb/A. The average dry matter readings of the S sufficient plots were: control-559 lb/A; Urea-1,018 lb/A; AMS-1,128 lb/A. The response seen in the AMS and urea inputs were similar in both S sufficient and deficient plots. Quality analysis of the treatments indicated a similar response to urea and AMS. Our results indicate that forages in soils as low as 7.7 ppm S did not have a significant change with the addition of soluble S fertilizer as compared to a fertilizer without S.

THE EFFECTS OF TILLAGE PRACTICES AND FERTILIZER APPLICATIONS ON SOIL CO2 IN FARMS WITHIN STARK COUNTY, OHIO, U.S.A.

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Farm management practices can have significant, lasting effects on soil dynamics. Tillage practices spanning the

spectrum of conventional tillage to no-till systems affect the amount of crop residue on the soil surface. This residue is important for maintaining soil moisture and nutrient availability. Fertilizer applications, whether this be synthetic or organic, also have effects on soil nutrient cycling and overall soil health.

As part of the Stark Sustainable Soil Initiative (started in 2020), to determine how farm management practices affect soil health, we selected 12 farms in Stark County, Ohio. All participating farms use a variety of tillage techniques, fertilizer types and application rates. All are classified as having the canfield silt loam soil type (55% silt, 31% sand and 14% clay), which is the most common soil type in Stark County. In the Fall of 2023, soil cores were collected from both 0-15 cm and 15-30 cm depths. Soil cores were dried and sieved through 2mm mesh to determine several soil parameters including the carbon mineralization potential (CO2 burst). CO2 burst was used as a proxy for potential microbial activity that can be related to nutrient cycling.

Although there was no significant effect of tillage on CO2, our long-term hayfields (receiving no tillage), had the highest CO2 values compared to our cultivated fields. Whether farmers used manure as an organic fertilizer did not affect CO2. Overall, there was no significant loss of CO2 under intense tilling or lack of manure, at least within the context of our study design. Funding for this project was provided by the Herbert W. Hoover Foundation.

NORTH EAST REGION ENTRIES:

THE EFFECT OF POTASH FERTILITY ON ORCHARDGRASS FORAGE YIELDS IN MARYLAND

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Orchardgrass (Dactylis glomerata) is a popular forage species in the Mid-Atlantic region due to its yield potential and feed quality but it requires relatively high fertility levels, especially in a hay system where nutrients are being exported from the field. To test and demonstrate the importance of potash (potassium) fertility in orchardgrass plantings, a replicated trial was established at the Western Maryland Research and Education Center in Keedysville, MD in the fall of 2021. High (200 lbs/A), medium (45 lbs/A) and low (0 lbs/A) potash fertility rates were evaluated across three orchardgrass varieties. Consistent results were observed in 2022 and 2023 where the high and medium potash fertility program yielded significantly more per cutting and overall season dry matter yield than low potash programs. Variety 'Potomac' established quicker than the other two varieties, yielding more than 'Olathe' and 'Rushmore II' in the first year. No statistically significant interaction was observed between variety and potash fertility level. This project affirms the importance of maintaining proper potash fertility in orchardgrass plantings to maximize yields.

NATIVE PLANT NEEDS ASSESSMENT SURVEY OF NURSERY AND LANDSCAPE PROFESSIONALS

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Native plants are becoming increasingly popular choices for low-input ornamental landscapes in residential and commercial applications. However, there are currently several barriers to increased wide-spread adoption of native plants at the production level. Many nurseries and independent garden centers in New Jersey are currently growing or offering at least some native plants in response to this increasing demand. However, supplies are still limited and there are specific best management practices associated with growing, marketing, and maintaining native plants that need further development. To determine which priorities were most important to the green industry in New Jersey, Rutgers Cooperative Extension developed and disseminated a state-wide native plant needs assessment survey. The survey received 44 responses (n=44) from nursery and landscape professionals. Survey responses from stakeholders indicated native alternatives to invasive species, deer resistant native plants, and new cultivars of native plants were among the highest priorities

for Extension programming. Knowledge gaps in native plant propagation methods, managing insects, market potential, and disease management were identified. Based on this direction from stakeholders, Extension programming can be developed to effectively meet these needs to support the green industry in their production and marketing of native plants.

EFFECT OF AN IMPROVED GRAZING MANAGEMENT SYSTEM ON DAIRY HEIFER PERFORMANCE

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The objectives of this study are to investigate the effects of improved grazing management on pregnant dairy heifer performance, along with its economic feasibility relative to a conventional management system. Holstein heifers at the University of Maryland Dairy were utilized for this study on a rolling basis, with heifers added following pregnancy confirmation and removed three weeks prior to calving. Heifers (n=166; 2021-2023) were blocked by due date and randomly assigned to one of two treatment groups which varied in size throughout the study period (15 to 22 per group) but were kept consistent between treatments. Heifers in the control (CON) group received a daily TMR and had access to one continuously managed 5-acre perennial pasture. Heifers in the grazing (ROT) group were rotationally grazed across 19 acres of both perennial and annual pastures subdivided into approximately 0.5-acre paddocks (1-2 d rotation); ROT heifers also received a daily corn/mineral mix (1 lb/head/d) to ensure dietary requirements were met. Both groups of heifers were measured [BW, BCS, hip height (HH)] and fecal samples were collected on a bi-weekly basis throughout the grazing season (April-December). Average daily gain (ADG) was calculated by linear regression and data were analyzed using a mixed model analysis with statistical significance set at $P \leq 0.05$. Results are presented for the 2021 grazing season. Initial BW (1122 lb), BCS (3.7), and HH (145 cm) did not differ between ROT and CON heifers ($P > 0.05$). Final BW and HH did not differ, but final BCS was greater for CON heifers (3.7) compared to ROT heifers (3.5; $P \leq 0.05$). For both groups, heifer ADG varied considerably across weigh periods, but ADG was greater for CON compared to ROT (1.66 vs. 1.38 lb/d; $P \leq 0.05$). Fecal egg counts were very low for both groups but were lower for ROT heifers compared to CON heifers (9 vs. 16 eggs per gram; $P < 0.01$). Results indicate a slight growth disadvantage for heifers in the ROT system; however, heifer performance was still good and expenses for this system may be reduced compared to a conventionally managed system.

EVALUATING BIOSOLARIZATION AS AN IPM TACTIC IN VEGETABLE PRODUCTION

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Biosolarization is a soil disinfection technique similar to solarization, with the added step of incorporating organic amendments into the soil prior to the passive solar heating process. Studies have demonstrated its ability to enhance weed seed mortality and reduce soil pathogens. Moreover, biosolarization is well-suited for organic farming and can be utilized in climates where the long process of solarization may be impractical. Fruit processing by-products (pomace) emerge as promising soil amendments for biosolarization due to their richness in organic compounds, lack of biohazard risks, and cost-effectiveness. In this study, the biosolarization potential of a mixture of apple and grape pomace combined with a between-row living mulch was investigated as an integrated pest management (IPM) technique. Our objectives were to develop a novel practice that vegetable growers can utilize to manage multiple crop pests, including weeds. The study was performed at the Central Maryland Research and Education Center in Upper Marlboro, MD in organically managed eggplant. The study included four replicated treatments comprising of eggplant: 1) grown in living mulch + no-till (LM-NT), 2) interplanted with cover crops (LM), 3) grown in solarized soil (Sol), or 4) interplanted with a cover crop and grown in biosolarized soil (Biosol). The results indicated that Biosol plots had the lowest mean number of broadleaf weeds at all rating times. Broadleaf weeds were greatest in LM plots throughout the study.

Sedge weeds were significantly greater in Biosol and Sol plots compared to LM and LM-NT plots at all rating times. There were significantly more grass weeds in LM plots than LM-NT, Biosol and Sol plots at 2 and 4 WAP. However, at 6 and 9 WAP, Sol plots contained significantly more grass weeds than the other treatments. Eggplant yield was greatest in LM followed by LM-NT, Biosol then Sol plots. The findings tentatively suggest that biosolarization effectively controlled broadleaf weeds, although sedge control was minimal. Furthermore, biosolarization may be a potentially effective IPM tactic in vegetable production. However, more research is needed to validate these promising results.

SOUTHERN REGION ENTRIES:

REDESIGNED POLYMER-COATED PAPER MULCH FOSTERED HIGHER YIELDS THAN PLASTIC MULCH IN WATERMELON CROP

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Mulching refers to the use of a cover for the soil with a physical barrier that permits only the roots of the crop to be in contact with the soil. Benefits of mulching in horticultural crop production include increased water use efficiency by limiting soil water loss through evaporation, improved nutrient cycling, improved soil properties through the reduction of erosion, earlier yields, weed suppression, and increased micro- and macrobiological activity in the soil due to higher soil temperatures. Since they were first used commercially in the late 1950s, polyethylene mulches have become the preferred type of mulch among horticultural crop growers. Nondegradable polyethylene mulches, however, are produced from non-renewable, petroleum-based materials that typically are used for one growing season before being removed and discarded, exacerbating issues of plastic disposal and adding labor and expenses. Advances in the manufacturing of paper mulches have made this material a potential alternative to plastic mulch that is also cost-efficient due to weed control and labor hour reduction over the crop development cycle. This study aimed to compare the effectiveness of paper mulch (WestRock Gen 3, Richmond, VA) and the more commonly used standard low-density polyethylene (LDPE) mulch from the perspective of resistance to degradation, nutsedge emergence, and watermelon (Citrullus lanatus) early and total season yield. Data was collected on nutsedge emergence through mulch treatments, degradation rate of the mulch at the buried tuck, and marketable yield of watermelons.

No nutsedge was observed to pierce through any treatment of paper mulch throughout the entire watermelon growing season, while the LDPE mulch did allow nutsedge emergence. Total season yields were higher for the plants on the black paper mulch treatment than all other treatments. Future commercialization of Gen 3 paper in watermelon production will require a black color to warm the soil early in the spring season in Florida and to reduce sunlight penetration through the paper for weed suppression. On-farm demonstrations are currently being carried out in North Florida to increase farmer awareness of the benefits of the paper mulch and to assess further technological adjustments needed based on the farmer experience with this material.

GRAIN YIELD AND QUALITY RESPONSE TO FUNGICIDES ON WINTER WHEAT IN NC

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Wheat (Triticum aestivum.) is commonly grown across the United States, a nutritionally important cereal grain worldwide, and is second only to maize in production and utilization (Beta et al., 2020). Soft Red Winter (SRW) is commonly grown for poultry and swine feed in North

Carolina. In the Southern Piedmont of NC, SRW is primarily grown for its milling qualities to produce flour for human consumption. Acceptable falling number, protein, and test weight values will vary depending on the purchaser and the product that is intended to be made from the milled wheat (Post and Heiniger, 2021).
Fungicide applications are often recommended for winter wheat on a 'regularly scheduled' or 'preventative' basis, regardless of disease occurrence (Weisz et al., 2011). Research in North Carolina has shown that applying fungicides routinely to wheat is rarely profitable. However, applying fungicides when a disease is present, especially if the disease is over the recommended threshold, is profitable in most cases (Cowger, 2021).
The present analysis aimed to understand the impact of a 'fungicide program' on grain yield, test weight, and milling quality compared to a non-treated control in the Southern Piedmont of North Carolina. This work was completed over multiple growing seasons in a variety of different yield environments, and with variable weather conditions at the time of harvest.

OPTIMIZING WHEAT FUNGICIDE MANAGEMENT

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Fungicides are a significant input cost intended to protect yield and grain quality. This study investigates different fungicide application timings and modes of action to identify which fungicide approaches are most cost-effective for growers of soft red winter wheat in North Carolina. Small plots were planted at research stations in Salisbury, NC in 2020 and 2021, and in Kinston, NC in 2022 and 2023. No significant fungal diseases appeared in the test in the first two years and no economic benefit was found from applying fungicides in the absence of disease. In the 2022-2023 growing season, however, multiple diseases were observed in the plots. Disease severity ratings were conducted for powdery mildew, Septoria nodorum blotch (SNB) and leaf rust. Profit for each experimental treatment was calculated for the 2022-2023 growing season by calculating the local price/bu x yield. The input costs for fungicide management were then subtracted accordingly. They included the cost of the fungicide at the labeled rate, the cost of application, yield reduction for tire tracks and any dockage received for low test weight. When examining revenue, the only significant factor was timing (P=0.01). The treatments with applications at both top-dressing and flowering were the most profitable in the year with high disease pressure.

ANALYZING NEMATODE MANAGEMENT PRACTICES IN COTTON

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Root-Knot nematodes (Meloidogyne incognita) are detrimental to cotton production in Effingham and Screven Counties. Root-knot nematodes can hide underground in fields while showing symptoms above ground which could be confused with fertility issues, poor soils, or disease issues. This situation can lead to the wrong approach for management of the problem and cost producers' revenue. Cotton Producers in Georgia have virtually zero profit margin according to the May 2023 UGA crop comparison tool. The UGA Irrigated Cotton Crop Budgeting tool for 2023 shows a cotton farmer that locked into a contract in February of 2023 at 0.75/lbs. would have to yield a minimum of 1,000 lbs./acre to just break even. With a low profit margin, it is imperative growers maximize yield potential to prevent a negative return on investment. In 2022, Effingham County ANR Agent and the Southeast Agronomy Agent collaborated with a local producer and implemented a cotton variety trial to compare varieties and production practices when facing nematode pressure. Twelve treatments were selected, each replicated four times across the field. Out of those treatments, six were nematode resistant varieties, three were nematode susceptible varieties with a nematicide (AgLogic at 5lbs/acre), and those same three nematode susceptible varieties without the nematicide. The results from this trial revealed very impactful data. Root gall ratings showed the RK nematode resistant variety Phytogen 545 had the lowest root gall rating with only 3.7. Varieties such as

DP2141, PHY 411, ST5091 (with nematicide), and ST5600 out yielded the next statistically different variety by a range of 42-130lbs. The same number of nematode resistant varieties and susceptible varieties yielded above 1,000 lbs./acre, which meant 50% of the treatments in this trial yielded enough to either keep the grower out of the negative, or even make the farm profitable for the growing season.

EFFECTS OF NITROGEN SOURCES AND RATES ON DRY MATTER YIELD OF HYBRID BERMUDAGRASS

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The effectiveness of different nitrogen fertilizer sources for summer forage production is often discussed. There is debate whether urea nitrogen is less effective than ammonium nitrate for bermudagrass production. Most research shows either no or small differences in forage yield between these sources, yet the belief persists that much of the N in urea will be lost during hot summer weather. Further, new additives are available that reduce N volatilization losses from urea potentially improving its effectiveness for summer forage production. This study was initiated to compare the forage yield response of hybrid bermudagrass to ammonium nitrate, urea, urea with two N loss preventative additives, and urea ammonium nitrate (UAN 32%) applied at three N rates. Treatments were arranged as a randomized complete block design with four replications. The plots were harvested 4 times and clipped to a height of approximately 3 inches. Nitrogen sources were not significantly different for dry matter yield. Nitrogen rate did significantly influence yield with dry matter increasing with increasing N rate. The biggest DM increase per unit of N was from the 30 lb N per acre rate followed by the 60 lb N rate. It should be noted that each nitrogen application received rainfall within 5 days after nitrogen application.

EFFECT OF N RATE ON FORAGE YIELD OF LATE SUMMER PLANTED JERRY OAT

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As temperatures transition from a warm summer to a cool fall/winter, warm-season forage growth slows, and cool-season forage growth increases. This transition period can result in gaps of inadequate forage grazing seasons. Planting winter annuals late in the summer as warm season growth slows can provide ample forage to help fill these gaps in the grazing period. This study was conducted to determine the optimum nitrogen (N) application rate for forage biomass production in late summer planted jerry oats. Jerry oats were planted on September 12, 2023, at 100 lb. seed/acre using a Great Plains 606 No-till drill. Nitrogen treatments were applied by hand spreading Urea (46-0-0) at planting at rates of 30, 60, 90, 120, and 150 lb. N/acre, along with a no N control to monitor response to N fertilization. To prevent yield limitations and monitor N nutrient impact only, 120 lb. P2O5/acre and 150 lb. K2O/acre were also applied at planting. Plots were harvested on December 5, 2023, at a 4-inch harvest height by mowing and collecting the biomass. Forage biomass was weighed, and sub-samples were collected for moisture and nutritive value analysis. Application of N resulted in increased forage biomass production of late summer planted jerry oats compared to the control. Unfortunately, this data represents a single year which had an extended dry period following the fertilizer application that reduced the response to applied N.

ON-GOING FUNGICIDE AND GROWTH REGULATOR EFFICACY RESEARCH IN LOUISIANA PEANUT

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At the request of growers and with funding from the National Peanut Board, we have been investigating fungicide application timing and efficacy as well as growth regulator effects in peanut in Louisiana. On-farm efforts at five locations during 2021 and 2022 included comparisons of two applications of tebuconazole (7.2 fl oz/A) against one application of Elatus (9.5 oz/A) for Southern stem rot (white mold) management. Two applications of the growth regulator, Kudos (5.4 oz/A), also were compared to non-treated plots. Treatments were applied after canopy lap and at first sign of white mold. Treatments were as follows: tebuconazole (7.2 fl oz/A) applied twice, Elatus (9.5 oz/A) applied once, Elatus applied once plus Kudos (5.4 fl oz/A) applied twice, and Kudos applied twice. Significantly lower disease incidence was observed in fungicide-treated and Kudos-only treated plots compared to the non-treated control. Plots treated with Kudos had significantly higher row definition compared to the non-treated and Elatus only. Plots with no treatment yielded the lowest, and plots that were treated trended higher yields. Small plot fungicide and growth regulator efficacy trials were initiated in Winnsboro and St. Joseph, LA during the 2021 and 2022 growing seasons. Eleven labeled fungicides were applied to GA-06 plots at both locations. Stem rot incidence and severity was low and highly variable at both locations; therefore, results were inconclusive. Five rates of Kudos ranging from 1.8 to 9.0 fl oz/A were applied twice to GA-06 at both locations. In St. Joseph, row definition significantly increased with growth regulator rate, and in Winnsboro data trended the same. Unfortunately, harvest was impossible at both locations because of equipment issues. On-farm and small plot research continues during the 2023 season with equipment upgrades during the off-season.

COMMUNITY DEVELOPMENT AND LOCAL FOOD SYSTEMS: FOCUS ON CARTERSVILLE'S FARMERS MARKET IN GEORGIA

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Farmers markets are regular or seasonal community gatherings where local farmers, ranchers, seafood vendors, processed food vendors, and artisans can sell their local and sustainably grown products directly to community members. Markets participate in building or maintaining the network of local food systems. Following an important shift in consumer behavior in 2020, some farmers markets had to face a substantial increase in demand for local food products. Numerous surveys have emphasized consumer interest for fresh, high-quality local foods sold at farmers' markets. Furthermore, factors such as social appeal, convenience, and ambiance have played significant roles in determining the success of such ventures. Recent studies have broadened their focus to include social and environmental aspects, revealing the impacts that farmers' markets have on communities. This study is the result of a collaborative effort among faculty from the University of Georgia's Department of Agricultural and Applied Economics, the Center for Agribusiness and Economic Development, and the County Extension office in Bartow County, GA. This study aims to define the profiles and activities of visitors and buyers within the market, while also evaluating its economic, social, and environmental implications. Based on guidelines to evaluate local food systems and a buyers' survey conducted directly at the market during the 2022 season, the results underscore visitors' and buyers' high levels of satisfaction toward the Cartersville Farmers Market. In terms of strategic planning for farmers market practitioners, this study highlights three key points for consideration. First, it emphasizes the holistic nature of markets, where buyers value experiences,

ambiance, and social interactions with vendors and peers. Second, it underscores the potential of younger buyers as a demographic for local producers to engage with. Third, it advocates for partnerships between market organizers and nearby businesses, as these collaborations can foster economic development within the community.

EVALUATION OF 10 PRE-EMERGENT HERBICIDE COMBINATIONS AND RATES FOR NON-BEARING PECAN AT THE VIDALIA ONION RESEARCH CENTER

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As the Georgia pecan industry continues to grow, new growers are learning both farming practices and pecan production. Particular to Southeast Georgia, small – medium producers manage their operations on a marginal budget. The markets for post emergent herbicides became volatile in 2021, raising the price of each herbicide. Pecan growers commonly rely mostly on these herbicides for weed control. Continued use of these post-emergent herbicides incurred a 200% increase in weed control per acre in 2021. The area pecan agent applied 10 different pre-emergent herbicide combinations and rates in a randomized block design for both research and demonstration. Ratings were taken at 30, 60 and 90 days after treatment (DAT). A field day was held to display both herbicide plots and costs per acre to pecan growers in Georgia.As the Georgia pecan industry continues to grow, new growers are learning both farming practices and pecan production. Particular to Southeast Georgia, small – medium producers manage their operations on a marginal budget. The markets for post emergent herbicides became volatile in 2021, raising the price of each herbicide. Pecan growers commonly rely mostly on these herbicides for weed control. Continued use of these post-emergent herbicides incurred a 200% increase in weed control per acre in 2021. The area pecan agent applied 10 different pre-emergent herbicide combinations and rates in a randomized block design for both research and demonstration. Ratings were taken at 30, 60 and 90 days after treatment (DAT). A field day was held to display both herbicide plots and costs per acre to pecan growers in Georgia.

MISSISSIPPI LOG TRUCKING LIABILITY INSURANCE RATES: A HEDONIC ANALYSIS

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Rising liability insurance rates have negatively impacted log trucking business operations in Mississippi. This research used a statewide mixed mode log trucking business owner survey to analyze liability insurance rates and factors impacting them. A semilogarithmic hedonic regression model was developed to identify log trucking business characteristics that significantly influenced liability insurance rates. Marginal implicit prices were calculated to reveal an average per unit monetary contribution of each significant attribute while holding the others constant. The three-year inflation adjusted average for Mississippi companies was $12,466 per truck per year with the minimum value of $4,000 per truck per year and maximum of $24,404 per truck per year. On average, each year of owner experience provided a discount of -$68.15 to the mean insurance premium ($p=0.01$). Each additional 1,000 miles traveled by log trucks at the mean insurance premium was valued at $40.00 ($p < 0.01$); each safety violation, $3,125 ($p = 0.01$); and an overweight violation, $1,230 ($p = 0.03$). Statistical significance was not reported regarding insurance premiums and the implementation of safety practices and safety equipment ($p = 0.4939$). Companies were not directly rewarded for implementing safety practices but were penalized through increased policy rates when cited for safety and overweight violations. Investing in safety practices (e.g., regular truck inspections, truck driver training, repair, and maintenance programs, etc.) and safety equipment (truck scales, cameras, GPS, telematics, etc.) would reduce roadside inspection citations and crashes, which contribute to rising liability insurance premiums.

TOBACCO NEMATODE SURVEY IN TATTNALL AND CANDLER COUNTIES IN GEORGIA

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Soil borne pests can be some of the most difficult pests to control. These pests include a wide array of fungal, bacterial, nematode and insect species. Plant-parasitic nematodes (PPN) are microscopic worms that feed and reproduce in plant root tissue and severely impact yield, causing economic losses. Nematode surveys of tobacco fields have not been completed in over 40 years and updating knowledge of PPN species diversity in Georgia tobacco fields is important. The invasive and aggressive guava root nematode (Meloidogyne enterolobii) has been recently detected in Tattnall and Echols Counties and understanding the distribution of these pests is critical. In the fall of 2023, sampling was conducted between first and second tobacco harvest by Extension agents serving tobacco growing counties of Georgia. Sampling was conducted by randomly walking throughout each field collecting soil cores from 15 to 20 sampling points and a composite of three to four liters of soil were collected for each sample. Root-knot nematodes (RKN) were the most abundant and commonly found nematodes in Georgia's tobacco fields, including the fields surveyed in Candler and Tattnall Counties. These nematodes are considered the most aggressive group of PPN in the world. The highest density of RKN detected in the survey were 1,460 nematodes per 100 cc of soil. Whereas, the highest density of RKN in Candler and Tattnall counties were 1,314 and 765 nematodes, respectively. Of the remaining species collected in the state, reniform nematodes had the second highest population density in a field. However, only one field in Colquitt County was found to be infested with this nematode in our survey. The most destructive and important PPN population in Georgia tobacco fields are RKN populations. According to previous literature, these appear to be the most economically important nematode affecting tobacco to date.

EVALUATING PERCEPTIONS OF UGA EXTENSION HORSE RESOURCE CREDIBILITY AND ACCESSIBILITY USING DIFFUSION OF INNOVATION THEORY

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With over 7.2 million horses in the U.S., the equine industry is a thriving sector of agriculture (AHP, 2018). Horse owners rely on veterinarians and the internet for equine information, not Extension resources (Hartmann et al., 2017; Martinson et al., 2006; Spahn, 2005). The purpose of this study was to use diffusion of innovation theory as a basis for understanding the dissemination of UGA Extension innovation to horse owners (Rogers, 2003). Objectives were to describe the demographics of individuals using UGA Extension horse resources and to describe public perceptions of these resources. This preliminary study used a voluntary, anonymous online survey (Qualtrics, LLC, Provo, UT) consisting of 20 questions distributed to 1,300 individuals through email and social media during a 14-day period. A total of 221 responses were collected, of which 104 met the inclusion criteria. The majority of respondents were from Georgia (70.2%), horse owners or leasers (79.8%), and had 1-2 horses (37.5%) and reported current use of UGA Extension horse resources (70.2%). SPSS data analysis focused on determining differences in credibility and accessibility between respondents who currently use

UGA Extension horse resources and those who do not. Statistical significance was set at P<0.05. Independent sample t-tests revealed differences in perceived credibility and accessibility between users and non-users of UGA Extension horse resources. Respondents who currently use these resources perceive them as more credible (p=0.001) and accessible (p<0.001) than non-users. Further analysis across demographic categories showed variations in perceptions of credibility (p=0.008) and accessibility (p=0.005), which may reflect varying needs of equine industry stakeholders. The results of this study highlight that long-term engagement and targeted education are critical to building positive perception of UGA Extension horse resources. A future qualitative study should evaluate barriers to the use of UGA Extension horse resources by horse owners and industry stakeholders.

BREAKING THE SURFACE ON STRIP-TILL FEASIBILITY IN RANDOLPH COUNTY

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Long term no-till practices have left producers competing with compaction on the heavy clay soils commonly found in Randolph County, NC. One producer in particular was interested in adding strip-tillage into his production practices. The equipment needed to make this transition is expensive, and there is not a lot of data to suggest it would be economically justifiable. We identified a field that had a hardpan from 2 inches to 8 inches below the soil and has been in no-till for over 20 years.

The study's objective is to determine if the added costs of purchasing and using a strip-till implement is economically justifiable based on the potential impact on yield as compared to a no-till system.

A replicated strip trial was designed with two treatments, planting using a no-till planter and planting with the same no-till planter into the strip-tilled rows. The strip-till implement used was an Unverferth 332 Ripper-Stripper.

No statistically significant yield benefits were observed from the strip-till treatment as compared to the no-till treatment. The plants in the strip-till treatments were visibly taller and had deeper roots early in the season. While strip-tillage seemed to increase the health of the crop early season, it did not result in a yield benefit at harvest and therefore couldn't be economically justified based on this trial.

EVALUATION OF SYSTEMATIC SPRAY PROGRAMS TO REDUCE ONION CENTER ROT INCIDENCE

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The bacterial disease, Center Rot (Pantoea spp.) is the leading cause of loss in Vidalia Onions each year. In 2021, local Vidalia Onion agents conducted a survey assessing the need for research into center rot prevention. This survey showed that 94% of producers believe that center rot is a significant issue and over 69% of the respondents lose over $1000 per acre each year. Following this survey and for the past three years, local agricultural agents have evaluated four systematic approaches to center rot incidence in Vidalia Onions including a Low Input, Growers Standard, High Input, and Organic approach. Agents planted Vidalia Onion Varieties 'Pirate' or 'Century' in 20-ft plots consisting of 4 replications of each treatment with a 3-ft bare-ground buffer between each plot. All applications were made based on the input levels during the growing season. Treatments were applied with a backpack sprayer calibrated to deliver 33 gal/A at 40 psi through TX-18 hollow cone nozzles. Natural infection was relied upon for center rot contamination. Center rot bulb symptoms were assessed 14 days after harvest following incubation at 28? and 50% RH. Marketable yield, input costs, and total revenue were calculated for each treatment. Based on three year field assessments we observed that integrated management practices had an impact on marketable yield. The 'high input' treatment revenue was $1237.00 more per acre than the 'growers standard' even with similar infections. Organic treatment was also $367.00 more per acre than 'grower standard' and on average had an 9.04% increase in center rot incidence. Overall, the 'high input' treatment led to greater revenue despite having the greatest input cost.

OMISSION FERTILIZATION OF BAHIAGRASS PLOTS, A MULTI-YEAR STUDY

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This study examined the effects of omitting select macronutrients (nitrogen, phosphorus, and potassium) from fertilization treatments on bahiagrass (Paspalum notatum) on-farm plots in Florida to determine the impact on long-term stand health and production. The research was conducted in four counties over several years using a randomized complete block design. Treatments were as followed 1) full mineral fertilization, 2) biosolids (Class AA + muriate of potash) representing mineral-based and organic-based controls, respectively, 3) complete mineral fertilization minus N, 4) minus P, 5) minus K, and 6) no fertilization (check). Within the first season, forage production decreased over time without the addition of nitrogen, forage production decreased by the end of the second season without the additional of potassium and forage production remained equally high for treatments 1, 2, and 4 over 3 to six seasons. The low potassium treatment reduced stand density over time and increased weed intrusion as soil potassium concentrations decreased. The study concludes that soil amendments should be supported with tissue sampling to avoid excess phosphorus fertilizer applications and suboptimal soil potassium concentrations, to maximize forage production in Florida bahiagrass stands.

WESTERN REGION ENTRIES

BALANCING AGRICULTURE AND WILDLIFE: AN INVESTIGATION ON THE IMPACT OF ELK AND DEER GRAZING ON FARMING AND RANCHING LANDS

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This poster demonstrates producers' perceptions of elk and deer grazing on their private lands through a survey conducted at the American Farm Bureau Federation (AFBF) National Conference. This survey also dived into the relationship status of producers with wildlife officials. With 140 complete responses from producers across the nation, the study underscores the varying impacts of elk/deer grazing on a more nationally representative level. Out of the 140 responses, about 64% of producers experience some kind of issue with wildlife grazing on their private land, and roughly 23% participated in some kind of mediation effort. When asked about opinions of wildlife grazing around their operations, responses were nearly evenly distributed among positive, negative, or no opinion. About 43% of respondents reported positive opinions of wildlife outside of their operations, while about 24% were negative and the rest had no opinion. Most respondents (69%) reported positive relationships with wildlife officials while only 5% had a negative relationship and the rest had no opinion. These results highlight the need for thorough collaboration between agricultural and livestock producers with wildlife management authorities to address wildlife grazing impacts effectively. Our findings also address the opinions that many producers nationwide have toward wildlife in general. In conversation during the AFBF National Conference, it was clear that many producers enjoy seeing wildlife, however, they cannot put that value above the agricultural products they must produce.

COMPREHENSIVE SURVEY OF COMMON SCAB IN ALASKAN POTATO TUBERS

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Common scab, caused by soil bacteria in the genus Streptomyces, poses a significant threat to potato crops, leading to unsightly lesions on tubers and potential yield reduction. Dr. Leslie Wanner's 2009 scab survey for North America identified twelve pathogenic species of common scab, with five dominant species accounting for 98% of isolates. At that time, a handful of tubers from one location in Alaska were submitted for testing, which resulted in identifying only one species: S. europaeiscabiei. To provide updated insights into the prevalence and distribution of common scab across the state, the UAF Cooperative Extension Service in collaboration with the Alaska Plant Materials Center conducted a widespread survey covering potatoes harvested during the fall of 2021 and 2023. Harvested potatoes with lesions were excised and processed with a Qiagen DNA extraction kit. All the tuber lesions were analyzed via PCR. Results from the survey and implications for controlling potato scab in Alaska will be presented.

COMPARISON OF METHODS OF CONTROLLING POCKET GOPHERS

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Valley pocket gophers are a common agricultural pest in many areas of Utah, Nevada, and other western states. Pocket gophers predominantly eat roots, although they will pull vegetation into their burrows, and eat plants immediately adjacent to their burrow holes. They are called pocket gophers because they have external fur-lined pouches that they use to carry food. Pocket gophers are best identified by their cheek pouches and the soil mounds they leave behind as evidence of their tunneling or burrowing activities. Unlike other fossorial rodents (rodents that live under the ground), pocket gophers are active year-round. Because of this, they do more damage than many of the other rodents. They cost farmers hundreds of thousands of dollars annually in control cost and damage to haying equipment and loss of crops. A variety of methods are available to manage these populations but there are many questions about which method works best. Utah State University Extension has compared methods of controlling pocket gophers and conducted research plots in ten different counties throughout the state. These methods include trapping, applying bait into the burrows, and using different kinds of fumigants. Some farmers in Utah have purchased the Gopher General. It is a machine that is pulled behind a tractor and meters a slow-release fumigant product into an artificial tunnel. The fumigant gas released stays below ground, spreads throughout the tunnel and moves through the soil. All the control methods tested showed some control, but more research is needed to determine the best method. The research shows that farmers trying to control pocket gophers should pick the control method or methods that works best for them and their operation and continue it throughout the season and coming years.

MICROBIAL RISK ASSESSMENT OF SOIL AMENDMENTS IN ORGANIC ROMAINE LETTUCE, CALIFORNIA'S LOW DESERT, 2023 SEASON

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The use of biological soil amendments of animal origin (BSAAO) and organic liquid fertilizers in leafy green production raises concerns about the potential growth or survival of pathogenic Escherichia coli. While BSAAO has been extensively studied, the microbial food safety implications of sugar-based organic liquid fertilizers, such as corn steep liquor (CSL), remain largely unknown. This study aimed to evaluate the survival of rifampicin-resistant E. coli TVS 353 in soils amended with heat-treated poultry pellets (HTPP), seabird guano pellets (SBG), and CSL used for growing organic romaine lettuce in California's Imperial Valley during the 2023 growing season. Eight treatments were evaluated: Control (no amendment), HTPP-1 (one application), HTPP-2 (two applications), SBG-1, SBG-2, CSL, CSL+HTPP, and CSL+SGB. Romaine lettuce transplants were planted in triplicate plots, and soils were inoculated with rifampicin-resistant E. coli TVS353 (7-8 log CFU/mL). E. coli levels were quantified via direct plating and most probable number (MPN) assays from soils and lettuce plants at harvest (42 days). Weather data, soil temperature, and moisture were recorded throughout the trial. All treatments showed a 3-5 log CFU/g reduction of E. coli in soils within 21 days and an approximately 7 log CFU reduction by day 42, with no significant differences ($p>0.05$) between treatments. However, CSL treatments supported higher levels of E. coli on the lettuce plants compared with BSAAOs ($p<0.05$). Increased E. coli reduction in soils correlated positively with higher soil temperatures and longer sunlight exposures during the growing season. These findings suggest that while BSAAO and CSL amendments may initially support E. coli growth, environmental factors, such as temperature and sunlight exposure, play a crucial role in reducing E. coli levels in soils over time. However, the potential for CSL to support higher E. coli levels on lettuce plants compared to BSAAO warrants further investigation to ensure the microbial safety of organic leafy green production systems.

EXCLUDING PIGEONS FROM BUILDINGS WITHOUT SPIKES, NETS, OR CHEMICALS

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High numbers of pigeons on buildings can lead to disease concerns, damage to property, and a public nuisance. Urban environments increase the defensive space from predators and provide an abundance of food resources leading to overpopulation and increased disease risks for the human community. Pigeons are associated with many disease-causing pathogens, some of which pose a threat to people in Arizona. Individuals who are immunocompromised are especially vulnerable. It is estimated that pigeons also cause approximately $1.1 billion of damage every year in the United States. Numerous tactics including spikes, nets, lasers, chemicals, sound cannons, and other devices have been used to deter pigeons from public areas. However, pigeons habituate to some things and may be harmed by others. The ability to detect magnetic fields is a sense used by a wide array of animals to navigate. We investigated the use of a commercially available, constantly reversing-polarity electromagnetic field to create a pigeon exclusion zone. Pigeons were successfully repelled from a building with the device installed. Additional work is ongoing, investigating the effects on invertebrate organisms.

Poster Session

Extension Education

2024 NACAA

109th
Annual Meeting
and
Professional Improvement Conference

Dallas, Texas

2024 Poster Session

Extension Education

1st Place

GREEN UNIVERSITY: LEARNING PESTICIDE BASICS AND CATEGORY 24 TOPICS THROUGH LECTURE AND LABS

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Georgia's green turf and ornamental industry is an important economic contributor across the state, valued at over $1.37 billion dollars annually. This agricultural commodity is more complex than other production systems due to its clientele diversity, widespread impact, and increased need for certified pesticide applicators and pesticide safety education. Extension personnel sought to assist green industry professionals preparing for their commercial pesticide applicators exam as well as those needing recertification hours by offering a two-day program with a novel format combining experiential labs and traditional lectures. Green University was offered as a dual-language program in both English and Spanish running concurrently to serve a diverse audience in collaboration with 13 Extension agents and specialists. One day focused on the National Pesticide Applicator General Standards, and the following day focused on Georgia's Category 24: Turf and Ornamental Pest Control curriculum. The program offered traditional lectures in the morning coupled with hands-on laboratory sessions in the afternoon which aimed to integrate experiential and traditional teaching principles to educate participants about pesticide stewardship, increase understanding of integrated pest management (IPM) principles in urban landscapes, and prepare participants for the Georgia Commercial Pesticide Applicators Core and Category 24 Exam. Thirty-four participants were engaged in 12 hours of programming across two days earning 165 recertification credit hours. Feedback indicated participants were more confident understanding the importance of personal protective equipment (PPE), aware that they are responsible for the environmental impacts of pesticide applications, and 72% strongly agreed information from these classes would help them in the future. Eighty percent of post-program respondents agreed they understood and could make an IPM for the pest they have identified, while also stating they will use UGA Extension for resources moving forward. Implementing IPM plans in green industry production systems can increase the efficacy and decrease the quantity of pesticides applied in urban landscapes. This can reduce operation costs and potential off-target pesticide movement. Contributors will continue to host Green University programming annually to meet the needs of Georgia's turf and ornamental pest control operators.

2nd Place

MONTANA BEEKEEPING AND POLLINATOR EDUCATION

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Honeybees and pollinators are of critical importance to global food production and play a major role in the success of Montana's primary industry, agriculture. Beyond the fascination and rewards of keeping bees, humans are deeply concerned about the wellbeing of bees and other pollinators. Colony collapse disorder and declining populations have spurred an interest in education regarding beekeeping, habitat preservation, restoration of beneficial insects, floral resource availability and the sustainability of modern agriculture. This desire for further information resulted in 23 targeted educational outreach events by MSU Extension Agents in Montana reaching 734 clients and the creation of a networking club of 84 people. The Agents responded by self-educating, keeping bees of their own, training to be local resources, and then offering a series of educational events across Montana. The approach was targeted to provide information relevant to the audience and with a focus on advancing beekeeping abilities from introductory to mastering beekeeping. The Bee Team has incorporated a multi-pronged approach to providing education, resources, and outreach to audiences such as youth, educators, hobbyist beekeepers, pesticide applicators, and interested

parties. Introductory short courses, hands-on field events and workshops, in-service learning instruction, innovative curriculum and tools, and the placement of a grant-funded 6-colony beekeeping learning laboratory were developed to enhance learning. Topics covered included introduction to beekeeping, identification and management of pests and diseases, honey and wax production, pollinator-friendly gardening, hive management, equipment, and pollinators and pesticides. Evaluative surveys show that the top learning points were beginning beekeeping, pest management, improved awareness of honeybees and pollinators, and successful overwintering of colonies. On average participants increased their confidence in beekeeping by 39%, and their confidence in managing hive pests by 56%. Armed with their new knowledge, participants feel more comfortable diving into beekeeping, pesticide applicators have a better understanding of laws and regulations surrounding bees, youth are more secure around bees, and pollinator programs with government agencies are on the rise.

3rd Place

PROMOTING HYDROPONIC EDUCATION IN SOUTHEAST MISSOURI

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Hydroponic growing methods can be a sustainable alternative over traditional growing methods of specialty horticultural crops. The purpose of this educational programming was to educate students, hobbyists, secondary education ag teachers, and growers about sustainable hydroponic farming through a combination of lecture, demonstration, printed guide sheets, recorded video interviews, and hands-on activities. From 2021 to 2023, there were 34 events that took place with various topics related to hydroponic production. These included introduction to hydroponic crop production focusing on different types of hydroponic systems, growing, and managing hydroponics crops, understanding pH and EC in nutrient solutions, monitoring and managing diseases, pests and environmental stresses, and career opportunities in hydroponics. In addition to the educational events, numerous PowerPoint presentations, resource guides, schematic drawings and a video was created aide participants with hydroponic growing. In schools, 54 students gained experience operating and growing in three different hydroponic units (nutrient film technique (NFT), deep water culture, Dutch Bucket, and aeroponics). They grew lettuce, kale, basil and tomatoes through a crop cycle. At one-day events, 396 students learned about hydroponics and watched demonstrations. During workshops, 229 adult learners experienced active hydroponic systems through lecture and hand-on experiences and learned how to operate the systems. In the evaluations, all participants indicated a knowledge increase. All participants reported an increase in knowledge of hydroponics. All three teachers in the schools continued to teach hydroponics after the program sessions ended. Four students pursued horticulture in college and are considering hydroponics. 37 students tried hydroponics at home after the programs. Four of the high school purchased hydroponic supplies online before the one of the educational events was over.

NATIONAL FINALISTS

CULTIVATING CONSERVATION FOR MARYLAND AND DELAWARE'S HISTORICALLY UNDERSERVED FARMERS

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Navigating conservation practices and programs can be confusing and intimidating, especially for farmers who do not yet have a relationship with sponsoring agencies. The USDA identifies four groups of farmers as "Historically Underserved (HU)"—Beginning; Socially Disadvantaged; Veterans; and Limited Resource. Despite earmarked provisions and services, HU farmers' involvement with

agencies and enrollment in conservation programs remains lower than desired. "Cultivating Conservation" is an educational effort to increase knowledge of conservation opportunities particularly among HU farmers. The program strives to improve the environmental and economic performance of working agricultural lands and build capacity of local partners to develop and implement effective projects. University of Maryland Extension partnered with the Agriculture Law Education Initiative, University of Delaware Cooperative Extension, NRCS, and Soil Conservation District offices to develop and teach programs. Curriculum discussed conservation practices, programs, and sponsoring agencies, how conservation fits within farm planning, conservation contractual agreements, and included opportunities such as touring conservation service centers and meeting local conservation professionals. Programming reached 99 participants at in-person and virtual workshops and 239 participants at other events. Workshop participants completed pre-class, end-of-class, and follow-up surveys. Participants were 67% female and 33% male; 5% Asian, 19% black or African American, 67% white, and 9% two or more races. Participants' primary interests included crops (33%), livestock (22%), and value-added products (18%), and 39% of participants hoped to start farming in the near future or were farming <1 year. 98% of workshop participants said the program was good or excellent. Participants reported gaining a significant increase in knowledge following the program in: using USDA Web Soil Survey tool (37% gain), what federal, state and local agencies to contact (28% gain), contractual obligations and expectations (40% gain), and the role of conservation in a farm production plan (27% gain). All respondents of the follow-up survey took some action following the workshop: 88% reviewed literature about various programs available, 81% reviewed Web Soil Survey for their property, 53% contacted their county NRCS office, 69% implemented a conservation practice, 38% visited a USDA service center or participated in tours, and 64% began or created a conservation farm plan.

EVALUATION OF AN EXTENSION FIELD DAY TO IMPROVE FARM PROFITABILITY AND SUSTAINABILITY FOR NEW AND RETURNING CLIENTELE

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Beef cattle and forage production are the leading agriculture industries in southeastern Ohio and a primary focus of the Ohio State University Extension and Ohio Valley Extension Education and Research Area. Extension Educators have partnered with the Ohio Agricultural Research and Development Center in Jackson, Ohio since 2011 to deliver annual educational field night programs. Educators provide educational and social programming related to beef and forage production to improve farm profitability and sustainability in southeastern Ohio and surrounding areas. The 2023 objectives of the annual program were (1) To show proper construction techniques of the different variety of fencing options farmers may implement on their operations. (2) Showing the economic and environmental benefits of rotational grazing strategies compared to continuous grazing to extend the grazing season. (3) Educating participants on buying cattle based on Expected Progeny Differences to see the economic-benefit of selection based on genetic testing instead of only based on visual appraisal. (4) Introducing new farming technology that may not have historically been considered to southeastern Ohio farmers. A quantitative approach was taken where participants were asked to rank learning statements on a 1 – 6 Likert scale. Learning statements included: (1) I understand the opportunities and challenges of using drones for pasture management. (2) I understand additional management systems that can be added when using EID tags on cattle. (3) I understand the economic benefits of implementing grazing strategies. (4) I know the environmental benefits that grazing can provide. (5) I know how to use data in a sire directory. (6) I know how to identify economically important traits specific to a herd. (7) I understand proper gate placement in my fence. (8) I understand how to select the correct size fence energizer. (9) I understand what type of staple I have and correct placement. (10) I understand the importance of proper corner post installation. The survey results were collected

on a retrospective pre/post-test. A net gain of knowledge of 1.74, improving on the 2022 results of 1.66. Collection of evaluation data will help plan future objectives for the program.

WASHINGTON STATE UNIVERSITY VOUCHER PROGRAM

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Agriculture is known to be a dangerous occupation full of potential stressors like weather, changing economic markets and machinery breakdowns, requiring flexibility and adaptability when external and internal resources might already be scarce. When stressors start to compound, many farmers experience excessive stress and feel overwhelmed, making it hard to move forward to positive solutions. High levels of stress and easy access to means, such as guns or poisons, contribute to high rates of suicide in agricultural workers. To prevent agricultural suicides, Washington State University Extension, in collaboration with the WSU Psychology Clinic and a private foundation donation created the WSU Voucher Program https://extension.wsu.edu/skagit/free-therapy-voucher-program/. In June of 2021, Extension Professor Don McMoran developed a partnership with Dr. Conny Kirchoff of the WSU Psychology Clinic, starting the voucher program that allows agricultural workers to receive up to six telehealth counseling sessions at no cost. To receive services, participants call the WSU Psychology Clinic at (509) 335-3587, mention the Farm Stress Counseling Program, and provide their name, phone number, and email to set up an appointment. The Clinic then asks participants to complete intake paperwork at https://psychologyclinic.wsu.edu/
Special accommodations are provided to farmers, ranchers and farm workers whose primary language is Spanish, using translation services, and participants without internet access, using telephone options. To date, the program has been utilized by nine (9) participants, with an uptick of numbers after specific efforts were made to advertise the program. In addition, work on decreasing stigma around farmer mental health through direct promotion at fairs, workshops and conferences, brochures, and video material has helped increase participation. A marketing campaign is planned to encourage more farmers, ranchers and farm workers to utilize the WSU Voucher program and decrease stigma around mental health in this community. Participants had the following comments: "I am so glad you are focusing on us (agricultural community);" "This has helped me determine what is most important for me and using my values moving forward;" "Reaching out to other people in my farm community was a life saver."

CONNECTING WOMEN AND FAMILIES IN FORESTRY: REACHING NEW AUDIENCES IN NEW WAYS

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Women forest owners are playing an increasingly important role in forest management decisions and successorship. Recent evaluations from University of Idaho Extension Forestry educational programs indicate that women typically make up approximately 30% of attendees. Research shows that there is a need to employ unique tactics and leverage women-centric knowledge to improve engagement with female forest landowners. In recent years, efforts to connect women in forestry have gained momentum through the establishment of organizations, forums, and training opportunities. These efforts aim to provide resources, mentorship, and advocacy for women working in forestry-related roles and decision-making capacities. Through networking, women can share experiences, learn from peers, hone their skill sets, and address common challenges in their roles. In an attempt to reach and engage this audience, the University of Idaho Extension Forestry and the Idaho Department of Lands teamed up to offer a women-centric forestry training series entitled "Women in the Woods." This two-part series aimed to reach a broader audience by including children and providing child-focused activities during the event to increase inclusion in forestry training for those with families. Participants spent one day in the classroom and one day in the field, learning from and interacting with professionals from different agencies and companies that assist landowners with forestry management. This

programming effort directly impacted twenty-one family-owned properties, opened additional networks to provide resources for participants, and highlighted numerous opportunities for the future.

AGRICULTHER: A SOCIAL MEDIA CAMPAIGN HIGHLIGHTING WOMEN IN AGRICULTURE

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According to the US Census of Agriculture, there were 67,425 Arkansas agricultural producers in 2022. Only 39% of those were female, and that's just producers. That number doesn't include the women who contribute to agriculture in other ways both on and off the farm and ranch. AgricultHER was created to showcase and celebrate women contributing to Arkansas agriculture. The campaign's main goal is to bring awareness to the women who have stayed in the shadows for too long because of the challenges and barriers they face in the agricultural industry.

AgricultHER launched in June 2023, and I recruited my daughter and colleague, Jessica Wesson, to be a fellow team member on this project because of her background in agricultural communications. As a team, we set up interviews with women we know personally and travel to their operation to film. Each month, one woman is featured through approximately 4-10 videos about her contribution to Arkansas agriculture. They are shared on AgricultHER's social media pages and posted to the White County Extension website.

Since starting the project, we have always asked our interview subjects what challenges they face. Answers vary, but some of the most common obstacles are weather, capital investments, labor shortages, disease, and other environmental challenges. However, most ladies we talk to say that their biggest challenge is overcoming sexism in agriculture.

This project is still in the early stages, but we have seen some impressive results. Our social media platforms include Facebook, Instagram, X, and YouTube. Overall, our videos reached 16,594 people in nine months. Our audience is mostly female, aged 35-64.

We believe this social media campaign could be easily implemented in regions across the country. Based on our campaign impact results, we recognize that this issue is of great interest to the public. According to National Geographic, "Gender-specific obstacles—such as lack of access to land, financing, markets, agricultural training and education, suitable working conditions, and equal treatment—put female farmers at a significant disadvantage before they ever plow a field or sow a seed."

BRINGING BACK MASTER GARDENERS TO CAPE MAY COUNTY

Extension Education
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The Rutgers Master Gardener Program in Cape May County was a successful volunteer program, having over 80 volunteers by the year 2009, who participated in outreach and education programs in the county. Over the next five years, the number of new volunteers progressively decreased, and in 2014 the program stopped being offered due to a lack of quorum. Over the years the number of volunteers dwindled due to many factors such as an aging group of volunteers, the lack of a program coordinator and the COVID-19 pandemic. This resulted in having only 2 active volunteers in the county in 2022. Extension decided to bring the program back and recruit new volunteers in 2023. The program needed a major overhaul, updating of content and modification of learning modalities. Cape May County joined other New Jersey counties in offering a gardening education webinar series, which would become the core training for the Rutgers Master Gardener program. This allowed them to identify potential volunteers among participants of the webinar series. Since they were already taking the educational webinars, they were offered to complement that education with in-person workshops and sessions (which expanded on the webinars), and field trips to local horticulture related businesses and sites. Participation in the additional activities had no additional cost and would allow them to become Rutgers Master Gardeners. The webinar series had 15 participants from Cape May County, 8 of which decided to continue the training to become Rutgers Master Gardener volunteers and who are currently completing volunteer hours.

SINGING IN THE RAIN: EMBRACING THE HYBRID METHOD FOR RAIN GARDEN EDUCATION

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Rain gardens are a working landscape feature that receive stormwater runoff from impervious areas to work with nature to collect, filter, and infiltrate stormwater runoff, which allows them to manage erosion & moisture control issues, aid in water conservation, beautify the landscape, remove pollutants, and attract desirable wildlife. To be inclusive and meet the needs of all individuals, beginner to advanced, residential to professional, varied educational methods such as online learning modules, websites, factsheets, discussion boards, in-person hands-on workshops, and informative signage are utilized by Clemson Extension to address different learning styles and accessibility. The Clemson Extension Rain Garden Program aims to attract a diverse audience of individuals to use some or all of the online and in-person educational resources provided by Clemson Extension for them to be able to enhance an area that will be designed with soil and site conditions optimized, manage erosion, collect and infiltrate stormwater, and attract wildlife. The hybrid method of educating the public about rain gardens has attracted triple the number of participants compared to if this program was offered only in person. Since 2018, 358 people have participated in the Master Rain Gardener Program, 125 people have participated in conference workshops about rain gardens, and 127 people have participated in hands-on workshops about rain garden installation and maintenance. 100% of participants plan on implementing practices learned from the course in the future and felt the online course was a valuable use of their time. 95% of participants enjoyed the hybrid course format. 100% of participants agreed or strongly agreed that the Field Day provided them with hands-on experience that will help them with future rain garden installations.

STRATEGIES THAT EMPHASIZE MANAGEMENT OVER MEDICATION IN EXTENSION SWINE PRODUCTION

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Antimicrobial resistance (AMR) occurs when bacteria, viruses, fungi, or parasites resist the drugs used to treat or prevent infections. This is a significant public health concern, as it can create resistance to infections in humans and animals, leading to increased morbidity, mortality, and healthcare costs. Antimicrobials are fed to livestock to prevent disease; overuse and misuse can lead to AMR development in animals and humans. To address this issue, the Food and Drug Administration (FDA) has taken several steps to reduce the use of antimicrobials in livestock. Continued monitoring and regulation of antimicrobial use in animal agriculture remains essential. Five years post VFD implementation, Michigan State University Extension (MSUE) wondered how these guidelines have affected Michigan pork producers and swine veterinarian perceptions regarding impacts on antimicrobial use, herd health, and other farm management practices aimed at controlling disease. Surveys were distributed to small-herd Michigan pork producers and veterinarians to explore how herd health and management practices have changed since VFD implementation. The Michigan Animal Agriculture Alliance grant funded this project. It was administered in 2022 using both online and in-person formats. The surveys questioned perceived antimicrobial use and how they may have changed on farms in January 2017. Questions included whether the use of feed-grade antimicrobials had increased, stayed the same, or decreased; whether there were changes in the use of vaccines; and whether health prevention measures such as farm biosecurity measures had been altered. The surveys asked the producers if they thought the incidence or severity of common swine diseases had changed during the past five years. Surveys completed by swine veterinarians asked similar questions

but also included questions regarding how knowledgeable their clients were about VFD. The MSU Extension pork team has produced a series of articles, factsheets, and videos to raise awareness of and evidence-based solutions for many of the issues raised by Michigan pork producers and swine veterinarians through this survey—the complementary short videos describe the practical applications of approaches described by these articles and fact sheets. A resource section titled Management over Medication has been created on the MSU Extension pork team site.

NORTH CENTRAL REGION

KITCHEN TABLE CONVERSATIONS FOR OHIO WOMEN IN AGRICULTURE AT THE FARM SCIENCE REVIEW

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The program aimed to increase educational opportunities for women in agriculture throughout Ohio. We accomplished this task by working with women farmers, our Ohio Women in Agriculture team, and extension professionals to identify the needs and wants of the target audience. Kitchen Table Conversations (KTC) is a creative twist that uses an informal and conversational approach around the farmhouse kitchen table that is supported by peer-to-peer learning and fosters a learning network environment. Educational topics are geared around key and controversial topics of the given time. Strategies to educate the audience have transformed from virtual in 2020 and 2021 to hybrid in 2022, with three sessions each year, to in-person in 2023, with six sessions as a "progressive kitchen table" at six topical sites during the Farm Science Review. We utilize multiple teaching methods, embrace a safe harbor environment, and encourage audience participation. Through these teaching strategies, we have reached 144 individuals in the program over four years. The change in presentation styles and marketing has allowed an increase of 73% in participation from 2020 to 2023. These educational activities were marketed in 2023 through multiple channels such as email (1010 members), social media (1200 followers), blog postings (372 posts), personal contact, flyers, and brochures. The program participants indicated that the information gained was far more valuable for their operation and helped increase productivity, mental health, and marketing. However, the participants' increased knowledge is a more valuable indicator of success as they reach out to Ohio Extension professionals during the year and participate in other OSU Extension Ohio Women in Agriculture Learning Network events and programs.

AMERICAN LAMB MEAT : CONSUMER AND PRODUCER PERCEPTION

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According to a recent survey, only half of the U.S. population has tried eating lamb. Ironically, many sheep producers have never tried the mouthwatering and savory lamb they raise. There is a sharp decline in the local lamb production in the U.S partly due to lack of lamb meat consumption among American consumers. The objective of this educational workshop was to bridge the gap between producers that are looking for ways to boost their production and adventurous consumers seeking to diversify their home cooking cuisine. This synergy will increase local sheep production and more profit margin for the producers.

PLACE-BASED LOCAL LEADERSHIP IN THE RURAL AND URBAN INTERFACE

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Brown L.E.A.D.S. (Leaders Educating, Accelerating, And Developing through Service-Learning) is a comprehensive place-based leadership program designed for business professionals who are passionate about making a positive impact in both their professional and local environments. This program aims to empower individuals to lead with integrity, educate through continuous learning, accelerate personal and organizational growth, and foster development through meaningful service-learning experiences. By equipping participants with the necessary skills, knowledge, and resources to create a dynamic network of leaders who collaborate, innovate, and contribute to the sustainable development and well-being of Brown County and beyond. Business leaders come from both rural and urban interfaces in the county. The hope is that business professionals will gain a sense of community and promote remaining in the county to live and work. This is accomplished through a 10-month leadership development program partnered with the Brown County Chamber of Commerce and OSU Extension Brown County. Educational activities in the place-based program include a leadership component and service learning. The program is off to early success, 98% of participants have indicated in post class evaluations gaining more county knowledge than expected. The total community support dollars for Brown LEADS is more than $25,000, this does not include the economic impact of the retained trained business leaders living and working in their home communities. Overall, participants indicated they had positive knowledge gains in the program and benefited from participating. However, long term impact evaluations will be a more valuable indicator of the program's true success and effectiveness.

MENTAL HEALTH - FAITH, FARMERS & FAMILIES EXTENSION EDUCATION

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University of Missouri Extension (MU Extension) used USDA National Institute of Food and Agriculture (NIFA) funds to launch the Farm and Ranch Stress Assistance Network (FRSAN) to address the rising mental health crisis in the farming and ranching community. Since 2020, the FRSAN team with MU Extension equipped Missourians with 1) stress and mental health classes, 2) suicide prevention programs, 3) stress and mental health awareness resources, and 4) free behavioral health and telehealth counseling sessions. Our hope was to involve communities at the grassroots level in helping MU Extension improve mental health among rural Missourians. One prime example is the Mental Health - Faith, Farmers & Families initiative in Cole Camp, Missouri. Using existing resources the MU Extension FRSAN team, University of Missouri College of Arts & Sciences Psychological Services Clinic and University of Missouri School of Medicine worked with the faith community of St. Paul's Lutheran Church to 1) host a farm family concert featuring the Peterson Brothers band; 2) partner with a clinic for farmers; 3) develop local networks of community allies that connect farmers, 4) connect ranchers and families to resources (MU Extension Mental Health Tool Kit); 5) offer free stress and mental health programs; 6) provide free telehealth counseling services and fun family activities with a mental-health focus, and 7) deliver targeted, faith-based story-telling education about stress and mental-health. In 2023, 74 workshops were held across the state with 1,349 farmers and allies served. Forty-two farmers or immediate family members received teletherapy counseling sessions,

996 participants completed Mental Health First Aid, 46 people completed QPR, and 307 finished Weathering the Storm stress training. The FRSAN team and partners provided $247,413 in total value of services.

ENHANCING LIVESTOCK MANAGEMENT THROUGH FENCING

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Livestock fencing is indispensable for efficient farm management, yet its design and implementation pose challenges for producers, encompassing factors like cost, durability, water location, livestock species, and environmental impact. To address these complexities, our program received a $6,000.00 grant, enabling the acquisition of specialized equipment to enhance our initiatives.

Our primary objective is to equip livestock producers with practical skills and knowledge to design and sustain fencing systems tailored to their unique requirements. Several workshops, hands-on demonstrations, and educational resources were made possible through this grant with the purchase of essential equipment. These include state-of-the-art fencing tools, energizers, wire stretchers, and electric fence testers, numerous types of temporary posts and insulators. This allowed participants to learn firsthand about various fencing materials, designs, and installation techniques.

Collaboration with agricultural experts, industry professionals, and local stakeholders remains integral to our approach. By leveraging the expertise and resources made possible through the grant, we ensure the dissemination of up-to-date information and best practices. Participants can make informed decisions, fostering improved livestock management practices, operational efficiency, and risk reduction associated with inadequate fencing infrastructure.

Through the strategic utilization of the grant, our Livestock Fencing Demonstration Program has been utilized at local, regional and multi-state programs.

LAVENDER STUDY DETERMINES BEST CULTIVARS FOR MISSOURI GROWERS

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Lavender has increased in popularity for its appeal in the home landscape and its usefulness in culinary, medicinal, beauty products, cut flowers, aromatherapy, and essential oil production. As a result, interest in commercial production has increased, but cultivation resources for growers in Missouri are limited. A team of horticulture specialists was funded a Missouri Specialty Crops Grant through the Missouri Department of Agriculture in 2021 to grow and collect data on lavender cultivars in three regions of the state, including in a high tunnel. Growing practices included plant establishment, soil preparation, winter protection, cultivar selection, plant phenology, insect and disease issues, optimal flower and oil production parameters, and fertilization. Lavender plants were grown in 8” raised rows covered with fabric and irrigation line. At the Adair County MU Extension Center in Kirksville, in the northeast region, data was collected on 22 cultivars. Data was collected on stem length, flower color, winter hardiness, drought tolerance and moisture/rain tolerance. Peak bloom time was mid-June. Flowers were harvested, bundled and placed on a rack to dry. The plants were covered with row cover and staked down in late December at the Kirksville site, to protect plants from moisture and freezing temperatures. Covers were removed at the end of March. All plants suffered some winter damage to the foliage and had to be pruned back by one-third to a half. They recovered and by the end of May were starting to bloom. By the end of the project, we had learned that ‘Phenomenal’, ‘Provence’, ‘Super’, ‘Grosso’, ‘Hidcote’, ‘Munstead’, ‘Melissa’, ‘Betty’s Blue’ and ‘Sachet’ were the cultivars were best suited to our growing region. Results of the project were disseminated via workshops, programs, newsletters, a magazine, radio and television.

Each of the three sites held a workshop with an average of 45 people in attendance. As a result of our findings, cut flower growers have incorporated hardy lavender cultivars into their operations. One cut flower grower in northeast Missouri planted over 500 lavender plants. Home gardeners who had not grown lavender in the past, are now growing lavender. The project concluded on September 15, 2023.

SMALL FARMS, EDUCATION AND OUTREACH

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According to Ohio State University Extension bulletin 973, "The United States Department of Agriculture defines a "beginning farmer" as an individual who has been farming 10 years or less, regardless of age. Between 2017-2022, Ohio gained about 5,000 new and beginning producers, and just over 900 farmers younger than 35. To meet the needs of these new and beginning farmers, The Ohio State University Extension Small Farm Team offers yearly conferences, colleges, and field days to help answer small farm questions. The focus of the four-week college is to teach farm management skills that will be necessary to run a farm. To build upon the skills learned at the colleges we then offer day-long conferences and field days that are more enterprise focused. At the three-day Farm Science Review the Small Farm Team offers a help desk and enterprise speakers followed by question and answering sessions every day.

Attendees impact statements have shown that after attending the Small Farm educational events that they learned:
How to set realistic goals.
Recordkeeping skills
Licensing and permits
Information to create a business plan.
Farm transition
Creating balance sheets
Is this enterprise right for me?
We used the data from 2,100 attendees' evaluations to build future conferences, field days and Farm Science Review topics.

HOW DOES SPRAYING PESTICIDES WITH A UAS WORK?

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The application of pesticides with a UAS has become a popular practice over the past few years within crop production. The ability to carry larger volumes of liquid onboard, reduced costs, and simple operation has attributed to the increased popularity. Additionally, the increased number of fungicide applications in corn due to the tar spot disease has shown that the demand for aerial applications of all types has increased. UAS pesticide application technology is providing another opportunity to meet the increased demand. With the increase interest in UAS spraying there is a need for an educational program to help farmers and UAS operators learn how to implement this technology. The goal of the program is to connect farmers, UAS operators and other stakeholders to information that will address challenges such as F.A.A. rules, Ohio Department of Agriculture requirements, and the general lack of knowledge of this technology. Field demonstrations have been conducted to give farmers and operators a hands-on view of the UAS sprayer and to see the flight planning tools to control the UAS sprayer. Additionally, on-farm research on UAS sprayers is conducted to begin to answer questions farmers & UAS sprayer operators have in terms of management of the spray operation, quality of the application, and the economics of UAS spraying. Outcomes of this program include over 500 farmers & operators at multiple teaching events across Ohio, 400 attendees at fields days to see the operation of a UAS sprayer in person, and five on farm demonstrations located across western Ohio. In addition, five different on-farm research projects have

been published in the eFields publication through The Ohio State University Digital Ag Program.

GROBUCKS: ENGAGING RESIDENTS IN GROWING FOOD

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Due to increased demand for locally grown produce, the office began a community garden project in partnership with the county's free health clinic and funded by a local foundation. The purpose was to increase the availability of vegetables to low-income residents of the county. The office works closely with food pantries, soup kitchens, and other advocacy groups and utilized these partnerships to facilitate produce distribution.

This project garnered attention from locals who received the produce. We were often asked about gardening and how to start. Therefore, we applied for and received a grant to begin GROBucks, a project centered around increasing fresh food access, equipping residents with gardening knowledge and empowering them to grow their own food. Specific activities included: gardening workshops and container gardening plant distribution. Through the workshops and garden kits, the goal was to allow residents to try simple container gardening in their own space and to increase confidence in growing their own food. Containers were chosen to overcome barriers related to space with an aim to include residents in apartments. The project included supplies, educational classes, and gardening incentives for participation. We specifically endeavored to reach lower income and first-time gardeners with this program.

GROBucks participants were about three-fourths female and one-forth male. Five percent identified as a veteran. The majority were over 60 years of age. Twenty percent identified as having a disability.

The GROBucks plant distribution participants were evaluated via a pre-Qualtrics survey (n=110). Of the respondents, 37% were first time gardeners; 15% planned to garden on a patio, deck or in a container; 29% were planning to garden to save money due to a concern over food costs and 35% wanted more access to fresh food. About 71% of participants estimated spending four hours or less gardening. About 66% were interested in growing vegetables and 57% would participate in training session or receive help from experienced growers.

The post survey (n=9) revealed 57% gardened on a deck or patio. Of those surveyed, the top three reasons for gardening were food production, outdoor physical activity, stress relief, and because it made them happy.

NORTH EAST REGION

USING COMMON MEASURES TO EVALUATE "COMMON PROGRAMS"

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Blue ribbon animals are nice, but blue-ribbon kids are the focus of the program; that is the mantra of the Calhoun & Gilmer County Youth Livestock Program. These two rural counties in central West Virginia boast a small but impactful livestock program that serves 70 youths, producing 125 market lots annually; it is important to recognize that those participants are limited to just two lots each. This livestock program emphasizes the objectives of personal growth and development, character building, and animal husbandry through a series of annual workshops, with participation requirements part of a showman's contract to sell in the market sale. Since 2021, the program has implemented a comprehensive evaluation process for participants to share the impact beyond project completion and sale revenue. That effort has allowed program stakeholders to more efficiently tell the story of these youth participants!

THE NORTH JERSEY ORNAMENTAL HORTICULTURE SYMPOSIUM A TRADITION OF TURF, TREE AND LANDSCAPE PROFESSIONAL EDUCATION

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Rutgers Cooperative Extension has offered a professional symposium for landscape professionals for 63 years. As the industry has changed, Extension has been there to keep horticulture industry businesses and county/municipal employees educated about best management practices and enabled them to keep their professional certifications. Each year Extension Agents, Specialists, Rutgers Plant Diagnostic Lab Professionals and representatives from the NJ Department of Environmental Protection and the industry provide the professionals with information that they use to improve their horticultural practices. The 2024 North Jersey Ornamental Horticulture Symposium featuring Turf, Tree and Landscape Days, provided New Jersey Agricultural Experiment Station research-based information and management practices to 562 turf and landscape professionals and arborists. A total of 276 professionals completed program evaluations. Ninety percent (90%) indicated that as a result of attending the symposium they will make more informed pest management decisions. Of participants who have attended the symposium in the past (N = 141), 122 have been able to maintain their NJ DEP Pesticide applicator license, 69 maintained their Turf Fertilizer Applicator certification, and 22 retained various professional arboriculture certifications.

ENCOURAGING MID-ATLANTIC PRODUCER AUTONOMY IN LAND USE DECISION-MAKING THROUGH PEER LEARNING INITIATIVES

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This poster presentation outlines our ongoing extension program addressing the legal and economic dimensions of large-scale solar development's implications on Maryland's (MD) leading industry, agriculture. As MD's solar carve-out goal creates tensions, our work aims to empower producers and rural landowners with the knowledge needed to make informed decisions about their land.

Building on previous extension education efforts, we bridge marketing, asset management, and business planning with solar leasing. We address the pressing issue of landowners entering long-term contracts without sufficient and unbiased information, leading to challenging and risky situations.

By providing resources to realtors, lenders, UMD extension, and agricultural stakeholders, we aim to empower landowners, resulting in more favorable and less risky contract terms. Through a combination of in-person and virtual formats, including engaging virtual webinars with live polling and peer group discussions, we ensure broad accessibility and active participation.

This project seeks to positively impact Maryland's agricultural landscape by equipping landowners with the tools they need to navigate utility-scale solar leasing, promoting economic resilience, and supporting sustainable land use decisions. Additionally, future attendees should gain confidence in assessing renewable energy projects' viability, benefits, and considerations within their agricultural operations, fostering connections with other landowners.

This extension programming, recognized through the AAEA GSS & EXT competition, is open to all landowners in the Mid-Atlantic. Currently underway, this poster presentation will reflect on programming set to happen in February and March.

This material is based upon work supported by USDA/NIFA under Award Number 2021-70027-34693.

MAINE NEW FARMERS PROJECT: BUILDING OUR "BUILD YOUR SKILLS" WEBSITE FOR NEW FARMERS IN MAINE

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The "Equipping New Farmers with Practical Skills and Knowledge" project team established the name Maine New Farmers Project (MNFP) and a media campaign based on the slogan "Build Your Skills!" This slogan denotes our offerings of farm production and farm business educational opportunities for new farmers in Maine. On our webpage, under "Build Your Skills, farmers can choose "Learn with Us" or "Learn on Your Own." "Learn With Us" is a list of programs that are in-person or virtual and synchronous from many agricultural entities around Maine including UMaine Extension, Maine Organic Farmers and Gardeners Association (MOFGA), Maine Department of Agriculture, Conservation, and Forestry (DACF), Land For Good, Maine Farmland Trust, and more. "Learn on Your Own" shows our online new farmer resources including recorded webinars, recorded courses, fact sheets, videos, etc. Also, on the MNFP webpage are networking opportunities, a new farmer newsletter sign-up, and many more resources for new farmers looking to start an agricultural business. Our webpage has had 35,821 views since the project started in 2021. 160 participants of this project have started farms in Maine. 246 participants improved their business skills. 445 participants improved their production skills. 52% of the over 400 project participants are women and 10% are Veterans.

NURSERY AND GREEN INDUSTRY RESOURCES

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Quick Response codes, aka QR codes, aka the black and white digital looking squares, regained popularity during COVID-19 as outdoor bars and restaurants sought out 'touch-less' ways of sharing menus or payment options, both of which are subject to regular changes. The educational need here is the ability to share, on a physical resource, copious, diverse, and constantly evolving information that can be quickly modified via QR code destination link manipulation. QR codes if properly implemented, and their destination directories or files properly maintained, offer Extension professionals the opportunity to update resource in the virtual space, while maintaining the usefulness of printed resources. Extension deliverables are at risk of becoming obsolete the moment they are printed, which often impacts what type of information is printed or how a deliverable is designed. Here an example, taken to the extreme, utilizes QR codes to place University, government, and professional association resources in nursery and green industry stakeholders' breakrooms, pesticide sheds, and meeting locations. If properly designed, this type of QR code laden resource can escape becoming obsolete for considerably longer. This poster is meant to challenge an Extension professionals' ideas of sharing dense, volatile, or time-sensitive information with diverse stakeholder groups.

SOUTHERN REGION

TACKLING THE DIGITAL DIVIDE FOR AGRICULTURAL PRODUCERS IN BEN HILL COUNTY, GEORGIA THROUGH 4-H YOUTH INSTRUCTORS

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Ben Hill Extension Agriculture and Natural Sources & 4-H partnered together in 2023 with National 4-H Council for the Tech Changemakers Project in Agriculture Technology. We call the team our Ag Tech Changemakers. Tech Changemakers is a national grant program empowering youth to teach adults about technology-related topics, in this case all technology is agriculture related. Ben Hill County Extension was honored to be selected as one of the ten counties in the state of Georgia with an Agriculture and Technology Changemakers grant. Tech Changemakers is a unique, community-centered program that tackles the digital divide head-on. Empowering young people with the support needed to use their digital skills, 4-H Ag Tech Changemakers deliver adult skill-building workshops to create practical, real-world solutions to increase digital know-how and drive economic opportunity in their community and beyond. The goal for adult participation in Ben Hill County Georgia is 250 individuals. This national program elevates teens as teachers to provide training on technology and digital literacy skills to assist adults in 80 communities across 13 states (2021 statistics). 4-H Tech Changemakers address the digital divide between young people and senior citizens by providing education on common technological devices, assisting with one-on-one support, and helping with online activities. Ben Hill County 4-H will offer multiple classes, workshops, and presentations to teach agricultural producers in our area about the advantage of adding technology to their operations. Ben Hill County 4-H's Ag Tech Changemaker team members hosted a Spring Garden Workshop to educate community members on how they can incorporate technology into their garden planning. Participants indicated that they incorporated new skills learned from the workshop into their planning which resulted in high yields this season.

TRUE YAM RUST IPM: USING EXTENSION AND EDUCATIONAL STRATEGIES WITH TRUE YAM GROWERS IN PUERTO RICO

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Commercial production of true yam in Puerto Rico is limited by true yam rust, [True Yam Rust (TYR)]. True yam rust can be found in South Asia, Oceania, and Africa, and more recently in Dominica, as Goplana dioscorea in Dioscorea alata. This type of rust had not yet been reported on the Island so far. This is why it is a potentially invasive species for Puerto Rico. Losses can be estimated between 60% and 100% of the production, which is why true yam rust can be classified as the first cause of economic losses in this crop on the island. The severity of the damage caused by true yam rust is due to the damage caused to the foliage during the period of tuber development. True yam producers should use Integrated Pest Management (IPM) practices to control true yam rust on their farms. This work focused on educating commercial true yam producers in Puerto Rico on how to apply integrated management practices in their production plots to control this pest. The implementation of the prevention and control measures for true yam rust recommended by the Puerto Rico Agricultural Extension Service where recommended, based on the results of field surveys on the fungus and the economic limits that these practices represent. Several educational interventions were conducted, including two workshops in the southeast area, on-farm individual training, and the publication of newsletters with this information. The effective use of these practices allowed commercial true yam producers to keep or even improve the harvest quality and quantity while increasing the supply of true yam in Puerto Rico.

TEACHERS CONSERVATION WORKSHOP: BRINGING THE OUTDOORS INTO THE CLASSROOM

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Outdoor education is as important as ever for students, teachers, and society. However, opportunities for classrooms to experience the outdoors have declined. The Teachers Conservation Workshops (TCW) conducted by Mississippi State University and the Mississippi Forestry Association (MFA) have been bringing the outdoors into the classrooms for over 60 years. These workshops take place over six days in the summer, where teachers from all grade levels experience all aspects of forestry and conservation career work at a hands-on and participatory level. TCW leverages partnerships with forest industry and state and federal agencies, as well as NGOs to provide room and board for all participants at little to no cost. This poster will focus on experiences that participating teachers have had over the years at TCW as well as lessons learned on how to approach various forest industry companies for assistance ranging from monetary support, educational expertise, and access to field and mill facilities.

PASSION FRUIT: AN EMERGING CROP IN FLORIDA

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Background: From 2020 to 2023 agricultural land prices and production costs increased significantly in Florida and especially so in North Central Florida. Consequently, these economic conditions create substantial challenges for new farms to begin and existing farms to expand. Passion fruit is an emerging crop that can be grown on small acreage in the region, opening new agricultural opportunities. Objective: The combination of sustainable production methods and marketing research can help small farms begin, grow, and become profitable with passion fruit production. Methods: In order for growers to plant passion fruit as new crop on their farms, they must know the marketing potential of passion fruit. Until now, no recent passion fruit marketing research has been conducted by UF/IFAS. A sensory evaluation of passion fruit was conducted to evaluate public perceptions and buying interest. A production guide has been published to support current and prospective growers. Two production meetings have been held from 2022 to 2023 where participants provided needs assessment surveys. Additionally, growers are directly supported with a recurring site visits, diagnostic services, and regular updates to on-going research. A SARE and SEEDIT grant have supported passion fruit crop development beginning in 2023. Results: Small farms (N=12) in North Central Florida have planted passion fruit or are in the process of planting small acreage. Small farms have harvested passion fruit after one year of planting and some have initially achieved profitability. Sensory evaluations were completed (N=111) and indicated very strong favorability of the flavor and aroma as well as an interest in buying passion fruit products and fruit. Conclusion: Growers that are seeking alternative crops, particularly for small to medium acreage, now have the option of passion fruit. It is an emerging alternative crop that has significant growth potential to generate profitability for Florida and similar growing regions.

BALANCING PROFITABILITY AND SUSTAINABILITY IN WATERMELON PRODUCTION

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Florida is historically one of the leading producers of watermelons and in 2021 according to the United States Department of Agriculture the state produced 1.016 billion pounds of the 3.4 billion pounds produced domestically. Of the state's production, Lafayette County contributes 19,500,000 pounds to Florida's watermelon production. The Suwannee Valley region, where Lafayette County is located, is faced with significant water quality and quantity regulations aimed at protecting the Floridan Aquifer and countless natural springs in the county. With watermelon being one of the leading agriculture industries in the region, producers are faced with the challenge of growing a crop within these regulations and scrutiny while remaining profitable. The main objective of this program was to satisfy the stringent regulations by assessing

nutrient status regularly to adjust fertilizer applications weekly instead of applying the same amount each week throughout the growing season. This agent applied for and was awarded a Florida Best Management Practice mini grant to purchase meters to monitor nutrient status of watermelon plants for growers in Lafayette County. Each week, petioles from each field were collected and the agent squeezed the sap from the petiole into the meter to determine Nitrate-Nitrogen and Potassium levels. The agent then records the numbers and shares them with the grower at which time the agent provides guidance for nutrient application for the upcoming week based off University of Florida sap levels recommendations. This service offers immediate information to the grower which minimizes nitrogen applications while maximizing profitability. The relationship that is formed due to the ability to provide this service also leads to other discussions that benefit the environment and producer like using soil moisture sensors, irrigation audits, and solutions for weed and diseases. For the acreage that was weekly sap tested by the agent, growers reported that they were able to reduce the amount of fertilizer fertigation events by at least 2 weeks during the growing season. That reduction saved 8,400 pounds of Nitrogen from entering the soil and allowed the grower to save $30,000.

ACRONYMS ABOUND WITH IPM BMPS AT UF IFAS

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The IPM BMP project focused on educating Florida Panhandle producers about Integrated Pest Management (IPM) Best Management Practices (BMPs) to mitigate the adverse effects of pesticides on water and soil quality. Through tabletop demonstrations illustrating pesticide drift, runoff, and leaching, 371 producers were educated, surpassing the goal of reaching 200 farmers. Pre/post surveys revealed a 97% increase in knowledge, with 67% of participants anticipating implementing practice changes. Pesticide Continuing Education Units (CEUs) were provided to licensed individuals, fostering greater engagement. The success of the project underscores the importance of ongoing education in promoting sustainable practices among producers and pesticide applicators. By addressing the overlooked BMPs within Florida BMP manuals, this initiative aligns with broader objectives of enhancing water policy objectives and fostering environmental stewardship. Moving forward, follow-up surveys will assess actual practice changes, ensuring sustained impact and promoting the long-term viability of these educational tools.

CATTLE BUSINESS 101

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Cattle Buisness 101 is a series program focusing on financial and risk management for cattle producers. It is being held for the second year in April 2024. The 2023 program had 7 participants, 100% of whom reported knowledge gained in all areas, 80% had already begun implementing best practices discussed. This program was well supported by local insurance, banks, Farm Bureau, and Cattlemen's Association.

ARKANSAS COUNTY CORN NEMATODE SURVEY

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Arkansas County boasts a rich farming history, with corn emerging as a major crop in our region over the past decade. Despite its relatively recent prominence, corn has swiftly become integral to our agricultural landscape, significantly boosting the state's output. As a vital component of our crop rotation system alongside rice and soybeans, corn offers a plethora of benefits, including enhanced weed control through additional herbicide

action modes. However, the threat of pests, such as nematodes, looms large, posing a significant risk to yields and often resulting in misattributed reductions.

To tackle this challenge head-on, we launched a comprehensive corn nematode sampling program, generously supported by USDA-NIFA grant funds and the Arkansas Corn and Grain Sorghum Board. Our primary objective was clear: to assess the prevalence and severity of nematode infestations in Arkansas County's corn fields, empowering local producers with actionable insights for informed decision-making.

Commencing in spring 2020, we adopted a systematic sampling approach, meticulously selecting fields across the county during the V3-V4 growth stage of corn. Soil samples underwent thorough analysis at the Arkansas Nematode Diagnostic Laboratory in Hope, AR. Over four years, we gathered data to evaluate nematode levels in our corn production fields.

Additionally, we published yearly reports summarizing our findings and insights. These reports provide a comprehensive overview of the nematode situation in Arkansas County, serving as valuable resources for farmers, researchers, and stakeholders in the agricultural community.

At the recent county crop production meeting in February 2024, we proudly presented our findings. After comprehensive data analysis spanning four years, we are glad to report that Arkansas County currently faces no significant corn nematode problem. Consequently, there is no immediate need for seed treatments or additional nematode control measures. This not only conserves valuable resources but also optimizes agricultural practices, ensuring sustainable corn production in our region for years to come.

EDUCATING LAND MANAGERS OF BENEFITS AND PRACTICES OF CATTLE GRAZING

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Background: The State of Florida owns 4,940,120 acres which is about 14.2% of land area of Florida. Local governments own more than 500,000 acres of the more than 12 million publicly owned lands in Florida. Objectives: 1) increase the knowledge of land managers of the ecosystem services provided by cattle grazing and of best management practices cattle producers follow to increase productivity, manage forage, and sustain environmental quality and natural resources 2) improve attitude toward grazing and increase the acreage available for grazing leases. Methods: The two-part program consisted of seminars covering ecosystem services, phosphorous and nitrogen budgets and soil health, stocking rates and forage management, body condition scoring and physiology, invasive plant management, and invasive wild hog management. In the afternoon, tours included demonstrations such as soil testing, weed identification and management, hay production, body condition scoring, native range management, wild hog trapping, and winter supplementation of cattle. Participants received a handbook with resources for future reference. Results: For three consecutive years, the program had a total of 88 participants and they had an average knowledge gain across all topics of 67%. Nearly two thirds of the participants were currently land managers overseeing nearly 2 million acres of land. From the evaluations, 92% stated they felt more equipped in their land management role; 83% stated they have a more positive view of cattle grazing leases as a tool for land management. Comments in our surveys showed we may impact future discussions about land management (nearly 10,000 acres.) One county's managers decided to

begin discussions to re-open their land for grazing leases. Another county's managers opened an additional 500 acres to grazing. Conclusion: The program provided land managers a setting with Extension Agents who provide science-based resources for their management decisions. Using best management practices for cattle and forage management on public-owned properties can enhance wildlife habitat, control invasive species, maximize carbon sequestration, and provide economic benefit for Florida.

ADVENTURES BY LAND & SEA: 4-H YOUTH NATURALIST DAY CAMP IN GULF COUNTY, FL

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Introduction: Gulf County is a rural, ocean-facing county in the Panhandle of Florida, known for its great outdoors. This area is home to a pristine bay system, St. Joesph Bay, and is outlined partially by maritime forest habitat. Despite abundant natural resources, there are very few youth-focused educational opportunities built upon conservation, environmental sustainability and stewardship content. Those most in need of—and likely to experience a lasting impact from—sustainability outreach are our youth (Chawla, 1998; Schusler, Krasny, Peters, & Decker, 2009). Therefore, UF/IFAS Extension County Agents planned, implemented and evaluated a day-long camp to educate youth about their local natural environment.

Methods: Utilizing feedback from our Overall Extension Advisory Committee and interest from the community, a day camp focusing on area flora and fauna was designed. The St. Joseph Bay State Buffer & Aquatic Preserve was the host location of the event. A morning session involved classroom lecture and live demonstrations. Florida Sea Grant Agents educated the youth on bay scallops and seagrass habitat, as well as amphibians and reptiles found in the area. A local sea turtle conservation group taught about sea turtles in the area, their nesting strategy and migration pattern and how they protect and foster sea turtles around the bay. Afternoon programming consisted of a guided tram tour of the maritime forest. Topics included native and rare plant identification, archeological resources, and forest management practices, such as prescribe burning. A kayak safety lesson and short paddle tour of the bay concluded the day.

Results: Ten participants were surveyed using a pre/post-test method with seven questions/true and false statements. Survey topics included, reptile anatomy, scallop biology, seagrass habitat and sea turtle species identification. Pretest results yielded a collective 44% correct response rate (31/70), whereas the post-test garnered a 74% correct response rate (52/70). This equates to a 60% positive change in knowledge gained. Conclusion: Youth day camps focusing on the natural environment can result in a better understanding of conservation, with increased knowledge, and can change attitudes and behavior. Experiences such as this increase youth conservation awareness and promote environmental stewardship behaviors.

AN OVERVIEW OF RISK MANAGEMENT WORKSHOPS FOR SMALL AND UNDERSERVED FARMERS IN SOUTHEASTERN NORTH CAROLINA

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Producers need the ability to deal with risks that come with new attractive farming opportunities. To assist small farmers with this challenge, North Carolina Cooperative Extension in partnership with National Crop Insurance Services and Digital Extension Risk Management Education conducted series of Risk Management Workshops in 2014, 2017, and 2022. The goal of each workshop was to assist small and underserved farmers in Southeastern North Carolina respond to risk by developing their own personal risk management and marketing plans. Applied education consisting of sequential workshops supplemented by homework assignments and individualized counseling was delivered via a partnership of subject matter experts and local educators to farmers in Southeastern North Carolina. Project outcomes show that 156 producers attended at least one of the series of workshops and acquired the risk management and market analysis skills and understanding of their own operations to set a goal,

delineate three implementation actions for each goal, for each of the five areas of risk and five key marketing mix variables. Interviews were conducted with participants six months after the end of each series of workshops showed that 117 of the 156 producers had completed at least half of their actions in their personal risk management plans which included: adding high tunnel greenhouses, installing irrigation systems, receiving financial assistance, and developing personal webpage and social media pages. Follow-up evaluations were completed in March 2024, detailing the amount of income each participant earned or saved by participating in the workshops. A total of 81 participants completed the evaluations. They reported a total amount of $608,300 earned or saved by participating in the workshops and completing the actions in their personal risk management and marketing plans. Farmers now have the confidence they need to deal with future risks.

RECRUITING YOUTH TO PLANT SCIENCE CAREERS

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U.S. production agriculture will fall behind other countries if we fail to recruit the next generation of agronomists, Extension agents, scientists, & industry reps. Our scientific advances over the last 100 years have given us economic stability, national security, and helped feed the global population. Young people rarely understand the vast career options available in agriculture because they tend to think only of what they can see. They see tractors and livestock but most do not understand the science that allows production ag to flourish. It is our responsibility to educate them on the rewarding careers they would never have imagined. This set of programs (Science Experiments, Agronomy Bowl, Agronomy Camps, and Seed ID) enlighten youth of many career options available for individuals who wish to work in agriculture yet prefer not to farm directly. Participants learn about salaries, coursework, position stability, and more from a host of presenters.

MIDVILLE AGRONOMIC FIELD DAY: GROWING SUCCESS IN SOUTHEAST GEORGIA FOR OVER A DECADE

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As prices for the major row crops in Georgia have declined and government programs evolve, farmers need to make informed and sustainable decisions for their farm. The cost of producing row crops, particularly cotton and peanuts, is already high because of large investment in capital and the intense management of inputs from planting to harvest. Suppressed commodity prices due to large domestic and global supplies, in combination with reduced demand because of trade issues have led to very tight margins. The Southeast Research and Education Center (SEREC) in Midville, Georgia is in a prime location to be a central point for education that addresses the problems row crop farmers are facing. The SEREC Experiment Station's mission is to research agricultural practices on a management scale large enough to accurately assess costs and returns for various commodities that could be adapted to the local soils and dry climate of the upper Coastal Plain region. Today, the 720-acre facility has over 60 ongoing research projects. Using that research, the Midville Research Team has rallied together for over ten-years to deliver timely crop updates and display the research that is being conducted on farm. Extension Specialists, Agents, and State Leaders meet growers and show them production practices they can apply to improve their own operations and demonstrate how their commodity check-off dollars

are being used to fund research that supports sustainable food production. As of the end of the 2023 field day, over 1,200 growers, industry representatives, and state leaders have attended the Midville Agronomic Field Day. The most recent field day saw that roughly 62% of attendees were repeat visitors, while 37% were first time attendees. Roughly 98% of attendees found the field day applicable to themselves or other growers in Southeast Georgia. The most profound impact can be seen in the 92.5% of attendees that plan on implementing any of the knowledge gained in their own operation or business. A follow-up survey to this year's survey is planned to be given in 2024 to assess the actual change or additions made in the attendees farming practices or business decisions.

COUNTY VEGETABLE EDUCATION USING STATE COST-SHARE GRANTS

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Grainger County is the largest fresh tomato producer in Tennessee. The TN department of Agriculture has several grant opportunities that fit well for vegetable producers. Therefore, Extension presented programs which educated producers on Tennessee Agricultural Enhancement Program (TAEP) grants and how they would benefit their operation. The goals were for farmers to identify needs on their farm, apply for grants that would meet those needs, purchase items needed, and implement strategies which made them more profitable. Over a 5-year period, producers received $911,026. After the multiplier effect, the local economy was increased by $5,548,148. Farmers increased productivity, quality and marketing of their produce due to items bought by grants.

A COMMUNITY-ENGAGEMENT APPROACH TO MANAGING AGRICULTURAL DROUGHT

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Most agricultural water use is attributed to irrigation as a form of drought risk mitigation. The mid-South has increased its portion of national irrigation totals from 4.6% to 12.2% since 1985. Thus, the long-term goal of this project is to inspire behavioral change in overall water consumption across increasing drought risk scenarios to enhance regional environmental sustainability. This goal will be accomplished through university-community partnerships and community engagement that helps with solving community problems and enables universities to meet their civic missions. The Carnegie Foundation developed a community engagement classification framework to help universities deepen service practices and strengthen bonds between campus and community. This framework emphasizes creating more reciprocal partnerships within extension programs, allowing key stakeholders to serve as co-creators of knowledge while creating programs, research, and scholarship that better meets the needs of communities. This project's community engagement was used to capture feedback from stakeholders throughout the development of the irrigation scheduling webtool called Drought Irrigation Response Tool (DIRT). Thus far, two meetings have been held to capture direct feedback about webtool functionality, usability, features, and aesthetics. Pre- and post-meeting reflection captured additional comments and assessed collaboration and integration of community voice using the Carnegie community partnership scale. Results demonstrated that stakeholders (n=11) became significantly more aware of irrigation resources (60% to 86%) and technologies (58% to 82%) provided by the LSU AgCenter. They also rated the LSU AgCenter irrigation program as a more credible resource (87% to 96%), collaborative partner (83% to 90%), and felt involved in impactful decisions (78% to 86%). Additionally, the LSU AgCenter increased overall impact on stakeholders, valued expertise, and knowledge of AgCenter resources and personnel for making irrigation decisions.

Stakeholders that participated in both sessions continued to rate the AgCenter more favorably as a credible resource, collaborative partner, and felt more valued as a community expert. Efforts to progress through the collaboration and shared leadership stages of the engagement process will continue once DIRT is released publicly.

FOSTERING YOUTH ENGAGEMENT AND COMPREHENSION IN ENTOMOLOGY AND WILDLIFE EDUCATION

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Wildlife & Invasive Species Education™ for Kids (WISE Kids) has emerged as a beacon of educational innovation, dedicated to immersing young minds in the captivating realms of entomology and wildlife education. In a world increasingly challenged by biodiversity conservation and invasive species management, nurturing profound understanding and engagement among youth is paramount. The objective was to assess the efficacy of WISE Kids in achieving knowledge in the fields of wildlife and entomology. WISE Kids conducted a variety of outreach activities across different venues, including daycare schools and day camps. Through interactive sessions, participants delved into urban entomology, insect sampling techniques, disease-carrying arthropods, external anatomy, and native wildlife education. A group of 27 youth participants underwent thorough evaluation across three distinct events, incorporating engaging hands-on activities. The results highlight a remarkable achievement, with all participants demonstrating exceptional proficiency across three fundamental domains of entomology and wildlife education. Notably, participants showcased adeptness in identifying urban pests through practical methods, differentiating between herbivores, carnivores, and omnivores using various mammalian and reptilian specimens, and recognizing the primary body parts of an insect while effectively distinguishing insects from arachnids and other arthropods. WISE kids were also introduced to invasive species such as the walking catfish (Clarias batrachus) and Cane Toad (Rhinella marina). In conclusion, this study confirms the resounding success of WISE Kids in elevating youth knowledge and understanding in entomology and wildlife education. By fulfilling its educational objectives, WISE Kids emerges as a transformative force, empowering young minds with invaluable insights into biodiversity conservation and invasive species management. Through its innovative approach and commitment to experiential learning, WISE Kids continues to shape the next generation of environmental stewards, fostering a deep appreciation for the intricate wonders of the natural world.

USING UAS TO COLLECT PLOT DATA

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Scouting fields for farmers and conducting plot work are routine tasks for County Extension agents. Walking fields can be time intensive and large fields may portions that go unchecked. By utilizing a UAS, or drone, to get a bird's eye view of a field, an agent can make more efficient use of time by easily identifying problem areas and follow with ground truthing. In the Summer of 2023, Dyer Co Extension purchased a Mavic 3 Pro to be flown over fields for this purpose. The UAS was launched once weekly from June through August to scout the corn and soybean County Standardized Test, CST, plots. Examples of issues documented include nutrient deficiencies, weed pressure, and drought effects. An additional benefit to drone footage was the ability to video planting and harvest activities to educate the public about crop production. Videos for the corn and soybean variety trials were created using harvest footage to summarize county variety plot data. The video was published on YouTube and Facebook in November 2023. The soybean video was viewed 80 times and the corn video was viewed 129 times.

BUILDING AN INFORMED COMMUNITY OF SMALL RUMINANT PRODUCERS THROUGH FAMACHA CERTIFICATION

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Small ruminant industries continue to attract new and small farmers in Florida. These producers often start off in sheep and goat production with little to no experience with livestock management, and unfortunately, research-based resources for small ruminants can be limited and difficult to find. Internal parasite management is inherently part of the job for sheep and goat producers, and these problems can be exacerbated by the Florida climate, posing a severe and unique challenge for producers in the state. FAMACHA scoring is a standardized, widely accepted practice to inform deworming programs, and certification is required for producers to have access to FAMACHA materials and properly implement this practice on to their operations. Yet, there is little opportunity for Florida producers to become certified. Offering multiple FAMACHA trainings throughout the year beginning in 2022 has built up a community of small ruminant producers who are open to improving their operations through recommended practices and eager to interact with and learn from Extension and other producers. Presently, three hands-on programs have been offered by the group, with 66 producers in attendance. Survey results indicated 88% of the program participants increased their knowledge on topics such as internal parasites, deworming methods and products, as well as information and utilization of FAMACHA scoring. Additionally, 93% of participants also indicated an intention to change their behavior to include monitoring their herd for internal parasites, deworming according to UF/IFAS recommendations, and utilizing FAMACHA. The training offered by UF/IFAS Extension is one of the only methods for producers to become certified in FAMACHA scoring and receive a FAMACHA card to utilize in their operation, therefore this service is paramount to reducing dewormer resistance in the state. Participants indicated a total perceived economic impact of $34,598 for their operations as a result of this valuable training.

USING THE WATER WHEELS OUTDOOR WATER CONSERVATION LABORATORY TO EXPAND WATER QUALITY EDUCATION

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Water is one of our most crucial natural resources. Alabama Extension at Alabama A&M University offers a unique outreach delivery system to educate residents on how to conserve water and improve overall water quality in the environment. The Home Grounds Water Wheels Outdoor Water Conservation Laboratory is a 36-foot mobile water conservation laboratory that provides hands-on, engaging workshops and demonstrations. During the 2023 program year, this mobile learning unit traveled to more than a dozen events throughout Alabama, including water festivals and Earth Day events, bringing conservation education to more than 16,500 youth and adults. As a result, program participants increased their knowledge of watersheds, rainwater collection, water conservation, water quality, and integrated pest management. Ninety-five percent of those surveyed said they would share what they learned with others. Ninety-five percent of participants agreed they would adopt at least one of the recommended best management practices. Program Area: Horticulture, Agriculture and Natural Resources

COMBATTING WATERMELON VINE DECLINE IN PUERTO RICO THROUGH EXTENSION: AN INTEGRATED APPROACH TO ENHANCE WATERMELON PRODUCTION

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Watermelon production in Puerto Rico has encountered significant challenges due to the disease called watermelon vine decline (WVD), leading to significantly reduced yields and production. WVD is attributed to Squash Vein Yellowing Virus (SqVYV) as the primary causal agent and transmitted by whiteflies, Bemisia tabaci, which persist in weeds and other cucurbit hosts. The lack of integrated management strategies early in the production has caused the disease to persist without success of its control at many local farms. The overarching objective of this multi-disciplinary project is to enhance sustainable management practices of WVD and to promote an intense outreach program for growers in Puerto Rico. Our outreach plan seeks to bridge the gap between research findings and practical application by equipping growers and stakeholders with the knowledge and tools necessary to enhance watermelon production in Puerto Rico. We have actively engaged in outreach activities aimed at demonstrating and promoting the adoption of effective management practices for watermelon production. Several surveys were conducted among watermelon growers to continue refining our outreach methods. In November 2022, we organized a field day at the Agricultural Experiment Station in Juana Díaz, PR that included varieties trial demonstration plots and workshops. The selection of the watermelon varieties used in continuing the research objective was based on input from growers through surveys and regular interactions. To expand the knowledge and adoption of the practices, an e-learning short video was created to help growers with early detection of WVD symptoms in the field, as well as educate them about management strategies that have successfully reduced WVD incidence in other regions of the United States. In September 2023, we conducted a comprehensive survey to learn how growers made diagnostic detection of WVD in their farm and to understand the agronomic practices currently used to manage WVD. The results indicated that most growers had to adjust their agronomic practices in response to this disease.

CHECKING THE HEALTH AND VITALITY OF CLUBS

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Following Covid the Faulkner County 4H program was in a rebuilding phase just like all clubs and counites across the nation! To help rebuild clubs and get back to the basics of what the 4-H Program stands for, the county agent implemented club “health check-ins”. These meetings were to get the clubs rejuvenated and back on track. The agent utilized many tools that agents across her state had created, and developed check sheets for the clubs in the county. Thus, ensuring that the message they were receiving would be uniform aka creating basic club standards for the clubs in the county regardless of subject matter. The agent needed to see the clubs meeting on a regular basis, wanted to inspire new club leaders, and help other leaders transition from retired leaders to new leadership. She also encourage leaders that were continuing the in program creating relationships and open lines of communication between agents, leaders, the extension office, and much more. Overall, making the best better!

VIRGINIA CATTLE AND EQUIPMENT W.I.S.E.

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In Virginia, the number of women reported as the farm principal operator has increased since 2012, to a total of 16,456 farms totaling 2,043,877 acres (2017), accounting for 40% of VA farms. VA is home to 2% of the nation’s cattle inventory, with cattle ranking 2nd in sales according to the United States Department of Agriculture (USDA). Beef Quality Assurance (BQA) programs and Low Stress Cattle Handling (LS) can increase profits to the cow and calf operation by $100,898,000, and prevent calving difficulties losses of $15,000,000, for the number of cattle in VA per year. Additionally, the U.S. Bureau of Labor Statistics indicates that the agricultural sector is the most dangerous in America with 574 fatalities, including 19 fatalities in Virginia’s agriculture, forestry, fishing, and hunting sectors,

per year (2018). Accidents and injuries on the farm are primarily due to interactions with livestock or equipment. A Penn State study estimates there are approximately 396 agriculture related emergency visits in VA each year, with an average cost of $1,600, totaling $576,000 in accidents alone.

Cattle WISE was created to educate and empower women to effectively manage cattle and safely operate farm equipment. Dr. Temple Grandin was a special guest speaker on low stress cattle handling. Attendees included 130 participants from 24 counties in Virginia. 91% of evaluation respondents stated that the presenters and information provided was of "Excellent Quality". 88% of participants indicated an overall increase in confidence in all areas. As part of the program, we held an evening session with Dr. Grandin presenting to 130 participants, including 4-H youth, youth educators, and those affected by autism. Using NC State University's publication, 'Learn How to Analyze Cost-Benefits of Extension Programming', we can see the economic benefit potential of addressing these issues to be $46,935,200. Therefore, for every $100 put into this program over the last three years generates $32,176.10 return on investment.

STOCKPILING WARM SEASON GRASSES TO REDUCE WINTER FEED COSTS

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The cost of hay and feed for winter feeding is the largest expense of maintaining a beef cattle herd. Estimates in Arkansas in 2021 - 2022 according to USDA-NASS showed that hay prices averaged $133/ton. All too often, producers finish harvesting hay in the fall and then begin feeding it soon afterward. Adopting pasture management practices that extend the grazing season avoids investing more cost into forage that could be grazed instead of being harvested for hay. Stockpiling warm season grass is a pasture management practice that has the potential to reduce winter feed cost for beef producers. A stockpiled warm season grass demonstration was conducted on forty acres in the Fall/Winter 2022 through Winter 2023. The fields were clipped to 2-3 inches in height in early August and fertilized with 125 lbs./acre of urea fertilizer on August 4th. Grazing was deferred until November 13, 2022. The stockpiled forage was strip grazed. Ninety-eight animal units (AU = 1,000 lbs. cow) grazed on the stockpile for 48 days. The forage quality of the stockpiled was 7.6% CP and 55.5% TDN. Protein tubs were used as a supplement to balance animal nutritional requirements. The total savings between strip grazing the stockpiled forage vs. feeding hay was $6,854.66 or $98.91 per animal unit. Stockpiling warm season grass will save producers money.

CLEBURNE & INDEPENDENCE COUNTIES BOOTCAMP FOR CATTLEWOMEN

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Women contribute greatly to agricultural and rural society because of the roles they play on and off the farm. Since the early 1980s women's roles on farms have been expanding to include more decision-making and hands-on participation. According to the USDA more minorities and women became primary operators of farms and ranches in the past decade as the total number of farms and ranches across the nation decreased by about 3%. The objective behind the bootcamp was to empower women in the agriculture sector by giving them an opportunity to learn the day-to-day, hands-on skills they need to make informed decisions on their beef cattle operation. The camp took place at the Cow Palace at Chimney Rock Cattle Company in Concord and at the Arkansas Agriculture Experiment Station, Livestock and Forestry Station in Batesville. Thirty-five women from 7 counties and 3 states attended the bootcamp. The event kicked off with keynote speaker Lt. Governor Leslie Rutledge. The bootcamp combined traditional educational methods as well as hands-on exercises. Ladies were given opportunities to network with other ladies in the cattle industry while making new friends along the way. The camp covered a wide variety of topics within the cattle industry including farm business management, bull selection & calving seasons, forage management, farm estate planning, sprayer calibration, how to pull hay and soil samples, tractor safety, animal

handling, how to administer injections, how to back a trailer and much more. As a result of the bootcamp 86% of the women indicated they planned to implement changes in the areas of herd health and forage management while 91% indicated they planned to make changes in the area of estate planning. Educational tours, workshops, and a pasture walk have been planned in order to continue beef cattle education with this group of ladies. A bootcamp for new participants has been planned as well.

CHAIN BIRD SELECTION WORKSHOP

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Every year 4-H members are given the opportunity to participate in the poultry chain program. Each member is given a batch of birds, between 15 and 30 baby chicks on the same day that originates from the same source. Extension does do a good job of educating participants on starting and raising the birds. It seems like there's a gap in the education provided by the 4-H program, particularly when it comes to helping participants select the best birds for the fair. This oversight could be addressed by integrating a segment on decision-making into the program's curriculum. By teaching participants about the selection process, including factors such as evaluating the health, size, and appearance of the birds, as well as considering judges' preferences and competition criteria, participants can make more informed choices about which birds to showcase at the fair. This addition to the program would not only enhance participants' understanding of decision-making processes but also improve their chances of success in the competition.

During the Workshop. The participants settled in with their lawn chairs under the shade of the trees behind the Extension office, we began with a general overview of the selection criteria, handling qualities, size, conformation, feather quality, and overall health. Once everyone had a good grasp of the basics, we moved on to the practical aspect of the session. Working individually with each family, we demonstrated proper handling techniques, showing them how to gently hold their birds and what specific features to look for in terms of health and condition and handling qualities.

At our county fair, the competition for chain birds is divided into four distinct categories. Hyline Brown Pullets White Leghorn Pullets Broilers Turkeys The Grand Champion winners in the Hyline Brown, White Leghorn, and Turkey categories had previously participated in the selection class

FLORIDA MIDDLE & HIGH SCHOOL FFA FORESTRY STUDENTS GAIN TREE IDENTIFICATION SKILLS THROUGH EXPERIENTIAL FOREST DENDROLOGY CURRICULUM

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Agriculture education instructors teaching in middle and high schools are expected to have knowledge on a wide range of topics, but often lack certain skill sets or hands-on experience in some areas. To meet the demands for outdoor education programs and assist local Future Farmers of America (FFA) advisors, an experiential Extension program and curriculum on the topic of forest dendrology (tree identification) was created. As part of this agent's Environmental Horticulture Extension Program, a 3-acre arboretum was developed for use as an outdoor classroom and learning landscape. Designed with the FFA Forestry Contest in mind, tree species were selected from the dendrology practicum list. Having 80% of the contest trees (40 of 50 species) growing in the arboretum, the experiential learning opportunities offered in the arboretum help students successfully transition from theory to practice while developing their tree identification skills. Teaching methods include classroom presentations, arboretum tours, and mock contests. Materials created for this program include a tree identification techniques presentation, tree identification activity with dichotomous key, and a forest dendrology study guide. Training topics have included leaf arrangement, leaf divisions, leaf shapes, leaf margins, using a dichotomous key, plus tips and tricks for telling species apart. Since 2014, 18 FFA Forestry Teams (112 students) from six schools across north and central Florida have improved their tree identification skills during training activities held by the agent in the arboretum. All student participants self-reported learning new information to develop their skills and at least 80% of students felt well prepared for their contest after spending time in the arboretum as part of the program. Advisors and parents also reported learning new information because of the program. Mock contests designed to

prepare students have improved team scores at district contests, and in three separate years, teams scored high enough to compete at the state level. Additionally, at least 19 students also placed individually (first, second, or third overall) in the forest dendrology section. Having a large majority of the contest trees on site, advisors report that the forest dendrology curriculum, including the arboretum, is an invaluable resource for their students.

APPLYING HERBICIDES PRIOR TO EXTREME COLD WEATHER FOR BUTTERCUP CONTROL DEMONSTRATION

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Winter weeds are a common problem in Faulkner County warm season pastures and hay fields every year. Winter weeds can grow very rapidly during the dormant season of the warm season grasses causing issues when green up starts in the early spring. There are many common winter weeds but the one most asked about by Faulkner County producers is buttercup. This weed starts out as a small plant but by spring the common yellow flower is seen all over the county. Some producers will spray in the fall, but most of the applications go out in the late winter months of February, March, and April. Sometimes warm spells in January and February get producers out and ready to spray but these days are usually followed by more cold days. This demonstration was established to evaluate the effectiveness of buttercup herbicides when applied during warm days when cold weather is predicted to follow. If the herbicides are ineffective after extreme cold temperatures this will save producers money to save that application until after the temperatures warm up again. But on the other side, if producers have an opportunity to apply a herbicide they need to take advantage of it because you never know when you will get another chance with Arkansas weather. It is important to know the results of this demonstration. The three most used herbicides by producers in Faulkner County for buttercup were chosen for this demonstration. Treatments included using each individual herbicide and then one treatment with a combination of all three. The results showed that good weed control can be achieved by early herbicide applications even if extreme cold weather occurs soon after application. Glyphosate and Patriot gave 80% control, and the combination of all herbicides gave 100% control of buttercups. 2,4-D at a pint only gave 50% control. The lack of control from 2,4-D could have been attributed to cold weather, but it also could have been from only using a pint of product. A better test with different rates is needed to make that determination.

UGA WATER TEAM DEVELOPS THE MASTER IRRIGATOR DEVELOPMENTAL PROGRAM IN THE ALTAMAHA REGIONAL WATER PLANNING COUNCIL AREA

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Irrigating without an irrigation scheduling method can be have a significant impact on crop yield and irrigation water use efficiency. In the most recent United States Department of Agriculture NASS survey 87 percent of Georgia producers consider “visible stress” and 27 percent consider “feel of the soil” when deciding when to apply an irrigation event both of which generally lead to yield and profit losses. Technology aids us in better understanding where our irrigation water ends up, whether the amount and frequency of irrigation events were sufficient. In 2018, only 11 percent of Georgia producers reported that they were using soil moisture sensors. The UGA Extension Ag Water team applied for and received a $75,000.00 grant through the Georgia Environmental Protection Division’s (EPD) Regional Water Councils to begin a Master Irrigator Developmental Program for Georgia. With its launch in 2023, the Master Irrigator Developmental Program began with 16 participants in the Altamaha Regional Water Planning Council funded through the EPD grant and four additional participants funded through extramural funding by Georgia’s Soil and Water Conservation Districts and other sources for a total of 20 participants during 2023. The Master Irrigator Developmental Program was designed to train irrigation managers through several avenues including indoor seminars and in field one-on-one trainings. Seminar session trainings included irrigation systems requirements for precision application, types of equipment available for irrigation scheduling, utilizing apps for scheduling, data interpretation, sensor installation methods, field requirements for successful scheduling and cost-share for irrigation equipment. The UGA Extension Ag Water Team assisted and trained participants on a one-on-one basis to help guide the installation of soil moisture sensors, how to interpret data and how to make informed decisions on setting irrigation trigger points. Instead of making decisions based on field observations which are not accurate, producers are now utilizing state of the art technologies to decide when to irrigate and crops are being irrigated more efficiently.

THE POWER OF EFFECTIVE PARTNERSHIPS

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The Ormond Scenic Loop and Trail, spanning over 35 miles, winds through some of the most captivating and ecologically diverse landscapes in coastal central Florida. This area offers immediate access to multiple water bodies, various parks, as well as barrier island dunes, and beaches. However, it faces threats from development, increased traffic, aging tree canopies, and natural impacts. In response, the Volusia County Council launched the ReGrow the Loop initiative in June 2023, led by the University of Florida/IFAS Extension Volusia County office, and supported by state and local partners invested in the Ormond Scenic Loop and Trail. This initiative aims to educate residents of the loop on the importance of restoring and enhancing the natural beauty of the loop. The objective of this presentation is to showcase how Extension established partnerships to effectively engage residents.

In collaboration with these partners, we organized over twenty educational events, both formal and in-formal. The partners were instrumental in providing expertise and topic relevancy. In addition to these events, social media posts and blogs were created to educate residents about invasive species. Partners embarked on in-person outreach to encourage residents to commit to the ReGrow the Loop pledge, indicating their intention to implement practices to restore and protect the natural resources of the loop. Monthly partner meetings were held to review initiative progress, social media engagement and pledge counts, share organizational updates, and plan future events. The ReGrow the Loop initiative, through partnerships, notably engaged over 500 individuals from nine different cities throughout the county, with 70% actively participating in multiple events, and 209 committing to the pledge. This demonstrates a widespread dedication to the program. These collaborative efforts widened resource availability, strengthened community ties, that created, and rekindled new and existing partnerships that boosted

the initiative's outreach. Collectively, these strategies have been pivotal in showcasing the effectiveness of united community actions towards the ReGrow the Loop mission. With partner buy-in they can continue to support and maintain the enthusiastic interest of this pilot program.

PREPARING 4-H YOUTH TO BE TOMORROW'S LEADERS

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Situation: Youth have not had the opportunity to learn and practice communication skills at the county level in a supportive environment since before the pandemic. The life skill of communication can have a positive long-term impact on preparing youth for the work force. Mary Arnold, PH.D. states that youth can "thrive" if there is a plan and implantation of a high-quality youth development context. Methods: One way 4-H develops communication is through county councils. Youth who have a propensity for leadership can develop communication skills and learn leadership roles by holding offices. With the revitalization of the council, the agent can educate the county officers, encourage shared leadership, and peer education. The objectives of this positive youth development were to educate officer roles, provide the opportunity for youth to practice their communication skills, to inspire other youth, and to foster shared leadership. Dr. Arnold stated that challenging growth, holding youth accountable, shared power through collaboration, and exposure to leadership opportunities prepare youth for life beyond high school. Using a supportive train-the-trainer model, a series of learning experiences were designed and presented to educate the council officers regarding the best practices of an effective club officer. The officers then became the presenters at the countywide officer onboarding as an opportunity to practice their communication skills. Participants were given officer books, gained knowledge of expectations, how to conduct 4-H meetings, and how to keep accurate records. Results: The survey results proved 100% of participants gained knowledge of officer roles. It provided the council officers the opportunity to practice effective communication and allowed 36 club officers to gain knowledge of their roles to effectively lead their clubs. The leaders that were present were reminded to foster shared leadership. As a result, three of the six county officers became district officers, and one officer joined the state executive board. 4-H Conclusions: Officers learned the key elements of being a successful officer and then how to share that knowledge with their peers. Evidence was found in the survey that all officers effectively imparted knowledge to all 36 participants during the training for club level officers.

DETERMINING CORN NUTRIENTS AND WATER USAGE

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Looking at the value of timely water intervals and the role they play in micronutrient uptake in corn. We all know that watering corn at specific growth stages can make a crops yield potential change dramatically. Something that is commonly overlooked is, while having the available moisture for nitrogen uptake, the need of water availability for key micronutrients uptake to help with finishing grain development. First what we need to look at is making sure the soil series is compatible with producing corn. Then we can move on to seeing what nutrients a soil sample tells us we need to generate a high yielding crop on that particular fields soil. While knowing nitrogen plays a great role in corn production there is a large interest in what micronutrients we are falling short on being available. Once we know what the soil sample tells us we can start to determine what the right approach is to applying both macro and micronutrients for plant uptake. The way we determine how to continually keep the needed nutrients available is by taking tissue samples and adjusting what we apply with more timely fertilizer applications. While making sure we make timely fertilizer applications we need to also be sure we are making timely water applications to help with the intake of these closely determined nutrients applied. The way we look at this is determined is by the use of soil moisture sensors and keeping the correct needed levels of moisture content in the soil. Something to also keep in mind is paying attention to other yield limiting factors such as the commonly known corn disease, Southern Rust, and the most known corn pest, southwestern corn borer. Integrated pest management always plays a key role in maximizing corns yield potential. While trying to key in on macro and micronutrient uptake, being able to keep other outlying yield factors controlled helps with making sure your nutrient research is maximized.

7TH AVENUE COMMUNITY GARDEN

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7th Avenue Community Garden in Hendersonville was started in 2011 with a partnership between the City of Hendersonville and a few dedicated community members to use city land for a community garden in the Green Meadows/Brooklyn Community. Brooklyn is a historic Black neighborhood established in the late 19th century. The garden became disused and now community members and volunteers including Henderson County Master Gardener Volunteers are working to revitalize the garden. 21 three hour workdays were held. EMGV Jane Grossman donated 641 volunteer hours (641 x $31.80 federal vol. hour value = $20,383.80). Grant funds are vital for making this project possible. To date, the City of Hendersonville and community members have come together and secured $50,000+ in funds dedicated for the garden. These grants include $25,000 from Healthy Babies Bright Futures, $25,000 from the Community Foundation of Henderson County, $5,000 from the City of Hendersonville Bee City USA program and $2,050 from The Seed Money Challenge & N.C. Community Garden Partners. Soil testing was performed to assure there were no heavy metals. Invasive weeds were removed and native pollinator plants and trees will be replacing the weeds. Raised beds and other infrastructure are being rebuilt.

OPTIMIZING BERRY PRODUCTION WITH FLORIDA-FRIENDLY LANDSCAPING™ STRATEGIES FOR HOME GROWERS

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Rising costs and limited access to diverse fruits exacerbate food insecurity in north central Florida households, compounded by the disappointment of newcomers from temperate climates as they face the challenge of growing tropical and subtropical fruits in the region's colder temperatures. To address this issue, a three-hour program was developed in Putnam and Flagler counties, focusing on Florida-Friendly Landscaping™ practices tailored for sustainable cultivation of blackberries, mulberries, and goji berries. Participants learned essential cultivation techniques and received two plants of their choice to apply their newfound knowledge at home. Notably, eleven out of fifteen participants (73%) expressed commitment to the Florida-Friendly Landscaping (FFL) principle of "Right Plant Right Place," aiming to curtail water, fertilizer, and pesticide usage while fostering healthier, more productive plants and reducing environmental impact. Post-program assessments revealed significant enhancement in participants' gardening knowledge, particularly concerning berry cultivation. By empowering homeowners with the skills and know-how to cultivate dooryard fruits, this initiative aims to mitigate the economic and health repercussions of escalating fruit prices and reduced accessibility to fresh produce. Future workshops are planned, with follow-up surveys slated to monitor participants' progress in berry cultivation, thereby advancing food security and environmental stewardship within our communities.

FLORIDA 4-H FOOD PLOT PROJECT: ENVIRONMENTAL STEWARDSHIP AND LIFE SKILLS

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North-central Florida has many diverse natural resources and conservation priorities related to these resources. Youth in this area also enjoy participating in outdoor recreation, specifically hunting. This educational program aimed at combining education in environmental stewardship and natural resources management and the outdoor recreation that many youths already participate in. The Florida 4-H Food Plot Project is a 5-month record book-based project where youth are provided with materials to plan wildlife food plots, monitoring their use and environmental impact and documents those

activities. Youth are provided with food plot seed, record keeping tools, a soils test, rain gauge, and other wildlife documenting resources to plant, monitor, and document their own food plot. In doing so the project intends for youth to learn principles of natural resource management and environmental stewardship while also developing live skills. In 2021, the project began one county but has expanded to four counties by 2023. Youth enrollment in 2021 was 19 youth and has expanded to 40 youth annually across those four counties. Project evaluations completed by youth (n=29) indicated that over 90% of youth increase their knowledge of natural resources, became a better environmental steward, increased their importance of wildlife in their area, and learned techniques for improving or creating wildlife habitat. Additionally, 79% of youth improved their plant identification skills and wildlife sign. The 29 youth that have responded to project evaluations indicated they learn or improved 26 different life skills. The most reported life skills learned or improved were keeping records, planning and organizing, Decision-making, problem solving, goal setting and working. In future years the project will expand to include additional counties in Florida and address the seasonal challenges in such a large state to hopefully provide this project opportunity throughout the state.

THE 8TH GOLD CUP COMPETITION AS AN EDUCATIONAL TOOL TO IMPROVE THE QUALITY OF COFFEE FOR PUERTO RICAN COFFEE GROWERS

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The origin of the coffee quality competition, Puerto Rico's Golden Cup, was for the year 2014-2015. It arises as part of a research project of the Agricultural Experimental Station (AES of the University of Puerto Rico. It was not until 2016 that the Agricultural Extension Service joined to carry out the process of non-formal education, through the agricultural extension agents group "Los Cafetaleros de Puerto Rico". The fundamental purpose of the competition is to educate and motivate coffee farmers to produce high-quality coffee, and to improve their cup quality of coffee produced in Puerto Rico. This provides greater economic income to coffee farmers when they produce premium or specialty coffee. This results in an improvement in the quality of life of families in the coffee-growing area. In addition, through the process of education, farmers also learn to recognize the quality of the coffee they produce on their farms. This aims to reposition Puerto Rican coffee in the world as a producer of high-quality coffee.
In the eighth Gold Cup competition, a total of 28 coffee samples were received. They come from farms that are in the mountainous area of the island. These samples were in turn classified into categories washed and unwashed coffees. The competition samples were evaluated by panels of tasters certified by the Coffee Quality Institute (CQI). The results indicated that 39% of the samples were specialty coffees, 43% were premium and 18% were commercial. Of the 28 coffee samples that participated in the competition, 82% of them belong to coffee with the special and premium classifications. This indicates the achievement of the educational work carried out by agricultural extension agents. Because coffee farmers adopted practices and strategies that increased the quality of the coffee produced on their farms, to obtain a differentiated product. A differentiated product is one that consumers are willing to pay at a higher price than a conventional product. This is because the product meets different parameters with different quality and production system.

PASTURE EVALUATION IN DAIRY FARMS IN THE NORTHERN AREA OF PUERTO RICO AS A TOOL TO EDUCATE PRODUCERS

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Although in Puerto Rico most dairies have a grazing/ supplementation system, feedstuff costs are forcing to increase or improve the grazing system as an alternative to reduce milks cost production. The local Cooperative of Milk Producers, USDA- Natural Conservation Service, and University of Puerto Rico at Mayagüez, Agricultural Extension Service are collaborating to educate and provide technical assistance to improve grazing systems.

The objective of the partnership is to educate, promote and improve grazing systems as a sustainability strategy. Efforts in the last 2 years involved two main activities: (1) educational field days, and (2) evaluation of pasture condition score in dairies. Field days related to grazing systems were planned in 3 regions to educate about benefits of grazing, and management practices as well observing recommended practices in those farms. The USDA NRCS Pasture Condition Score (PCS) is the tool used to identify grazing practices that need improvements, while serving as a benchmark for this effort. For the PCS, producers indicated the paddock with most recovery days (1-30 days) and Extension Agents followed the procedure indicated by the USDA-NRCS Pasture Condition Score Guide. Descriptive statistics were used to summarize data. Although data is still being collected, preliminary results indicate that 59.5% of the paddocks had between 61 to 80% of desirable plants; 70.3% of them had live canopy of 66 to 85%, 70% had an adequate or rapid recovery; 40.5% presented some overgrazing; 94.5% had at least 41% of soil cover; 41% of them had soil compaction; and 67.5% had few or no signs of erosion. These results imply that dairy producers can make changes to their actual grazing system, since it's probable the net return of investment, and it will improve production and the environment. In addition, more educational activities will be needed to help dairy producers adopt recommended practices.

BEEF CATTLE SERIES: 101 & 201 EDUCATIONAL CATTLE WORKSHOPS FOR BEGINNING, VETERAN, AND ESTABLISHED CATTLE FARMERS

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Over the last five to ten years, middle Georgia has experienced farm turnover. UGA Extension and the Natural Resource Conservation Service have seen a drastic increase in cattle management questions. There have been approximately 40 new famers moved to the area and about 80% of the current farms have experience turnover. This has led to the need for an increase in beef cattle management programming. The purpose of the Beef Cattle Educational Series is to meet the educational needs of cattle producers. The programs were hosted to provide the necessary background information to start or take over a beef cattle cow/calf operation. The program series' original objectives were to cover the basics of beef cattle production management but grew to cover more advanced topics in the 201 class. The topics ranged from forages to animal science: Getting Started (GATE Card, FSA Programs, Record Keeping), Economics/Market Outlook, Grazing Systems for Cattle, Conservation Practices, Testing: Soil, Forage, Litter, Etc., Planning Your Grazing System (Establishment, Renovation, Management), Weed Management/Sprayer Calibration, Structural Practices/ Equipment, Cattle Nutrition/Selection, Herd Health, Reproduction/EPDs. Since origination, our Beef Cattle Educational Workshop series has been a success with over 300 participants throughout all courses: 65% beginning farmers, 14% veteran farmers, and 21% established farmers. Participants were not expected to attend all sessions, but majority chose to. Participants ranged from multiple counties including but not limited to: Upson, Lamar, Pike, Monroe, Crawford, Spalding, Coweta, Toombs, and Chatham. The series grant sponsor made it possible for each attendee (first night of BC101) to get free soil samples. With those results, they were able to help come up with a game plan for pasture renovation, establishment, and management throughout program. As a result of the program series, 100% of the participants have continued to utilized FSA, NRCS, and Cooperative Extension in their perspective counties and many schedule regular check-ins regarding available educational materials, testing, and arrange site visits with their local offices.

HORMONAL IMPLANTS ON STOCKER HEIFERS

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Growth promoting implants have been used in beef cattle to increase weight gain and feed efficiency since being approved by the FDA and commercially available in 1957. The use of hormonal implants in beef production is lowly adapted in Oklahoma with only 9% of cow-calf producers with herds less than 100 cows implanting their steer calves. Only 28% of operations that run stocker cattle along with their cow-calf operation implant their

steers. In 2023, Adair County Extension Educator, Jennifer Patterson along with OSU Extension educators Scott Clawson, Donna Patterson, and Earl Ward partnered with local beef producer, Todd Snyder, to conduct an implant demonstration on stocker heifers. The demonstration showed how growth promoting implants affected performance and finances. The Ralgro® implant added an additional 5.63 pounds per head and the Component TE-G w/ Tylan® implant added an additional 14.02 pounds per head, resulting in an additional $10.67 and $29.33 per head over the cost of the implant, respectively. The Synder Ranch also served as a tour stop for the 2023 Adair County Annual Pasture Tour where beef producers were given a handout to learn more about implants, their use in beef cattle, and the results from this local demonstration. Over 80% of the participants evaluated said that they had an increase in knowledge gained about implants. The information and results were used as a feature article for the Farm Talk Newspaper, which is distributed to at least 10,000 people in ten different states. A presentation on the information was given to the Adair County Cattlemen's Association and articles were written for OSU Extension newsletters as well as the local newspaper. Beef producers who are slow to adapt a technology are more willing to consider it if they can see local results. If the Snyder Ranch had implanted all the heifers in the study, it would have resulted in an additional $2,933. The Synder Ranch is preparing to implant calves in 2024.

DEVELOPING A MOBILE POULTRY PROCESSING RESOURCE FOR SMALL FARMERS IN NORTH CENTRAL N.C.

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The final USDA inspected slaughter plant accepting poultry in North Carolina ceased operation in Fall 2017, leaving producers with no options if they wished to market poultry products. This increased utilization of North Carolina Department of Agriculture and Consumer Services (NCDA&CS) poultry processing exemption, which allows individuals to process poultry they have raised to sale while not being under daily inspection. In response to this, N.C. Cooperative Extension, Stokes County Center purchased a mobile poultry processing unit (MPPU) with the purpose of making the equipment available for rent to the public. Promotion of the MPPU included adaptive development of a streamlined reservation system, standard operating procedures, and biannual poultry processing training. Each workshop was 6-7 hours long and consisted of lectures in the morning, including detailed processing instructions and how to become a poultry exempt operator in N.C. The afternoon portion of the training gave participants the opportunity for hands-on practice processing chickens and turkeys. The first processing training was held in May 2021, and while nearly 25 were registered, only four people attended. Biannual training began in 2022, with the spring training being held in Danbury, N.C. and the fall training in Greensboro at N.C. A&T University's farm. 40 people were trained in 2022. The training format remained this way through 2023, with 48 people being trained in 2023. Of attendees completing evaluations during 2022-2023, 18 increased their knowledge of safe food handling, 40 gained knowledge and skills to increase production for local markets, 43 implemented biosecurity practices on their farm, and 26 increased their knowledge of poultry flock management. The Stokes County MPPU was rented 63 times between January 1, 2022 and December 31, 2024 and was used to process an estimated 4,000 birds. The combined economic impact of these trainings and the Stokes County MPPU for 2022 and 2023 is estimated to be nearly $95,000.

GROW YOUR OWN GROCERIES: A VIRTUAL SEMINAR SERIES TEACHES HOME GARDENING, COOKING, AND FOOD PRESERVATION

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The Grow Your Own Groceries (GYOG) seminar series was started in 2020 during the height of the COVID pandemic to provide virtual horticulture and family and consumer sciences (FCS) education to stakeholders at a time when they needed it most. With people spending more time at home and grocery supply chain issues, there was an

increased interest in and need for educational programs on home gardening, cooking, and food preservation. Objectives of this educational program include teaching the public how to grow, cook, and preserve edible crops at home and demonstrating the breadth of Extension work and Extension's statewide impact to a large audience. The GYOG program continues to be one of our most popular Extension programs even now that in-person activities have resumed. Each GYOG presentation features a different crop or gardening topic. An agriculture presenter and FCS presenter are generally paired up to provide information on how to grow healthy, nutritious food in home gardens and how to cook and prepare the harvest. The monthly programs are presented as Zoom meetings which are recorded. All registrants receive a follow-up email with a link to watch the recording, copies of any recipes that were shared during the program, links to webpages or fact sheets with pertinent information about the topic, and information about how to join the GYOG mailing list. Topics have included how to grow and cook individual fruit and vegetable crops, composting, integrated pest management, starting a vegetable garden, pruning fruit crops, using cover crops, and soil preparation and fertilization. Many attendees report gaining knowledge that will help them grow their own food and making or planning to make recipes presented in the GYOG presentations. By featuring multiple programs and Extension presenters from around the state, the Grow Your Own Groceries series has become an excellent tool for demonstrating the breadth of Extension work and our statewide impact to a large audience. The GYOG program has also increased interaction between county agents and other Extension offices and improved collaboration between agriculture and FCS programs.

COASTAL PLAINS CHICKEN PROJECT - POULTRY PROCESSING DEMONSTRATION

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The main objective of the 2023 Coastal Plains Chicken Project - Poultry Processing Demonstration was to educate poultry producers interested in learning how to safely and efficiently process poultry on their farms. Another goal was to educate them on the rules and regulations from the North Carolina Department of Agriculture and Consumer Services Meat and Poultry Inspection Division, to make sure they're in compliance with the rules that apply to their farm. The methods used to accomplish these goals were offering the class in-person as well as via Zoom and providing various ways to accommodate different learning styles such as PowerPoint presentations and hands-on demonstrations. Agents also had the North Carolina State University Prestage Department of Poultry Science technician teaching how to safely process the birds which meant she was at the participants' disposal for questions. The results of the program showed 83% of participants improved their knowledge from Very Low to High before the class to Moderate to Very High after the class. One of the most meaningful impacts of the class was donating 73 birds to families in need in local communities. In addition, of the 12 participants who answered the evaluation question about how much they thought this program would save them on their farm, seven said $1-$500 and three said $500-$1,000. Another positive impact of the program included the Carteret County 4-H agent utilizing the chicken hearts and feet from the processing day for local high school science labs. Jones County donated 25 birds to participants of the Jones County Holiday Food Box Giveaway and Food Safety program. Overall, our poultry processing demonstration has proved to be a success year after year and our Extension team will continue to improve and update this program annually to keep it relevant and meeting the needs of our clientele.

2023 HAY IMPROVEMENT PROGRAM: INCREASING HAY TESTING ADOPTION

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Adoption of hay testing has been slow in Baxter County. Many producers don't have an accurate view of the quality of the hay they produce, sell, or feed, oftentimes relying solely on a visual appraisal of a lot of hay. As such, hay is bought, sold, and eventually fed, with little to no regard to accurate forage quality. This, of course, can lead to problems further down the line with reduced winter body condition in the cow herd that aren't being supplemented properly, lower conception rates, and ultimately less weaned calves to sell. The primary goal of the Hay Quality Improvement Program was to address this domino effect at its source. In addition to measuring forage quality, we

wanted to provide producers with accurate dry matter weights for their bales, which are often unknown, to be able to better market their hay and/or plan for winter hay inventory needs.

Producers were recruited to participate via social media and a quarterly beef and forage newsletter with the incentive that the lab analysis fees would be waived – an $18 per sample value. Participants were limited to a maximum of 6 samples and weighings each. For 2023, 34 grass hay samples were taken, representing 12 producers in Baxter County. At the conclusion of the project, producers were sent a summary of their results that included their hay weights and a breakdown of how each lot of hay compared to their cow herd requirements. Results from this program were shared on the county Facebook page, and presentations were given at the county cattlemen's association meeting and Baxter County Conservation District field day. Promotion of the program and its results has prompted other producers to have their hay tested.

THE FEASIBILITY OF WATERING AGED PECAN ORCHARDS

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Over the past generation many pecan orchards have been abandoned in Lonoke County Arkansas. As a result, many have gone out of production . Families have since given thought to the idea of regeneration of these orchards, making them productive yet again. Research has been conducted to help identify orchards that are candidates for regeneration and several aspects of this research have been identified that are factors affecting the feasibility of helping these orchards produce pecans regardless of the variety. Trees in these orchards are on average forty years old and older. Soil tests along with proper watering are two of the major issues not to mention insect and disease control that many times have not been dealt with since the orchards were unattended. The orchard floors must be cleaned, soil samples taken. Trees in these orchards require watering far beyond what the micro watering systems of younger orchards can muster to adequately provide for proper irrigation. The question is whether all the issues mentioned above are enough to bring the trees back to a productive state. In our research the answer in many cases is yes, these older trees can be productive once again. Water being used from nearby row crop fields can be used as a source of irrigation. This water that would otherwise just be subject to run-off after field irrigation can be a life saving tool to revive these older orchards. These orchards are all part of Integrated Pest Management demonstrations that can be used by clients across the state if an alternative water source is available.

POLLINATOR SHORT COURSE LEADS TO A BUZZ OF CHANGE

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Situation. The Villages is known as the largest retirement community in the world with approximately 160,000 residents according to the Villages Homeowner Advocates, in almost 80,000 homes, and it continues to grow. As new communities are developed, they are cleared of much of the vegetation that would be used for nectar and host plants, or pollen. Often new residential plantings can be basic green shrubs providing limited resources. The installed green shrubs that may not support all aspects of pollinator life cycles, and that is one of the possible reasons for native bee and butterfly declines. Educating new and existing residents on the importance of pollinators broadens the opportunity to the increase of pollinator plants to support butterflies and native bees. Methods. In April 2023, the first Pollinator Short Course was offered featuring UF/IFAS Extension specialists and experts to discuss managing pests on pollinator plants, discuss butterflies, their conservation and those at risk, honey beekeeping, native bees, and landscaping to attract and support pollinators. Results. There were 79 participants registered to attend the Pollinator Short Course, as well as volunteers. Participants took a pre- and post-quiz which resulted in an overall 28.5% (n=62)

knowledge gain. Participants completed an evaluation with results indicating 84% (n=48) would change something in their landscape/pollinator garden after attending with some participants providing specific changes, and 100% (n=58) responded they would share something they learned with others, including specific information they would share. Conclusion. While new landscapes can be unsupportive of pollinator lifestyles, the Pollinator Short Course motivated participants to change their landscapes or share knowledge with others.

SC WOMEN'S AGRICULTURAL NETWORK

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The South Carolina Women's Agriculture Network (SC WAgN) was developed as an overarching initiative to provide all women in agriculture the tools they need to grow their success, feel confident in their roles, and provide a network for women in agriculture in our state. Currently, there are three existing program areas under SC WAgN: Ladies Engaged in Agriculture Development, Women Owning Woodlands and Annie's Project. Each of those areas had their own developed programs and network of participants; however, agriculture in South Carolina is not one-dimensional, and different program areas often overlap.

In 2020, these three programs were combined to create one large network. Programmatic efforts include a monthly webinar series, quarterly newsletter, field days and an annual conference. In 2019, the initial number of newsletter subscribers was 91. As of March 15, 2024, there are now 946. The webinar series, entitled "Webinar Wednesday," began in 2021 with 41 subscribers and now has 192.

Field days and an annual conference were added to the programmatic offerings in 2022. Both provide hands-on learning experiences and networking opportunities. There is currently a field day planned for May of 2024, as well as a conference in March of 2025.

EXPERIENCING GARDENING THROUGH THE 5 SENSES

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Paulding County is one of the fastest growing counties in the nation with a current population of 182,000 and estimated to grow to 230,000 by the year 2030. The county is an outer ring county in the Atlanta metropolitan region and sits at the intersection of suburban and rural landscapes. Most residents live in suburban settings and are disconnected from agricultural production, while farms are just on the other side of the county. In an effort to increase agricultural and environmental literacy, Agriculture and Natural Resources staff in Paulding worked with volunteers, community leaders, and educators to reach youth with hands-on gardening education

EVALUATION OF COOL-SEASON FORAGE SPECIES AS DECISION TOOL FOR FORAGE AND LIVESTOCK PRODUCERS IN SOUTH CAROLINA

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Annual cool-season forages can extend forage production and distribution and decrease reliance on supplemental feeding during cooler months in the Southeast region. The planting window for annual cool-season forages ranges from late September through November in South Carolina, and proper nutrient and harvest management should be used to guarantee the proper establishment and production throughout the season. Choosing adequate forage species adapted to each location, weather, and management skills is crucial. In this context, in 2023, a study evaluating cool-season grasses was conducted at the Clemson Research and Education Centers in Blackville (EREC) and Columbia (SREC). Triticale (xTriticosecale Wittmack), wheat (Triticum aestivum), rye (Secale cereale), and ryegrass (Lolium multiflorum) cultivars were managed under two harvest strategies: simulated grazing (three harvests) or baleage production (single harvest). Visual ratings for cold damage and forage accumulation and nutritive value responses were determined in both locations. Trical 344 triticale yielded 3,372 vs 4,371 lbs/a at the EREC and SREC, respectively (Fig. 1). Wheat Gore had 3,336 vs 1,873lbs/a at the EREC and SREC, respectively. Among the ryegrass cultivars, they ranged from 2,284 to 4,603 lbs/a among locations. In terms of crude protein concentration, results were up to 23%. In 2023, field days were held at both locations in March and April, and approximately 90 people attended. In addition, Dr. Silva presented the data in meetings and developed educational online content that disseminated the information further and allowed for additional visualizations (n>200 views). Results emphasize the high quality of cool-season annual forages and their ability to meet nutritional requirements for livestock. Additionally, the interest from producers supports the need to conduct additional data collection and work to provide information on variety selection statewide.

4-H EMBRYOLOGY PROGRAM

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Students in Bladen and Hoke counties are not proficient in science and math and need hands-on learning opportunities in STEM to help them meet expectations. The purpose of the Embryology program is to provide curriculum to teachers that meets seven NC Essential Science Standards, provide technical assistance for teachers to hatch eggs successfully in their classrooms, and to provide learning modules to enhance student learning. Teachers are provided fertile eggs and incubators; teacher and student training about incubation, chickens, eggs and handwashing; weekly learning modules on a Google Site with lessons and videos; student worksheet packets; a 21 day plastic chick life cycle sets; and chicken reading books. Livestock agents in both counties and the Bladen 4-H agent developed the modules and videos to increase student learning, but not increase teacher workload.

Students and teachers love the embryology program. Many teachers enjoy teaching this part of the curriculum and look forward to the spring program each year. The program has been provided for 13 years in Bladen and 25 years in Hoke. In 2023, 21 teachers and 400 students in Bladen County and 13 teachers and 759 students in Hoke County accessed the website. 2023 program evaluations showed 90% of teachers used the website and student packets. 100% of teachers strongly agreed or agreed that it was a useful addition to my science unit, the curriculum helped me prepare lesson plans, materials reinforced standards of study, and enhanced students' perception of science. When asked about how the program was beneficial to them, positive teacher comments included: "My students were exposed to content and material that helped them better understand the world around them. They thought the inside of an egg had a chick inside. As we talked and discussed what the inside of a fertilized egg

had, they began to understand the reason why it had the parts it did" and "I liked the book, packets and embedded videos that were sent. They helped the students visually gain knowledge about the process." URLs for the student page https://sites.google.com/ncsu.edu/2024-embryology/home

EGGSPLORING SCIENCE: 4-H EMBRYOLOGY PROGRAM IGNITING LEARNING IN SCHOOLS

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Seventy-eight percent of Volusia County Public Schools carry Title I status, a reflection of the high number of students facing economic challenges. This socioeconomic backdrop magnifies the urgency of addressing STEM (Science, Technology, Engineering, and Mathematics) education disparities, which pose a substantial threat to the nation's capacity to bridge education and poverty divides. In response to these challenges, a school-based embryology program has been devised to actively nurture scientific curiosity and instill an understanding of life sciences among students. The objective is to immerse youth in 5 local schools per semester in the journey of embryonic development, fostering a hands-on and captivating learning experience. This initiative addresses the immediate needs of STEM education. 4-H and Agriculture agents plan to provide teacher training, classroom kits and curriculum to teachers. The program will consist of 5 teachers in the Volusia County schools for each of the spring and fall semesters. Extension provides an educational google site with resources for the project. Lessons will be from Eggcellent Adventures in classroom Embryology. The program started this spring semester and had its first 5 pilot schools, a total of 10 adults and 120 youth, currently going through the program. As the program ends at each school, the teachers will be provided guidance on applying for classroom grants from outside organizations to secure their own embryology supplies for future use along with a 4-H curriculum. The 4-H embryology program stands out as a forward-thinking and successful approach to motivate a new cohort of students with scientific literacy. By combining theoretical knowledge with hands-on experiences, the initiative creates a dynamic learning environment that not only enriches the curriculum but also instills a lifelong appreciation for the wonders of life sciences.

BRIDGING COMMUNITIES: COUNTY FARM TOUR

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The agricultural industry is the silent engine of the Volusia County economy as the demand for sustainable and locally sourced products continues to grow. For 42 years, Farm Tour has served as an educational and immersive opportunity for individuals and communities to connect with the agricultural roots of the county. The objective was for participants to increase knowledge and awareness of agricultural enterprises, sustainable practices and their economic impact to Volusia County. The University of Florida/IFAS Extension office and the Volusia County Farm Bureau have partnered with eight local producers to highlight their farming techniques, products, and passion for agriculture. The tour was organized with four stops on the west side and four stops on the east side of the county from small in size to large operations. The tour encompassed a range of agricultural activities, including crop cultivation, livestock management, and agro-processing. Farmers and agricultural experts guided participants through the production processes. The tour offered interactive demonstrations, displays and onsite commerce that offered an understanding of farming techniques and value-added products to purchase, creating a bridge between consumers and producers. 2023 farm tour was a success with 155 people exploring at least one of the featured stops. A post evaluation was

conducted, with 25% participation. Evaluation results indicated 97% of respondents stated that due to attending the farm tour they have increased their knowledge of the agricultural and environmental practices and 97% are more aware of the value of agriculture and natural resources added to their community. Thirty-five attendees reported that they shared the information they learned at the farms with others. Farm Tour created a space for dialogue, collaboration, and appreciation of the agricultural heritage, contributing to the sustainable development of the local farming community. It also serves as a platform for promoting agro-tourism, encouraging local economic growth, and strengthening the bond between rural and urban communities. The tour not only provides an opportunity for participants to purchase fresh, locally grown produce but also promotes awareness of the economic impact of supporting local agriculture.

UGA EXTENSION'S AGWET PROGRAMMING PROMOTES IRRIGATION EFFICIENCY WHILE PROVIDING EDUCATION OPPORTUNITIES FOR AG PRODUCERS

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The availability of water in the state of Georgia is very important to the overall state economy, but especially in agriculture. In recent years there have been multiple disputes between the State of Georgia and its neighboring states over water use rights. Though the most recent case ruled in favor of Georgia, the ruling "emphasized that Georgia has an obligation to make reasonable use of basin waters in order to help conserve that increasingly scarce resource." UGA Extension, through a team of agents, specialists, educators and interns worked together with agricultural producers on irrigation water management and the use of technologies available in an effort to promote the efficient use of water resources in 35 producer fields across 27 counties. This impacted over 2713 acres of row crops in the state of Georgia which included 316 acres of corn, 668 acres of cotton, 1577 acres of peanuts, and over 200 acres in fruits, vegetables and pecans. Phones calls, text messages field visits and emails maintained a constant flow of pertinent information. Agents presented in five field days where they demonstrated types of sensors available, pros and cons of each, installation methods, funding available, irrigation scheduling and more. According to research done in 2018-2019 on peanut irrigation, correcting over irrigation can be a decrease of between 1.5 inches to 6 inches of irrigation applied or an average of 3.75 inches. Similar research in cotton in 2020 and corn in 2022 yielded a decrease of 2.25 inches and 11 inches of irrigation, respectively. Using the average of 3.75 inches over 1577 acres of peanuts, 2.25 inches over 668 acres of cotton and 11 inches on 316 acres of corn, this project yields a water savings of over 295 million gallons of water.

FARM SCHOOL FOR WOMEN

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The Farm School For Women program is geared towards women that manage and work on the farm. This setting of education allows for women to feel safe and able to address questions they may have in a group of similarly interested people. The 2022 program addressed the following topics: small fruit production; lawn management and care; cattle body condition scoring; manure analysis and utilization on forages; utilizing social media for marketing farm products. The broad range of topics assisted the ladies in making farm management decisions and assist in improving farming operations.
The first session was an on-farm experience at a small fruit farm. UK Horticulture Specialist assisted in the educational portion of the evening. Our second session covered lawn care topics in which we utilized the ANR and Horticulture agents to cover the major topics. Our third session was an on-farm experience at a farm with a compost-packed

bedding barn with an active cattle operation. The ladies were able to learn from the ANR agents' presentations. The last session covered marketing farm products via social media in which a UK Specialist from the Center of Crop Diversification provided education and statistics on marketing using social media. Educational publications, PowerPoint presentations and hands on learning opportunities were utilized. The broad range of topics assisted the ladies in making farm management decisions and assist in improving farming operations. Every participant of the evaluation survey gained at least one new piece of knowledge to utilize on their farm. Several participants shared that they planned on making upgrades to their cattle handling facilities after gaining ideas from the on-farm session on cattle body condition scoring. Farm management processes have been improved by attendees of the program.

EXPONENTIAL GROWTH IN 4-H ENROLLMENT & ENGAGEMENT THROUGH POSITIVE LEARNING EXPERIENCES

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4-H enrollment and participation across the State of Arkansas dropped dramatically during COVID and the year following. In White County, our enrollment numbers had decreased by 50% as families were not allowed to meet in person and virtual meetings or activities had very low success rates in our area. These families were slow to return, and some did not return at all as their family situations or priorities changed. The need to increase enrollment and improve engagement was identified by the 4-H Expansion & Review committee within our county. To reengage these families and return to our normal operating enrollment numbers a plan was put in place to offer our normal 4-H Youth Programming to all interested youth in the public. We reached out to community centers, libraries, newspapers, and social media to advertise the programs. After the COVID situation, an increase in life skills and self-sufficiency educational requests were also noticed. Programming was planned to increase 4-H exposure to the public that focused on these skills. Over the last two years, nine-day camps have been made available to the public for youth. Day long workshops focused on holiday baking, leadership, survivor skills, livestock, life skills, the outdoors and rocketry were conducted. The educational programming was provided by the 4-H Agent, Master Gardeners, Volunteer 4-H leaders, and 4-H Teen Leaders. The opportunities and benefits of 4-H were incorporated into each of the day camps to increase awareness of our existing county programs. Each day camp was attended at full capacity by 4-Hers and non-4-H youth with 459 youth and adults attending. The adults and teens assisting benefitted from the day camps as they encouraged others to get involved and shared their personal experiences in or with 4-H. Ultimately, the enrollment and participation in White County 4-H has increased 378% since our low during COVID in part to these efforts. These youth have become contributing members across many areas of our program and have encouraged friends and family members to participate. 4-H positive youth development programming made available to non-4-H youth can exponentially increase enrollment and engagement in county 4-H programs.

WESTERN REGION

SOUTHWEST PREGNANCY DIAGNOSIS PROGRAM

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Cattle producers make critical business and herd management decisions based on the breed back of their cattle. This pregnancy diagnosis program helps in deciding between keeping or culling a cow, or when a cow will calve. Many ranchers will call in a vet or a certified individual to pre-check all their cattle for a fee. Unfortunately, there are limitations for certified individuals to do this because

of a lack of large animal vets and very rural communities. This program serves as a ranch awareness course, to provide knowledge and skills for ranchers, foremen, and cowboys to diagnose pregnancy stages themselves. After this course, participants will have the ability to identify an open cow vs a bred cow. Collaboration between 5 county agents and NMSU specialists to provide programming for 16 participants from different regions of New Mexico. This clinic was broken into two days, while the first morning was in a classroom with NMSU Extension Specialists, Dr. Marcy Ward and Dr. Craig Gifford discussed the importance of pregnancy diagnosis and different methods. Dr. Ward had an ultrasound and allowed time for participants to look at it. Dr. Gifford then discussed the importance of a vaccination program and Steve Lucero, Sandoval CES, discussed the anatomy of a bovine reproduction tract. The conclusion of the classroom led the class to a feed yard where reproductive tracts were brought out and discussed female anatomy and what to expect to feel. The next day and a half participants palpated cattle that were in various stages of pregnancy. Every participant had the opportunity to palpate about 100 head of cattle. 86% of the participants reported that they were likely to execute pregnancy diagnoses in their operation. 100% of participants reported that they acquired skills and knowledge to help increase their efficiency, enhance profitability, or increase quality of life. 80% of those reported that they strongly agree with enhancing knowledge and skills. 100% of participants reported that they acquired skills to start or enhance their pregnancy diagnoses in their cattle operation. 80% of participants ranked the program as excellent.

AG TALES

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AgTALES is a podcast that was developed with the intent to bridge a relationship between the podcast listeners, and leaders in agriculture today. There is a tangible gap that grows between the agriculture world and the rest of the world, however, this podcast was seen as a creative opportunity to allow listeners a peek into the lives of leaders in agriculture. The podcast was created using an online platform allowing for multiple and automatic uploads across several popular listening platforms. Guests of the podcast have included the vice president of Extension at Utah State University, as well as a Merck Animal Health veterinarian and spokesman for animal welfare. A member of the United States Congress is next slated to appear in the podcast. The podcast interview centers around four key questions: What was your upbringing like? What is your "thing" that keeps you thinking at night? Is this where you thought you would end up? Are you happy? After completing each interview, the content is reviewed, edited and enhanced for clarity to the audience. During the interview process, listeners are able to hear and understand the passion that drove these people to the positions they hold today. This podcast has also been instrumental in showing that agricultural leaders come from all walks of life, allowing the listeners to relate to them in unexpected ways. Data from the platform shows that the podcast has been downloaded in 48 cities and 9 countries with only two episodes published. Emotions including frustration, joy, and gratitude have been easily heard and felt in these published interviews, allowing the listeners to feel what agriculturally devoted leaders feel in their work and personal lives. This podcast will continue to grow and allow for more real communication between those in agriculture and the rest of the world.

MEAT RABBITS 101

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Nephi

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With the growing popularity of self-sustainability and locally sourced foods, raising meat rabbits has become a rapidly growing industry in Utah with over 1,000 active small-farm and urban producers. In 2022, Utah State University Extension launched education programs to teach research based practices and methods for raising meat rabbits. This program included YouTube videos, public education events, and exhibition for market rabbits as part of the Utah State Fair. The YouTube videos have a combined total of over 118,000 views from 12 different countries, public education events reached over 300 individuals in 2022, and the meat rabbit exhibition at the State Fair has tripled in size and reached approximately 150 people in 2023. The use of a variety of digital and in-person programs to share educational resources has

had a significant impact on the meat rabbit industry. These resources provide research based education to a wide audience and have aided in growing the meat rabbit industry.

GROWING FORWARD FARM AGRICULTURAL LITERACY PROJECT

Bonnie Hopkins
County Extension Agent/Agriculture
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Aztec

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Data and community needs assessments show that San Juan County faces multiple challenges related to food literacy, obesity rates, youth lack of physical activity, and the need for agricultural career opportunities. Addressing these challenges requires a multifaceted approach integrating education, community engagement, and economic development initiatives.

The Growing Forward Farm Agricultural Literacy project hosted 1,223 fourth-grade students during the spring and fall farm tour events in 2023. Each event included six farm tour stations, which participants learned about through hands-on activities that increased their understanding of agriculture. Extension staff, other community partner organizations, and volunteers led educational programs at the tour stations. The objectives of this project were to connect consumers to improve localized agricultural production through educational opportunities, to create connections between youth and potential agricultural career pathways in the region, to increase and encourage opportunities for healthy living, and to create a demonstration area at the San Juan County Extension Growing Forward Farm that fostered the education and development of agri-tourism operations.

The project helped bridge the gap between consumers and localized agricultural production by exposing students to various aspects of agriculture through hands-on activities. Experiential learning opportunities at the farm tour stations offer students insights into various agricultural practices and potential career options. Survey responses from the participants indicate a significant increase in agricultural knowledge and motivation to implement practices at home with their families.

The Growing Forward Farm Agricultural Literacy project serves as a platform for showcasing agricultural practices, educating visitors, and fostering connections between the agricultural and tourism industries. The Growing Forward, Farm Agricultural Literacy project, continues to make significant strides in connecting consumers to localized agricultural production, promoting agricultural career pathways, encouraging healthy living, and fostering the development of agri-tourism operations in San Juan County. Through continued dedication and collaboration, the project has the potential to have a lasting impact on the community's agricultural and economic development efforts.

ARIZONA STATEWIDE COMMERCIAL VITICULTURE NEEDS ASSESSMENT

Matt Halldorson
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Prescott

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Although vinifera grapes have been cultivated in Arizona since at least the early eighteenth century, recent decades have ushered in a renaissance for the state's wine industry. From 2012 to 2021, the industry has roughly doubled in both planted acreage and wineries. One of the missions of University Extension is to support emerging industries with objective, science-based information which will enable them to grow to their full potential. The inception of any good Extension program requires direction. While an Extension agent may have extensive experience working in a specific program area, every community is different and faces a unique set of challenges. Often, an agent's best resources of information are the community members themselves, and there are two principal sources of community information. The first is the Advisory Board, a group of individuals appointed with the express purpose of consulting with local Extension to ensure that programming is applicable to

the stakeholders. The second is the needs assessment, a survey designed to help the agent understand the community and its priorities, in order to develop impactful programming. The Statewide Commercial Viticulture Program began in July of 2022, and the first step in program identification and planning was the rollout of the statewide viticulture needs assessment. Growers responded by stating that having a programmatic area agent for viticulture was their top priority for Extension/ Technology Transfer and that top programming priorities included irrigation, pest and disease management, soil fertility, weather and weed management.

TEACHING THE TEACHER AG TEACHER RANGE CAMP

Ashley Longmore
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Utah State University
Brigham City

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Agriculture teachers have a wide variety of responsibilities. They find themselves teaching students about topics outside of their expertise. Utah State University (USU) Extension is trying to help bridge that gap and grow more interest in natural resource careers. Ag Teacher Range Camp is a three-day hands-on camp designed to empower teachers with insights into the management areas of natural resources, range, grazing, and soils. They also learn about ecological site descriptions, plant identification and associated careers. The curriculum is crafted to enable teachers to integrate their camp learnings into classroom instruction effectively.

WYOMING RANCH CAMP

Chance Marshall
Extension Educator
UNIVERSITY OF WYOMING
Lander

Marshall, C.[1]

[1] Sr. Extension Educator - Agriculture and Natural Resources, University of Wyoming Extension, Wyoming, 82520

Wyoming ranchers face many challenges to operating a sustainable ranch. Wyoming's climate creates unique challenges and necessitates that a ranch manager be extremely competent in managing range and pasture resources. It is imperative that young and beginning producers be given opportunities to hone and practice their skills to better prepare them for these challenges. Helping ranchers meet these challenges is not only important for the individual ranchers but is also critical to the sustainability of Wyoming communities. To meet this need, University of Wyoming Extension educators collaborated to create the Wyoming Ranch Camp program in 2021. The Wyoming Ranch Camp provides an experiential, in depth learning experience targeted towards recent high school graduates, college-age young adults, and early ag-professionals. During the five-day program, participants tour the host operation and learn about the many aspects of working on and managing a Wyoming ranch. Participants are exposed to realities on the ranch and gain firsthand education from UW educators and specialists, host-ranch personnel, and other industry professionals. Topics such as ranch economics, meat science, animal science, ranch recreation, and rangeland management are covered each day in addition to participating in hands-on learning opportunities provided by the host ranch (i.e., processing/handling cattle, docking lambs, artificial insemination, etc.). Participants are grouped in teams to develop a complete "ranch plan" for the host ranch. Ranch plans are evaluated by principal educators and ranch managers. Members of the winning team each receive monetary scholarships and awards. From 2021-2023, 32 participants ranging in experience and age (17-36 years old) have participated. Many participants reported that skills learned at Ranch Camp helped them obtain jobs and present ideas in professional settings. A 2022 participant student, who had indicated that she had little ranching background, had the winning ranch plan presentation. She has now completed a master's degree in agriculture and has recently accepted a position with UW Extension as an Agriculture and Natural Resource Extension Educator. Another participant utilized the skills

learned in the class to purchase property and create an operational plan to start her own cattle operation.

EXTENSIONS ROLL IN ALTERNATIVES TO POST FIRE RECOVERY AND INFRASTRUCTURE

Sara Marta
Sierra County Program Director
NMSU
Truth or Consequences

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In 2022 New Mexico experienced not only the largest, but second largest wildfire in state history. The Black Fire burned 325,133 acres of the Gila National Forest directly affecting nine active permittees with livestock and approximately 90 miles of fence. As the dynamics to wildfire intensity and size continue to grow and change, so does the recovery efforts to the landscape and livestock producers. Ranching operations are extremely dependent upon the infrastructure available to provide water and management for their livestock. Not only is the cost to repair or replace damaged infrastructure at an all-time high, but the labor to do so is becoming more difficult to find. The agent initiated coordination meetings with ranchers, United States Forest Service (USFS), NMSU Extension Specialists, New Mexico Department of Agriculture and Farm Service Agency during post fire recovery efforts to determine alternative solutions that would allow ranchers to graze their allotment's and re-stock their cattle.

During initial discussions it was determined that virtual fencing may provide another means of livestock management at least until fences could be re-constructed. Through multiple educational workshops the agent and extension specialists provided detailed information and training opportunities for ranchers affected by the Black Fire to determine if virtual fencing was a reasonable alternative for their operation. Extension specialists additionally identified funding available for programs through a grant for Rapid Response to Extreme Weather Events Across Food and Agricultural Systems. Two allotment permittees with some of the more remote fence re-construction needs decided to participate in the alternative fence program. A total of 200 cows were collared on 52,000 acres of Forest Service lands. This allowed these producers to continue grazing on USFS lands prior to fence repair and replacement following the Black Fire to provide management within different burn intensity areas of the forest. Participants are completing the first full year of utilizing virtual fencing collars on their operations. Although it continues to be a learning process, especially in the remote areas of the Gila that have no cell service, producers are ultimately pleased with the program and see a bright future for this technology.

RENOVATING AND PROMOTING SMALL-TOWN FARMER'S MARKET WITH EXTENSION RESOURCES

Victoria Xiong
Extension Assistant Prof.
Utah State University
Kanab

Xiong, V.[1]

[1] Extension Assistant Prof., USU Extension, Utah, 84741

In September 2021, USU Extension-Kane County took over the management of Kanab Farmer's Market (KFM), which previously was managed by Kanab City Office, Kane Co. Art Board, and a self-motivated group of residents. Due to the inconsistency of management, vendor counts have been dropping every year since 2019. Then, the COVID-19 pandemic hit the KFM, similar to other low-budget community activities across the region and the nation. During the 2021 market season, KFM's time and locations changed multiple times, which is not great for returning customers. The season was also historically short. These issues are potentially mainly solved with a solid and resourceful organization team led by the USU Extension team. In order to organize and manage a successful 2022 season, the organization team started recruiting vendors at the end of the 2021 season. The team has set simple objectives and scheduled monthly meetings to find out how to achieve the goals and problem-shooting. The first actions were accomplished at the beginning of 2022 by collaborations with the Kane County Tourist Office (KTO) for 1) confirming the location of the KFM at the parking lot of the KTO, with the stage from May 4 to Oct 4, with the set time of 5-7 p.m. every Wednesday. By Jan 20, 2022, KFM will have received a $1500 grant from KTO for public relations. The organizing team has contacted the Kane County Art Board, Kane County Master Gardener, and Kanab school districts for potential collaboration during the 2022 season. The KFM organize team has reached out to local artists and Extension Marketing for designing logos, banners, and other PR materials.

Award Winners

(Ag Awareness, Search For Excellence, JCEP Creative Excellence, Hall of Fame, Daniel Kluchinski Memorial Scholarship, Distinguished Service Award, Achievement Award, Communications)

2024 NACAA

109th Annual Meeting and Professional Improvement Conference

Dallas, Texas

Agriculture Awareness and Appreciation Award

NATIONAL WINNER

PROMOTION OF AGRICULTURE: AN IMMERSIVE EXPERIENCE

Jacci Smith
Extension Educator ANR/4-H
Ohio State University
Delaware

Team Members: Smith, J*[1], Leeds, R*[2], Leggett, R[3], Hornyak, K*[4]
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According to the 2020 US census, Delaware County experienced a remarkable 22.9% population increase, once again the fastest-growing county in Ohio. However, as Central Ohio's population increases, the importance of agriculture and its value may not always be apparent. With 292,000 total acres in Delaware County, 132,875 acres dedicated to farming, agriculture plays a vital role within the county.

The agricultural landscape of Delaware County is notably diverse, with the northern half characterized by rural areas with a strong focus on the livestock industry and traditional row crops such as corn, soybeans, and wheat. The southern half of the county, while more densely populated, still boasts a variety of agricultural enterprises including farm markets, greenhouses, wineries, and agritourism operations. In 2022, Delaware County's agriculture sector generated $86.9 million in agricultural sales.

Recognizing the increasing urbanization and disconnect from agriculture within central Ohio, Ohio State University Extension Delaware County embarked on a mission to share agricultural knowledge with the community. Leveraging the innovative iFarm Immersive Theater, Extension created 360° videos showcasing the breadth of Ohio's agriculture and the various elements at work on its farms.

In 2023, the iFarm Immersive Theater successfully reached an audience of 10,800 individuals, including 6,514 children and 4,286 adults. Online evaluations revealed a positive impact, with 96.92% of respondents reporting learning something new and 92.96% feeling fully immersed in the videos. Impressively, 62.32% of participants had no prior involvement in OSU Extension programming, highlighting the effectiveness of this immersive approach in engaging new audiences and conveying the significance of agriculture.

Observations during the videos demonstrated that participants truly felt immersed in the experience, with some even experiencing motion sickness due to the lifelike depiction. Each video concluded with a connection to OSU's College of Food, Agriculture, and Environmental Sciences, reinforcing the university's commitment to supporting farmers, production agriculture, and the broader food industry across the state.

Post-video conversations revealed that participants gained newfound awareness of the interconnectedness of agriculture with food manufacturing and daily life. The iFarm Immersive Theater successfully provided an enriching experience for over 10,000 individuals, significantly increasing exposure to Ohio's vibrant agricultural sector.

NATIONAL FINALISTS

AGRICULTURAL AWARENESS AND APPRECIATION AWARD: EXTENSION CALLING

Karen Cox
Extension Assistant Professor / County Agent
West Virginia University
Wheeling

Team Members: Cox, K*[1], Lima, D*[2]

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Similar to much of the United States, the counties of Belmont, Ohio and Ohio, West Virginia have less than 2% of their population working in the field of agriculture. While many of the residents are supportive of the local foods and products movement, the majority are still unaware of the complexity of the systems needed to produce plants, food, fiber, and fuel. Extension Calling is a weekly audio production researched, recorded, and produced by two county Extension Educators straddling

the Ohio River in two states. This 30-minute program is broadcasted across the east coast of the United States and Canada. It is also accessed via podcast by local, national, and international audiences. The program is followed by local farmers who have indicated improvements in their production systems by information gained from the weekly shows. It is also followed by many non-farming listeners who have indicated a novel appreciation and understanding of agricultural systems. Extension Calling provides a verbal interpretation that provides accommodations to limited readers and improves understanding, retention, and application making topics digestible to people who are new to agriculture. Even the most experienced in the field reported enjoying a passive review of concepts that reinforce important materials for their safety and production.

MONTANA BEEKEEPING AND POLLINATOR EDUCATION

Wendy Becker
Agent
Montana State University
Culbertson

Team Members: Becker, W*[1], Mills, S*[2]

[1] Agent, Montana State University Extension, Culbertson, Montana, 59218
[2] Agent, Montana State University Extension, Glasgow, Montana, 59230

Honey bees and pollinators are of critical importance to global food production and play a major role in the success of Montana's primary industry, agriculture. Beyond the fascination and rewards from keeping bees, humans are deeply concerned about the wellbeing of bees and other pollinators. Colony collapse disorder and declining populations has spurred an interest in education regarding beekeeping, habitat preservation, restoration of beneficial insects, floral resource availability and the sustainability of modern agriculture. This desire for further information resulted in 23 targeted educational outreach events by MSU Extension Agents in Montana reaching 734 clients and the creation of a networking club of 84 people. The Agents responded by self-educating, keeping bees of their own, training to be local resources, and then offering a series of educational events across Montana. The approach was targeted to provide information relevant to the audience and with a focus on advancing beekeeping abilities from introductory to mastering beekeeping. The Bee Team has incorporated a multi-pronged approach to providing education, resources, and outreach to audiences such as youth, educators, hobbyist beekeepers, pesticide applicators, and interested parties. Introductory short courses, hands-on field events and workshops, in-service learning instruction, innovative curriculum and tools, and the placement of a grant funded 6-colony beekeeping learning laboratory were developed to enhance learning. Topics covered included introduction to beekeeping, identification and management of pests and diseases, honey and wax production, pollinator friendly gardening, hive management, equipment and pollinators and pesticides. Evaluative surveys show that the top learning points were beginning beekeeping, pest management, improved awareness of honey bees and pollinators, and successful overwintering of colonies. On average participants increased their confidence in beekeeping by 39%, and their confidence in managing hive pests by 56%. Armed with their new knowledge, participants feel more comfortable diving into beekeeping, pesticide applicators have a better understanding of laws and regulations surrounding bees, youth are more secure around bees, and pollinator programs with government agencies are on the rise.

STATE WINNERS

SOUTHERN REGION

Georgia	Blake Carter
Kentucky	Miranda Rudolph
North Carolina	Andrew Baucom
South Carolina	Justin Ballew

WESTERN REGION

New Mexico	Andrew Garnett
Utah	Jake Hadfield

Search for Excellence in Sustainable Agriculture

NATIONAL WINNER

IMPROVING SOIL HEALTH AND FARM PROFITABILITY WITH COVER CROPS

Heidi Reed
Field & Forage Crops Educator
Penn State University
York

Team Members: Reed, H*[1]
[1] Field & Forage Crops Educator, York, Pennsylvania, 17402

Although there are many benefits to using cover crops, there are also many challenges including timing of cover crop planting after agronomic crops, cover crop termination, and the overwhelming number of cover crop options. A 2019 survey was distributed at pesticide education and a soil health events across the state. Producers indicated soil health topics of greatest interest on which they needed more information: cover crop species and mixtures (42%), cover crop management (31%), interseeding cover crops (28%), and planting green (25%) as soil health topics of greatest interest to producers (multiple answers allowed, n=64). To address these issues, the program objectives were: 1. increase cover crop adoption, 2. have a positive cash impact on farms, and 3. reduce synthetic inputs by farmers due to ecosystem services provided by cover crops. To meet these objectives, webinars, in-person workshops, on-farm research, and guest lectures were conducted. Over 1,000 participants were reached by these cover crop programs. Evaluations were conducted shortly after programming. For webinars, long term (8 months to 2 years) follow-up surveys were also conducted. After attending any evaluated 2021-2023 webinar, cover crop walk, or workshop, 33% of farmer and ag service provider respondents indicated they would implement or would recommend implementing cover crops for the first time within the next year on a total of 8,048 acres (n=172, objective 1). 76% of respondents indicated that attending a program would have a positive cash impact on their business (n=156), with an average value of $20.46 per acre (n=61, objective 2). In a follow-up survey of participants in the “Making Cover Crops Pay” 2021 and 2022 webinar series and workshops (n=161), of 46 farmer respondents, 27 had adopted cover crops on 4,096 acres for the first time (objective 1). Of 8 farmer respondents who attended the “Managing Cover Crops for Nitrogen” webinar session, 3 reduced the use of their synthetic fertilizer by 25-49 lb/A (objective 3). 6 of 12 farmer respondents said they saved money because of attending at least one of the webinar sessions, averaging $6 per acre (objective 2).

NATIONAL FINALISTS

BMPS IN THE BASIN - AN EDUCATIONAL CAMPAIGN TO PRESERVE THE CHIPOLA BASIN & PROMOTE CONSERVATION AGRICULTURE

Daniel Leonard
County Extension Director
UF/IFAS Calhoun County Extension
Blountstown

Team Members: Leonard, D*[1], Mayo, D*[2], Carter, E*[3], Albertin, A*[4]

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[2] County Extension Director, UF/IFAS Jackson County Extension, Marianna, Florida, 32448
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[4] Regional Specialized Agent - Water Resources, UF/IFAS Extension Northwest District, Quincy, Florida, 32351

Background: Florida’s Chipola River Basin stretches nearly 100 miles and is home to myriad endangered species, pristine springs, and over 200,000 acres of cropland. Though agriculture is the region’s primary economic driver, nutrient accumulation in the basin’s springs from ag runoff has become a major environmental/legislative issue. Objectives/Purpose: Recognizing that basin agriculture producers needed assistance adopting new technology and Best Management Practices (BMPs) to comply with new water quality rules, Northwest District Ag Agents sought to educate producers on water quality BMPs and connect them with agencies to help fund conservation equipment purchases. Method: A team of Northwest District Extension Agents received a grant in partnership with the Southern Aquatic Resources Partnership (SARP) and the Florida Department of Agriculture & Consumer Services (FDACS) to fund ongoing BMP education and promotion targeted to Chipola Basin producers. With this funding, the BMP Agent Team planned a series of farm tours and educational videos and purchased specialized conservation ag equipment for conducting BMP demonstrations. The farm tours consisted of conservation technology/practice demonstrations on basin farms and Q&A sessions with the participating producers and organizations. The videos were professionally produced/edited, showed conservation practice implementation results, and featured interviews with farmers that had already adopted water quality BMPs successfully on their farms. Conclusions: The Chipola Basin BMP program has delivered three farm tours with 160 total participants since 2021. As a result of attending the farm tours, 87 participants (96%) reported gaining knowledge of BMPs and available conservation practice programs, 42 respondents (46%) planned to alter and/or adopt conservation management practices, and 34 respondents (37%) planned on enrolling in a BMP or conservation practice program. Three videos have also been published into the following playlist and have been viewed over 1,100 times: https://www.youtube.com/

EDEN CONFERENCE 2023: BUILDING EXTENSION'S CAPACITY FOR EMERGENCY PREPAREDNESS SHOWCASING GEORGIA'S COASTAL RESILIENCY EFFORTS

Maria Bowie
Grant Management Specialist
University of Georgia
Athens

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[2] Director of County Operations, University of Georgia, Athens, Georgia, 30602
[3] ANR Program Development Coord., University of Georgia, Athens, Georgia, 30602
[4] Agricultural Climatologist, University of Georgia, Athens, Georgia, 30602
[5] Agricultural Economist , University of Georgia, Athens, Georgia, 30602
[6] ANR Agent/County Coordinator, University of Georgia , Athens, Georgia, 30602
[7] FACS Agent/County Coordinator, University of Georgia, Dublin, Georgia, 31021
[8] 4-H Agent, University of Georgia, Calhoun, Georgia, 30701
[9] Evaluation Specialist, University of Georgia, Athens, Georgia, 30602
[10] Housing Specialist, University of Georgia, Athens, Georgia, 30602

Weather-related hazards including flooding, hurricanes, and storm surge are a constant challenge on the coast of Georgia. Many of these hazards are worsening due to the effects of sea level rise and climate change.

The goal of the National Extension Disaster Education Network (EDEN) Conference is to foster a system of Land Grant extension professionals, researchers, local/state/federal agencies, and others interested in sharing research, resources, expertise, and best practices supporting emergency preparedness.

In 2023, Georgia had the opportunity to host the conference and showcase sustainable best practices in coastal Georgia through preconference workshops and educational excursions. We were able to highlight our coastal resiliency projects on Tybee Island, our partnerships with the Chatham County Emergency Management Agency, and conclude with an option of tours of the Georgia Port Authority or UGA Marine Extension Education Center and Aquarium. UGA Extension received a $50,000 conference grant from the USDA Agriculture and Food Research Initiative A1451 Sustainable Agroecosystems Program.

UGA Marine Extension Service and Georgia Sea Grant's coastal resiliency program collaborates with national, regional, state, and local partners to provide coastal communities with knowledge, data, and tools needed to prepare for and recover from coastal hazards. One such tool highlighted during the tour of Tybee Island was the use of hardened structures composed of oyster shells to alter the effects of wave energy and slow coastal erosion while improving natural habitats. The Georgia Port Authority's role in invasive species management and emergency preparedness was highlighted in the afternoon Tour B, while a tour of the UGA Marine Education Center and Aquarium on Skidaway Island highlighting sustainable aquaculture practices was featured in afternoon Tour A.

EDEN Conference attendees were able to: (1) Learn how maritime ship traffic may impact coastal environments, (2) Describe ways to support coastal restoration, (3) Describe strategies to mitigate the impact of invasive species in agricultural imports, (4) Discuss ways the port engages with partners for emergency management and supports post-emergency recovery efforts for the greater Savannah community, (5) Describe the role Marine Extension has in coastal resiliency, and (6) Describe the benefit aquaculture has on protecting coastal life.

"SAVING THE FAMILY FARM" NAVIGATING KENTUCKY'S HEIRS PROPERTY TRAINING ON A REGIONAL LEVEL, TRAIN THE TRAINER EVENT

Kendal Bowman
CEA for Agriculture
Owenton

Team Members: Bowman, K*[1]
[1] CEA for Agriculture, , Owenton, Kentucky, 40359

The "Navigating Kentucky's Heirs Property Training On A Regional Level, Train the Trainer" program, led by Kendal Bowman and Irma Johnson on December 8th, 2023, in Breathitt County, Kentucky, addresses the critical issue of heirs' property in sustainable agriculture. Heirs' property, prevalent in rural and African American communities, arises when land passes down without a clear will, leading to fragmented ownership among many relatives. This complicates land management and can result in lost economic stability and land ownership, challenging the sustainability and viability of agricultural operations.

This initiative aimed to educate participants about heirs' property, improving their understanding and ability to manage such situations, thereby promoting sustainable agricultural practices and preserving family legacies. The program, significant against the backdrop of an aging farmer population and the historical context of land ownership challenges faced by African American communities, involved collaboration with Kentucky State University and experts from the University of Kentucky.

Using pre- and post-training surveys, the program demonstrated a measurable improvement in participants' knowledge and confidence regarding heirs' property issues. The results indicated a positive shift towards greater familiarity and understanding, highlighting the effectiveness of the training in addressing a complex challenge to sustainable agriculture and land preservation.

By focusing on heirs' property, the training not only aimed at enhancing environmental quality and the economic viability of farms but also at improving the quality of life for farmers and the broader community. It represents a significant step towards overcoming legal and systemic barriers to land ownership and sustainable agriculture, underscoring the importance of educational initiatives in fostering a more equitable and sustainable agricultural future.

STATE WINNERS

SOUTHERN REGION
Oklahoma Kennedy McCall

WESTERN REGION
Arizona Ethan Orr
Utah Mark Nelson

Search for Excellence in Crop Production

NATIONAL WINNER

NEW JERSEY HEMP PROGRAM

Stephen Komar
Agricultural Agent
newton

Team Members: Komar, S[1], Bamka, W*[2], Infante-Casella, M[3], Brown, K[4]
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[2] Agricultural agent, Rutgers, westampton, New Jersey, 08060
[3] Agricultural Agent, Rutgers, Clarksboro, New Jersey, 08020
[4] County Agent III/Assistant Professor, Rutgers, Bridgewater, New Jersey, 08807

Hemp is a new crop for many producers throughout the United States and much is unknown about modern production of hemp. Rutgers Cooperative Extension Agricultural Agents recognized the need for research, education, and outreach for farmers interested in and implementing hemp production. With the approval of the USDA Farm Bill of 2018 preceding the New Jersey Hemp Farming Act, these agents immediately developed and delivered an extension program by answering stakeholder questions, planning, and conducting field research for hemp, and developing and publishing hemp resources for agricultural service providers, farmers in New Jersey and other clientele in the region. Two Agricultural Agents on the team have secured hemp permits from the New Jersey Department of Agriculture for the past 3 years in order to plant, harvest, and transport hemp for research trials and demonstrations. In addition, the team secured grant funds from the following sources: 1) the USDA Northeast Sustainable Agriculture Research and Education, Professional Development Program; 2) the Rutgers New Jersey Agricultural Experiment Station Special Projects Funding; 3) the State of New Jersey Governors Special Projects Funding in cooperation with the New Jersey Department of Agriculture. Through their efforts in hemp crop production the team planned and implemented educational programs, planned and hosted a 2-day international symposium, published extension fact sheets, published a field production guide for commercial hemp, published a referred journal article, wrote and published professional conference proceeding articles, grower conference proceeding articles, conducted replicated field research projects, produced a podcast about hemp production, produced a video about the Rutgers hemp program, developed a Rutgers hemp website, created and managed a Rutgers hemp Facebook page, and provided multiple presentations to farmers, students, and agricultural service providers on hemp topics. Throughout these efforts the team has provided hemp information, education, and outreach to more than 8,569 persons.

NATIONAL FINALISTS

WESTER BEAN CUTWORM RESISTANCE UPDATE

Wayne Ohnesorg
Extension Educator
Nebraska Extension
Norfolk

Team Members: Ohnesorg, W*[1], Peterson, J[2]

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[2] Entomologist Extension Specialist, University of Nebraska-Lincon, North Platte, Nebraska, 69101

Resistance to management tactics by pests is a growing issue worldwide. Over 540 species of insects and mites have developed resistance to pesticides and plant incorporated protectants. In the United States alone, it is estimated that $1.4 billion is lost each year in increased control costs and lost yield. Resistance in field populations of western bean cutworm (WBC) population in Nebraska had developed to a Bt protein and the commonly used insecticide bifenthrin by 2017. In response to these growing concerns about WCB resistance to Bt and bifenthrin, the Wester Bean Cutworm Resistance Update (WBCRU) program was developed by an extension educator and an extension specialist. The primary goal of WBCRU was to deliver information on the biology and management of WBC and its resistance to Bt and bifenthrin. The 45-minute WBCRU PowerPoint and TurningPoint clicker questions were incorporated into the existing private pesticide applicator training program in a portion of Northeast Nebraska. This met the integrated pest management requirements of the Nebraska Department of Agriculture for private pesticide applicator training and delivered relevant pest management information. In the three years WBCRU was delivered, 743 participants were reached at 27 sessions held in Northeast Nebraska. End-of-meeting and three-year follow up surveys were conducted to assess knowledge gain and behavior changes of participants. The end-of-meeting survey showed that 96.4% of participants increased their knowledge of WBC management practices (n=671) and 77.9% planned to adopt or change management practices within their operations (n=687). Survey respondents represented over 900,000 acres. When participants were asked about the estimated value of the knowledge gained, they indicated a value of $8.06 per acre, for an estimated value of WBCRU of $7.3 million. Three-year follow up surveys revealed that 72.6% of respondents (n=215) reported behavior change by adopting production practices to reduce WBC resistance development.

UMD EXTENSION WINTER MEETINGS 2023

Shannon Dill
Extension Educator - AGNR
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EASTON

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The University of Maryland Extension (UME) Agriculture and Food Systems team annually organizes winter agriculture production meetings, covering diverse topics in agronomy, vegetable and fruit production, and forage management systems. These meetings also offer recertification in pesticide and nutrient management, catering to a wide audience, including new and experienced farmers, with over 600 participants. In addition to agricultural audiences, these meetings attract representatives from private industry, government, and nonprofit organizations, fostering networking opportunities and disseminating industry updates.

The Agriculture and Food Systems team has implemented a comprehensive statewide survey tool capturing demographic, production, and economic data to evaluate the efficacy and relevance of education received. The survey, consisting of 18 questions, including multiple-choice and open-ended questions, was approved by the Institutional Review Board. All participants received a

paper survey, and results were entered into Qualtrics survey software.

The 2022-2023 winter meetings drew participants from 21 Maryland counties and out of-state. Of the participants, 39% farm over 300 acres, with 57% farming for over 20 years. Challenges identified by participants include input costs, regulations, weather, and wildlife. Participants found the meetings beneficial, intending to: implement improved crop production efficiencies, pest management practices, and regulatory compliance. Participants preferred future educational formats, favoring half-day seminars or workshops followed by full-day seminars and hands-on training. Top priorities identified for UMD Extension focus included research data, agricultural regulations, educational materials, and agriculture promotion. Participants also provided ratings on nutrient management programming, with the majority expressing satisfaction with nutrient management plans' quality, timeliness, and usefulness.

Economic impacts from education obtained during winter meetings and year-round Extension events were evaluated, with participants estimating an increase in yield per acre and dollars earned per acre due to knowledge and skills gained from Extension programming. On average, participants estimated a 9% increase in yield per acre and a $19 increase in dollars earned per acre. These findings provide valuable insights into the economic value generated by Extension education, aiding informed decision-making and program evaluation.

PIEDMONT WINTER GRAINS MEETING

Morgan Watts
Livestock Agent
NCSU
Salisbury

Team Members: Watts, M[1], Elmore, L*[2], Carleo, J*[3], McGraw, M*[4]

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Each year a regional group of Field Crops agents in the Central Piedmont hosts the Area Winter Grains Conference. This conference hosts around 75-95 attendees annually. We typically start the conference off with an Auxin Herbicides Best Management Practices training option and then we transition into programming topics related to field crops. We partner with NCSU specialists to teach these classes. We also have several key stakeholders in attendance at the tradeshow for our growers to visit with. This educational event offers production insight for improved management and provides much-needed Continuing Education credits for private applicators and Certified Crop Advisors. We as agents work to secure funding for this conference and we receive $2,000 annually from local seed and chemical companies to make this happen.

STATE WINNERS

SOUTHERN REGION

Arkansas	Jennifer Caraway
Florida	Keith Wynn
Georgia	Aubrey Shirley
Texas	Tyler Mays

Search for Excellence in Consumer or Commercial Horticulture

NATIONAL WINNER

ONLINE GREEN INDUSTRY PROFESSIONAL DEVELOPMENT COURSES

Ruth Benner
Extension Educator
Penn State University
ERIE

Team Members: Abbey, T[1], Barger, L[2], Benner, R*[3], Berghage, R[4], Butzler, T*[5], Clitherow, M[6], Delvalle, T*[7], Feather, S[8], Ford, T[9], Fowler, J*[10], Himes, D[11], Hoffman, M[12], Kopco, J[13], Korman, A*[14], Masiuk, M[15], Diehl Mazzone, J[16], Nagy, A[17], Pickoff, M*[18], Pittman, K[19], Ruyak, D[20], Savage, J[21], Seaman, J[22], Sulpizio, J[23], Young, N[24]

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[12] Assistant Professor and Program Coordinator Landscape Contracting, Penn State University, University Park, Pennsylvania, 16802
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The Penn State Extension Green Industry Team developed 35 online courses to address the need for training resources for the green industry. The project team included extension educators and Penn State University faculty who collaborated to develop the curriculum, content, visual elements, and assessment tools, as well as conduct peer reviews of the courses. The resulting self-paced, asynchronous courses are offered at several learning levels, with options for entry-level, intermediate, and advanced workers. The courses utilize videos, images, short readings, and knowledge check questions to teach each topic. From 2021 to 2023, 2,030 participants completed courses. Evaluation data indicates that 81% of participants reported an increase in knowledge, and 91% of participants reported the intension to implement the knowledge they gained from the courses in their work or daily life. The courses also allow participants to earn professional continuing education credits and pesticide applicator recertification credits. In the past three years, the courses generated $132,747.00 in our efforts to support future green industry programming in Pennsylvania.

NATIONAL FINALISTS

STARK COUNTY COMMUNITY SEED BANK

Heather Neikirk
Extension Educator
Ohio State University Extension
Massillon

Team Members: Neikirk, H*[1]

[1] Extension Educator, Ohio State University Extension, Massillon, Ohio, 44646

The Stark County Community Seed Bank was established in 2013 as a collaborative effort of Ohio State University Extension Stark County, the Stark County Master Gardener Volunteer Program and the Stark County Library Main Branch to address chronic food insecurity and child hunger for the residents of Stark County by offering free seed packets and food gardening and nutritional resources and educational programming. Master Gardener Volunteers obtain donations of certified seeds from the previous growing season from local, regional and national seed companies and prepare single or family use seed packets for free distribution to residents, patrons and the general public. Educational programs, resources and activities connect community seed bank participants to important gardening and nutritional information. In the last three years, the project has received and sorted over 4,000 pounds of donated seed and distributed over 60,000 individual seed packets to the local community. In 2023, the Community Seed Bank project completed it's tenth year of implementation and conducted a survey to learn more about the impact the program has had on the local community. When asked by the survey how they benefitted, 74% of community seed participants stated that the program provided them with the opportunity to try out new seed types or varieties; 69% stated that the program provided them with an affordable option to obtain seeds; and 56% stated that the program allowed them to grow a portion of their own food. Additionally,

98% of participants agreed or strongly agreed that the community seed bank program is not only an asset to the community but also provides a valuable service to the community.

RUTGERS MASTER GARDENER ONLINE TRAINING PROGRAM

Madeline Flahive DiNardo
COUNTY AGENT
Berkeley Heights

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As county Extension offices closed to the public due to the pandemic, a team of Rutgers Cooperative Extension (RCE) Agents and Master Gardener Coordinators created an online Master Gardener Training program. Our goals were to: continue to be able to recruit and train new volunteers so that once the pandemic restrictions were lifted, a new group of Master Gardeners would be ready to assist Extension with our outreach programs; provide students with a curriculum featuring basic horticultural training complemented by specific topics; and to develop evaluation quizzes and assignments to measure knowledge gained. A pilot program was offered in three counties in January 2021 and the course is in its fourth year with six counties participating in the learning experience. The Rutgers Online Master Gardener Training Program was successful at meeting its goal by recruiting 252 new Master Gardener students. A curriculum with 22 learning modules was developed on a Rutgers University Canvas course management site. The online course curriculum evaluation tools indicated improvement of pre/post knowledge of lecture topics that was confirmed by midterm and final exam scores. The total average of quiz scores (N=202) increased from 72% to 95% and average midterm and final exam scores were 96% and 95% respectively. Students demonstrated how they used their knowledge gained by developing Integrated Pest Management plans for their home property. Course graduates have become active Master Gardeners contributing over 8,662 hours of volunteer service and 93 have earned the title of Certified Master Gardener by meeting a 60-hour volunteer hour requirement.

EMPOWERING KENTUCKY FARMERS TO THRIVE IN THE CUT FLOWER INDUSTRY

Alexis Sheffield
CEA for Horticulture
University of Kentucky
Danville

Team Members: Sheffield, A*[1], Hildabrand, K*[2], Finneseth, C[3], Knight, J[4]
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[4]Senior Extension Associate, Center for Crop Diversification, Lexington, Kentucky, 40546

Kentucky's cut flower industry has grown significantly in recent years. In 2017, there were 68 growers, but today there are over 150. The industry has high market potential and can be profitable on small acreages. To address the needs of this growing industry, the University of Kentucky Cooperative Extension Agents, the Center for Crop Diversification, and the Kentucky Horticulture Council formed the Kentucky Cut Flower Initiative Group in 2019.

The Kentucky Cut Flower Initiative has dramatically impacted the state's agriculture sector. Through education, the program has empowered farmers with skills for success in commercial cut flower farming, resulting in economic growth, sustainability, and resilience. The program promotes enhanced farming techniques, market access, sustainable practices, financial management, and continued learning. The Kentucky Cut Flower Initiative sets a new agricultural education and support standard.

The initiative has reached and benefited many growers statewide through its various activities, including commercial cut flower courses, in-person classes, and the Kentucky Cut Flower Month promotional campaign. Farmers have shown impressive attendance and

viewership due to the program's accessible and convenient teaching methods, such as webinars, YouTube videos, and an interactive map.

Over four years, targeted outreach efforts have been made toward the cut flower industry segment. The results of these efforts are as follows:

- Nearly 1,200 established and pre-commercial growers have received live education on cut flower production and marketing.

- Over 26.6 K viewers have watched recorded content on cut flower production and marketing topics on YouTube.

- 147 Kentucky farms have been promoted directly, increasing their visibility to over 245,000 potential customers.

- An online interactive map developed in 2020 has been updated to assist customers in identifying purchasing options based on geographic location.

- The Kentucky Fruit & Vegetable Conference now includes a cut flower track, which has educated 190 participants.

- 142 cut flower operations in Kentucky have received one-on-one support.

- 2 wholesale flower markets in Kentucky have received direct support.

STATE WINNERS

NORTH CENTRAL REGION
Iowa Ron Lenth

NORTHEAST REGION
West Virginia Jodi Richmond

SOUTHERN REGION
Alabama Rebecca Catalena
Arkansas Jan Yingling
Florida Bonnie Wells
Georgia Savannah Tanner
North Carolina Steve Pettis
Texas Matthew March

WESTERN REGION
Washington Linda Chalker-Scott

Search For Excellence in 4-H Programming

NATIONAL WINNER

REGIONAL CHICKEN PROJECT

Liz Joseph
Extension Agent
Fayetteville

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The Regional Chicken Project provides youth involved in 4-H and FFA in eight southeastern and south central North Carolina counties with the opportunity to learn how to raise and show chickens. Participants can choose to raise laying hens and/or broilers. Laying hens are kept by the participants at the end of the project while the broilers are given back and processed the day after the show for their meat to be donated to a local food bank. Youth must attend two mandatory training sessions, complete a project record book that includes an animal science section, and show their birds at the Regional Chicken Project Show. The project starts in February with the orientation training and culminates in April or May with the show. Over the past three years, 141 youth completed the project and over $2,200 has been raised for awards and prizes. The main goals of this project are to provide a hands-on, educational opportunity to encourage and increase skills in showmanship, poultry production, record keeping, and to help build responsibility, confidence, and communication skills in youth. Youth must attend a mandatory orientation Zoom and mandatory in-person showmanship and project book training. Youth submit a project record book that is designed for each age group and has the traditional 4-H components as well as a chicken supplemental learning section. Youth compete in a showmanship class based on their age and breed class based on the breed(s) of chicken(s) they choose to raise. The judges ask questions from the project books to test their knowledge of chicken production. 4-H projects

teach life skills to our kids and how persistence is key to anything in life. Over the past three years, we have had several participants that have stood out as reasons why we continue this project and the importance of 4-H.

NATIONAL FINALISTS

ENVIRONMENTAL EDUCATION FOR YOUTH FROM A NON-4H EXTENSION EDUCATOR

Genevieve Christ
Extension Educator
Penn State Extension
University Park

Team Members: Christ, G[1]

[1] Extension Educator, , University Park, Pennsylvania, 16802

Environmental Education for Youth is both challenging and rewarding. The educator developed and presented presentations in three program areas integrated pest management, invasive species, and non-point source water pollution. Two of the three program areas were completely technology free and all three program areas included interactive elements or hands on demonstrations. Between all three program areas, from June 2020 until October 2023 the educator presented at 66 youth programs and reached a total of 7,967 youth. Through the use of pre and post tests, the educator demonstrated an increase in knowledge from program participants. Environmental Education for youth impacts the whole family and sometimes even the communites. Youth participants are very good at sharing what they have learned with others.

RECRUITING YOUTH TO PLANT SCIENCE CAREERS

Bill Burdine
Agronomy Specialist
Mississippi State University
Verona

Team Members: Burdine, B*[1]

[1] Agronomy Specialist, Mississippi State University, Verona, Mississippi, 38879

Scientific advances in agriculture have given the U.S. economic stability, helped feed a global population, and provided national security. But the U.S. may fall behind other countries if we fail to recruit the next generation of agronomists, Extension agents, scientists, & industry personnel. Young people rarely understand the vast career options available in agriculture because they tend to only consider what they can see. They see schoolteachers, firefighters, nurses, and factory workers. They might even see tractors and livestock, but most do not understand the science and related careers that furnish our food and fiber. It is our responsibility to educate them on the facinating careers they would never imagine otherwise, so they can continue to advance scientific exploration and production agriculture. This set of programs (Science Experiments, Agronomy Bowl, Agronomy Camps, and Seed ID) enlighten youth on many career options available for those who would work in agriculture but prefer not to farm directly. Participants learn about salaries, coursework, position stability, and more from a host of presenters.Three states are looking at duplicating this series of activities which has reached over 325 youth since 2021. Evaluations show youth are receptive to ag-related careers once they have been introduced to the wide array of possibilities.

BEEF QUALITY ASSURANCE FOR YOUTH

Scott Stinnett
Area Extension Specialist
Colorado State University
Burlington

Team Members: Stinnett, S*[1]

[1] Area Extension Specialist, , Burlington, Colorado, 80807

The purpose of the Beef Quality Assurance (BQA) for Youth program is to prepare youth for a future in the beef industry by providing them training and certification in a nationally recognized program backed by funding from the Colorado Beef Council, the Beef Checkoff and support from Colorado State University. I began with an initial offering to senior Colorado 4-H members, ages 14 to 19 years old, at the Colorado State 4-H Conference in 2019. Since then, the program has become an annual educational offering at the State 4-H Conference. The program has also expanded to include several offerings to high school agricultural education programs. A total of 92 certifications have been earned.

STATE WINNERS

NORTH CENTRAL REGION
Ohio Nancy Snook

NORTHEAST REGION
West Virginia Daisy Bailey

SOUTHERN REGION
Alabama Kerri Roberts
Arkansas Kami Green
Florida Laura Bennett

Georgia	Sarah Cranston
Kentucky	Leann Martin
Louisiana	Bradley Pousson
Oklahoma	Leslie Lewis
South Carolina	Alana West

WESTERN REGION

New Mexico	Jeff Anderson

Search for Excellence in Farm and Ranch Business Management

NATIONAL WINNER

IT'S AS EASY AS ABC - FIGURING COST OF PRODUCTION USING THE AGRICULTURAL BUDGET CALCULATOR PROGRAM

Glennis McClure
Extension Educator - Farm & Ranch Management Analyst
Nebraska Extension
Lincoln

Team Members: McClure, G*[1], Parsons, J[2], Van Tassell, L[3], Eide, J[4], Sand, S*[5], Wilson, R[6]

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[2] Professor - Agricultural Economics, University of Nebraska - Lincoln, Lincoln, Nebraska, 68583
[3] Professor Ameritus, University of Nebraska - Lincoln, Lincoln, Nebraska, 68583
[4] Programmer, University of Nebraska - Lincoln, Lincoln, Nebraska, 68583
[5] Extension Educator, University of Nebraska - Lincoln, North Platte, Nebraska, 69101
[6] Project consultant, Independent, Lincoln, Nebraska, 68516

The Agricultural Budget Calculator (ABC) program is a unique enterprise budgeting program that offers a suite of risk management decision tools with educational and technical support provided by extension educators. The ABC program is available online for anyone interested in using it. Producers, bankers, students, farm managers, ag industry professionals all have free access to it. With continued development and expansion of features of the ABC program, user numbers have grown to over 1250 with 2800 enterprise budgets created thus far using the program. ABC serves as an excellent teaching resource, utilized in educational presentations and workshops to help participants learn how to create enterprise budgets and then to use that information in management decision making. After one or more base budgets are prepared in the ABC program by individual users, further analysis and decision-making resources are available within the program. For example, users can analyze break-even scenarios, do crop comparisons, analyze annual crop insurance decisions for corn and soybeans, prepare proforma profit and loss statements with a cash flow needs report available that can be converted into a projected monthly cash flow report. Overall impact information received from program evaluations has indicated a high (90%) rating of the ABC program with at least 75-80% of training participants indicating that they gained knowledge on the topic of enterprise budgeting for crop production and in their understanding of what the ABC program is and what it can be used for. Feedback received from producers and agribusiness professionals that have utilized the ABC program in general say it is intuitive, dynamic, and important for them to be able to utilize in their planning. In 2023, an ABC program user from Boone County, Nebraska noted the following which would indicate a high level of usage and its significance as a decision-making resource. "I found the tool to be very useful. I developed crop budgets on it and used the budgets as my baseline to make future income projections from. I used that (information) to buy 450 acres of farmland last week!"

NATIONAL FINALISTS

FARM PULSE - FINANCIAL MANAGEMENT AND ANALYSIS PROGRAM

Katie Wantoch
Farm Management Professor of Practice
UW-Madison Division of Extension
Menomonie

Team Members: Wantoch, K*[1]

[1] Farm Management Professor of Practice, UW-Madison Division of Extension, Menomonie, Wisconsin, 54751

Wisconsin farmers are experiencing a prolonged period of significant financial stress which has contributed to beginning and well-established farmers reevaluating their financial situation. Farm Management Outreach Specialist, Katie Wantoch, coordinated the development of the curriculum, Farm Pulse: Financial Management and Analysis. Educational objectives included raising awareness of the purpose and value of farm financial topics and encouraging farmers to build their capacity to employ

these concepts through review of articles or videos, experiential exercises, and hands-on case studies. The Farm Pulse: Financial program includes articles, videos, and a self-paced online course for farmers interested in learning how to use farm financials to explore their farm business decisions and work with their lender. A project team developed content into website articles and videos, with some articles translated into Spanish and Hmong languages. Wantoch adapted the material for the online course, which contains eight modules on farm financial management topics. Wantoch also worked with farmers to create case farms for participants to follow throughout the course. Farm Pulse: Financial was piloted by fourteen farmers during spring 2023. The course was launched in the summer of 2023, with seventeen farmers enrolling from six states. The course includes a pre-and post-course survey and includes quizzes at the end of each module to review content. Participants (n=14) have reported increased knowledge of how to prepare farm business financial statements and planned to conduct a financial analysis to review their farm's financial position and financial performance (100%). A majority of course participants agreed that not only had their ability to analyze farm finances improved due to their participation, but they were making direct management decisions based on those analyses, further demonstrating the strategies acquired from the course and implementing them into their farm business decisions. Additionally, more than 75% of the respondents believe their overall financial situation has improved due to participating in the Farm Pulse: Financial course. One farmer noted, "I am enjoying my gained knowledge for our yearly meeting with our financial institution." The course does fulfill education requirements for USDA Farm Service Agency loan borrowers in Wisconsin (all states available soon).

DAIRY BUSINESS CASH FLOW

Samantha Gehrett
Dairy Business Management Educator
Penn State Extension
Carlisle

Team Members: Gehrett, S*[1]

[1] Dairy Business Management Educator, , Carlisle, Pennsylvania, 17013

The significance of dairy business management is paramount, especially in the face of the evolving and challenging dairy cattle industry. The adoption of sound business plans and effective dairy management practices are key to maximizing production and profits. Monitoring key metrics, such as the herd's "income over feed costs" (IOFC), is another critical aspect of dairy business management. This metric allows producers to keep track of their operations and make necessary adjustments to maintain profitability.

Future planning is a fundamental component of dairy business management. It is equally important to understand market trends. By monitoring fluid milk sales trends and consumer perspectives, dairy farmers can effectively determine product offerings and drive their marketing strategies. However, dairy farmers often encounter obstacles due to a lack of legal and business knowledge. This deficiency can hinder efficient land transfer and understanding of business structures, presenting significant challenges to dairy business management.

Effective dairy business management is crucial for the success and sustainability of dairy farming operations. It covers a wide range of aspects, including profitability and sustainability, monitoring key metrics, future planning, adapting to market trends, and legal and business knowledge. Therefore, it is evident that a comprehensive understanding and application of dairy business management principles are indispensable for anyone involved in this industry.

A recent dairy needs assessment conducted in early 2023 (N=232) revealed that 97 percent of respondents believe that business management will contribute to their future profitability. The program aims to educate producers in cash flow planning, record keeping, income over feed costs (IOFC), and risk management. Farm financials are intrinsically linked to production management, which encompasses feeding strategies, cropping programs, and heifer-raising systems. This highlights the need for a whole approach to dairy business management that integrates financial planning with production management.

MASTER AGRI-MANAGER

Blake Carter
County Extension Agent
University of Georgia Cooperative Extension Service
Springfield

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[1] County Extension Agent, , Springfield , Georgia, 31329
[2] Senior Public Service Associate, University of Georgia Ag Econ Department, Tifton, Georgia, 31793

In 2020, the coronavirus pandemic created even more problems for crop, livestock, and specialty crop producers. Although 2021 saw a recovery in commodity prices

through higher demand for agricultural products via increased domestic consumption (increased productivity and consumer spending) and record or near record export levels, producers were also faced with higher input prices, labor shortages, continued supply chain disruptions, and higher transportation costs. As a result, the farm economy is experiencing more volatility and uncertainty than we have seen in over a decade. Farmers must become even better at the business aspects of farming. A team of faculty from the University of Georgia (UGA) College of Agricultural & Environmental Sciences Department of Agricultural & Applied Economics and Cooperative Extension Service worked together to create the Master Agri-manager program. This program was done in collaboration with the UGA Small Business Development Center, AgSouth Farm Credit, United States Department of Agriculture (USDA) Farm Service Agency, and a Private Practice Attorney. The pilot Master Agri-manager series consisted of six face-to-face sessions through November 2021. Each session of the Master Agri-manager series included 90 minutes of lecture from UGA Extension faculty and collaborative partners with designated time for networking with other participants, interactive hands-on work, discussion, and Q & A the first time, but was formatted to be just a one-day event the second time the program was offered. Participants were asked to fill out pre and post program surveys to determine knowledge improvement and value of content. Twenty-five percent of participants self-reported that they will consider converting their farm into a Limited Liability Company. Furthermore, 25% of participants reported they intend to develop a farm business management plan. All the skills learned will combine to help them improve the business side of their farming or ranching operation. The Master Agri-manager Curriculum is now available for agents to adopt and use in their counties across the state.

STATE WINNERS

SOUTHERN REGION
Arkansas Courteney Sisk

WESTERN REGION
Wyoming Chance Marshall

Search for Excellence in Livestock Production

NATIONAL WINNER

EMERGENCY RESPONSE TO ACCIDENTS INVOLVING LIVESTOCK

Mike Metzger
MSU EXTENSION
JACKSON

Team Members: Metzger, M*[1], Ferry, B*[2], , T*[3], Zangaro, C*[4], Okkema, C*[5], Bacigalupo-Sanguesa, P*[6], Jaborek, J*[7], Fronczak, S*[8], Heck, A*[9], Benjamin, M[10], Honke-Seidel, M[11], Ockert, K[12]
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[12] Extension Educator, Michigan State University Extension, East Lansing, Michigan, 48824

Award Abstract

In the United States, total red meat production is around 52.1 billion pounds with large numbers of animals transported over the nation's highways daily. According to the 2020 Ag Census, there are 3.26M head of livestock in Michigan. The MSU Extension animal agriculture team identified the need to prepare first responders for livestock transportation accidents as our state began to experience an influx of livestock haulers. This need is addressed through the Emergency Response to Accidents Involving

Livestock (ERAIL) program which is a comprehensive training and response program. This program serves Michigan's animal agriculture industry by providing resources to help respond to accidents involving livestock.

The ERAIL program is made up of four different components: In-person training for response and transportation professionals, virtual training modules dedicated to expanding the reach of the ERAIL training program, individual consultations for organizations, locations, and units that are looking to be prepared for these types of situations, and developing a fleet of emergency response trailers in Michigan dedicated to providing the equipment and tools needed by responders to address emergency situations involving livestock. These efforts make up a robust, effective and proven program supported by evaluation data, funding support, stakeholder comments and effective response events. To date, over 700 people have been trained through the ERAIL program with 96% of participants indicating an increase in their skill set. Consistently, over 90% of the training participants indicated that they felt more comfortable around livestock after this experience and are more confident in their skills to address needs for accidents involving livestock. 100% of participants are aware of response resources that are available to them to help prepare for and respond to accidents involving livestock.

The ERAIL team remains steadfast in their goal to increase the preparedness for accidents involving livestock by continuing to focus on training for first responders and providing accessibility to specialized equipment needed for these events. These efforts will continue to protect the safety of first responders at accident scenes, the public traveling on the roadways, promoting welfare of animals involved, and protecting the image of the animal agriculture industry.

NATIONAL FINALISTS

BOOTS IN THE BARN

Denise Schwab
Extension Beef Specialist
Iowa State University
Vinton

Team Members: Schwab, D*[1], Bentley, J*[2], Hall, F*[3], Euken, R[4]
[1] Extension Beef Specialist, , Vinton, Iowa, 52349
[2] Extension Dairy Specialist, , Decorah, Iowa, 52101
[3] Extension Dairy Specialist, Iowa State University, Orange City, Iowa, 51041
[4] Extension Beef Specialist, Iowa State University, Garner, Iowa, 50438

"I just wanted to say thank you for putting this together! The presentations were great and there was so much wonderful information. Happy to be a part of such an awesome event". This quote summarized the response to the Boots in the Barn programs offered in 2021-24 in Iowa. Boots in the Barn was created to teach production management to beef and dairy women. One virtual and three in-person sessions were offered across Iowa in the last three years, with 115 women participating in the program plus 973 views of the recorded sessions. Follow-up evaluations show women increased their knowledge by at least one point on a 1-4 point scale. A very high percentage of participants are also adopting recommended management practices and have convinced farming spouses to make changes to their operation. Recognizing the economic losses associated with dystocia and the consequences it can have on dairy and beef herds due to death loss or injury to both cow and calf, the calving simulator topic was consistently offered at each program. By allowing time to work through difficult births using a simulator, these women are more knowledgeable and prepared to intervene, thereby reducing the risk of further disease and illness in both cow and calf. Colostrum management is the single most important factor in calf survivability and these women learned the skills to properly manage colostrum to provide the highest quality. Women participating in Boots in the Barn can confidently bring back valuable knowledge and management skills to their beef and dairy operation or operations they may work on to improve efficiency and profitability of the farm. The gained knowledge and skills facilitate greater involvement in the farming operation and potentially greater quality of life through more teamwork and family cooperation in day-to-day farm management.

CATTLE AND PASTURE HEALTH INITIATIVE

Blake Carter
County Extension Agent
University of Georgia Cooperative Extension Service
Springfield

Team Members: Carter, B*[1], Tanner, S*[2], Mallard, J*[3]

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Emmanuel County ANR Agent, University of Georgia
[2] Cooperative Extenion, Swainsboro, Georgia, 30401
[3] Area Water Agent, University of Georgia Cooperative Extenion, Statesboro, Georgia, 30458

Soils, pastureland, grazing strategies, and nutrient management all combine to create a proper cattle

operation. Based on the 2022 Georgia Farm Gate Report, Livestock and aquaculture production in Georgia touted a value of $1,592,729,959. More specifically, counties that the initiative focuses on are those comprising the Ogeechee Cattlemen's Association (Bulloch, Candler, Chatham, Effingham, Emanuel, and Screven) which have a combined value of $85,707,836. This was more than enough motivation for the agent in Effingham County, to partner with the agent in Emanuel County, and the water agent/secretary of the Ogeechee Cattlemen, to provide programming that addresses the highest needs of the members. Through a needs assessment given at the beginning of each year to the members, it was shown that since 2020 the producers' top needs fell into one of four categories: 1) Pasture Health: Soils, Grazing, Forage Selection, 2) Cattle Health: Nutritional Requirements, Feed Mixing, Hay and Baleage Storage, 3) Addressing Anti-quality Factors in Cattle: Toxic Weeds, Algae, Nitrates and Low-Quality Forages, and 4) Economics. Utilizing cattlemen's meetings, field days, and hands-on demonstrations, there have been 22 programs or events that have been held aimed at addressing our growers' top four needs. Surveys were used at the end of each program to gauge the effectiveness, as well as to see what topics priority amongst clients are. Between the meetings, the research trial, and the field days there were a total of 20 partners and/or sponsors that worked the agents to make the initiative come to fruition with a total of over $15,000 in raised funds to support the programs. As it stands over 1510 attendees/viewers have been taught about cattle and pasture health since 2020. Over 40 people received their Beef Quality Assurance Certification, and a total of 437 pesticide hours have been given out.

OKAN CATTLE CONFERENCE

Kennedy McCall
Washington County Agriculture Educator
Oklahoma State University
Skiatook

Team Members: McCall, K*[1], Powell, W*[2], Pugh, B*[3], Ward, E*[4], Stein, D*[5]
[1] Washington County Agriculture Educator, , Skiatook, Oklahoma, 74070
[2] Livestock Production Agent, , Caney, Kansas, 67333
[3] Area Agronomy Specialist, , Muskogee, Oklahoma, 74401
[4] Area Livestock Specialist, , Muskogee, Oklahoma, 74401
Associate Professor, , Stillwater, Oklahoma, 74078

The OKAN Cattle Conference is a dual state collaboration between Washington County OSU Extension agriculture educator Kennedy McCall and Kansas State Extension's Wildcat District livestock production agent Wendie Powell. After many years of Washington County independently hosting a conference, it was decided collaboration could expand the reach and improve conference offerings. Beef cattle are a top commodity in all five of the counties covered by Kennedy and Wendie, making this conference pertinent to the majority of producers.

The first OKAN Cattle Conference was held in Bartlesville, OK in 2023, while 2024 was held in Coffeyville, KS. Both locations welcomed cattle producers from across Oklahoma & Kansas, some who had cattle in both states. The conferences focused on topics for both stocker & cow/calf producers. Participants received information by more traditional teaching methods such as PowerPoint presentations, as well as hands-on education through activities such as handling reproductive tracts and sampling new ruminant pregnancy tests.

Participants indicated a 79% increase in knowledge, with 71% of attendees intending to use new practices learned at the conference. Evaluation data also showed that topics covered during the conferences equated to an additional $415/head and $48/acre on average. According to recently released NASS data, there are 206,275 head of cattle and 622,691 acres used for beef production across the five counties the hosting educators cover. This could potentially equate to an economic impact of $60,778,928 to regional cattle herds and $21,221,309 to the pastures supporting those cattle.

Aside from the university partnership, the event also allowed collaborations with local veterinarians, professors, area and state specialists. Both conferences held full trade shows with booths from farm and ranch businesses, cattlemen and women's associations, USDA, beef councils, and more. At the 2024 event, the hosts partnered with the Kansas Beef Council, which allowed us to provide Beef Quality Assurance training to over 80 people in one setting. Each year the cattle conference has strongly increased its attendance numbers. This is an event that will continue to provide the most up-to-date, research-based education & techniques to cattle producers.

STATE WINNERS

NORTH CENTRAL REGION
Wisconsin Aerica Bjurstrom

NORTHEAST REGION
Pennsylvania Cassie Yost

SOUTHERN REGION
Arkansas Rex Herring
Florida Laura Bennett

Kentucky	April Wilhoit
North Carolina	Adam Lawing
Virginia	Jennifer Ligon

WESTERN REGION

Arizona	Betsy Greene
Montana	Rose Malisani
New Mexico	Sara Marta
Utah	Melanie Heaton

Search for Excellence in Young, Beginning, or Small Farmers/Ranchers

NATIONAL WINNER

DEVELOPING AND EDUCATING MANAGERS AND NEW DECISION-MAKERS (DEMAND) SERIES

Jonathan LaPorte
Farm Business Management Educator
Michigan State University Extension
Cassopolis

Team Members: LaPorte, J*[1], Whittington, S*[2], Wardynski, F*[3]

[1] Farm Business Management Educator, Michigan State University Extension, Cassopolis, Michigan, 49031
[2] Field Crops Educator, Michigan State University Extension, Stanton, Michigan, 48888
[3] Ruminant Educator, Michigan State University Extension, Ontonagon, Michigan, 49953

Every year, inspired individuals enter the world of farming with passion, creativity and drive. These beginning farmers face a number of challenges as they start their new careers as farm managers. Those challenges can become roadblocks that reduce profitability. They may even restrict their farm's ability to grow. To navigate these roadblocks requires an understanding of the financial and business aspects of farming.

To meet the farm business needs of beginning and small farmers, MSUE created the Developing and Educating Managers and New Decision-makers (DEMaND) series. Since 2019, the series has offered guidance to the next generation of farm operators and helps individuals learn about financial and business strategies. Led by MSUE educators and specialists, the series is a cross-team collaboration that features industry involvement from key partnering agriculture organizations.

The series features an assortment of free educational publications authored by MSU Extension educators and reviewed by agricultural professionals. This combination of university and industry expertise provides up-to-date information on a variety of important topics from insurance to marketing, land access to loans and credit, cost of production to budgeting and more. Between 2021 and 2023, these resources have been read 9,217 times and downloaded an additional 1,472 times.

Webinar programs featuring guest speakers also offer added insight into essential topics. From 2022 to 2024, live attendance has averaged 27.77 participants per session. In 2022, 94% of respondents indicated knowledge improvement and 86% intended to use information learned. In 2023, 65% of respondents indicated both knowledge gain and intention to use information learned. Educational videos are also available on financial statements and grain marketing with 3,149 plays between 2022 and 2023.

Whether participants represent the transition of generations, from an employee to owner, or are new to farming, the DEMaND series continues to offer a fresh look at farm management. Helping individuals from all levels of farm business knowledge grow in their capacity to meet the complex needs and challenges of managing a successful farm business. With resources to aid them in preparing for their future and give them the freedom to enjoy the fruits of their labor.

NATIONAL FINALISTS

OPERATION GROW PROGRAM

Harli B. Willis
Administrator I, Outreach Programs - Virtual Events Coordinator
ACES
Auburn

Team Members: Willis, H*[1], Kelly, N*[2], Schavey, E*[3], Sims, K[4], Lounmala, S[5]
[1] Administrator I, Outreach Programs - Virtual Events Coordinator, Auburn, Alabama, 36849
[2] Regional Extension Agent, Alabama
[3] Regional Extension Agent, Alabama
[4] County Extension Coordinator, Alabama
[5] County Extension Coordinator, Alabama

The purpose of this beginning farmer program was to alleviate employment and mental health concerns for

military veterans interested in agriculture. I accomplished this task by training, networking, and providing sustainable support to beginning farmer military veterans in the state of Alabama. I created program activities to help the program achieve progress toward programmatically set goals and objectives including digital and print resources, online and in-person training events, and internal and external panel systems. Seven types of digital resources were made available to educate, connect, and contribute to the success of beginning veteran farmers. Eleven types of print resources were also developed to promote awareness, guide education, and drive progress. One highlighted print resource is the Beginning Farmer Checklist, a full-encompassing detailed progress report designed to serve each farmer throughout their first five years farming. Multiple training events were hosted across the state both online and in-person. One highlighted online event is the newly annual Operation Grow Connect, a zoom session designed to network beginning veteran farmers with experts and each other. One highlighted in-person event is the also newly annual Operation Grow Bootcamp, an all-day training event designed to breakdown the complexities of agriculture and bring scientifically proven information to farmers directly from experts in their field, as well as provide business planning courses to strengthen their farms' success. With the original goal of 30 farms served in the first two years(2022-2024), Operation Grow is currently serving 147 farms in 50 counties (2024). The program's activities resulted in 4,743 direct participants based on collective team efforts.

RANCHING FOUNDATIONS: NAVIGATING THE FUNDAMENTALS OF CATTLE MANAGEMENT

Allison Williams
Small Farms & Alternative Enterprises Agent
University of Florida
Seffner

Team Members: Williams, A*[1], Bennett, L*[2], Crawford, S*[3], Greder, R*[4], Kirby, C*[5], Stice, B*[6]

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[2] Multi-County Livestock Extension Agent I, UF/IFAS Extension, Dade City , Florida, 33525
[3] 4-H and Livestock Extension Agent III, UF/IFAS Extension, LaBelle, Florida, 33935
[4] Sustainable Agriculture Extension Agent III, UF/IFAS Extension, Sarasota, Florida, 34241
[5] Livestock Extension Agent IV, UF/IFAS Extension, Palmetto, Florida, 34221
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Background: Florida is a significant cow-calf state, however, farms with 1 to 49 head make up 85% of the state's beef cow inventory. According to the National Agricultural Statistics Service (NASS – 2017), 33% of the beef cattle ranches are run by new and beginning producers, confirming that foundational knowledge of beef cattle production is needed to serve these small-scale producers. Extension agents from the UF/IFAS South Florida Beef Forage Program developed the Ranching Foundations program to educate producers on site assessment, cost-share programs, best management practices for water quality, developing successful pastures, and pasture weed management. Objectives: The objectives were to increase knowledge of cattle producers in improving production practices, encourage the adoption of management practices, and increase profitability of the operation. Methods: This program was a collaboration between UF/IFAS County Extension agents, the Florida Department of Agriculture and Consumer Services, and Natural Resources Conservation Service. An in-person seminar was delivered using presentations, case studies, and displays. Interactive experiences included potted pasture weeds for participants to view, along with a question-and-answer session between participants and speakers. Participants received a take home packet of educational materials to support the topics presented and contact information for local extension agents. Results: Thirty-three producers participated in the program. An end of program survey was used to evaluate knowledge gain and intended behavior change. One hundred percent of participants indicated an increase in knowledge. Knowledge gain was reported in the areas of site assessment (+38%), resources and cost-shares (+53%), best management practices (+49%), pasture establishment and management (+44%), forage selection (+37%), and weed management (+31%). Seventy percent of participants indicated they would implement at least one management practice learned at the training. Sixty-five percent of participants anticipated an increase in profitability as a result of adopting practices discussed at the program. Conclusion: Based on feedback, the program will be redesigned to incorporate more interactive components and advanced training. Knowledgeable cattle producers improve their production practices and decision-making skills which can result in increased production and improved environmental and economic impacts.

SMALL ACREAGE, BIG POSSIBILITIES

Kennedy McCall
Washington County Agriculture Educator
Oklahoma State University
Skiatook

Team Members: McCall, K*[1], Toothman, O*[2], Peverly, B[3], Rose, M*[4], Pugh, B*[5], Ward, E*[6]

[1] Washington County Agriculture Educator, Skiatook, Oklahoma, 74070
[2] Creek County Agriculture Educator
[3] Past Nowata County Ag Educator
[4] Mayes County Ag Educator
[5] Northeast Area Agronomy Specialist
[6] Northeast Area Livestock Specialist

According to the United States Department of Agriculture, small farms average 231 acres. Highlights from the 2017 National Agricultural Statistics Service census indicate that 75 percent of the farms in Washington County are between 1 & 179 acres. Overall, our county is seeing a trend of producers moving from urban environments to more rural settings. The COVID-19 pandemic caused a shift for them to want to grow more of their own food and also look into agricultural practices as a new hobby, and also a business. With the growing number of small acreage properties being purchased coupled with an increased interest in agriculture, a program to provide them with the necessary information was needed, so "Small Acreage, Big Possibilities" was born. The goals for the program were to both show how to get started with small acreage for those interested, but also to provide different avenues and go more in depth on the opportunities they provided. It was important to me that participants ended the program feeling more knowledgeable about their property and also adopting practices that would improve their operations. The program showed participants the various resources and agencies available to agriculture producers as well. There were 7 one-hour sessions, via Zoom. Meetings were also recorded and sent to participants for later viewing. There were 100 participants in 25 different counties in Oklahoma as well as one from Kansas and one from Tennessee. The follow-up evaluation indicated that participants expected to increase their farm's revenue & had new revenue generating ideas because of the program. It also served as a recruiting tool for other extension programming such as Master Gardeners, Beef Short Course, and various other workshops.

STATE WINNERS

NORTH CENTRAL REGION
Ohio Gary Gao

NORTHEAST REGION
Pennsylvania Samantha Gehrett

SOUTHERN REGION
Georgia Mary Carol Sheffield
Kentucky Tyler Ray
North Carolina Thomas Shea
South Carolina Janet Steele
Virginia Sarah Sharpe

Search for Excellence in Environmental Quality, Forestry and Natural Resources

NATIONAL WINNER

CONSERVATION FOR GENERATIONS

Kalyn Waters
CED/Agriculture Agent
University of Florida
Bonifay

Team Members: Waters, K[1]

[1] CED/Agriculture Agent, , Bonifay, Florida, 32425

Hunting and fishing are critical to wildlife conservation in the U.S. In 2016 there were 11.5 million anglers/ hunters, representing a decline of 2.2 million from 2011. (U.S. Fish and Wildlife Service). The aging trend of this population causes a need for youth to become involved. Objectives: To address these issues the Conservation for Generations (C4G) was developed with the objectives to: 1) increase the knowledge of conservation, 2) increase the number of youth who participate in natural resource management (NRM) and conservation minded hunting/ fishing, and 3) provide platforms for multigenerational interactions that will increase mentorship of youth in conservation, while encouraging the aging populations to continue to participate conservation activities. Method: Formal and informal learning events facilitate multigenerational knowledge dissemination, science

based NRM training, and build a network of mentors for youth/new conservationists. This program model is based on volunteer led experiential learning activities that are hands-on in a field setting. Example events include: a Big Doe Contest, Fishing Tournaments, Live Wildlife Demonstrations, etc. were adults' team up with youth or inexperienced adults to hunt/fish following educational training. Results: Post-program survey data indicates that 84% of participants applied knowledge gained for actual practice change, 100% increased their understanding of the National Conservation Model, 94% increased their efforts to take youth hunting/fishing because of what they learned through C4G, and 100% of participants feel C4G reaches a critical audience and increased their quality of life. Additionally, 45% of all participants have never used Extension, or attended an Extension event, making it an effective model for reaching non-traditional clients. Not including social media reach, a total of 27,076 participants have been educated, 26 scholarships to purchase lifetime hunting licenses to youth and $36,545 of funding has been generated. Conclusion: This program develops the next generation of conservationists, a critical component for population management and wildlife viability in an ecosystem. The program's growth indicates its critical need and ability to reach non-traditional audiences to foster change and knowledge gain. The impact of this program will last a lifetime for those involved. It's impossible to quantify positive experiences and memories this program facilitates.

NATIONAL FINALISTS

AQUATIC WEED CONTROL AND POND MANAGEMENT

Tyler Caston
CEA-Agriculture
UofA Division of Agriculture Research & Extension
Mountain View

Team Members: Caston, T*[1], Heck, A*[2], Griffin, D*[3], Mobley, M*[4]
[1] CEA-Staff Chair - Agriculture, University of Arkansas Systems, Division of Agriculture, Cooperative Extension Service, Mountain View, Arkansas, 72560
[2] CEA-Staff Chair - Agriculture, University of Arkansas Systems, Division of Agriculture, Cooperative Extension Service, Heber Springs, Arkansas, 72543
[3] CEA-Staff Chair - Agriculture, University of Arkansas Systems, Division of Agriculture, Cooperative Extension Service, Clinton, Arkansas, 72031
[4] CEA-Staff Chair - Agriculture, University of Arkansas Systems, Division of Agriculture, Cooperative Extension Service, Batesville, Arkansas, 72501

Many farms across Stone County, AR utilize ponds as the main water source for livestock or for irrigation. Ponds also provide landowners as a recreational resource for fishing and swimming or as an aesthetic landmark on their property. Sometimes aquatic weeds become an issue for pond owners in one way or another. Pond owners seeking to resolve issues pertaining to aquatic weeds either clogging up irrigation pumps, making livestock access difficult, preventing recreational activities, or just being unpleasant to look at have sought assistance from the Extension Service. The purpose of this educational program is to educate pond owners on the best options to control various aquatic weeds using the most cost-effective methods. Over the past three years I have conducted 16 aquatic weed demonstrations on ponds across Stone County and 4 demonstrations applied in different AR counties targeting algae, submersed, emergent, and floating aquatic weeds. I have utilized social media to share demonstrations results reaching 5,314 users. I have performed 48 farm visits to assist pond owners and numerous one on one consultations. Pond owners that have sought assistance have learned the effectiveness of different aquatic herbicides and how to achieve excellent (90-100 %) control of aquatic weeds.

GEORGIA GREEN LANDSCAPE STEWARDS PROGRAM

Jessica Warren
County Extension Coordinator
University of Georgia
Woodbine

Team Members: Warren, J[1], Wunderly, M*[2]

[1] County Extension Coordinator, , Woodbine, Georgia, 31569
[2] Area Water Agent, University of Georgia, Watkinsville, Georgia, 30677

The Georgia Green Landscape Stewards certification program provides educational resources that teach Georgians about protecting natural resources, increasing plant and animal biodiversity, conserving soil and water, providing wildlife and pollinator habitat, and improving public and environmental health. After learning about sustainable land management practices, participants can measure their own activities with the program metric scorecard and earn certification status for their landscape. This statewide sustainable landscape program allows clients to learn from educational modules at their own pace, implement practices in their landscapes and evaluate their landscape practices for recognition. Educational and scoring metric components include 65 different actions in composting, mulching, pollinator habitat, welcoming

wildlife, water conservation, water quality, stormwater, invasive species, native plants and biodiversity. Certification is free and participants have the opportunity to purchase an attractive yard sign that designates their property as a Georgia Green Landscape. The program is open to all Georgia residents and businesses. Clients can navigate the program on their own or through the leadership of their local extension agent. The website contains an "UGA Agent Resources" tab that contains ready to use presentations and marketing materials for Extension personnel through a password protected shared file. Since the program launched, 199 landscapes in 47 different counties have been certified through the Georgia Green Landscape Stewards Program. To date, the Georgia Green Landscape Stewards Program has created more than 4,000 face to face extension contacts across the state. In addition to residential landscape certifications, there have been several church and public demonstration garden certifications. Evaluations from the applicants shows improvements to very and extremely knowledgeable from 26% to 79% after participation. The likelihood of conducting sustainable landscaping actions after participation improved from 15% to 41% extremely likely. The Green Landscapes certification applications provide evidence of which sustainable actions participants are selecting and enacting real world change for natural resource protection in Georgia.

SIERRA COUNTY COOPERATIVE EXTENSION PROGRAM DIRECTOR

Sara Marta
Sierra County Program Director
NMSU
Truth or Consequences

Team Members: Marta, S*[1], Marta, J[2], Hall, W[3]
[1] Sierra County Program Director, , Truth or Consequences, New Mexico, 87901
[2] Hot Springs High School Vocational Ag/FFA Teacher , , Truth or Consequences, New Mexico, 87901
[3] Sierra Soil and Water Conservation District Board, , Truth or Consequences, New Mexico, 87901

The Pasture and Range Science Camp provides education in natural resource management with the intent of motivating youth, coaches and educators to focus on environmental impacts related to Range Management, Ecological Site Descriptions, plant identification and pasture and range contest procedures. The camp included both classroom and hands-on field education to teach the diversity and importance of range science.

Forty two students from FFA chapters and 4-H programs from across the state of NM attended the camp. Students indicated a better understanding of how vast and complex rangelands are in New Mexico. Students also indicated they would be extremely likely to participate in contests focused on range and careers related to natural resources following the camp. The camp additional focused on unique skills and techniques associated with range careers including GIS Specialists in mapping/ fire science and natural resource specialists.

STATE WINNERS

NORTH CENTRAL REGION
Iowa Ron Lenth

NORTHEAST REGION
New Jersey Steven Yergeau

SOUTHERN REGION
Kentucky Macy Fawns
North Carolina Rhiannon Goodwin

DAN KLUCHINSKI MEMORIAL SCHOLARSHIP AWARD

NATIONAL WINNER

Peyton Ginakes
Research Associate
University of Maine
Monmouth

Training Event
2024 National Association of County Agricultural Agents Annual Meeting/Professional Improvement Conference
July 14-18, 2024
Dallas, TX

I am applying for this scholarship with the hope of attending this year's NACAA AM/PIC conference. I began my career in Extension in the fall of 2020, when I began working at the University of Maine Cooperative Extension as a Fruit and Vegetable Research Associate. I work alongside UMaine's state Vegetable, Small Fruit, Tree Fruit, and IPM Specialists to conduct a broad range of applied fruit and vegetable crop research trials and provide growers with science-based production resources.

The most challenging, and rewarding, part of acclimating

to my role in Extension has been delivering outreach. With a background in academic research where producers were consulted less frequently, I have worked earnestly to strengthen this skill and engage producers. I now survey producers' research priorities, co-organize state and regional farmer meetings, speak frequently at grower meetings and farm tours about my work, and create a multitude of crop production resources resulting from my research. I am eager to meet and learn from colleagues in my new professional society. By learning how they deliver their programming, I expect to creatively and effectively broaden my own program outreach methods. These improvements will be applied across my programs – from assessing needs, to designing programs, to creating resources.

Attending this conference until now has not been financially feasible because, being in a soft-money position, I am not eligible for the professional development funds made available to base-funded Extension professionals at my institution. However, I recently assumed the role of SARE (Sustainable Agriculture Research & Education) State Coordinator with the primary task of providing professional development training for Maine's agricultural service providers. As part of this program, I have a limited amount of discretionary funding for my own professional development with which I plan to offset the cost of attending this conference. Attending this training will therefore enable me to develop improved programming for producers, as well as for fellow agricultural service providers who in turn will be better equipped in their roles.

NATIONAL WINNER

Courtney Mitchell
Agriculture Agent
New Mexico State University
Mosquero

I am applying for the Dan Kluchinski Memorial Scholarship Award to aid in attending the 2024 National Association of County Agricultural Agents (NACAA) Annual Meeting/ Professional Improvement Conference (AM/PIC) in Dallas, Texas from July 14-18, 2024.

In the fall of the 2018 I was hired by New Mexico State University as the Agricultural Extension Agent for Harding County, NM, an incredibly rural county dependent on the beef cattle and agricultural industry. Since 2019, I have been a member of NACAA and the New Mexico Association of County Agricultural Agents (NMACAA). I served as the Northeast District Director for the state association, and during a period of growth and reorganization, served as the secretary, president-elect, and now currently president. While membership in the NMACAA has grown agent turnover has caused active participation within the association to stall.

As an agricultural agent in a county of less than 700 people, it is my goal to provide producers with the most advanced, beneficial, and relevant information to keep their operations sustainable and profitable. The job of county agent is unique, and as the sole agent in the county, it can be difficult to generate ideas and maintain enthusiasm for programming. By attending the NACAA AM/PIC I can take advantage of educational information presented by expanding my knowledge and learning about emerging trends, innovative techniques, research findings, and best practices in agriculture. The conference will provide a valuable opportunity for me to learn new skills, and stay updated on the latest technologies, tools, and resources which will enhance my work as an agricultural extension agent.

The NMACAA executive committee and general membership have expressed a strong desire to re-energize the state association, and as president it is my duty to use that motivation to create a stronger state association. Early 2024, I called for the executive committee to meet and set goals for the association and objectives for the coming year. We now hold regular webinars to highlight the benefits of being a NACAA member, generate interest in attending the AM/PIC and encourage applying for awards. We are also exploring ways to mentor new agents and foster a supportive environment among extension professionals to increase job retention.

Attending the AM/PIC will allow me to network with extension professionals from other states and discover ways to build a more robust state association. By being able connect and build relationships with like-minded individuals I will develop valuable collaborations, partnerships, and friendships that support my effort in helping the NMACAA continue strong growth and participation.

Collaboration and idea sharing among extension professionals is imperative to successful programs. By attending the NACAA AM/PIC I'll be able to engage with fellow agricultural agents, gain fresh perspectives, find inspiration, and discover new approaches to strengthen my work in Harding County and the NMACAA. It would be an honor to receive this scholarship, and funds would help with costs associated with attending the NACAA AM/PIC in Dallas this year.


NATIONAL ASSOCIATION
COUNTY AGRICULTURAL AGENTS
RESEARCH
EXTENSION
LAND GRANT COLLEGE
NACAA


TEXAS 2024
NACAA AM/PIC
TRADITION, HERITAGE, AGRICULTURE

2024 NACAA
Distinguished Service Award Winners

NORTH CENTRAL REGION


Illinois
Doug Gucker


Ohio
Gary Gao


West Virginia
Greg Hamons


Florida
Matthew Lollar


Iowa
Terry Torneten


Ohio
Amanda Douridas

SOUTHERN REGION


Florida
Jonael
Bosques-Mendez


Kansas
Stacie Edgett-Minson


South Dakota
Bob Thaler


Alabama
Ronni Brasher


Florida
Alicia Lamborn


Michigan
Mike Metzger


Wisconsin
Sandra Stuttgen


Alabama
Jeremy Pickens


Georgia
Brian Hayes


Minnesota
Angie Peltier

NORTHEAST REGION


Alabama
Lucy Edwards


Georgia
Jason Edenfield


Missouri
Joni Harper


Maryland
Paul Goeringer


Arkansas
Kenny Simon


Georgia
Jessica Warren


Nebraska
Wayne Ohnesorg


New Jersey
Salvatore
Mangiafico


Arkansas
Chris Elkins


Kentucky
Vicki Shadrick


North Dakota
Chris Augustin


Pennsylvania
Leon Ressler


Arkansas
Kevin Van Pelt


Kentucky
Chelsey Anderson

DSA

Kentucky
Brandon Sears

South Carolina
Zachary Snipes

Virginia
Stephanie
Romelczyk

Louisiana
Trey Price

South Carolina
Jaime Pohlman

WESTERN REGION

Mississippi
Doug Carter

Tennessee
Anthony Carver

California
Oli Bachie

Mississippi
Rocky Lemus

Texas
Justin Dudley

Colorado
Todd Hagenbuch

Mississippi
Ross Overstreet

Texas
Michael Berry

Idaho
Jennifer Jensen

North Carolina
Andy Burlingham

Texas
Brad Roeder

Montana
Megan Van Emon

North Carolina
Tom Dyson

Texas
Michael Potter

New Mexico
Bonnie Hopkins

North Carolina
Tim Britton

Texas
Neal Alexander

Utah
Andree
Walker Bravo

Oklahoma
Dana Bay

Virginia
Amy Byington

Wyoming
Chance Marshall

2024 NACAA
Achievement Award Winners

NORTH CENTRAL REGION


Illinois
Sarah Farley


Ohio
Haley Shoemaker


New York
Margaret
Quaassdorff


Arkansas
Tyler Caston


Indiana
Abigail Heidenreich


Ohio
Aaron Wilson


Pennsylvania
Samantha Gehrett


Florida
Mayerling Tatiana
Sanchez-Jones


Iowa
Sarah DeBour


South Dakota
Madalyn Shires


West Virginia
Lisa Jones


Florida
Ethan Carter


Michigan
Jeremy Jubenville


Wisconsin
Natasha Paris


Florida
Alicia Halbritter


Minnesota
Colleen Carlson

SOUTHERN REGION


Alabama
Elizabeth (Beth)
Yates


Georgia
Savannah Tanner

NORTHEAST REGION


Missouri
Rusty Lee


Maine
Bee Khim Chim


Alabama
David Russell


Georgia
Greg Huber


Nebraska
Katja Koehler-Cole


Maryland
Sarah Hirsh


Alabama
Dylan L. Gilbert


Georgia
Holly Anderson


North Dakota
Breana Kiser


New Jersey
Timothy Waller


Arkansas
Bob Powell


Kentucky
Kendal Bowman

Kentucky
April Wilhoit

North Carolina
Marshall Warren

Texas
Andrew Lewis

Kentucky
Adam Huber

Oklahoma
Bradley Secraw

Virginia
Sarah Sharpe

Louisiana
Ashley Edwards

South Carolina
Sarah Scott

WESTERN REGION

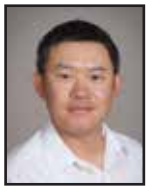
Mississippi
Keri Jones

South Carolina
Mallory Maher

Arizona
Ethan Orr

Mississippi
Kelby King

Texas
Matthew March



California
Zheng Wang

Mississippi
Austin Brown

Texas
Michael Bowman

Colorado
Kim Peters

Oregon
Jenifer Cruickshank

North Carolina
Leslie Rose

Texas
Megan Carter

Idaho
Meranda Small

Utah
Jake Hadfield

North Carolina
Joe Deal

Texas
Megan Eikner

Montana
Mat Walter

Wyoming
Jaycie Arndt

North Carolina
Liz Joseph

Texas
Michelle Moss

New Mexico
Talisha Valdez

2024 NACAA
Hall of Fame Award Winners

2024
Southern Region
Hall of Fame Award

Kenneth White

Texas
33 Years - Retired

Being from a farming family in the Rio Grande Valley of Texas, Kenneth White knew he wanted to be involved in Agriculture. After graduation from Edcouch-Elsa High School he attended Southwest Texas Junior College in Uvalde, Texas achieving an associate degree. He had always wanted to go to Texas A&M and become a County Extension Agent.

In 1974 after graduation from Texas A&M with a degree in Agricultural Education he was offered several positions as Assistant County Agricultural Agent. Being from the Rio Grande Valley of Texas he accepted the position in Liberty, a county with rice and soybeans of which he said he knew nothing about but was willing to learn. His parents, trainer agents and professors had always told him to work hard and do a good job and you'll never have to look for work. They were all correct. He had the privilege of working in Liberty, Goliad, Collin, and Uvalde Counties during his thirty-three-year career. Dr. Seaman Knapp's famous quote, "What a man hears he may doubt, what he sees he may possibly doubt but what he himself does he cannot doubt." That quote stuck with him throughout his career and has been his focus in educating producers with the use of result demonstrations.

In 1994 he accepted the County Extension Agent job in Uvalde, Texas. Uvalde is in what is known as the Winter Garden Region of Texas due to the mild winters where several winter vegetables are grown. As with many minor commodities there is a lack of funding at the national or university level to address the problems of insects, diseases or weed control. In 1995 working with the growers in the area they were able to pass the first vegetable commodity check off program in the state. The Wintergarden Spinach Producers Board was organized in October 1995 and to date has funded over $760,000.00 in research projects to address issues facing the industry.

Kenneth retired in 2007 and many people said you will be bored, you're too young or you'll go crazy sitting at the house doing nothing. He continues to serve as the Executive Director of the Wintergarden Spinach Producers Board and has served fifteen years as a Director on Medina Electric Cooperative Board which serves seventeen counties in South Texas serving as President the past five years. Medina Electric elected White as a Director on San Miguel Electric Cooperative an area Generation and Transmission Cooperative serving nine distribution cooperatives and has served twelve years and Board President the past four years. White also serves as the Fire Chief of Reagan Wells Volunteer Fire Department and a Deacon at Reagan Wells Baptist Church.

White has been actively involved in both the state and national associations, holding various positions throughout his career and attending twenty-five consecutive AM/PIC's. One of Kenneth's most enjoyable activities is getting together with fellow NACAA members he has met throughout the nation for the Annual NACAA Hunt at the Flying H Ranch in Llano.

Years of CES Service: 33

2024
Western Region
Hall of Fame Award

Charles Cheyney

Idaho
31 Years - Retired

Chad Cheyney was truly an outstanding county Extension educator. His commitment and dedication to his county, stakeholders, community, and colleagues serves as a stellar example for Extension professionals as a model for a successful, impactful Extension career. His use of participatory and experiential teaching methods helped increase the adoption of best management practices in agricultural practices among farmers and livestock producers. This stakeholder group

continues to practice the methods Chad demonstrated and taught to improve their operations. During his 31-year Extension career, Chad conducted numerous demonstration and applied research trials in biocontrol of leafy spurge, alfalfa fertilization, effective herbicide use in alfalfa, cereal grain and cereal forage varieties, livestock grazing methods, nitrogen fertilizer materials in pasture, nitrogen application and loss-inhibiting factors in soft white wheat, and others. Chad was a prolific writer and authored and/or co-authored two book chapters, several journal articles, and numerous Extension publications over the course of his career. He presented the results of his work at local, state, regional, and national meetings. He led the development of the Lost Rivers Grazing Academy which is an applied science grazing course focused on management-intensive grazing of irrigated pastures. This program has continued after 23 successful years, reaching attendees from over twelve different states and three countries. The program was recognized in 2006 as the national winner of the NACAA SFE award in livestock production. Chad continues to co-organize and teach this program seven full years after his retirement.

Association involvement

Chad has been active in NACAA and IACAA since 1986. He served as IACAA Junior Director (1998-99); IACAA Senior Director (2000-2001) and IACAA President (1992-93). He chaired the national Program Development Committee (1997-1999). He was a member of the awards committee (1992-1995) and co-chaired the awards committee (1997-99). In 2011-12, Chad was a planning committee member for the Western Region NACAA PIC. During his Extension career, Chad attended the majority of IACAA annual meetings and summer tours, and conferences. He helped organize and host several of the IACAA summer meetings and tours. He attended several NACAA AM/PICs throughout his career. Chad received the NACAA Distinguished Service Award for Idaho (2003).

Humanitarian/leadership

Chad had has a remarkable community service record. He is a member of the Arco Lions Club (1988-current). He volunteered on the Lost River Ambulance as an emergency medical technician for 7 years. He has volunteered on the ski patrol at both Grand Targhee and Blizzard Mountain ski resorts since 1993. Chad has served in various capacities at the Epiphany Episcopal Church. He and his wife Terri have managed the community food bank since 2010. Chad continues to volunteer at numerous events in his community and Idaho. Additionally, Chad mentored numerous faculty members and graduate students. He was dedicated to teaching all new faculty and was always available to assist them in any manner with their career and their achievement of success. He continues to serve his community, colleagues, friends, family, and country as a true role model and public servant.

Years of CES Service: 31

2024
North Central Region
Hall of Fame Award

Gregory Endres

North Dakota
40 Years

Greg has served NDSU Extension for 40 years, including the past 33 years as Cropping Systems Specialist, based at the Carrington Research Extension Center (CREC). In his current position, the priority audience is crop advisers, and specifically Extension county ag agents. He serves North Dakota agents with a focused in-service program including annual spring agronomy updates, in-season crop Zoom calls, individual and group field days, individual consultation, presentations during winter meetings and summer tours, and including their involvement in field research and surveys.

Examples of Greg's programming for crop advisers and farmers include the CREC Crop Management Field School, Advanced Crop Advisers Workshop (ACAW), and Getting-it-Right (GIR) in Crop Production. He is co-chair of the ACAW (since 1993) conducted by NDSU and University of Minnesota Extension serving 150 to 175 persons per workshop (over 5000 during past 30 years) through in-depth training of selected crop production issues. Greg serves as co-chair of the GIR program initiated for soybean over a decade ago to provide NDSU production research updates and recommendations. Since 2020, the program expanded to dry bean, canola, flax, sunflower and corn, primarily delivered virtually (Zoom). The GIR program directly reaching over 2000 persons is another example of successful Extension programming through Greg's work in program planning, moderating, presenting and evaluation.

Greg's agronomy focus for educational programs and research during the past two decades has been row crops, primarily soybean and dry bean. His research and educational efforts corresponded with the growth of soybean acres in North Dakota starting in the mid-1990's (less than 500,000 acres) and reaching the status of highest acreage crop (greater than 5 million acres) in the state in 2016. Greg has annually devoted about 20% of his time to research. Taking a research idea from a stakeholder;

planning and implementing field research; analyzing data; presenting to clientele during educational events; and publishing in research and Extension documents has been routinely achieved.

Greg has had a high and consistent productivity throughout his career. For example, between 2014 and 2022, he has delivered over 400 presentations to nearly 25,000 agricultural clients, delivered over 200 media outreach programs, published 28 Extension publications (14 as main author) and over 130 research reports, and directly consulted with an estimated 23,000 individuals. His work has been widely recognized with awards and honors that recognize excellence from NDSU and including NACAA.

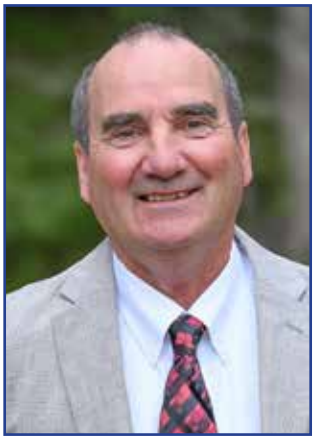
Greg has been a member of the North Dakota Association of Agricultural Extension Agents (NDAAEA) since 1983. Has served NDAAEA in numerous leadership positions including as president, secretary and committee chairs. He has participated in numerous NACAA AM/PICs including poster and oral presentations, and received numerous communication awards. In addition to his Extension career, Greg has been an active community volunteer, primarily in youth (e.g. 4-H and FFA) and faith programs.

Years of CES Service: 40

2024
Northeast Region
Hall of Fame Award

Richard Brzozowski

Maine
35 Years - Retired



Dr. Brzozowski's exceptional commitment to the mission of Extension is evident in the substantial impact he has made through his extensive volume of educational programs, contributions to statewide leadership, and his remarkable success in securing over $1.9 million in grant funds for diverse research and educational initiatives. His influence spans from county-based educational programs supporting sustainable agriculture and home horticulture to statewide responsibilities as a small ruminant & poultry specialist, illustrating his dedication to collaborative efforts with a variety of agricultural producers. Dr. Brzozowski's leadership in farm safety, particularly through the Maine AgrAbility program, highlights his commitment to addressing the unique and underserved needs of his audience. Highlighted achievements in his educational programs since 2011 underscore his effectiveness. Notable examples include the Farm Tractor Safety course, resulting in job placements and increased safety consciousness among participants. His outreach to Maine Goat and Sheep producers has positively impacted income through the adoption of new guidelines and practices. Additionally, his leadership in applied poultry science projects and the Maine AgrAbility program emphasizes his commitment to enhancing the well-being of farmers, forest workers, and fishermen with disabilities. Brzozowski was instrumental in bringing the Maine Master Gardener Volunteer (MGV) program out of dormancy in 1988. The MGV program is now one of the most popular educational programs of UMaine Extension with over 1,200 MGV across the state.

Dr. Brzozowski's multifaceted approach is further showcased through his involvement in applied research, national conference presentations, and the integration of research findings into educational programs. Serving as the Nat. Chair for the Program Recognition Council and the Nat. Chair for the Search for Excellence at the NACAA attests to his leadership on a national level.

Transitioning into a Program Administrator(PA) role in 2015 until his retirement in 2022, Dr. Brzozowski served as the State Program Leader for the Maine Food System. In this capacity, he provided administrative support for three counties, supervised 32 faculty and staff, and served as the Director for the Maine Food and Agriculture Center. His engagement in professional development, participation in the Supervisory Development Institute, and enrollment in relevant courses reflected his commitment to enhancing his skills as a PA.

Demonstrating a forward-thinking approach, Dr. Brzozowski identified challenges and opportunities facing UMaine Extension, setting strategic goals and implementing creative strategies to address them. His proactive engagement within the Maine Food System community solidified his reputation as an excellent ambassador for UMaine Extension.

Dr. Brzozowski has demonstrated a lifelong commitment to service starting in his days as a US Navy Seabee in the Construction Battalion from 1973 to 1977. He later became a Vocational Agriculture Instructor teaching learning disabled high school students on a school farm in the early 1980s. From there, he became a staff member of Christian Campus House in Columbia, MO where he directed outreach to the international population (students and refugees) as part of a Christian friendship program where he helped meet spiritual, physical and social needs of people from other cultures and taught others to do the same.

Years of CES Service: 35

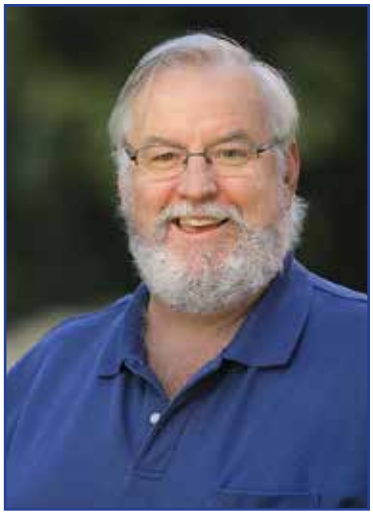
2024 SERVICE TO AMERICAN/WORLD AGRICULTURE AWARD RECIPIENT

Dr. Derrell S. Peel
Extension Livestock Marketing Specialist in the Department of Agricultural Economics at Oklahoma State University

The Oklahoma Association of Extension Agriculture Agents is pleased to nominate Dr. Derrell S. Peel for the NACAA Service to American/World Agriculture Award. Dr. Peel holds the Breedlove Professorship of Agribusiness and serves as an Extension Livestock Marketing Specialist in the Department of Agricultural Economics at Oklahoma State University. With over 35 years of experience at OSU, Dr. Peel has cultivated a distinguished Extension program, integrated with applied research and teaching initiatives, showcasing a deep-rooted dedication to advancing knowledge and fostering global perspectives in agricultural economics.

In his role as an Extension Livestock Marketing Specialist, Dr. Peel's primary responsibilities revolve around developing and implementing comprehensive extension education programs tailored to the livestock industry. His duties encompass a wide range of activities, including the creation of educational materials, providing market analysis and outlook information, and supporting Area and County Extension personnel in delivering impactful educational programs. Moreover, Dr. Peel engages in applied research to enhance the effectiveness of educational materials and ensure the relevance of information provided to stakeholders. His expertise spans various areas, including Livestock Market Analysis and Outlook, Livestock Marketing Education and Risk Management, and the Economics of Stocker Cattle Production and Marketing, among others.

A pivotal aspect of Dr. Peel's career trajectory is his profound understanding of international cattle and beef trade dynamics. In the early 1990s, Dr. Peel recognized that the advent of NAFTA, along with emerging trends in global cattle and meat trade would change livestock marketing in the U.S. dramatically. Dr. Peel traveled extensively in Mexico with universities, producer groups, and government agencies. Through numerous international presentations, workshops, and publications, Dr. Peel has become a respected authority on the Mexican cattle and beef industry, fostering collaborative relationships and knowledge exchange on a global scale. His reach extends to other countries as well. Dr. Peel has made more than 25 international presentations as an invited speaker and workshop presenter at academic and industry conferences in Mexico, Argentina, Brazil, Vietnam, Scotland and Canada. You would be hard pressed to find a room of cattlemen anywhere, including Mexico and Canada, where the name Derrell Peel is not recognized and respected.



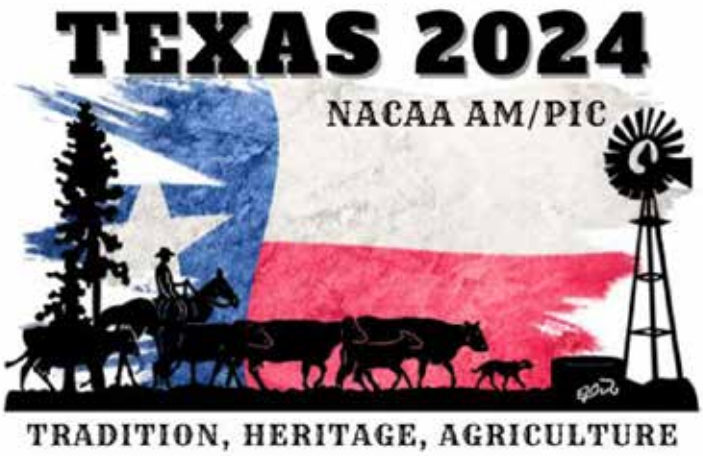
Dr. Peel is a fluent Spanish speaker and one of his notable achievements is the development of the Spanish version of Oklahoma's Beef Cattle Manual, a testament to his inclusive approach to education and outreach. By spearheading the translation process and ensuring linguistic accuracy, he has facilitated access to vital resources for Spanish-speaking cattlemen, furthering the dissemination of knowledge and best practices in diverse domestic audiences and across borders.

Beyond extension, Dr. Peel has been active in both research and teaching. Derrell has not had a formal research appointment for most of his career, yet his scholarly output in applied research includes more than 60 refereed publications and more than 55 selected papers and published abstracts at professional meetings. Dr. Peel exemplifies the full research/extension circle of identifying relevant questions through Extension, applying solid science, and then creating science based Extension programming. Approximately 10% of that output addresses questions with an international focus or international implications, often with graduate students as he mentors them, continuing to plant the seed that the world is larger than what is right in front of us and that we must be open to see the whole picture.

Dr. Peel brings Extension into the classroom and also brings the classroom out into the field. He has played a pivotal role in facilitating international experiences for college students, including organizing Study Abroad courses to Mexico and more recently Scotland and Ireland. He is also leading educational tours for students domestically, specifically recruiting students that are international or from other states. His class on Oklahoma Agriculture Experiences is a series of tours that take students out of the classroom and across the state to see and touch every part of the food supply chain. He organizes tours for Oklahoma Cattlemen's Association groups and visiting producer groups from other states, with a specific emphasis on beef cattle production. Additionally, his involvement in the China Agricultural University program underscores his dedication

to fostering cross-cultural understanding and collaboration in agricultural education. Dr. Peel pivots quickly, adopting new ways of reaching audiences. He has a weekly RFD radio spot on cattle markets with an extensive following, and created the Farm to Market podcast series that reaches new and non-traditional audiences by telling the stories of agricultural history and current issues in his characteristic humor.

In summary, Dr. Derrell S. Peel embodies the essence of the Service to American/World Agriculture Award through his unwavering commitment to integrating global perspectives into Extension, research, and teaching. His multifaceted contributions have not only enriched the agricultural community in Oklahoma but have also fostered meaningful connections and collaborations worldwide. Dr. Peel's career stands as a shining example of excellence in global education, deserving of the highest recognition and appreciation.



2024 ABSTRACTS OF THE NATIONAL WINNERS AND FINALISTS COMMUNICATIONS AWARDS CONTEST

AUDIO RECORDING

National Winner

ADVOCATING FOR AGRICULTURE

Vicki Shadrick
Dixon

Shadrick, V*[1], Stone, J*[2], Fourqurean, D*[3]
[1] Extension Agent for Agriculture and Natural Resources, Dixon, Kentucky, 42409-9492
[2] Extension Agent for Agriculture and Natural Resources, Eddyville, Kentucky, 42038
[3] Extension Agent for Agriculture and Natural Resources, Calhoun, Kentucky, 42327

"Advocating for Agriculture" was recorded at the Webster County Extension Office and published on March 5th, 2024. The podcast was hosted on Podbean and shared to Apple Podcast, Google Podcasts, Spotify, Amazon Music and iHeart Radio. In this episode, Vicki Shadrick, Webster County ANR agent, Jay Stone, Hopkins Lyon County ANR agent and David Fourqurean, McLean County ANR agent discussed the importance of advocating for agriculture and being a positive voice for agriculture. KY Ag Matters podcast educates and informs our listeners about all things related to agriculture. As of March 12, 2024, we have recorded 106 episodes with a variety of topics geared towards meeting the emerging needs of our clientele. With a weekly audience base that extends well beyond the state borders, Kentucky Ag Matters has developed a regular listening audience who receive weekly, research-based information on a variety of different online hosts. This allows everyone to access this information while commuting to work or while in the field. To date, the show has had over 6,400 downloads. Our guests range from Extension Specialists to commodity group leaders, as well as extension agents and law enforcement officers. Our goal is to offer timely, research-based information to the agriculture community in a consistent and reliable way. We now have over 600 monthly listeners across the United States and several foreign countries.

National Finalists

RADIO PROGRAMS FOR POST ROCK EXTENSION DISTRICT, KANSAS

Sandra Wick
District Extension Agent, Crop Production
K-State Research & Extension
Smith Center

Wick, S*[1]

[1]District Extension Agent, Crop Production, K-State Research and Extension - Post Rock District, Smith Center, Kansas, 66967

Chinch bugs can definitely be a challenge for producers in newly emerging forage sorghum or milo! To address this challenging situation, I developed a radio program for producers. The objective of this particular radio program was to provide guidelines for producers for managing chinch bugs. The purpose was to educate producers on specific recommendations for managing chinch bugs by scouting early and applying treatment to obtain a profitable forage sorghum or milo crop. The Post Rock Extension District is an agricultural-based, five-county area with a population of approximately 20,250 citizens. The producers were provided this forage sorghum or milo production information with two different radio stations, KDNS, Glen Elder, KS and KVSV, Beloit, KS. The programs were aired on Friday, June 30, 2023 at 6:40 a.m. and on Monday, July 3, 2023 at 12:05 p.m. After the programs were aired, more specific questions arose on more specific questions managing chinch bugs and we were thanked for providing the information. The radio program was prepared and recorded in the Post Rock Extension District – Smith Center Office, on a computer using a Yeti microphone and the software, "Audacity".

NOVEL "FEED SAVED" TRAIT FOR GENETIC SELECTION?

Martin Mangual
Extension Dairy Educator
Michigan State University Extension
West Olive

Mangual, M*[1]

[1]Extension Dairy Educator, Michigan State University Extension, West Olive, Michigan, 49460

The submitted audio recording was produced and published by Martin J. Carrasquillo-Mangual, Dairy Extension Educator, for Michigan State University Extension housed in Ottawa County, Michigan. The objective was to provide specific information to dairy producers in a flexible, accessible way. The specific purpose of the episode was to present information regarding a new trait added to the net merit index in 2021 called "feed saved". The index is used to select sires based on their genetic merit value and is determined by a combination of factors. In the episode, Martin interviews Dr. Michael VandeHaar, the principal investigator who led the developing efforts for the new trait. The NACAA member coordinated the interview and developed the guiding questions for the episode. Additionally, he performed the interview, edited the audio, and published the final version on the platform for the MSU Extension dairy team podcast. The audio was recorded using Zoom and all edits were performed with Audacity audio editing software. The episode is distributed on all major podcast platforms for flexible access. The episode has reached 160 listeners across all platforms. The full episode lasts 26:26 and has an audience median play time of 25:30 reflecting that most listeners tuned in for most of the episode. Although over 15 minutes, the episode's format, style, and objectives can be evaluated for the first 14:44 of the episode. The original publication is still accessible here.

THE GARDEN THYME PODCAST - GORGEOUS GOLDENRODS

Emily Zobel
Associate Agent for Agriculture and Food Systems
University of Maryland Extension
Cambridge

Zobel, E[1], Rhodes, R*[2], Boley, M[3]

[1] Senior Agent Associate for Agriculture and Food Systems, University of Maryland Extension, Cambridge, Maryland, 21613-0299
[2] Senior Agent Associate for Horticulture and Master Gardener Coordinator, University of Maryland Extension, Centreville, Maryland, 21617
[3] Principal Agent Associate for Horticulture and Master Gardener Coordinator, University of Maryland Extension, Easton, Maryland, 21601

The Garden Thyme Podcast is a monthly podcast that features three University of Maryland Extension (UME) professionals: Mikaela Boley (Principal Agent Associate, Talbot County), Rachel Rhodes (Senior Agent Associate, Queen Anne County), and Emily Zobel (Senior Agent Associate, Dorchester County). The podcast aims to share knowledge and information about sustainable gardening practices and environmental issues with the public in a friendly, approachable way. Episodes are approximately 35-45 minutes long and feature a central topic or interview with a specialist, plus 3 recurring segments for native plant, bug, and tip of the month. Episodes are recorded and edited using the software Audacity (www.audacity.org) and are housed on the podcast Buzzsprout website (https://go.umd.edu/gardenthymepodcast/). The episodes are released and can be downloaded using iTunes, Spotify, Overcast, and Google Podcast. Transcripts are available for each episode on the podcast website for accessibility. Advertising of the podcast relies heavily on the podcast's Facebook page (@GardenThymePodcast), Maryland Grows Blog (https://marylandgrows.umd.edu), the Master Gardener program, and other University of Maryland Extension Home Horticulture events. As of March 2024, 48 episodes have been published, with 9 episodes produced in 2023. Each episode averages 450 downloads, with a total of 24,360 downloads (7,493 downloads in 2023). 98% of listeners are from the United States, with minimal international listens from Europe, Asia, South America, and Oceania. In 2023, the podcast launched a listener survey that solicited over 80 responses. Survey participants responded that 66% increased the number of native plants in the landscape, 65% tried growing a new variety of vegetable or edible plant, and 28% performed soil tests based on the knowledge they gained from the podcast.

This entry is an edited 15 minutes from our Gorgeous Goldenrod episode, released September 12, 2023. This episode aimed to highlight the beauty and high wildlife value of goldenrods and encourage people to plant some in their landscapes. A handout with a bloom chart was created as an add-on to this episode (https://go.umd.edu/goldenrodbloomchart).

Regional Winners

THE FORAGE CONNECTION: GRAZING, GROWING, AND FEED

Ben Beckman
Extension Educator
Nebraska Extension
Hartington

Beckman, B*[1], Bauder, S*[2]

[1] Extension Educator, University of Nebraska - Lincoln, Hartington, Nebraska, 68739-0368
[2] Extension Field Specialist- Forages, , Mitchell, South Dakota, 57301

The Forage Connection podcast was launched on 8/14/2023 as a partnership project between UNL Extension and SDSU Extension. Ben and Sara host the show that focuses on 'grazing, growing, and feed'. Forages are a major player in both Nebraska and South Dakota agriculture systems. As an Extension Educator in northeast NE and a Forage Field Specialist in southeast SD, we wanted to provide producers with a local, free, learning opportunity that could be listened to at any time or place. This collaborative effort has yielded seven published episodes (by 3/15/24), focusing on everything from corn silage, to bale storage, to a new forage association. We carefully select each month's topic and guest, and record independently in our own offices; guests tune in with us remotely. The entire program is recorded and edited using Zencastr software. Ben provides editing for each episode while Sara creates cover art. Episodes are scheduled monthly and published through both the UNL and SDSU Extension webpages as well as major podcast outlets (Apple podcasts)(Spotify). Currently the show has 348 downloads over 7 episodes. The submitted episode, "Toxic Forages: Dr. Warren Rusche" (Apple & Spotify options for accessing) features SDSU Extension feedlot specialist, Warren Rusche and focuses on toxicity issues in annual forages during the fall. The portion that we submit for review (1:32 - 16:19) focuses specifically on prussic acid poisoning; how it occurs, impacts on livestock, and how producers can manage the risk posed.

FARMING THE FIRST THANKSGIVING

Amanda Douridas
Extension Educator
OSU, Madison County
London

Douridas, A*[1], Hawkins, E*[2]

[1] Extension Educator, The Ohio State University, London, Ohio, 43140
[2] Field Specialist, Agronomic Systems, The Ohio State University, Wilmington, Ohio, 45177

Farming the First Thanksgiving is episode 129 of the Agronomy and Farm Management (AFM) Podcast. Douridas and Hawkins are co-hosts of the agronomy episodes released once a month and took the opportunity of a release date close to Thanksgiving to break from traditional current topics and provide education on what it would have been like to provide food for the first Thanksgiving. While farming was simpler in a lot of ways, it is intriguing to consider what the pilgrims were up against trying to survive in a new land and how the Native Americans had adapted to raise and protect crops without today's modern technology. The target audience for the AFM podcast is grain farmers and certified crop advisers. With this episode we targeted these same folks but with the potential for families to listen together while travelling for the holiday. Douridas and Hawkins researched the topic and recorded the podcast using a standard laptop, Adobe Audition software, and a Yeti microphone in the Extension office. Douridas edited it using Adobe Audition and published the final product. It was released on November 22, 2023 and published to https://podcast.osu.edu/agronomy/ which pushes it to Apple Podcasts, Google Podcasts and a few smaller platforms. It has received 129 plays since it's release. The podcast episode can be found at: https://podcast.osu.edu/agronomy/2023/11/22/episode-129-farming-the-first-thanksgiving/.

WHERE WE LIVE 4-H INTERVIEW

Jennifer Cushman
University of Connecticut
Farmington

Cushman, J[1], Syrotiak, M[2], Stearns, S*[3]

[1] 4-H Extension Educator, UConn Extension , Farmington, Connecticut, 06032
[2] Extension Intern, UConn Extension, Farmington, Connecticut, 06032
[3] Communications Specialist , UConn Extension, Storrs, Connecticut, 06269

The objective of this audio recording was to fulfill the media's request for an interview on 4-H as an integral part of the agricultural pipeline while promote the UConn 4-H program including the Hartford County 4-H Fair to Connecticut Public Radio (WNPR) radio listeners. The primary audience for this column was residents of Connecticut. Our audience was UConn Extension reaches over 288,000 people annually, through its various efforts. WNPR has 240,000 radio listeners each week. Connecticut currently has 801,648 youth, and these, along with their parents and/or guardians were the target audience for our project. Posted to UConn Extension Facebook which has 321 followers and reshared with UConn 4-H Facebook which has 3,600 followers. The impact of this audio recording was the Fair set a record for attendance. Numerous individuals across Connecticut reached out noting they had heard the radio interview. The interview was also replayed the week of the Hartford County 4-H Fair, and the fair had a record attendance year. The Broadcast station expressed satisfaction with the interview and invited the speakers back for a future interview. The interview was shared on Extension and the College's social media. Analytics include Twitter/X: 527 reached, 4 re-tweets, 10 hearts; LinkedIn: 5 likes on the College post and Facebook: 162 impressions, 149 reached, 12 engaged. WNPR reached out to UConn Extension seeking to interview a 4-H professional. Stacey Stearns directed them to Jen Cushman & Matt Syrotiak. Speakers met ahead of time with the producer of the show to discuss content. Topics were identified and the two interviewees met to discuss possible talking points for a variety of topics. The interview was conducted live on July 13, 2023, via Zoom and recorded by WNPR. WNPR then repeated the broadcast the week of the Hartford County 4-H Fair, August 2023. The recording was distributed on UConn Extension's X (Twitter), LinkedIn and Facebook. Stacey Stearns coordinated the media connection, Jen Cushman & Matt Syrotiak served as interviewees.

CORNELL COW CONVOS EPISODE 3: TRENDS IN THE BEEF X DAIRY INDUSTRY

Margaret Quaassdorff
Dairy Management Specialist
CCE NWNY Dairy, Livestock, and Field Crops Team
Batavia

Quaassdorff, M*[1], Hicks, B[2]

[1] Dairy Management Specialist, Cornell Cooperative Extension Northwest NY Dairy, Livestock and Field Crops Team, Batavia, New York, 14020
[2] Area Dairy Specialist, Cornell Cooperative Extension South Central New York Dairy and Field Crops Team, Cortland, New York, 13045

This podcast episode was released on November 30, 2023 as part of the Cornell Cow Convos monthly series hosted by Cornell Cooperative Extension Dairy Specialists and Cornell PRO-DAIRY. This episode discussed the opportunities and challenges for farmers surrounding the beef x dairy industry in New York as well as the latest national trends. The target audience for this episode and the entire series is primarily dairy farmers, though it is also relevant to allied industry professionals, or anyone interested in new and emerging topics in the dairy industry from a practical perspective. The episode includes show notes that link to resources mentioned in the podcast, other related extension programs, and a survey link where listeners may submit questions or topic ideas for future episodes. The podcast episode content was developed and recorded by both authors from their home offices using Zoom and Yeti microphones, and edited by the primary author using Adobe Rush. It is available on SoundCloud and has received 124 plays since its release date. Further reach was accomplished when it was picked up by an associate editor at Hoard's Dairyman and the content was summarized in article titled, "Get dairy-beef right to make it pay" published in the Hoard's Dairyman Intel online on December 22, 2023. The entire podcast is 32 mins and 10 seconds. For judging purposes, please listen from minute 00:00 to 11:30 for introduction and content, and 30:00 to 32:10 for closing remarks and call to action. Link: https://soundcloud.com/user-301921459-118136586/e3-beef-x-dairy/s-9CTR5AV13BB?in=user-301921459-118136586/sets/cornell-dairy-convos&si=cf76e247e09545c99c49cc419e0834b2&utm_source=clipboard&utm_medium=text&utm_campaign=social_sharing

LANDSCAPES FOR THE ALABAMA COAST - FROM THE GROUND UP PODCAST

Brian Brown
Regional Extension Agent
Auburn University
Guntersville

Brown, B*[1], LeCroy, J*[2]

[1] Regional Extension Agent, , Guntersville, Alabama, 35976
[2] Regional Extension Agent, , Mobile, Alabama, 36608

From the Ground Up is a podcast from Alabama Extension's Home Grounds, Gardens, and Home Pests team that covers a vast range of topics within horticulture. In this episode, host Dr. Brian Brown interviews Jack LeCroy about the unique growing environment that Alabama's Gulf Coast region offers. This area of Alabama can provide great benefits such as extended growing seasons and the ability to grow many tropical plants, however there are pitfalls as well - such as hurricanes, heat, and humidity. The episode also covers how vastly different the coast can be as compared to just a few short miles inland. The podcast was recorded remotely via the internet between the Marshall County Extension office in Guntersville, AL and the Mobile County Extension office in Mobile, AL. The podcast series in it's first year accumulated approximately 4000 listens. This episode was recorded on May 1, 2023, and released August 28, 2023 on the Alabama Extension website located at https://www.aces.edu/blog/podcast/season-1-episode-4-landscapes-for-the-alabama-coast/, as well as Apple Podcasts and Spotify. Please consider 0:00-15:00 as the segment to be judged.

GROWER EXCHANGE PODCAST

Justin Ballew
Extension Agent
Clemson University Cooperative Extension Service
Lexington

Team Members: Ballew, J[1], Scott, S*[2], Snipes, Z*[3], Last, R*[4]

[1] Extension Associate, Clemson Extension, Lexington, South Carolina, 29072
[2] Extension Agent, Clemson Extension, Edgefield, South Carolina, 29824
[3] Extension Agent, Clemson Extension, Charleston, South Carolina, 29401
[4] Extension Agent, Clemson Extension, Lexington, South Carolina, 29072

The SC Grower Exchange Podcast aims to educate growers with bi-monthly crop updates from around the state. The podcast is recorded via Zoom in from each agent's respective office. Sarah Scott is the podcast host and interviews each regional agent about what they have seen in the field from the previous weeks. Agents chime in on the weather, crops, and pests, which keeps growers abreast of what is happening in the fields around the state. The podcast streams on Spotify, Google Play, and Apple Podcasts and is featured on SCGrower.com. In this episode (February 5, 2024), Clemson Extension agents Sarah Scott, Rob Last, Zack Snipes, and Justin Ballew discussed what has happened since the last episode, recorded before Christmas. Strawberries take up a large portion of the episode as they are a significant specialty crop in the field at this time. Agents discuss disease, deer damage, and counting crowns. Ballew gives a research update on cold-tolerant citrus and a new pecan planting at the research station. To finish the episode, Ballew discusses the latest Question of the Week: jelly fungus. The agents partake in some good-natured ribbing about Rob's Birthday.

GROWING A GREENER KENAI: HOT TAKES ON A SLOW START

Casey Matney
Agriculture & Horticulture Agent
Soldotna

Matney, C*[1]

[1] Agriculture & Horticulture Agent, UAF Cooperative Extension Service, Soldotna, Alaska, 99669

Dr. Casey Matney provided a guest appearance on Central Kenai Peninsula Public Radio. He discussed methods of soil preparation for the upcoming growing season and how to properly prepare compost piles for the spring. The 46 minute show was hosted by Larry Opperman and is provided regularly to the public to encourage more and productive gardening on the Kenai Peninsula. This feature show occurred during the annual spring public radio membership drive and included taking calls from the public.
Link to the recording can be found here - https://www.kdll.org/show/growing-a-greener-kenai/2023-06-27/hot-takes-on-a-slow-start

TOXIC PLANT AND PUBLIC LANDS GRAZING PODCAST EPISODE

Ashley Wright
Livestock Area Associate Agent
The University of Arizona
Vail

Wright, A[1], Brownlee, C[2], Rauber, R[3]

[1] Livestock Area Associate Agent, University of Arizona Cooperative Extension, Vail, Arizona, 85641
[2] Assistant Professor of Practice, University of Arizona College of Veterinary Medicine, Oro Valley, Arizona, 85721
[3] Instructional Designer II, University of Arizona College of Veterinary Medicine, Oro Valley, Arizona, 85721

In 2020, the University of Arizona welcomed its first class of students to the College of Veterinary Medicine. As a part of the Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension (ALVSCE), collaborations between UArizona Cooperative Extension (UACE) and the College of Veterinary Medicine (CVM), have been developing.

While many of the students at the CVM have a more traditional "small animal" focus to their study, a significant portion of the students have an interest in large animal, equine, or food animal medicine. While some of these students do have a background in agriculture, many do not. Dr. Brownlee, an instructor at the college, saw an opportunity to educate these students through collaborations with Cooperative Extension. Ashley Wright, an Area Agent with programs focusing on livestock production, specifically cow-calf operations grazing public lands, was interviewed on Dr. Brownlee's student facing podcast to discuss plant toxicity and public lands grazing. While the podcast format is an informal interview. Dr. Brownlee prepared some basic questions to guide the conversation which covered an extensive array of topics from how we successfully graze livestock on public lands even in the presence of toxic plants, to how public lands grazing works. The conversational flow of the podcast makes it much more interesting to the listener than a structured and formatted lecture, while still conveying important information such as which toxic plants are most common on Arizona's rangelands, under what conditions do we tend to see toxic plant issues, and even some of the general guidelines around utilization of forage species in a grazing situation. This podcast episode ran 39 minutes in length.

This podcast was provided to the veterinary students learning under Dr. Brownlee as a part of their lesson plan (100 students per veterinary class). It was also made available online and distributed through Cooperative Extension's Arizona Range and Livestock News (approximate distribution 600) and posted online for review. Exact downloads/plays are not known due to the format the podcast was made available in.
https://drive.google.com/file/d/1fVxgb_8gk8SUMRmhoGQopQ3pQSPLOMgQ/view?usp=sharing

ANTIMICROBIAL & HORMONES IN BEEF

Jessica Massengill
Extension 4-H/Ag Agent
New Mexico State University Cooperative Extension Service
Silver City

Massengill, J*[1]

[1]Extension 4-H/Ag Agent, , Silver City, New Mexico, 88061

The purpose of this podcast episode was to provide research-based information regarding the truth about the use of antimicrobials and hormones in the beef industry. This episode focuses on getting to the truth of what exactly is going on in the beef industry and how antimicrobials are used and the precautions that are taken to make sure that the beef that we eat is safe and healthy. The episode features an interview with the NMSU extension veterinarian.

In today's world misinformation is spread so easily and the public doesn't know the truth about how the beef industry operates. They only know what they see on social media, television or hear about from the news which are not credible sources. Therefore, having an extension veterinarian on the episode to set the record straight was incredibly impactful.

This interview was conducted in person in my office. The interview was solely edited by me using Audacity and then uploaded to the podcast host website Buzzsprout.
This episode was released on August 24, 2023. It has been downloaded 105 times. Most downloads were from New Mexico, however listeners from 13 states and five countries around the world have listened to this episode.
https://www.buzzsprout.com/750188/episodes/13465231

State Winners

NORTH CENTRAL

Illinois	Nicole Haverback
Minnesota	Emily Krekelberg
South Dakota	Sara Bauder

NORTHEAST
Pennsylvania Tom Butzler
West Virginia Karen Cox

SOUTHERN
Florida Jamielyn Daugherty
Georgia Robyn Stewart
Mississippi Eddie Smith
North Carolina Kellee Payne
Tennessee Mitchell Mote
Texas Matt Garrett
Virginia Tom Stanley

WEST
Utah Ethan Gilliam

Computer Generated Presentation with Script

National Winner

UNDERSTANDING LABEL STATEMENTS

Tana Haugen-Brown
Extension Educator
University of MN Extension
Zimmerman

Haugen-Brown, T*[1], Stahl, L*[2]

[1] Extension Educator & Co-Coordinator, PSEE, , Zimmerman, Minnesota, 55398
[2] Extension Educator, Crops, , Worthington, Minnesota, 56187

Pesticide labels and labeling comprehension are an important part of the application process. Pesticide labels contain information related to the safe use of pesticides from an applicator or handler perspective, as well as a food safety and environmental perspective. Helping private pesticide applicators to fully understand label statements and their meaning is key to following legal requirements as well as their health and safety. The statements "Read and follow the label" and "The label is the law" are at the core of how the U.S. manages dangers posed by pesticides and are also the foundation of pesticide regulation. The University of Minnesota (UMN) Private Pesticide Applicator Training (PPAT) team determined that with ever complex and changing pesticide product labels increasing an applicator's understanding of label statements was imperative. Lizabeth Stahl and I developed the "Understanding Label Statements" module for use during the 2022-2024 PPAT training cycle by researching label statements and utilizing available resources including the EPA's Label Review Manual. The module was peer-reviewed by other UMN Extension educators and the Minnesota Department of Agriculture.

The module's objective was to educate applicators about different types of statements found on pesticide labels. We worked through statements found on actual pesticide labels to gauge their understanding and comprehension of those statements. We utilized audience-response TP clickers to make the module more engaging for participants. Each question was followed with additional information about the statement. Information on where to go for help when label statements are unclear was included. PPAT Extension educators including myself and Lizabeth utilized the module at workshops during 2022-2024. Workshop attendance was 1,585 at 46 workshops, 1,399 at 45 workshops, and 1,722 at 44 workshops across Minnesota in 2024, 2023, and 2022, respectively. Using TP clickers, we were able to evaluate the module's effectiveness by asking participants at the conclusion of each workshop, if "as a result of today's workshop my knowledge about how to interpret pesticide label statements has increased," Data collected from the workshops showed that 94% of respondents answered "Strongly agree" or "Agree" - a key message of the presentation.

National Finalists

PRESERVING NATURAL AREAS IN & AROUND THE LANDSCAPE

Alicia Halbritter
Agriculture & Natural Resources Agent
UF/IFAS Baker County Extension
Macclenny

Halbritter, A*[1]

[1]Agriculture and Natural Resources Agent, University of Florida, Macclenny, Florida, 32063

In October of 2023 I was invited to give a presentation at the annual meeting of the Landscape Inspectors Association of Florida. As an Agriculture and Natural Resources Extension agent, I was a bit mystified at what I could offer a room full of 200 landscape professionals. The presentation, 'Preserving Natural Areas In and Around the Landscape' helped bring awareness to this eclectic group of individuals on the importance of supporting native ecological developments in urban areas. The presentation was given in downtown Fort Lauderdale, with many of the

attendees serving clients in south and central Florida, two very dense urban areas in the state. Urban settings are typically lacking in areas where native plants and animals can thrive. As developed areas grow, there is a risk to the stability and longevity of our state's flora and fauna. This presentation gave an in-depth look into the dynamics of Florida's residents, land, climate, and plant species before broaching the subject of the benefits of native species and why one should care about them. One cannot encourage a practice adoption without also discussing what challenges the individual may face doing so and of course, how to actually implement the practice. Because this was a presentation to a state-wide audience, specifics on what to plant and where to buy were not included as this varies greatly with regional differences. Instead, suggestions on resources to find plant lists and available native nurseries were given so the landscape professionals could utilize them in their business. I made significant efforts to develop a presentation that included movement and visual aspects that would keep the attendees engaged and attentive. Post-program surveys revealed that 87% of participants increased their knowledge of the subjects and 74% intended to implement native plant species in their landscape designs.
The visual and dynamic aspects of this presentation contribute to its worthiness for this award, please view as a slideshow here: https://uflorida-my.sharepoint.com/:p:/g/personal/aliciah1221_ufl_edu/EUa2wMEJEkZEiBF_MxmxCncB4R2WIG43iOxbwaCvnC4YEQ?e=hDqczR

4 CLASSIC GEORGIA LANDSCAPE PLANTS

Carsen Dean
Watkinsville

Dean, C*[1]

[1] Oconee County Agriculture and Natural Resources Agent, UGA, Watkinsville, Georgia, 30677

According to the 2022 Farm Gate Value Survey, the ornamental horticulture industry in Georgia has a $1.36 billion economic value. But what happens after those ornamental landscape plants are in the ground? Homeowners need to know how to manage their plants for a healthy and visually appealing landscape. The Oconee County Extension ANR Agent, Carsen Dean, presented a quick care guide for four of the classic landscape plants in Georgia: camellias, gardenias, azaleas, and hydrangeas. This presentation was aimed toward gardeners looking for a refresher as well as new residents of Georgia unfamiliar with these classic plants. The presentation covered how to identify these shrubs, how to plant and maintain them, and four common problems seen in each shrub. The presentation had 30 attendees, half of whom participated in the post-program survey. Of those who participated in the survey, 100% said they learned something new from the presentation. Attendees reported they learned how to properly care for their plants, how to handle diseases, and when to prune their shrubs.

Regional Winners

NITRATE IN NEBRASKA – ESSENTIAL INFORMATION FOR CROP PRODUCTION CLINICS

Katie Pekarek
Extension Educator-Water Quality
University of Nebraska-Lincoln Extension
Lincoln

Pekarek, K*[1]

[1] Extension Educator-Water Quality, , Lincoln, Nebraska, 68583-0996

The objective of the "Nitrate in Nebraska Groundwater" presentation was to increase the awareness of farmers, crop consultants, pesticide applicators, and agriculture industry professionals on the quality of groundwater used for agricultural production and drinking water in Nebraska. This presentation subject of Nitrate in Nebraska Groundwater was identified as a priority by a cadre of Extension Educators and Specialists developing a broader Water and Nutrient Management series for Nebraska Crop Production Clinics. The presentation was prepared using PowerPoint to support the broad goals of behavior change for water and nutrient management. The presentation was delivered to 441 farmers, agronomists, and agricultural professionals participating in Nebraska Crop Production Clinics across Nebraska in eight towns in January 2024. As a result of this presentation, an estimated 65% of participants reported that they increased understating of their role in protecting soil/water quality. In 2024, this program influenced an estimated 600,000 acres. The presentation focuses on nitrogen cycling, groundwater quality monitoring, and the resulting nitrate concentrations in Nebraska groundwater. The slides provide visual representations of nitrogen cycling and groundwater quality, while the script provides additional in-depth information. There are a total of 23 slides. Illustrations in the first 6 slide belong to the author. Maps in slides 15 through 19 were developed by the author using the data sited.

HAY AS A SMALL FARM CASH CROP

Lee Beers
Assistant Professor, Extension Educator
Ohio State University
Cortland

Beers, L*[1]

[1] Extension Educator, OSU Extension, Cortland, Ohio, 44410-1455

New and beginning farmers search for ways to increase revenue from their land. One of the most popular options to accomplish this is by entering the hay production business. This presentation was developed to help those individuals develop a plan to determine if it the right fit for their farm. This presentation is intended to be approximately 45-minutes in length and covers the basics of the hay making process, equipment, marketing, and sustainability. It uses real life examples, and references OSU resources throughout to guide participants. There are 17 slides in the presentation, most with a picture or diagram to help emphasize the topic of the slide. Pictures are original from the author unless noted on the slide or in the notes. This presentation was given at the 2023 Farm Science Review to 34 participants.

PLANTS GET SICK TOO!

Connie Strunk
Plant Pathology Field Specialist
SDSU Extension
Hartford

Strunk, C*[1]

[1] Plant Pathology Field Specialist, SDSU Extension, Hartford, South Dakota, 57033

Did you know that plants can get sick too? Plant diseases cause an estimated loss of 8 billion dollars per year in the United States alone. We need healthy plants if we want to have healthy and happy people. This PowerPoint presentation was developed for the 2024 Women in Science Event which was held at the Southeast Technical College Campus in Sioux Falls, SD on March 6, 2024. Studies show women are historically underrepresented in almost all of the science, technology, engineering and mathematics (STEM) related fields. The Women in Science event is geared towards 8th grade girls with the goal of stimulating interest in STEM careers by connecting the young women who attend with local women professionals working in STEM related careers. 135 8th grade girls attended my presentation titled “Plants Get Sick Too”. This presentation focused on 1) what is plant pathology, 2) how plant disease develops, 3) how plant disease spreads, 4) devastating plant diseases such as late blight of potato (Irish Potato Famine) and ergot of rye (St. Anthony’s Fire), 5) what courses are needed, 6) where plant pathologists are employed, 7) what my job as a plant pathologist entails, and 8) crop scouting. To help the young women understand how plant disease can spread a demonstration was conducted showing the movement of plant disease spores (coffee grounds) with rain (Orbeez beads). A hands-on activity was also used to explain crop scouting for plant disease incidence and plant disease severity. At the end of the session participants were encouraged to consider a career in plant pathology. Advertisement for the Women in Science event occurred through the 2024 Women in Science Committee’s website (www.wissiouxfalls.com) and direct mailings and emails to area schools and STEM professionals. The computer-generated graphics presentation (PowerPoint) was produced in Microsoft PowerPoint for Microsoft 365 on state equipment. Various font sizes and photos were utilized to draw interest throughout the presentation.

MINDFUL VEGETABLE GARDENING

Rebecca Magron
Horticultural Consultant and Research Associate
Flemington

Magron, R*[1]

[1] Horticultural Consultant and Research Associate, Rutgers Cooperative Extension of Hunterdon County, Flemington, New Jersey, 08822-4102

The objective of this presentation is to enable small space gardeners, such as community garden plot owners, to gain an understanding of practical horticultural techniques available to optimize their harvest.? Review of basic plant physiology and plant interactions with each other and the environment are discussed. Systems such as square foot gardening, vertical gardening and container gardening are introduced along with considerations for each. Discussion on how to maximize yield with successional gardening and interplanting techniques, as well as tips for soil preparation, are examined. Popular trends, such as companion planting, are explored and challanged. This presentation was developed for the New Jersey Community Garden Conference in Morristown, NJ and was attended by 110 residents and community gardeners. This presentation continues to be used in Rutgers Master Gardener of Hunterdon County training.

EQUINE PASTURE MANAGEMENT

Laura Kenny
Equine Educator
Penn State
Collegeville

Kenny, L[1]

[1] Equine Educator, , Collegeville, Pennsylvania, 19426

This PowerPoint was prepared by Laura Kenny, Montgomery County, Pennsylvania, as a guest presentation for a series of Pasture Production Workshops beginning on March 5, 2024. The PowerPoint was developed with a script so that multiple educators could present it similarly in different areas of the state. The first talk was presented by western Pennsylvania Equine Educator Olivia Watson and the second will be presented by eastern PA Equine Educator Laura Kenny on March 20. The workshops are for producers of all livestock species, and this guest presentation focused on equine-specific pasture considerations. While pasture management guidelines remain the same for most grazing species, horses present specific challenges based on their grazing behaviors and health concerns. Damage to forage plants, sugars in pasture grasses, toxic plants, and undesirable forages must be considered when grazing horses. The first workshop was attended by 16 people, and 69% of attendees said that their knowledge level moderately or greatly increased as a result of the presentation.

PRECISION IRRIGATION TECHNOLOGY

Behnaz Molaei
Assistant Professor and Extension Irrigation Engineering
Tennessee State University
Nashville

Molaei, B[1]

[1] Assistant Professor and Extension Irrigation Engineering, Department of Agricultural Sciences and Engineering , Nashville, Tennessee, 37209

The Precision Irrigation Technology presentation was developed to provide essential information on soil and water relationships for irrigation scheduling, along with insights into advanced sensing technologies, including soil, plant, atmospheric, and remote sensing-based sensors, for precision irrigation management. This presentation was delivered during six in-service training sessions organized by me in February and March 2024 for Agricultural and Natural Resources (ANR) extension agents at Tennessee State University (TSU) and the University of Tennessee (UT). These two in-service training events with the title of "Precision Irrigation Management" and "Fruit Crops: Frost Control and Water Management," were posted on www.super2.tennessee.edu, and each was conducted in three different regions of Tennessee—eastern, central, and western. In total, 60 extension agents attended the training in their respective regions. Based on the evaluation forms that were shared with them after my presentation, it was revealed that around 90% of respondents had limited prior knowledge about sensor applications for precision water management, with this presentation significantly enhanced their understanding. To further disseminate this information and increase its impact in their regions, the presentation was shared with all attendees via email the day after each session. Additionally, I was invited as a guest speaker at the PickTN conference on February 15th, where I incorporated this presentation into my discussion on "Irrigating Tennessee Fruit Crops". Approximately 40 individuals with diverse backgrounds and expertise attended this talk, potentially adding to the extension and outreach impact in the area of precision water management.

HERD HEALTH FOR REPRODUCTIVE SUCCESS

Computer Generated Presentation with Script

Ashley Wright
Livestock Area Associate Agent
The University of Arizona
Vail

Wright, A*[1]

[1] Livestock Area Associate Agent, , Vail, Arizona, 85641

The 2023 Southern Arizona Cattle Artificial Insemination (AI) Workshop featured a presentation titled "Herd Health for Reproductive Success," aka "All the reasons cows might not get bred that aren't related to AI error". This session provided attendees with an overview of the three most common reasons we see reduced calf crops or reproductive losses in the cow-calf herd, and encourages them to ensure they have these basic herd health practices in place before they begin utilizing advanced reproductive techniques such as AI. Without a solid management plan to maximize herd health and the calf crop, achieving successful reproductive outcomes that economically benefit the operation with AI will be extremely difficult. The presentation underscores the importance of a holistic approach to cattle management, emphasizing that the health of the herd is intrinsically linked to reproductive success. Key topics covered include the significance of nutrition and body condition score, mineral supplementation, and biosecurity/disease prevention

on pregnancy rates. The importance of developing a veterinary-client-patient relationship is highlighted, as this relationship will be critical when producers begin putting AI into practice on their operations. All topic areas include specific and relevant information on challenges producers face in Arizona such as trichomoniasis, drought, and mineral deficiencies.

Attendees of the AI clinic are often very excited to jump in and begin utilizing their new skills on their operations. This presentation is meant to remind them that implementing AI is adding another layer of complexity to an already complicated animal management system. If they have holes in their herd health management program, they might not be able to realize the benefits provided by AI, or they may even exacerbate an existing problem thus reducing their profitability. While the clinic itself is limited to only 12 participants due to the number of instructors, cows, and chute spaces available, this presentation will continue to be utilized at future AI clinics. It also has wider applications to livestock audiences who might not be ready or interested in AI but want to protect their operation from reproductive losses and improve their economic profitability and sustainability.

State Winners

NORTH CENTRAL

Illinois	Nancy Kreith
Wisconsin	Katie Wantoch

SOUTHERN

Arkansas	Tyler Caston
Kentucky	Macy Fawns
North Carolina	Margaret Ross
South Carolina	Terasa Lott
Texas	Jordan Voges

Personal Column

National Winner

HOMEGROWN GARDENING ADVICE

Leslie Munroe
EA I-Environmental Horticulture
UF/IFAS Indian River County Extension
Vero Beach

The UF/IFAS Environmental Horticulture Agent for Indian River County provides a monthly gardening column for the Vero Beach Magazine. Monthly circulation is approximately 10,000 in hard copy and averaging 3,000 online views. This column offers an additional opportunity to promote Florida-Friendly Landscaping in the county. Staying within the word limit of 400-500 words, landscape and gardening tips are shared with a focus on practicality, accessibility, and seasonal relevance. The “chatty neighbor” style of the column encourages an expectation of easy reading. The advice is simple and spare. The introductory column was published in September 2023, in it the agent was introduced and the issues with gardening in Florida for Floridians and transplants alike were briefly described. Then, an explanation of how Florida-Friendly Landscaping management techniques offer a science/research-based solution to those problems. The column word limit was extended to include September specific tips for the audience. The November 2023 issue included an article about landscape enhancements and the entertainment season. There was significant encouragement to be realistic in the approach to adding curb appeal and enhancing very visible areas of the landscape. Readers appreciated the overt emphasis on socializing. Each article incorporates personal experiences to allow readers to know they are being served by a local expert who is addressing the same issues they face. Feedback from the editor has been very positive; readers are enjoying the segment. Readers submit questions to the editor about specific topics they want to learn more about. Those topics will be woven into the monthly columns as I continue to write.

National Finalists:

SANTA FE WAY PERSONAL COLUMN

Shad Marston
County Extension Agent
K-State Research and Extension
McPherson

My personal column is a way to get information out to the community on current topics throughout the year. Santa Fe Way is a free, local paper that delivers information to all community members of McPherson, Canton and Galva areas. This is a monthly paper that prints 700 copies and is distributed at high traffic locations throughout the area. We also have this paper by our front door of the Extension office. The purpose of the December article, dated Dec. 1, 2023 “ Looking Towards 2024” was to remind the community of the agriculture obstacles during the year, an outlook for next year and some memories I had when growing up in this small community. The second article, dated Aug 4, 2023, is about making sure water is in adequate supply for our animals and paying special attention to all their needs during the hot summer days of August. I suggested many tips on how take care of our outside pets and livestock, and making sure their needs are met. K-State Research and Extension has many ways to

help community members get the real facts based on high quality information and researched based facts and I hope to do this by adding my personal touch in these columns.

OCONEE ENTERPRISE ANR COLUMN

Carsen Dean
Watkinsville

The Oconee County Agent, Carsen Dean, writes a monthly article for the Oconee Enterprise on topics relating to agriculture and natural resources. The articles are often directed toward small-scale producers or homeowners, as they make up many Oconee County residents. The articles aim to address current or projected local needs and to provide education or resources about those needs. "Safety is key when evicting bats from homes" was printed on October 12, 2023, a prime time for people to try to remove bats from structures as nursing colonies were heading for their winter roosts. The article provided steps to remove the bats while keeping both the people and the animals safe. "Rabbit meat high in protein, low in fat" was printed on December 7th, 2023 to provide an alternate meat option for residential areas as well as to prepare homeowners who may get Easter rabbits in the spring. It listed considerations that needed to be taken to keep meat rabbits, including housing, feed, medical care, and eventual harvesting. The Oconee County Enterprise has a circulation of 4000 and one reader commented to the Agent that they were happy to see meat rabbits addressed, as they had raised them in the past and felt most people were unaware of the option.

FROM THE HORT DESK – A COLUMN IN THE GARDEN BUZZ E-NEWSLETTER

Lisa Mason
Horticulture Extension Specialist
Colorado State University
Centennial

"From the Hort Desk" is a column in The Garden Buzz e-newsletter written by Lisa Mason, Horticulture Specialist. The Garden Buzz is published bi-monthly by Colorado Master Gardeners in Arapahoe County. The purpose of the column is to translate complex and timely scientific topics around horticulture and entomology. The column is written in a factual but informal way that anyone can understand. The target audience for the newsletter is residents of Arapahoe County with many subscribers from all along Colorado's Front Range urban corridor, the highest population areas in Colorado. Currently, we have 1,250 subscribers. New subscribers are added through word-of-mouth, attending local Extension classes or events, or subscribing online. Learn more about The Garden Buzz here: https://col.st/tuZ83. The first article, "Emerald Ash Borer in Littleton: What You Need to Know," was published on July 5th, 2023 shortly after the discovery of EAB in Arapahoe County. While we had been teaching about the impending arrival of EAB for many years, the discovery took our county by surprise because the currently known infestation was north of the Denver Metro Area. A suspected transport of firewood brought EAB to the southern Denver Metro Area in Arapahoe County skipping Denver all together. Residents care deeply about their trees and have some tough financial decision to make about the future of their ash trees. This column outlined the challenges with EAB, and considerations for homeowners when deciding to treat or remove their trees including a personal perspective. Read the article here: https://col.st/8cnBO. The second article, "Taking the Sting out of Insect Encounters," was published on September 4, 2023 to help dispel misinformation around bee and wasps. Since both are stinging insects, there is often fear around all species. The goal of this article was to ease fears, articulate the difference between beneficial and potential nuisance species, and when control options may be needed. Read the article here: https://col.st/E4CC3.

Regional Winners

ON THE FARM - WARREN TRIBUNE CHRONICLE

Lee Beers
Assistant Professor, Extension Educator
Ohio State University
Cortland

The Tribune Chronicle is a major printed news publication for Trumbull County and portions of Mahoning County in Northeast Ohio. The Tribune Chronicle has an approximate readership of 30,000 including online and print subscriptions. Once per month, the Ohio State University Extension Educator for Agriculture and Natural Resources writes a column on topics related to farming, gardening, rural issues, or natural resources. The goal of each article is to provide educational material for Trumbull County residents that are timely and relevant. Topics for the column are selected based on questions received by the Educator. Articles for publication are written by the Educator with a word count limit of 800 words, no pictures permitted, and submitted to the Tribune Chronicle. Submitted articles include "Passing on Passions to the Next Generation" published on July 27, 2023 and "Give Thanks for Farmers This Thanksgiving" published on November 23, 2023. Final published links are provided below.

"Passing on Passions to the Next Generation" - Tribune

Chronicle, July 27, 2023 - https://www.tribtoday.com/news/community-news/2023/07/passing-on-passions-to-the-next-generation/

"Give Thanks for Farmers This Thanksgiving" - Tribune Chronicle, November 23, 2023 -https://www.tribtoday.com/news/community-news/2023/11/give-thanks-for-farmers-this-thanksgiving/

WISCONSIN AGRICULTURIST MAGAZINE AGRIVISION COLUMN

Katie Wantoch
Farm Management Professor of Practice
UW-Madison Division of Extension
Menomonie

The Wisconsin Agriculturist magazine is published monthly and has a print circulation to 28,000 farmers and agricultural professionals as well as online email delivery and a website (https://www.farmprogress.com/wisconsin-agriculturist). Farm Management Outreach Specialist Katie Wantoch was invited by the magazine's editor to be a monthly contributor to the Agrivision column, beginning in January 2013. The objective of this column is to offer advice on farm management topic related questions posed by the magazine's readership. The editor receives questions and chooses two each month to send to the three column co-authors: an agricultural loan officer, a dairy farmer, and Extension educator Wantoch. Each author is not privy to the other's answers to the questions so care must be taken in crafting a response that does not duplicate the advice that may be provided by the other authors. Wantoch spends time researching potential answers to the reader's question by reviewing Wisconsin or other Extension service websites and reaching out to educators if more information is needed. Responses to the questions often contain unbiased research-based information with reference to website links for further information. Submissions were drafted for the September and October magazine editions. Questions in these columns focused on farm management topics of business planning, enterprise budgeting, farmland lease agreements, and farm succession. Question responses are limited to 200 words or less, are drafted in Microsoft Word, and emailed to the editor, who then reviews the content and submits to the magazine's layout staff. This column is the most read article each month on the magazine's website, as reported by the editor. Wantoch often receives feedback from farmers who read the Agrivision column and appreciate the information provided.

TIPS FROM THE PASTURE

Amanda Grev
Forage Extension Specialist
University of Maryland Extension
Keedysville

American Farm Publications Inc. specializes in agricultural publications for the Mid-Atlantic region of the United States. Their publications, which include The Delmarva Farmer and The New Jersey Farmer, are commonly referred to as "the farmer's bible" and are meant to provide subscribers with up-to-date information to help them remain viable. In 2023, I began writing a bi-monthly column, 'Tips from the Pasture', for the Delmarva Farmer. The Delmarva Farmer is published weekly and reaches over 13,000 households across the region, plus additional reach via sharing on social media, an e-newsletter, and access to archived publications which are available on the website. The goal of my column is to better connect with forage and livestock producers across the region and to provide timely, research-based, forage-related information to help producers improve their forage and grazing management and increase overall farm productivity and profitability. The column is meant to provide this information in an easy-to-read format while also providing practical information that producers can easily put into practice. The two columns submitted here focused on maximizing the potential of winter forages (i.e. cover crops) harvested as forage for livestock, first by setting oneself up for success when planting these crops in the fall and then by optimizing fertility and harvest timing of these forages the following spring. The first column ('Maximize the Potential of Your Winter Forages') was published on August 22, 2023, and the second column ('Optimizing Spring Fertility for Winter Forages') was published on March 5, 2024. This topic was chosen because there is a large number of acres planted in cover crops annually across the region, and along with that a growing number of producers who are making the most of those cover crops and utilizing them as a high-quality source of forage for livestock. There has also been some research done to develop recommendations for utilizing these forages in this way, which I wanted to share with producers. Feedback from readers has been positive thus far; I have received several emails from producers thanking me for the information and a few asking additional follow-up questions.

EXTENSION BITS AND PIECES AND ROOF GARDEN HOME AND FAMILY NOTES

Melanie Barkley
Extension Educator
Penn State University
Bedford

This personal column appears weekly in the weekend edition of the Bedford Gazette, called the Shoppers Guide, and in the home and family section of the Somerset Daily American. The column is shared with other educators in the Bedford and Somerset County offices. Entrant writes monthly articles for the column. The newspapers that the column appears in are distributed countywide with a circulation of 19,000 for the Bedford Gazette and 12,500 for the Somerset Daily American. The objective of these agricultural related articles is to help the general public gain a better understanding of agriculture principles and help the public apply these concepts to their home environment. Dealing with Those Pesky Deer, published July 8, 2023, discusses tactics for preventing deer damage to plants around the home. The article also suggests plants that homeowners can choose that deer are less likely to damage. October Tasks to Prepare Flower and Vegetable Gardens for Winter, published October 14, 2023, explains how to prepare flower and vegetable beds for winter, and how to protect perennial plants from cold winter temperatures. The column is prepared using Microsoft Word and is sent to the newspaper editor electronically via email.

FROM THE GROUND UP

Mitchell Mote
Extension Agent III
Murfreesboro

Agents in the Rutherford County Extension office were invited to begin writing a column for the local newspaper related to our various program areas ten years ago. Agents share responsibility on a regular rotation for writing From the Ground Up, a column published weekly in the Daily News Journal (DNJ) newspaper with a daily circulation of 15,800 and 18,900 on Sunday. The DNJ is part of the USA Today network, and columns are often included in other area newspapers. Because of our staff size and rotation schedule, I submit a column every 6 weeks. My columns typically focus on home horticulture topics and occasionally other aspects of agriculture. Rutherford County is one of the fastest growing counties in the U.S. with many new residents relocating from other regions, and new residents often aren't familiar with recommended lawn, landscape, and garden establishment and maintenance practices for Middle Tennessee or some of the pests frequently encountered. Columns are written to provide accurate and timely information with a touch of humor when possible. The January 7, 2024 column was a reminder that residents should expect the 13-year periodical cicada emergence in May. The February 18, 2024 column addressed the topic of crabgrass in home lawns, differing attitudes about it, and timely control measures. Columns were written using Microsoft Word.

State Winners

NORTH CENTRAL

Minnesota	Brad Carlson

SOUTHERN

Alabama	Anthony Harris
Kentucky	Annette Heisdorffer
Louisiana	David Moseley
Mississippi	Eddie Smith
North Carolina	Matthew Stevens
Oklahoma	Laura Payne
South Carolina	Paul Thompson
Texas	Elizabeth McMahon
Virginia	Tom Stanley

Feature Story

National Winner

ANNUALS MAXIMUM COLOR MINIMAL MAINTENANCE: TOP PERFORMERS FOR MIDWEST LANDSCAPES

Pam Bennett
State Master Gardener Volunteer Coordinator, ANR Educator
Ohio State Univeristy Extension
Springfield

Bennett, P*[1]

[1]State Master Gardener Volunteer Coordinator, ANR Educator, Ohio State University Extension, Springfield, Ohio, 45505

The feature story was written for the Landsculptor® magazine, a publication distributed by the Michigan Green Industry Association (MGIA) to over 3,700 green industry professionals. It is published monthly and is the premier green industry publication for the State of Michigan. The publication is free to members and features articles on

topics relevant to the green industry professional and business owner. Articles range from the latest trends in landscaping, irrigation, horticulture, or other industry issues, seasonally relevant topics, business management, legislative concerns, and other items to keep Michigan's green industry professionals informed. The author spoke at the MGIA annual conference and was invited to write an article for the publication.

This issue of the Landsculptor® is also provided for all attendees at the 2024 MGIA Trade Show & Convention. Approximately 900 industry professionals were in attendance and around 500 additional copies were available for attendees to pick up at the trade show booth. It was published in late February 2024 and made available to the members and attendees on March 5, 2024.

The author selected the topic of annuals for the feature story and the content is based on the author's research for Ohio State University. The author took the four photos included in the feature story; these were plants in the trials in 2023. The author wrote the story and the MGIA staff edited and developed the graphics and included it in the Landsculptor®. Staff also published and printed the magazine.

National Finalists:

JOCO MAGAZINE: CYCLES OF CHANGE IN THE COMMUNITY GARDEN

Anthony Reardon
Horticulture - Small Farms Extension Agent
United States
Olathe

Reardon, A*[1]

[1] Horticulture - Small Farms Extension Agent, , Olathe, Kansas, 66061

This feature article was published in the Fall 2023 edition of JoCo Magazine, a quarterly publication that goes to every household and business in Johnson County, Ks in the Kansas City metro area. Altogether, 275,000 copies were distributed. The article was written by Horticulture - Small Farms Extension agent Anthony Reardon about the Sunset Community Garden, a charity garden in Olathe, Ks that he oversees as part of his work with the Extension office. It highlights the origins of the garden, how the garden has shifted forms in its years of activity, and the contribution volunteers make to the local community by working in the garden. The article was prepared utilizing personal anecdotes and experiences, records of garden history and production, and interviews of volunteers and staff that have worked with the garden. The article ultimately garnered much attention for the work being done and inspired the participation of several new volunteers.

HELPING NEBRASKA FARMERS WITH THE ART & SCIENCE OF PRUNING

Elizabeth Exstrom
Extension Educator
Nebraska Extension
Grand Island

Exstrom, E*[1], Arens, C[2]

[1] Extension Educator, Nebraska Extension, Grand Island, Nebraska, 68801
[2] Editor, Nebraska Farmer, Croften, Nebraska, 68730

Nebraska Extension collaborates with 'Farm Progress' and 'Nebraska Farmer' industry publications to offer featured articles that focus on landscape, trees, perennials, and turf. Nebraska Extension Educator, Elizabeth Exstrom writes horticulture articles that answer the most common reader questions at a certain time of year. The objective of 'Prune Trees, Shrubs at Right Time' was to educate adults that live on farms and in rural areas about when to prune trees and shrubs. The story focuses on when pruning may be necessary and then explains about plant pruning tips based on the type of plant (trees vs shrub, evergreen vs deciduous...). The article was published in the regional magazine of 'Nebraska Farmer' in the January 2024 print edition. The story was viewed online over 60,000 times through the 'Farm Progress' website and was shared with to 30,000 print subscribers, 4,600 Facebook followers, and 4,100 daily newsletter subscribers of the 'Nebraska Farmer' magazine. The article appears in the online version of the magazine at https://www.farmprogress.com/commentary/when-should-i-prune-my-trees-and-shrubs-. The original story gained so much attention from the readers, that a follow-up story is planned to address other tree-related questions submitted to the magazine by its readers.

CLOVERLEAF ANNUAL REPORT: WINNING LEGACY

Carole Knight
Extension 4-H Specialist
University of Georgia
Athens

Knight, C*[1]

[1] Extension 4-H Specialist, University of Georgia, Athens,

Youth in Georgia 4-H explore their interests, discover their sparks, and engage in learning experiences that grow their social, emotional, and cognitive abilities. In the 2022-2023 program year, Georgia 4-H had 173,505 kids participate in the program. Livestock judging is a large part of the Agriculture and STEM pillar of Georgia 4-H. This article tells the story of Gordon County and their legacy of livestock judging within their county program and how they foster a robust program year after year. It appeared in the Cloverleaf Annual Report, which was published in December 2023. The Cloverleaf Annual Report highlights programmatic achievements from the past academic year. It is targeted to Georgia 4-H members, faculty, donors, and supporters to show the impact on youth across the state. It has a circulation of 3,000 hard copies, which are distributed to 159 county extension offices and mailed to Georgia 4-H Foundation donors. The article also appears in the online version at: https://georgia4h.org/wp-content/uploads/Cloverleaf-2023-Edition-for-Website.pdf.

Regional Winners

CALF RECUMBENCY

Heather Schlesser
Dairy Agent
UW-Madison Division of Extension
Wausau

Schlesser, H[1]

[1] Dairy Agent, Wausau, Wisconsin, 54403

The purpose of this feature article was to educate dairy producers about early-onset muscle weakness or calf recumbency. This educator wrote the article for the Wisconsin State Farmer, which has a printed distribution subscription of 10,000 people. This educator wrote the article to raise awareness of this current issue in the dairy industry. To bring awareness to how this genetic defect can affect their farming operations and to provide them with options to limit their risk of having affected calves.

SUSTAINABILITY AT CRYSTAL SPRINGS GOLF RESORT

William Errickson
Agriculture and Natural Resources Agent
Rutgers Cooperative Extension
Freehold

Errickson, W*[1], Quinn, E[2]

[1] Agriculture and Natural Resources Agent, Rutgers University, Freehold, New Jersey, 07728
[2] Student Intern, Rutgers University, Freehold, New Jersey, 07728

There is a great opportunity for golf courses and resorts to have their landscapes be an oasis for biodiversity and pollinator habitat. In New Jersey, one place that has taken many steps to promote sustainability and biodiversity is Crystal Springs Resort. These practices include landscaping with native and low input ornamental plants, building soil health through appropriate use of mulch, leaving natural areas to promote habitat, and developing a pollinator corridor through one of their golf courses. In the summer of 2023, Rutgers Cooperative Extension collaborated with the New Jersey Landscape Contractors Association to interview the ornamental horticulture professionals who manage the diverse landscape at Crystal Springs Resort. An article was written to highlight the sustainability practices at Crystal Springs Resort, to serve as real-world examples for how other green industry professionals may incorporate these methods into their own operations. The story was published in February 2024in the New Jersey Landscape Contractor Magazine, which includes hard-copy and online circulation that totals approximately 5,000 readers. William Errickson developed the concept, coordinated the tour, conducted the interviews, and contributed to writing the article. Erin Quinn assisted with writing the article and providing photographs.

LIVESTOCK PRODUCERS LEARN PASTURE MANAGEMENT SKILLS

Melanie Barkley
Extension Educator
Penn State University
Bedford

Barkley, M*[1]
[1] Extension Educator, Bedford, Pennsylvania, 15522

The “Livestock Producers Learn Pasture Management Skills” feature article was written for livestock producers to highlight a recently held pasture walk. The objective of the article is to share information that producers learned

about and saw during the pasture walk. The purpose of this feature article is to explain what management practices producers can utilize to improve pasture production, improve the health of livestock, and protect the environment. The article further explores topics presented by speakers such as common pasture species found in the Bedford County area, how these plant species should be chosen based on the livestock species grazing in the pastures, plus weed identification and control measures. The feature story was prepared using Microsoft Word. Entrant wrote the feature article, took the photo, and sent both electronically to the newspaper editor. The article appeared in the July 15 edition of the Shoppers Guide, the weekend edition of the Bedford Gazette newspaper.

FIVE FRAGRANT PLANTS FOR FLORIDA LANDSCAPES

Bonnie Wells
Extension Agent III, Commercial Horticulture
University of Florida
Cocoa

Wells, B*[1]

[1] Extension Agent III, Commercial Horticulture, , Cocoa, Florida, 32926

Fragrant plants provide a delightful means to boost mood and foster well-being, nurturing mental health while adorning the landscape with their beauty. Tasked with suggesting fragrant plants for a golf course clubhouse landscape, I prioritized the safety and suitability of plant species. Aware of concerns regarding invasiveness and the adaptability of plants like lavender to Florida's climate, I conducted a thorough literature review. Drawing from sources such as Florida-Friendly Landscaping™ and the University of Florida IFAS's Assessment of Non-Native Plants, I curated a comprehensive list of 50 fragrant plant recommendations, which I published on my University of Florida blog. Following the blog post's publication, the editor of Florida Turf Digest approached me to condense the recommendations to five plants for a feature in their upcoming issue. The goal was to provide a concise article for landscape management professionals on selecting fragrant plants suitable for Florida's environment. The resulting article was featured in the Summer Issue (Vol. 41, No. 4, pages 20-23) of Florida Turf Digest, published September 15, 2023. The Florida Turf Digest has a nationwide print circulation of 3,400 per issue and a quarterly publication frequency. The feature article is also published online at https://bit.ly/5fragrantplants.

A PIONEER OF EDUCATIONAL FILMS

Bruce Garner
Broadband Awareness/Education Coordinator
LSU AGCENTER
Bastrop

Garner, B*[1]
[1] County Agent , LSU AgCenter , Oak Grove, Louisiana, 71263

In the article I look at how modern-day Extension professionals are called to be change agents in their assigned areas and to use the most current technology to deliver university-based research information to our clientele to help improve their lives. In the article I look at this statement and explores how Extension professionals have been accomplishing this charge for over a century. The twist is what was old is now new, again. No matter the technology, visual instruction is a powerful tool, be it a YouTube video or a movie projected from the back of a truck on the back roads of Louisiana in the early 1910's. The article was published in the Summer 2023 issue of Louisiana Agriculture, readership of Louisiana Agriculture includes university staff and extension stakeholders from across Louisiana and the nation.

IMPROVING SOIL HEALTH

Joy Hollingsworth
Assistant CE Advisor
University of California
Tulare

Hollingsworth, J*[1]
[1] Table Grape Advisor, University of California, Division of Agriculture and Natural Resources, Tulare, California, 93274

Soils have a large influence on the success of any crop because they serve as an anchor, and the main reservoir for water and nutrients. Conserving soil resources has been the focus of numerous initiatives in recent years, with programs established at local, state, and national levels. Maintaining healthy soils requires an understanding of their basic needs: air, water, food, and shelter. Because California has many different soil types, it is important to understand their differences and how to make the most out of them. Hollingsworth, who is a grape advisor in Tulare and Kings Counties, wrote this article to inform vineyard owners and managers of different ways to protect and maintain their soil resources. It was published in American Vineyard Magazine, a national trade magazine for the grape industry which has over 9,000 subscribers.

Issues are printed monthly and also distributed online. The article was published on October 1, 2023.

State Winners

NORTH CENTRAL

Minnesota	Emily Krekelberg
South Dakota	Patrick Wagner

NORTHEAST

Connecticut	Stacey Stearns

SOUTHERN

Alabama	Melissa Voynich
Arkansas	Jan Yingling
Mississippi	Heather Jennings
North Carolina	Jim Hamilton
South Carolina	Kevin Burkett
Tennessee	Christopher Cooper
Texas	Rebecca Coward

Newsletter

National Winner

OREGON SMALL FARM NEWS

Melissa Fery
Small Farms Extension Agent
Oregon State University
Eugene

Lucas, C*[1], Lucas, C*[2], Comerford, A*[3], Stacey, N[4], Gwin, L[5], Anderson, T[6], Powell, M[7], Smith, E[8], Stoven, H[9], Bennett, L*[10], Moran, T[11], Noordijk, H[12], White, H[13]

[1] Small Farms Extension Agent, Oregon State University, Corvallis, Oregon, 97333
[2] Ag & Groundwater Quality Outreach Program Coordinator, Oregon State University, Corvallis, Oregon, 97330
[3] Outreach Program Coordinator, Oregon State University, Salem, Oregon, 97301
[4] Statewide Small Farms Specialist, Oregon State University, Corvallis, Oregon, 97333
[5] Director, Center for Small Farms & Community Food Systems, Oregon State University, Corvallis, Oregon, 97331
[6] Assistant Professor of Practice, Oregon State University, Corvallis, Oregon, 97333
[7] Assistant Professor of Practice, Oregon State University, Medford, Oregon,
[8] Outreach Program Coordinator, Oregon State University, Newport, Oregon,
[9] Assistant Professor of Practice, Oregon State University, McMinnville, Oregon,
[10] Outreach Program Coordinator, Oregon State University, Roseburg, Oregon,
[11] Outreach Program Coordinator, Oregon State University, Corvallis, Oregon, 97333
[12] Outreach Program Coordinator, Oregon State University, Corvallis, Oregon,
[13] Outreach Program Coordinator, Oregon State University, Salem, Oregon, 97301

Oregon Small Farm News is a free online newsletter that concentrates on both commercial small farm entrepreneurs as well as non-commercial small acreage landowners. Our focus embraces organic/biological and conventional farming systems and emphasizes three areas:
• Small Acreage Stewardship - Addressing enterprises, land management and soil and water quality for non-commercial small acreage's.
• Commercial Small Farms - Entrepreneurial Agriculture Addressing high value horticulture, livestock and poultry, and alternative crop production emphasizing organic and pasture-based systems and specialty and niche production.
• Community Food Systems - Address alternative and specialty marketing through creation and enhancement of local and regional food systems and farm direct marketing channels.

The newsletter is distributed quarterly to our subscribed listserv that varied from 6897 to 7632 during this time period and on the statewide OSU Small Farms facebook and instagram account. The program also posts the newsletters online at https://smallfarms.oregonstate.edu/smallfarms/about/oregon-small-farm-news for anyone who is browsing out website. regional program share in their local newsletters and on social media.
The Fall 2023 edition was published on September 21st, 2023 and the Winter 2024 edition was published on Dec 23rd, 2023.

National Finalists:

CENTRAL MICHIGAN AGRICULTURE NEWSLETTER

Casey Zangaro
Swine Production Educator
Michigan State University Extension
Alma

Zangaro, C*[1], Jean, M*[2]

[1] Swine Production Educator, , Alma, Michigan, 48801
[2] Field Crops Extension Educator, MSU, , Michigan,

The Central Michigan Agricultural newsletter has been ongoing monthly for six years. This newsletter promotes the Michigan State University Extension agriculture articles, programs, and events within the central Michigan area. The newsletter promotes the field crops, livestock, farm business, and farmer mental health areas of Michigan agriculture. This newsletter reached over ten counties and 345 farmers and agricultural stakeholders via an online format. Each newsletter is updated with the current programming our educators and regional partners are doing to collaborate with the community. News articles about the season and current events in the Michigan agricultural community are included to help farms with in-season concerns, allowing for greater relevance. To end the newsletter, MSU extension events, either in person or online statewide, are listed to showcase the breadth and depth offered in the region. Both newsletters had a combined open rate of 45%, with over 90% being opened via a desktop and 7% being opened via mobile devices.

DAIRY PROGRAM E-NEWSLETTER

Jackie Mccarville
Agriculture Extension Educator
University of Wisconsin Madison Division of Extension
Monroe

Mccarville, J*[1], Seefeldt, L*[2]

[1] Dairy Extension Educator, , Dodgeville, Wisconsin, 53533
[2] Dairy Extension Educator, , Altoona, Wisconsin, 54720

An evolving effort by Wisconsin dairy educators was a statewide dairy e-newsletter that started in September 2022. Jackie McCarville and Lyssa Seefeldt created the e-newsletters in Emma Marketing Software. Headers were created for each newsletter section in Adobe Express to have a consistent branded feel to each newsletter. To ensure accessibility, descriptive alternative text for any photo or graphics were created, as well as descriptive hyperlinks for articles or events. The layout and article selection was a collaborative effort between Jackie and Lyssa. The objective of the newsletter was to create a stronger connection with farmers, employees, and other industry service professionals. The e-newsletter has grown from including Wisconsin and Midwestern subscribers, to including national and international subscribers. The purpose of the e-newsletter was to get current Extension dairy information and events to those involved in the dairy industry. The e-newsletter has helped drive traffic to the Dairy Topic Hub website where current research and industry information is housed. The e-newsletters contain snippets from 1-2 factsheets or articles submitted by dairy educators or dairy specialists and links to the full article on the Dairy Topic Hub. Each e-newsletter contained upcoming events, prior webinar replay links, a monthly hay report, and hot topics of the month. At the bottom of the e-newsletter is a section with contact information for local dairy educators to help connect the dairy industry with a local contact. E-newsletters were sent out monthly, in addition to special issues, to highlight timely upcoming events. To date we have sent out 19 e-newsletters plus 5 special issues. Emma provides digital metrics which include a mailing score on a 10-point scale. This score factors in open and click rates, shares, opt-outs, and sign-ups. You then get an average score which compares to the community average from 45,000 other customers. There were 3 campaigns in a row that scored 10, showing very good campaign performance. The October e-newsletter was sent on October 24, 2023, to 1,272 participants with a 41.2% percent open rate. The December e-newsletter was sent December 21, 2023, to 1,659 participants with a 43.2% open rate.

Regional Winners

THROUGH THE VINE - MASTER GARDENER QUARTERLY NEWSLETTER

Carrie Brown
ANR Extension Educator
Ohio State University Extension
Lancaster

Brown, C*[1], Smith, C[2], Stoklosa, L[3]

[1] ANR Extension Educator, Ohio State University Extension, Lancaster, Ohio, 43130
[2] Program Assistant, Ohio State University Extension, Lancaster, Ohio, 43130
[3] Fairfield Master Gardener Volunteer Editor, Ohio State University Extension, Lancaster, Ohio, 43130

Ohio State University Extension Fairfield County's Master Gardener Volunteer program distributes a newsletter called "Through the Vine" each quarter. The newsletter is created in Microsoft Publisher and converted to a PDF for distribution. The objective of the newsletter is to communicate timely, research-based information regarding horticulture, as well as share the impact that our volunteers have on the surrounding community through project work and public outreach. Upcoming public educational events are also shared. The intended audience includes our own 45 active Master Gardeners along with others in the community with an interest in horticulture. The newsletter is available on our Extension website and posted on our Master Gardener Facebook page that has 1,200+ followers. Paper copies are also available to those who visit the Extension office. I am regular contributor to the newsletter, as well as other staff members. Some of our Master Gardeners also write for the newsletter and are responsible for its editing and layout. The editions submitted include Fall 2023 (released September 2023) and Spring 2024 (released February 2024).

HARTFORD COUNTY 4-H WEEKLY NEWSLETTER

Jennifer Cushman
University of Connecticut
Farmington

Cushman, J*[1], Wolf, P[2]

[1] 4-H Extension Educator, UConn Extension , Farmington, Connecticut, 06032
[2] Program Assistant, UConn Extension, Farmington, Connecticut, 06032

The electronic newsletter provides regular communication to youth, families, and volunteers throughout the county on 4-H program announcements, opportunities, and deadlines. It also centralizes the distribution of announcements, opportunities, and registration information for events on the county, state, regional and national level. Numerous county 4-H partners have requested that 4-H related items appear in the weekly newsletter. These partners include: the Fair Association (our county organizes and operates its own 4-H Fair), the 4-H Camp (our county operates its own eight weeks of summer camping), the 4-H Education Center at Auerfarm (outdoor education center), the Advisory Committee, and the Extension Council. The newsletter also includes information on statewide opportunities (including statewide data collection) and multi-state and national opportunities. A benefit of minimizing these types of communications to one email a week is that a recipient's inbox is not being flooded with 4-H emails that could result in messages being missed, content being forgotten, or making it more challenging to locate if one wanted to go back to a particular message and reread it. The weekly newsletter is designed using Mailchimp and is typically distributed on Wednesdays. The newsletter issued the previous week is used as a starting point for the following week's newsletter and additional content is added while expired content is deleted. Deadlines and the email subject message are updated with every issue. The email is sent using the county educator's email address to verify the authenticity of the sender and to centralize replies. Weekly newsletters are sent to over 1,410 recipients with a 0% bounce rate, and a 55.0% open rate (non-profit industry's benchmark of 44.5%). Qualitative feedback indicates they are appreciative of the regular communication and centralized location for 4-H opportunities. Numerous individuals also use the inbound email from the county educator as a reminder to engage with the 4-H office; data captured number of replies to the inbound email seeking additional information. The Hartford County 4-H newsletter is the foundation for weekly newsletters issued statewide because other Connecticut county educators

edit the Hartford County newsletter to ensure common messaging.

MARYLAND ENERGY EXTENSION NEWS

Drew Schiavone
Extension Specialist
University of Maryland Extension
Keedysville

Schiavone, D*[1]

[1] Extension Specialist, University of Maryland, Keedysville, Maryland, 21756-1104

The need for energy-related outreach is quickly growing in Maryland with over 400,000 households facing an unaffordable home energy burden and over 16% of agricultural costs expended on fuel and energy. A needs assessment indicated that energy efficiency and clean energy systems are receiving significant attention in light of high energy consumption rates and rising energy costs. Maryland Energy Extension (MEE) News is a quarterly newsletter, providing unbiased and research-based information to agricultural and residential clientele throughout Maryland. The newsletter aims to help facilitate sustainable energy decisions by providing updates on the MEE program and its context among all things energy in the state.

Each newsletter contains three or more educational articles covering various energy saving and clean energy opportunities for homes and farms, as well as an overview of an innovative energy project. Updates on MEE's outreach efforts and educational resources are also provided in each issue. Energy developments across the state are summarized by energy sector. Upcoming events, on-demand resources, and financial opportunities are provided in each issue to provide timely and convenient access to relevant information. Four issues were published between March 2023 and March 2024, collectively containing 12 educational articles and 13 programmatic updates.

Each issue was emailed to 389 subscribers, with an annual reach of 19,647 on social media. These newsletters were also made available on a digital publishing platform and webpage, constituting 1,070 direct downloads. A survey instrument indicated that 56% of readers found the information very or extremely beneficial; while 31% found the information slightly or moderately beneficial. Survey results also indicated that 56% share the information with others; while another 56% have indicated plans to apply for $26,000 in funding. Survey responses further indicated that 50% and 31% of readers planned, or completed, energy measures; while 44% and 13% indicated expected, or realized, economic benefits. Qualitative feedback included, "Best newsletter in the state," "I am very impressed with your very well done solar MEE NEWS and would like to sign up each of our Energy Advisors," and "I enjoy reading your energy newsletters, and I always share them with my family."

FIELD CROP NEWS

Adriana Murillo-Williams
Bellefonte

The NACAA Communications Award Nomination is for the Penn State Extension newsletter "Field Crops News" (FCN). The newsletter aims to provide the agricultural community with prompt educational information about field and forage crop production. In addition to the traditional ways to communicate with stakeholders via farm visits, phone calls, and newspaper articles, FCN became an alternative to reach and better serve those clients who prefer to receive information via email. Since 2017, extension educators and specialists in the Field and Forage Crops Team have met every Tuesday to share current crop conditions, weather updates from their respective counties, and questions they received during the week from stakeholders. Based on the discussion, the topics for the newsletter are selected, and educators and specialists prepare the articles. Each FCN issue contains 5-8 articles. After reviewing the articles, the weekly editor shares them with the communications team for formatting. The newsletter is distributed electronically every Thursday to 10,998 subscribers. In the period March 2023-March 2024, 38 newsletters were developed with an estimated 190 articles. Topics included updates on the Team's pest monitoring efforts (black cutworm, western bean cutworm, soybean sentinel plots, slug monitoring), weed and disease management, hay and pasture management, sunflower and hemp production, tar spot of corn, soil fertility conservation, and pesticide safety. Since September 2021, the number of FCN subscribers increased by 1,000. Furthermore, from the total number of subscribers, approximately 60% are Pennsylvania residents, 25% have not specified a location, and the remaining 15% correspond to subscribers from 43 states in the United States and 72 countries. These numbers show our tremendous global impact. During this time, I contributed to the newsletter by serving as editor four times and being an author/coauthor of 20 articles. I am beyond proud of being part of the Field and Forage Crops Team that initiated this effort. The FCN is a great example of teamwork and reflects Extension's spirit of service and Penn State Extension mission of providing access to in-person and online education to our stakeholders

to help them address problems and take advantage of opportunities for improvement and innovation.

ALABAMA COTTON SHORTS NEWSLETTER

Steven Brown
Extension Specialist - Agronomy
Auburn University

Brown, S*[1], Graham, S*[2], Scherer, A*[3], McGriff, E*[4], Wells, A*[5], Smith, R*[6], Prasad, R*[7]

[1] Extension Cotton Agronomist, Alabama Cooperative Extension System, Auburn University, Alabama, 36849
[2] Extension Entomologist, Alabama Cooperative Extension System, Auburn University, Alabama, 36849
[3] Extension Plant Pathologist, Alabama Cooperative Extension System, Auburn University, Alabama, 36849
[4] Regional Extension Agent, Agronomic Crops, Alabama Cooperative Extension System, Cullman, Alabama, 35055
[5] Regional Extension Agent, Agronomic Crops, Alabama Cooperative Extension System, Geneva, Alabama, 36340
[6] Extension Entomologist, Professor Emeritus, Alabama Cooperative Extension System, Auburn University, Alabama, 36849
[7] Nutrient Management Specialist, Alabama Cooperative Extension System, Auburn University, Alabama, 36849

This monthly newsletter covers a broad range of subjects related to cotton production in Alabama. It is designed to keep producers, crop consultants, ag retailers and others in the know regarding the many factors associated with agronomic issues, pest management, markets, etc. Pertinent news and announcements for meetings, field days and personnel are also included. Contributors include Extension Specialists from several disciplines as well as Regional Extension Agents for Agronomic Crops. Monthly posts also include information and reflections from the past, “In the Old Days...”

The newsletter is electronically distributed to those in Alabama and the Lower Southeast. Excerpts are often picked up by mass media outlets such as Farm Press. Recipients include farmers, crop consultants, ag retailers and distributors and policy makers; the current distribution includes about 1600 folks. The newsletter is produced and distributed through MailChimp.

GNO GARDENING NEWSLETTER

William Afton
Horticulture Agent
LSU AgCenter
Covington

Afton, W[1], Dunaway , C*[2], Willis , J*[3], Timmerman , A[4]

[1] Horticulture Agent, , Covington, Louisiana, 70433
[2] Horticulture Agent , , Jefferson , Louisiana, 70123
[3] Horticulture Agent , , New Orleans , Louisiana, 70112
[4] Horticulture Agent , , Chalmette, Louisiana, 70043

The purpose of this newsletter is to provide research-based horticultural information to home gardeners throughout the Greater New Orleans Metropolitan Area, a ten parish area with over 1.27 million residents. This goal is accomplished by LSU AgCenter Extension Agents, Louisiana Master Gardener Volunteers, and LSU AgCenter Extension Specialists who contribute content through written articles and photographs. The information presented is timely and regionally specific to Southeast Louisiana. Within each edition there are four standard articles, What’s Bugging You (insect pests), Plant Disease of the Month, Weed of the Month, and Look at Me (ornamental plant highlight). These articles are assigned so that they rotate for each agent. Special interest articles may be included each month for popular topics and concerns that need to be addressed quickly. Each newsletter also includes a regional vegetable planting guide, garden checklist, garden tips, times and location for farmers’ markets, list of independent garden centers, and contact information for all the Extension Agents working in the area. The newsletter is produced monthly and mailed to almost 36,000 subscribers and posted online. Based on subscribers, social media posts, and webpage traffic we estimate that the MG GNO newsletter reaches over 75,000 folks every month, providing them with timely, research-based information that improves their lives.

CENTER FOR PROFITABLE AGRICULTURE QUARTERLY PROGRESS REPORT

Alaina Boyd
Extension Assistant
University of Tennessee
Columbia

Boyd, A*[1], Holland, R*[2]

[1] Extension Assistant, University of Tennessee Center for Profitable Agriculture, Columbia, Tennessee, 38401
[2] Director, University of Tennessee Extension, Columbia, Tennessee, 38401

The Center for Profitable Agriculture releases a progress report every three months detailing the events and updates from the previous quarter. The two selected issues of this quarterly report are from April 2023 and January 2024. In 2023, a total of four progress reports were created. As of January 2024, only one progress report has been released with the remaining three set to be distributed as the year progresses. The April 2023 issue features content from January - March of 2023. It was first published on April 6, 2023 and was published to the Center's website (cpa.tennessee.edu). The report was distributed via email to the Center's various newslist subscribers in an email blast. This April issue was the 100th issue of the Center's quarterly report, and highlighted the celebration of the Center's 25th anniversary among other topics. The January 2024 issue features content from October - December of 2023. It was first published on January 9, 2024 and published to the Center's website (cpa.tennessee.edu). The report was also distributed via email to the Center's various newslist subscribers in an email blast. This January issue was the 103rd edition of the Center's quarterly report. Photos included were compiled by Center staff and various industry partners. Articles were written/edited by Rob Holland and Alaina Boyd. The layout and design of each progress report was created by Alaina Boyd. These reports adhere to the accessibility requirements and layout/design recommendations set forth by the University of Tennessee Institute of Agriculture's Marketing and Communications department. Alternate text, color contrast, and accessibility checks were performed for the PDF files in Adobe Acrobat. The audience for these newsletters includes CPA staff; UT Extension personnel; industry partners such as the TN Department of Agriculture and TN Farm Bureau Federation; University of Tennessee Extension administration; UTIA administration; and any website visitor (farmer, producer, or consumer) to the Center for Profitable Agriculture's website. The email newslist recipients include UT Extension specialists and personnel, as well as retirees and other relevant industry contacts.

AG NOTES NEWSLETTER

Bonnie Hopkins
County Extension Agent/Agriculture
New Mexico State University
Aztec

Hopkins, B*[1], Lombard, K[2]

[1] County Extension Agent/Agriculture, , Aztec, New Mexico, 87410
[2] Farmington Ag Science Center Superintendent, NMSU CES San Juan County, Aztec, New Mexico, 87410

The San Juan County Ag Notes Newsletter is a collaborative effort between the San Juan County Cooperative Extension Service, the San Juan Soil and Water Conservation District, and the NMSU Farmington Agricultural Science Center. The newsletter's target audience is a combined list of producers and community members who would benefit from an efficient and timely source of agricultural agency information. The newsletter also serves as a feedback loop for advisory committee members and residents who are interested in research, Extension updates, and outreach activities. The newsletter has been invaluable for determining updated extension publications, research updates, emergency notifications, water quality updates, and economic forecasts. The Extension Office distributed the joint effort directly to 456 community members and 495 email recipients. The quarterly newsletter was also distributed on social media, reaching over 9,000 community members on Facebook throughout the year.

March 2023 Ag Notes Newsletter: https://www.canva.com/design/DAFQzwC0UOY/HODTKaNK4l8c9muw-aDC9A/view?utm_content=DAFQzwC0UOY&utm_campaign=designshare&utm_medium=link&utm_source=editor
June 2023 Ag Notes Newsletter: https://www.canva.com/design/DAFYyU2Vtvw/yf4pDnDSOUMKQ8JLYfQREg/view?utm_content=DAFYyU2Vtvw&utm_campaign=designshare&utm_medium=link&utm_source=editor

State Winners

NORTH CENTRAL

Indiana	Abigail Heidenreich
Kansas	Shad Marston
North Dakota	Breana Kiser
South Dakota	Ron Frederick

SOUTHERN

Arkansas	Kim Rowe
Florida	James Davis
Georgia	Andrew Sawyer
Kentucky	Chelsey Anderson
Mississippi	Melissa Morgan
North Carolina	Kim Woods
Oklahoma	Hannah Hough
Puerto Rico	Anibal Ruiz-Lugo
South Carolina	Jaime Pohlman
Texas	Jordan Voges
Virginia	Theresa Pittman

Educational Video Recordings

National Winner

ARTIFICIAL INSEMINATION - SEMEN HANDLING

Heather Schlesser
Dairy Agent
UW-Madison Division of Extension
Wausau

Schlesser, H[1]

[1] Dairy Agent, Wausau, Wisconsin, 54403

The purpose of this educational video was to increase awareness of the proper method of semen handling to enhance conception rates. This video was created as an alternative method of teaching participants who registered for the artificial insemination course to reach the various learning styles of the participants. This video was initially intended for the thirty people who attended the artificial insemination course in the fall of 2023. However, having the video on YouTube allowed others (N = 91) who had not attended the course to watch the video. The video link was emailed to artificial insemination course participants before the course's educational sessions. Course participants watched this video and increased their knowledge of semen handling before attending the first in-person session. Having this prior knowledge allowed course participants to have a better understanding of how to remove semen from the semen tank properly, which allowed more time for practice and answering questions. The video was prepared by recording footage on a farm and in an office setting and editing the video segments together. This educator was responsible for capturing the video footage and editing it together.

National Finalists:

MILKING PROCEDURES I

Martin Mangual
Extension Dairy Educator
Michigan State University Extension
West Olive

Mangual, M*[1]

[1] Extension Dairy Educator, Michigan State University Extension, West Olive, Michigan, 49460

The submitted educational video was produced and published by Martín J. Carrasquillo Mangual, dairy Extension Educator, for Michigan State University Extension housed in Ottawa County, Michigan. The objective was to provide the basic training for dairy milkers. The specific purpose of this video is to cover the essential steps of udder preparation and their importance. Well-trained labor is key for optimal milk harvest, sustaining high milk quality, and maintaining animal health and productivity. The NACAA member developed the concept script and delivered the information and demonstrations presented in the video. Stan Moore, from Michigan State University Extension, was tasked with filming the recording. The video was recorded in the Michigan State University dairy cattle & research center and a privately owned Michigan dairy farm. This educational video is one of five in the milking unit of an online course designed for dairy employees. Prior to this video, the course covers milking parlor areas and milking equipment. After this video additional video material covers the second part of the milking procedure and how the procedure is adapted to different types of parlors. This closed online content had 29 enrolled students. In 2024 this educational video will be published in our MSU Extension dairy team YouTube channel to increase the reach, impact, and access for dairy producers. The educational video submitted for consideration can be found here https://mediaspace.msu.edu/media/Milking+Unit+2+Part+1+Udder+prep/0_gr0mhjmc

NUISANCE INVADERS PART 1: WANDERING INSECTS

Lisa Mason
Horticulture Extension Specialist
Colorado State University
Centennial

Mason, L*[1]

[1] Horticulture Specialist, Colorado State University Extension, Arapahoe County, Centennial, Colorado, 80112

Colorado State University Extension staff in collaboration with Denver Botanic Gardens and the green industry developed PlantTalk, a brand and educational campaign to educate Coloradans on over 600 horticulture topics. Short videos have been an increasingly popular way to deliver education through PlantTalk. “Nuisance Invaders Part 1: Wandering Insects” is PlantTalk video that introduces the concept of nuisance invaders—insects commonly found in residential homes. The target audience for this video is for anyone living in residential homes that have unwanted insect visitors in Colorado. Nuisance invaders is a large topic to cover considering the insect and arthropod diversity found in homes, so this video shares education around solitary, overwintering insects that incidentally wander into homes. Insects covered in this video include: Western conifer seed bugs, masked hunters, western conenose bugs (kissing bugs), native stink bugs, and the brown marmorated stink bug. Control options are also included. The video was created and uploaded on July 18, 2023 by Lisa Mason, Horticulture Specialist for Colorado State University Extension in Arapahoe County. She wrote the story board, recorded herself speaking in the video, and edited the video to the final product. The PlantTalk introduction and conclusion were designed by the CSU Extension communication staff. Since the upload on YouTube, 242 people have viewed the video. The video is linked on the PlantTalk website here: https://planttalk.colostate.edu/youtube-videos/insects-diseases-videos/. The direct link on YouTube is here: https://www.youtube.com/watch?v=SQaqz-ndQoA.

WHAT NOT TO FLUSH INTO A SEPTIC SYSTEM

Chrissy Lucas
Ground Water Quality Outreach Program Coordinator
Oregon State University Extension Service
Corvallis

Lucas, C*[1]

[1] Ag & Groundwater Quality Outreach Program Coordinator, Oregon State University, Corvallis, Oregon, 97333

This video was created to use with several landowner groups as part of other educational opportunities in February 2023. The intended audience is rural residents that rely on an onsite sewage system to manage their household waste water. Many onsite sewage system users, especially newer rural residents are unaware of what should and should not be flushed or go down the drain. This short video highlights the most common items that can cause clogs and longer term damage to systems. Keeping these systems working properly is key for systems to last as long as possible and protect water quality. This version (https://youtu.be/tdeBblUdqmw?si=22cnbgKSUnFVs6TW) is used with an in-person audience, a captioned version used in other applications. The video has been incorporated into several online webinars and self-paced lessons on Living with your Septic System.

Regional Winners

LIZ GRAZNAK, HAPPY HOLLOW FAMILY FARMS, UNIVERSITY OF MISSOURI EXTENSION

Eli Isele
St. Charles

Funkenbusch, K*[1], Isele, E*[2]

[1] Extension Specialist and State Specialist, Health and Safety, University of Missouri Extension , Columbia, Missouri, 65211
[2] Field Specialist in Horticulture, University of Missouri Extension, St. Charles, Missouri, 63376

https://youtu.be/i53K89gWHPM?feature=shared

The “Liz Graznak, Happy Hollow Family Farms” video went live in February 2024 with an intended audience of persons interested in learning about becoming a MBF or rancher. The goal was to educate viewers on how USDA-funded initiatives like Missouri MBF (MBF) provide education

opportunities for small-scale and MBFs and ranchers such as Liz Graznak. The intent is to direct viewers to resources through the University of Missouri Extension to help them establish and grow small-scale farms and ranches. The goal was to tell the story in a simple, easy-to-use format, using high-quality, visually appealing photographs, graphics and video that keep the viewer's attention and direct the viewer to links to resources. "Liz Graznak, Happy Hollow Family Farms" video posted February 5, 2024. In twenty-nine days, nearly 4,000 people viewed the video on social media pages hosted by MU Extension and Integrated Pest Management YouTube channels and Facebook pages in 114 counties and St. Louis, to reach diverse, new and beginning scale-scale farmers, farmers with disabilities, veteran farmers, women in agriculture, and other populations the video was also shared on five unique social media outlets including Missouri AgrAbility, MBF, Missouri Brain Injury Association and Happy Hollow Family Farms. Additionally, the video was placed in the Missouri Produce Growers Video Newsletter which circulates twice a month with 950 recipients. There have been more than 250 shares and 400 impressions. In addition, this video will be used at public-facing events including Missouri State Fair, educational workshops, and professional conferences. Nominees collaborated with a multi-disciplinary team of MU Extension specialists. The team chose to highlight the success story of Liz Graznak, who credits MU Extension for providing educational opportunities, farm visits and support to grow her business and earn recognition as the 2021 Marbleseed's Organic Farmer of the Year. The team developed and edited a script and sorted hundreds of high-quality photos and videos to tell the story of how MU Extension helps beginning farmers gain skills and knowledge. The video meets ADA requirements to ensure accessibility and provides clear direction for the viewer on where to obtain additional resources.

PROTECTING WATER FROM PESTICIDES: A VIDEO SUPPORT TOOL FOR PESTICIDE SAFETY EDUCATION

Katie Pekarek
Extension Educator-Water Quality
University of Nebraska-Lincoln Extension
Lincoln

Pekarek, K[1]

[1] Extension Educator-Water Quality, , Lincoln, Nebraska, 68583-0996

The Pesticide Safety Education Program (PSEP) at the University of Nebraska provides educational and training programs which address health, the environment, economics, and pesticide safety. The Extension team engages in comprehensive communications offerings, including educational videos. The objective of this video is to provide commercial and non-commercial pesticide applicators the knowledge of how water moves locally and within a larger system, describe the fates of a pesticides active ingredient and its potential impact on groundwater, and describe how IPM provides a system that can help protect water from contamination. Extension Educator Katie Pekarek developed the script for this video to address the key learning objectives described in the "Protecting Water from Pesticide" chapter of the Structural/Health Related Pest Control Applicator Training Manual. Pekarek narrated the content, with the video being shot at the University of Nebraska Communications Media Recording studio by the Electronic Media Specialist. Pekarek developed and provided the visual aides for the video using Canva using original photographs and content. The video was produced by the Electronic Media Specialist. The video was posted to the online PSEP certification platform on January 1, 2024. The video is also sold as part of a digital manual in the PSEP flipbook. Since January 1, 2024, the video has received over 700 views. The video will additionally be used in in-person training throughout 2024 and subsequent years. Based on the number of commercial and non-commercial pesticide licenses issued each year, it is estimated that the total annual in-person reach of the video will be 1,000. The video may be viewed here: https://www.canva.com/design/DAF_nJ5sSRY/He5qX6FPgxp5MxUjocPDvw/watch?utm_content=DAF_nJ5sSRY&utm_campaign=designshare&utm_medium=link&utm_source=editor

CONSTRUCTING A GREENHOUSE OR HIGH TUNNEL VIDEO SERIES

Jonathan Ebba
Landscape and Greenhouse Field Specialist
University of New Hampshire
Dover

Ebba, J*[1], McAdam, K*[2]

[1] Landscape and Greenhouse Field Specialist, University of New Hampshire, Dover, New Hampshire, 03820
[2] Program Team Leader, University of New Hampshire, Durham, New Hampshire, 03823

The number of high tunnels being purchased to be used for production on farms in the Northeast continues to increase as this production system helps to build climate and marketing resilience for local farmers. We created a series of videos which details the construction of a high tunnel from site selection through finishing by offering in-depth explanations, captivating close-ups and

insightful big-picture how-tos. The purpose of this series of videos was to give farmers and growers the know-how to assemble a high tunnel or hoop-style greenhouse themselves and was undertaken in response to multiple requests for a comprehensive, easy to follow tutorial. This was accomplished by securing funding from USDA/NIFA and contracting with a local video production company for filming and editing. A local greenhouse fabrication company selected the farms on which the construction took place, reviewed the script and provided labor for construction during the filming process. We wrote the entire script, directed the shots and narrated/demonstrated the entire process of construction, from site selection through assembly and finishing. We oversaw the editing process. The resulting product is a six- part YouTube video series, broken out by topic to allow farmers to watch the instruction pertinent to his or her current stage of construction. We have submitted "Part 5: Covering the House" https://www.youtube.com/watch?v=7VZOS3LSCIM&list=PLoiAXcxNjJLM57Mi4v02xcG5TsYbJzVb2&index=5 for review for this award, but the entire series is accessible through the UNH website here: https://extension.unh.edu/resource/constructing-greenhouse-or-high-tunnel-video or as a YouTube playlist here: https://www.youtube.com/playlist?list=PLoiAXcxNjJLM57Mi4v02xcG5TsYbJzVb2. These videos were first made available to the public in December 2023 and marketing is ongoing through digital and print means. We produced a promotional postcard to be distributed by manufacturers and funding agencies to farmers considering purchasing, or having already purchased, a hoop house. As of the submission of this application, views vary by video, but they have received between 47 and 397, with an average of 218, views. As this series has demonstrated support from industry, academia and government we expect that it will receive wide distribution and utilization and will help many growers and farmers safely and economically construct their high tunnels and greenhouses.

SUSTAINABILITY & BIODIVERSITY AT CRYSTAL SPRINGS RESORT

William Errickson
Agriculture and Natural Resources Agent
Rutgers Cooperative Extension
Freehold
Errickson, W*[1], Waller, T*[2], Quinn, E[3]

[1] Agriculture and Natural Resources Agent, Rutgers University, Freehold, New Jersey, 07728
[2] Agriculture and Natural Resources Agent, Rutgers University, Millville, New Jersey, 08332
[3] Student Intern, Rutgers University, Freehold, New Jersey, 07728

There is a great opportunity for golf courses and resorts to have their landscapes be an oasis for biodiversity and pollinator habitat. In New Jersey, one place that has taken many steps to promote sustainability and biodiversity is Crystal Springs Resort. This video by Rutgers Cooperative Extension of Monmouth County features a tour of the sustainable landscaping practices being implemented at Crystal Springs Resort. These practices include landscaping with native and low input ornamental plants, building soil health through appropriate use of mulch, leaving natural areas to promote habitat, and developing a pollinator corridor through one of the golf courses. The purpose of this virtual tour of the resort is to serve as a model for other green industry professionals to learn about ways that they can incorporate some of these sustainable management practices in their own operations. This video was first posted on 2/12/24 and has been sent out to an audience of commercial ornamental horticulture professionals through the Rutgers Plant and Pest Advisory. William Errickson developed the concept, coordinated the tour, conducted the interviews, and provided feedback on revisions of the video. Timothy Waller assisted with concept development and review. Erin Quinn recorded, edited, and narrated the video.
*note: This video is officially 15:14 long. The first 15 minutes are being submitted for consideration.
https://www.youtube.com/watch?v=kF71OLmz1qk

FRUIT AND VEGETABLE FOOD SAFETY TRAINING VIDEO FOR FIELD EMPLOYEES

Elizabeth Bihn
Director, Produce Safety Alliance
Cornell University Dept of Food Science
Geneva

Bihn, E*[1], Chapin, T[2], Suslow, T[3], Clements, D[4], Stoeckel, D[5], Saunders, T[6], George, L[7], Way, R[8], Nubile, J[9]

[1] Director, Produce Safety Alliance, , Geneva, New York, 14456
[2] State Specialized Agent, University of Florida Institute of Food and Agricultural Sciences, Lake Alfred, Florida, 33850
[3] CE Specialist Emeritus, University of California, Davis, California, 95616
[4] Senion Extension Associate, Cornell Agritech - Produce Safety Alliance, Geneva, New York, 14456
[5] Extension Associate, Cornell Agritech-Produce Safety Alliance, Geneva, New York, 14456
[6] Extension Associate, Cornell Agritech - Produce Safety Alliance , Geneva, New York, 14456
[7] Extension Associate, Cornell Agritech - Produce Safety Alliance, Geneva, New York, 14456
[8] Communication Specialist, Cornell Agritech - Produce Safety Alliance, Geneva, New York, 14456
[9] Principal, Fly on the Wall Productions, Brooklyn, New York, 11201

The Fruit and Vegetable Food Safety Training Video for Field Employees video was developed to support fresh produce growers as they implement employee training to reduce risks during fruit and vegetable production. This video is intended as a resource for all farm employees but focuses on employees that work in the field during harvest and contact fresh produce while packing. Employee training is important when ensuring the microbial safety of fresh produce by empowering employees to be actively engaged in food safety practices. Training programs also help farms meet buyer requirements, third-party audit requirements, and requirements in the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR). It is a requirement of the PSR that those working with fresh produce must receive annual training on food safety practices. This video can meet that training requirement. To provide greater access to employee training resources, this video is available is multiple languages; English, Spanish, Creole, and Hmong. Language barriers can create additional challenges for many growers, when it comes to employee training. These translations ensure a better understanding of safe produce handling practices for all employees. The first 15 minutes of this video, is the portion we are submitting to be judged and can be found using the following link: https://www.youtube.com/watch?v=ndwHxQAJ6_c&list=PLXlo9RrBr3i-UhCrQYbSvu0crIjRLC0gw&index=1 . This worker training video was released June 22, 2023 and has already been viewed 3,478 times in English, 3,600 times in Spanish, 350 times in Hmong, and 151 times in Creole. Bihn, Chapin, and Suslow authored the script and set up video locations. Bihn, Chapin, Suslow, Stoeckel, Clements, Way, Saunders, and George edited draft script and video. Bihn coordinated translations with Jay Nubile from Fly on the Wall Productions, who also coordinated all videography.

FARM AND HOME: ESTATE PLANNING

Joanna Coles
County Extension Agent for Agriculture and Natural Resources
UK Cooperative Extension Service
Bowling Green

Coles, J[1]

[1] County Extension Agent for Agriculture and Natural Resources, Bowling Green, Kentucky, 42101

Farmers are in the legacy business, wanting to pass the farming operation to the next generation. However, only 30% of those farms succeed to the next generation and only 12% to the third generation. Estate planning is an essential tool to help increase this statistic. The Warren County Extension Council identified estate planning as a priority because only 33 percent of Americans have an estate plan. A committee was formed to plan and conduct the program to increase that number in our community. This video was created to describe the importance of estate planning and to promote the educational meeting the committee planned. The video aired on January 25th during the Farm and Home segment on WBKO-TV (ABC, Fox, and CW affiliate) to 15,000 households in south central Kentucky. The video was also uploaded to Warren County Agriculture's Facebook and YouTube Channels and received 541 additional views on these platforms. The video was scripted and recorded by the agent and edited by Warren County Extension office staff under the agent's supervision. Seventy-three individuals attended the meeting, and 100% increased their knowledge of the estate planning process. Seventy-three percent intend to update or create a will. Twenty-nine percent of attendees heard about the program from this video. It can be found on YouTube at https://youtu.be/qtO2097W5iQ?si=4z5l1NTYzs4ioReP.

FLUSH ONLY TOILET PAPER MASS MEDIA CAMPAIGN

Susan Lunt
Water Resources Extension Associate
United States
Pendleton

Lunt, S*[1], Collins, K*[2], Porzelt, S*[3], Calhoun, B*[4], Watts, C*[5], Belken, T*[6], O'Shields, S*[7], Sturup Comeau, E*[8]

[1] Water Resources Associate, Clemson Cooperative Extension, Pendleton, South Carolina, 29670
[2] Water Resources Agent, Clemson Extension, Sumter, South Carolina, 29150
[3] Water Resources Agent, Clemson Extension, Charleston, South Carolina, 29401
[4] Water Resources Agent, Clemson Extension, Charleston, South Carolina, 29401
[5] Water Resources Agent, Clemson Extension, Conway, South Carolina, 29526
[6] Water Resources Agent, Clemson Extension, Florence, South Carolina, 29505
[7] Water Resources Agent, Clemson Extension, Anderson, South Carolina, 29625
[8] Water Resources Agent, Clemson Extension, Beaufort, South Carolina, 29906

Clemson Extension's Carolina Clear program 2022-2023 mass media campaign focused on the prevention of sanitary sewer overflows (SSOs). SSOs can lead to degradation of water quality in local water bodies through bacteria and other forms of pollution as well as cause costly damages to infrastructure. Stormwater Consortiums across the State have identified bacteria in waterways as a pollutant of concern. Preventing flushing of non-flushable materials has been identified as a target behavior to address through education. The multi-part mass media campaign included a billboard and television commercial developed by a team of Extension agents of which I was a member. The theme of the campaign was "Flush Only TP." The billboard reads "Protect Your Pipes. Flush Toilet Paper Only. Trash Everything Else." Nineteen billboards were install led around the state through a partnership with the Outdoor Advertising Association of South Carolina. These billboards impacts are documented with weekly views and had a combined total of over 1,899,118 totally weekly impressions in 2023 and documented through total impressions which reached over 40 million. Development of the commercial was based on feedback from regional Consortiums and the Carolina Clear Advisory Committee. The commercial aimed to include humor, demonstrate positive behavior adoption, and share a clear message. As a result, the "angelic plumber" was created who arrives just in time to prevent a non-flushable wipe from entering the toilet. The commercial directs viewers to visit Clemson.edu/carolinaclear. The commercial was shared on five stations and streaming services around the State and reached over 3 million viewers across South Carolina. To view the commercial visit: https://www.youtube.com/watch?v=g3_M0hj9FT0.

HOW TO COLLECT A SOIL SAMPLE FROM YOUR LAWN OR GARDEN

Seth Whitehouse
Extension Agent
UT Extension
Clinton

Whitehouse, S*[1]

[1] Extension Agent, , Clinton, Tennessee, 37716

Year after year, clients across the state of Tennessee reach out to county extension offices, the UT Soil, Plant & Pest Center, and even the Tennessee Department of Agriculture to submit a soil sample. Although there are written instructions and various videos on the web about soil testing, it was apparent that our organization needed a statewide soil sampling video. The goal of this video was to simplify the soil sampling process, as the soil lab and numerous extension offices are inundated with client's requesting basic information on how to properly and accurately gather their respective sample. According to the director of the soil lab, Robert Florence, this video has helped to point newcomers to a concise video on their website and the director also indicated that they have received fewer phone calls asking how to gather a soil sample. This video was shot on October 10, 2023 in coordination with Haley Harbin, Social Media & PR Specialist with the University of Tennessee Institute of Agriculture. This video has been distributed throughout social media (Facebook Post on October 18, 2023), shared by the Tennessee Department of Agriculture, posted on the UT Soil Lab Website (Soil, Plant Pest Center), and the agent's county website (anderson.tennessee.edu/soiltesting). This video has gathered over 3,600 views on social media, as of February 1, 2024. Not only does this video demonstrate how to collect a soil test for those unfamiliar with the process, but it also serves as a platform for the importance of this service and connecting the county extension offices to clients needing soil recommendations. I was responsible for the script and delivery of the video. The UT Institute of Agriculture YouTube Channel published the video here: https://www.youtube.com/watch?v=o0nKA_iyBM4 .

YELLOWHORN: A VIABLE CROP FOR NEW MEXICO

Jeff Anderson
Extension Agronomy & Horticulture Agent
NMSU
Las Cruces

Anderson, J*[1], Turner, T[2]
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[2] Instructional Designer, Video, NMSU, Las Cruces, New Mexico, 88003

The future of agriculture in water-scarce regions like New Mexico hinges on innovative approaches to crop selection and water management. With the state grappling with drought conditions for over two decades and facing forecasts of even harsher weather patterns, the urgency to adapt agricultural practices has never been greater. While efforts have been made to enhance drought responses in existing crops and refine water delivery systems, research into developing more drought-tolerant varieties has been lacking. Yet, the sustainability of traditional crops like Chile, cultivated in New Mexico for centuries, is increasingly uncertain in the face of shifting climate dynamics and diminishing water resources. Recognizing the imperative for change, the Doña Ana County Extension Agricultural Agent, NMSU, advocates for Xanthoceras sorbifolium, commonly known as 'Yellowhorn,' as a crop suited for the state's future. This resilient tree species thrives on minimal water, enduring extreme temperatures and exhibiting resistance to pests and diseases. Its capacity to yield a sustainable oil nut crop on as little as 18 inches of annual precipitation presents a promising solution to water scarcity challenges. Moreover, 'Yellowhorn' offers additional benefits beyond its water efficiency. Rich in naturally occurring compounds such as Nervonic Acid, known for its neuroprotective properties, this crop holds potential for promoting cognitive health and combating neurological diseases. To disseminate knowledge about this promising alternative, the Agricultural Agent collaborates with the NMSU-ACES Innovative Media Research and Extension Department to produce an informative video. This multimedia resource aims to educate farmers about the economic viability and environmental sustainability of 'Yellowhorn' cultivation in arid regions, highlighting its potential to ensure agricultural resilience in the face of climate uncertainty.

By championing innovative, water-efficient crops like 'Yellowhorn,' agricultural stakeholders in New Mexico can cultivate a more resilient and sustainable future, ensuring food security and economic prosperity amidst evolving environmental challenges.
Yellowhorn: A Viable Crop for New Mexico
Link: https://www.youtube.com/watch?v=Pe8KQptDLT4

State Winners

NORTH CENTRAL	
Indiana	Hans Schmitz
Iowa	Adam Sisson
Kansas	Sandra Wick
Minnesota	Nathan Hulinsky
Ohio	Aaron Wilson
South Dakota	Sara Bauder
NORTHEAST	
Connecticut	Stacey Stearns
Maryland	Paul Goeringer
Pennsylvania	Tom Butzler
SOUTHERN	
Arkansas	Krista Quinn
Florida	Shawn Steed
Georgia	Holly Anderson
Mississippi	Eddie Smith
North Carolina	Blake Szilvay
Oklahoma	Julia Laughlin
Texas	Stephen Brueggerhoff
Virginia	Jennifer Ligon
WEST	
Utah	Cheyenne Reid

Fact Sheet

National Winner

CLEANING AND SANITIZING MULTI-DOSE SYRINGES AND TRANSFER NEEDLES

Sandra Stuttgen
Agriculture Educator
University of Wisconsin Madison Division of Extension
Medford

Stuttgen, S*[1]

[1] Agriculture Educator, Medford, Wisconsin, 54451

Biosecurity and cattle health management practices influence beef producers' economic viability and sustainability. Effective biosecurity practices include vaccination protocols, and vaccination protocols will fail when mishandling vaccination equipment. The fact sheet is

part of a series of three; the other two fact sheets address vaccine product handling and proper injection technique. I created posters from the fact sheet series for the hands-on tabletop display and demonstration for beef producers and those learning about beef production who attended the July 2023 Wisconsin Farm Technology Days Beef Tent. Approximately 200 individuals participated, and industry partners remarked that our handling demonstration and display significantly increased traffic in the Beef Tent and helped them meet their educational missions. I used this factsheet when discussing chute-side herd health at a beef production meeting with 24 attendees in October 2023. The factsheet is available at the UW-Madsion Division of Extension Livestock Program website and was viewed 3,070 times by 2,575 individuals. To determine effectiveness, 32 livestock producers and allied industry representatives read this and other biosecurity factsheets and provided feedback through a Qualtrics survey. Ninety-four percent of respondents increased their understanding of cleaning and disinfection techniques for multi-use syringe guns and transfer needles. Written comments included: "I learned you can use a microwave to heat sanitize needles and syringe parts; The importance of not using soap/disinfectants to clean multi-dose syringes! I still hear of many people using soap to clean the syringes. I also learned I need to be boiling the syringes for 5 minutes, much longer than I currently am; Information is always welcome, and having reading material to understand what could be done on a ranch."

National Finalists:

LETHAL VIRAL NECROSIS (LVN) OF 'FLORATAM' ST. AUGUSTINEGRASS

Emily Marois
Urban Horticulture
UF/IFAS Extension
West Palm Beach

Marois, E*[1], Krueger, K*[2], Roberts, J*[3], Schall, W[4]

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[2] Environmental Horticulture Extension Agent, UF/IFAS Palm Beach County, West Palm Beach, Florida, 33415
[3] Commercial Horticulture Extension Agent , UF/IFAS Palm Beach County, West Palm Beach, Florida, 33415
[4] Commercial Horticulture Extension Agent - Emeritus, UF/IFAS Palm Beach County, West Palm Beach, Florida, 33415

Lethal viral necrosis poses a major threat to Palm Beach County landscapes, the third-largest county in Florida, with 1.5 million residents and 720,741 housing units. 'Floratam' St. Augustinegrass, is the most widely used turfgrass in the area and is highly susceptible to this disease. The condition of Lethal viral necrosis (LVN) is caused by the sugarcane mosaic virus (SCMV) and was initially detected in 2014 in western Boynton Beach and Wellington, Florida. Since then, it has spread widely across Palm Beach County and a few other counties in Florida. Named for its lethal effects, LVN impacts the 'Floratam' cultivar of St. Augustinegrass and other cultivars with 'Floratam' genetics, often resulting in death within three years of symptom onset. The virus can spread through infected grass sap via mechanical transmission (i.e., mower wheels) or biologically by aphids that can be moved by wind. It is not transmitted through the soil. There is no cure for SCMV or LVN. This factsheet explains the virus's symptoms, transmission, and pathology testing to confirm diagnosis, management, and turfgrass replacement recommendations.

DESICCATING SOYBEAN FOR HARVEST IN LOUISIANA

David Moseley
Soybean Specialist
LSU AgCenter
Alexandria

Moseley, D*[1], Stephenson , D[2], Miller, D[3], Villegas, J*[4]

[1] Assistant Professor, LSU AgCenter, Alexandria, Louisiana, 71302
[2] Central Region Director, LSU AgCenter, Alexandria, Louisiana, 71302
[3] Professor, LSU AgCenter, St. Joseph, Louisiana, 71366
[4] Assistant Professor, LSU AgCenter, Alexandria, Louisiana, 71302

The factsheet "Desiccating Soybean for Harvest in Louisiana" was published in July 2023 to help educate the clientele on applying harvest aids in soybean crops. The LSU AgCenter Soybean Specialist collaborated with LSU AgCenter weed scientists and an LSU AgCenter entomologist to develop the factsheet. The timing of applying a desiccant and the effect on seed quality when desiccants are applied versus no desiccant applications was communicated by the factsheet. The factsheet also discusses the need to continue controlling for Redbanded stinkbugs until harvest. The intended clientele for this factsheet is anyone that has an interest in learning more about applying desiccants in soybean fields. The factsheet was published on the LSU AgCenter webpage by the authors. To date, the online factsheet has had 508 views. The factsheet was also printed and approximately 200 copies have been shared at county meetings.

RAPID USER GUIDE: POSTFIRE GRAZING ON CALIFORNIA'S INTERMOUNTAIN RANGELANDS

Laura Snell
Cooperative Extension Advisor
University of California
Alturas

Little, J[1], Snell, L*[2], Lile, D[3], Roche, L[4]
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[2] Cooperative Extension Advisor, Alturas, California, 96101
[3] Cooperative Extension Advisor, Alturas, California, 96101
[4] Cooperative Extension Advisor, Alturas, California, 96101

"When can livestock resume grazing?" This is one of the first questions that land managers and producers often ask after a fire. This fact sheet for public and private land managers and livestock producers, will walk you through key considerations and timelines that should go into your decision-making process following wildfires on California's intermountain perennial rangelands. Rest from grazing is a viable option in some cases, but it is not always necessary. Specific grazing management decisions, including whether or not to rest from grazing, should be based on field assessments made in the spring following fire. This fact sheet was created by a team at the Unviersity of California Cooperative Extension, edited and peer reviewed through the UCANR communications process and dispursed by printed hard copy and free electronic download. This fact sheet was distributed through the USFS Region 5 grazing program, Cooperative Extension workshops, the California Cattlemen's association annual meeting and local newsletters and blogs to over 1000 people.

Regional Winners

SEED YIELD EFFECTS ASSOCIATED WITH SOYBEAN AND DRY BEAN PLANT ESTABLISHMENT FACTORS

Gregory Endres
Extension Cropping Systems Specialist
NDSU Extension
Carrington

Endres, G*[1]

[1] Extension Cropping Systems Specialist, NDSU, Carrington, North Dakota, 58421

The fact sheet provides tables that list 10 soybean and 7 dry bean plant establishment factors indicating seed yield increases with improved production practices compared to traditional practices. The data is based on results from North Dakota State University Agricultural Experiment Station and Extension field research trials conducted across the state during the past 25 years. The targeted audience that will use this fact sheet is North Dakota farmers and crop advisers, including NDSU Extension agricultural agents. If various improved production practices are implemented by farmers, the information has the potential for substantial economic impact, considering North Dakota annual average production of about 6 million acres of soybean (fourth in the U.S.) and 600,000 acres of dry bean (first in the U.S.) per year. The author compiled the data and wrote the fact sheet. NDSU Extension Agriculture Communication edited the narrative, formatted content, and posted the fact sheet in early March 2024 on the web: https://www.ndsu.edu/agriculture/extension/publications/seed-yield-affects-associated-soybean-and-dry-bean-plant-establishment. NDSU Extension ag agents and crop specialists have been alerted by email and a Carrington Research Extension Center blog has been released to announce the availability of the publication. With the very recent electronic only release of the publication, estimating number of clients using the reference would be too preliminary. The one-page document can easily be printed, distributed and discussed with audiences during soybean and dry bean production meetings and tours.

START GROWING THORNLESS BLACKBERRIES: HOW TO PREPARE AND SELECT CULTIVARS FOR THE MID-ATLANTIC

Haley Sater
Agent Associate – Agriculture and Food Systems
University of Maryland Extension
Salisbury

Sater, H*[1]

[1] Agriculture Educator , Univeristy of Maryland Extension, Salisbury, Maryland, 21801

Blackberries are a hardy plant and a great summer fruit option for a diversified farm, a U-Pick or a garden. While blackberries are a native plant to most of the United States and Canada, most wild blackberries are thorny vines with small and tart fruit. Many modern blackberry cultivars are thornless and produce fruit that is large (up to 10 grams) with varying levels of sweet and tart flavors. Unlike tree fruits such as apples, peaches, and cherries, blackberries grow on canes which are single stems and require fewer years of cultivation before a fruit crop is produced. This fact sheet will provide you with the first-year planting, initial management, and cultivar selection advice to help you begin small-scale blackberry production.

ARE YOU PREPARED TO STORE YOUR PESTICIDES SAFELY AND SECURELY?

Amy Papineau
Extension Field Specialist, Food & Agriculture
UNH Cooperative Extension
Brentwood

Papineau, A*[1], Harrison, L[2]

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[2] Administrative Assistant, UNH Extension, Brentwood, New Hampshire, 03833

Anyone using pesticides in the state of New Hampshire, either for the production of agricultural commodities or on a commercial basis, must pass a collection of exams evaluating their knowledge of safe and effective pesticide use and their understanding of the applicable federal and state laws and rules.

Deciphering the many rules pertaining to the construction and maintenance of pesticide storage facilities, as written in the NH Code of Administrative Rules, has been a challenge for applicators. The official rules are written in legal language that is well above the reading level of the general public and the many applicators who need to fully understand these pesticide storage requirements.

This fact sheet presents the NH rules pertaining to pesticide storage in a manner that is clear, logical, and relatable. All the applicable rules are addressed in a manner that allows applicators to visualize their unique setups and apply these rules accordingly.

The first two pages of the fact sheet are targeted to supervisors or those making decisions about the construction and maintenance of the storage facility. Page three addresses the rules and recommendations that everyone working in and around the storage facility should be aware of. Supervisors are courage to print page 3 to be posted in a central location as a reminder to all employees of their responsibilities in contributing to safe pesticide storage.

This fact sheet has been distributed via email to the state's approximately 2,700 licensed applicators and is used in trainings for new and prospective applicators. Hard copies are distributed at Extension on-farm meetings and are commonly provided to growers during on-farm visits. The online pdf has been accessed from IP addresses across the country. The fact sheet and link will be shared nationally at the upcoming meeting of the American Association of Pesticide Safety Educators in summer 2024.

The text and organization of this fact sheet were developed by Amy Papineau through careful reading of the state rules and consultation with the state Division of Pesticide Control. Tricia Perra formatted the text and images into the final layout.

FEEDING MARKET STEERS FOR SHOW

Melanie Barkley
Extension Educator
Penn State University
Bedford

Barkley, M*[1]
[1] Extension Educator, Bedford, Pennsylvania, 15522

Many 4-H members need assistance understanding how to feed their market steer project animals so that the project animal reaches a desired weight and fat cover for show day. The Feeding Market Steers for Show fact sheet was developed to assist 4-H members with growing and finishing market steers as a 4-H project. The objective of the fact sheet is to introduce 4-H members to basic concepts related to steer nutrition. The purpose of the fact sheet is to help ensure that members feed the proper amounts of concentrates and roughages so that steers reach a target market weight and body condition for show day. The fact sheet discusses concentrates, additives in concentrate feeds, roughages, water, and vitamins and minerals that make up the daily diet fed to market steers. The fact sheet also discusses how much feed steers of varying weights and growth rates should receive based on consuming 2.0% to 2.5% or 1.5% of their body weight as a concentrate. Entrant wrote the fact sheet, took photo, and submitted to Penn State Creative Services to design the print version of the fact sheet. Forty-one fact sheets were distributed to PA 4-H educators at a state-wide training. They shared additional copies with their county 4-H leaders, parents, and members. Over 50 fact sheets were also distributed through the Penn State Extension Animal Systems Team displays at Penn State's Ag Progress Days and the Keystone Farm Show. The fact sheet is available on the Penn State Extension website to read online or download as a pdf file.

EQUINE BODY CONDITION SCORING FLOW CHART: A FIELD GUIDE

Robyn Stewart
County Extension Coordinator
University of Georgia
Lincolnton

Stewart, R*[1], Wassel, B*[2], Wickens, C[3]
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[3] Associate Professor, Extension Equine Specialist, University of Florida, Gainesville, Florida, 32433

Until 1983, there lacked a consistent method to evaluate body condition or fat cover in horses across breeds, sizes, or conformations. The Henneke Body Condition Scoring (BCS) system was proposed in 1983 as a result of research done at Texas A&M. Today, the Henneke Body Condition Scoring system is a widely accepted method for monitoring equine condition by horse owners and professionals alike, and is one of the only methods of body condition evaluation valid in a court of law. The system is based on visual appraisal and palpation of fat cover on six areas of the horse assigning scores of 1 to 9, with BCS 1-3 considered thin, 4-6 moderate, and 7-9 over conditioned. Both thin and over conditioned horses present welfare concerns for horse owners such as decreased performance, disease risk, and issues with overall management. Maintaining a moderate BCS through appropriate management can ensure the long-term health and well-being of the horse. While many resources exist explaining the BCS system and how to use it, few provide guided facilitation through the body condition scoring process. Participants new to the BCS system may struggle to accurately score horses without adequate practice or expert guidance and feedback on scores. Inaccurate scoring of horses can lead to misperceptions about horse welfare and wellbeing, ultimately resulting in inappropriate management. Following livestock welfare educational programs in GA and FL, a flow chart was requested to help participants body condition score horses they encounter on the job. The BCS flow chart was designed to provide an easy to follow, step-by-step process for evaluating the specific physiological markers that differentiate between scores, with an appropriate BCS suggested to the user based on their visual and physical assessment of the animal. Furthermore, the accuracy check provides clarification on characteristics of each BCS and examples of what each score looks like. This resource has been distributed via paper copy and email to two livestock and equine welfare programs with over 70 participants reached. Initial feedback included: “I REALLY like this! Excellent job, this is simple to follow. I think it’ll serve as a great field guide!”

ON-FARM WATER IRRIGATION EFFICIENCY PROGRAM

Ethan Orr
Tucson

Orr, E*[1]

[1] Associate Director, Agriculture, Natural Resources and Economic Development , University of Arizona Cooperative Extension, Tucson, Arizona, 85721

The audience is the Arizona State Legislature and other state leaders. This one-page document provides an overview of irrigation projects done and the amount of water conserved in partnership with Extension which were funded by the state beginning in March 2023. This was presented during committee testimony in the both the State House and Senate in support of additional funding for the program during the 2024 legislative session.

PRESSURE-TREATED WOOD FOR RAISED BED CONSTRUCTION IN THE WILLAMETTE VALLEY

Brooke Edmunds
Commmunity Horticulture Faculty
Oregon State University
Salem

Edmunds, B*[1], Locher, L*[2], Presley, G[3], Konkler, M[4]

[1] Commmunity Horticulture Faculty, , Salem, Oregon, 97301
[2] Statewide Master Gardener Program Communications Coordinator, Oregon State University Extension, , Oregon,
[3] Assistant Professor, Dept of Forestry, Oregon State University, Corvallis, Oregon,
[4] Faculty Research Assistant, Dept of Forestry, Oregon State University, Corvallis, Oregon,

‘Pressure-treated Wood for Raised Bed Construction in the Willamette Valley’ brought together a diverse team of OSU research faculty, Extension faculty, and communications staff. This fact sheet summarizes research results from the OSU Department of Forestry’s Department of Wood Science and Engineering for an Extension gardening audience. The fact sheet details a multi-year study on the potential of copper-based wood preservatives to leach from framed garden beds. The fact sheet answered questions about how far copper leached into the soil and any plant uptake. It also shared information on the

history of wood preservatives and emphasized safety when working with pressure-treated wood. The web-based fact sheet has full-color photos and a list of additional resources.

The team collaborated to promote the publication online to gardeners and landscapers. Social media posts on the OSU Extension Master Gardener accounts had a total reach of over 42,000 on Facebook and over 3,000 on Instagram. The fact sheet was also highlighted in OSU Extension's Gardening eNews, which has a reach of over 84,000 subscribers. Local governments, nursery and garden centers, and other gardening websites have reshared the fact sheet. Since its publication in February 2024, this fact sheet has been viewed 4,390 times, and the promotions have brought 2,969 new users to the Extension website. Each team member contributed their specific expertise to this publication's development, writing, production, and promotion.

State Winners

NORTH CENTRAL	
Illinois	Nancy Kreith
Kansas	Sandra Wick
Minnesota	Taylor Herbert
Ohio	Beth Scheckelhoff
South Dakota	Madalyn Shires
NORTHEAST	
Connecticut	Stacey Stearns
SOUTHERN	
Kentucky	Alexis Sheffield
North Carolina	Cody Craddock
Puerto Rico	Sofía Macchiavelli Girón
South Carolina	Liliane Severino da Silva
Tennessee	Pramir Maharjan
Texas	Jordan Voges

Publication

National Winner

TEXAS CRAWFISH PRODUCTION MANUAL

Corena Fitzgerald
CEA-CMR
Texas A&M Agrilife Extension
Anahuac

Fitzgerald, C[1]
[1] CEA-CMR, , Anahuac, Texas, 77514

Texas is second in crawfish production in the United States and an important industry that is in co production with the rice industry. With close to 20,000 acres of crawfish production in Southeast Texas and new farmers interest in joining the industry, Corena Fitzgerald worked with Texas A&M AgriLife fisheries specialist Dr Todd Sink on producing a production manual, "Texas Crawfish Production Manual." Corena worked with local area crawfish farmers on gathering information and techniques from the industry, revitalized the previous manual that was out of date, took and added pictures, designed the graphics that was included in the manual, added the history of the industry, and worked with LSU crawfish specialist on updating current techniques and practices throughout the entire process. Along with writing the manual, Corena worked with LSU on research of the current White Spot Virus that has been plaguing the industry in Louisiana and tracking it in the Texas Crawfish industry and made updates to the disease section with current research. This manual not only contains techniques and practices from Louisiana farmers, but has been adapted to fit the needs and practices currently used by Texas Crawfish Farmers.

National Finalists:

NEBRASKA SPECIAL GARDEN PROJECT GROWING NEWSLETTER

Elizabeth Exstrom
Extension Educator
Nebraska Extension
Grand Island

Exstrom, E*[1], Ballagh, T[2]
[1] Extension Educator, Nebraska Extension, Grand Island, Nebraska, 68801
[2] Extension Master Gardener Volunteer, Nebraska Extension, Burwell, Nebraska, 68823

The Nebraska Extension Special Garden Project originated as a way for youth from across the entire state of Nebraska to gain an interest in gardening, try growing new and unusual vegetables and flowers, obtain the education necessary to be a successful beginning gardener, and learn about the wide range of plant-science related careers. This statewide, hands-on experience allows youth to try growing different plants with their families while gaining life skills. The project focuses on growing a different flower or vegetable each year. A seven-page educational publication is provided to 4-H youth along with seeds for the project. The objective of the Special Garden Project Growing Newsletter is to provide information that a youth would need to successfully grow the selected plant. It includes fun plant facts, cover plant history, planting basics, growing methods, plant care, identification of common disease and insect problems, harvest and storage tips, plant science-related careers, county fair exhibiting tips, and recipes (if applicable). The downloadable PDF publication is shared with the youth enrolled in the project, their families, as well as with Extension staff across the state through the website dedicated to the project (https://4h.unl.edu/special-garden-project). In 2024, the growing publication was distributed along with packages of Princess of India Nasturtiums seeds to 1,675 4-H youth across the state of Nebraska to educate them about growing, exhibiting, and using this unique flower. Elizabeth Exstrom, Nebraska Extension Educator, wrote, produced and distributed the newsletter along with Tiffany Ballagh, Extension Master Gardener Volunteer, who assisted with the graphic design of the publication.

CHARACTERISTICS OF THE BEEF X DAIRY INDUSTRY IN NEW YORK STATE

Margaret Quaassdorff
Dairy Management Specialist
CCE NWNY Dairy, Livestock, and Field Crops Team
Batavia

Quaassdorff, M*[1], Hicks, B[2]

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The 28-page publication was created as a summary of survey data collected by the authors via online Qualtrics survey from 107 New York State dairy and beef farmers from October 2020 through June 2021. The publication was used to inform an audience of extension educators, beef and dairy industry professionals, and farmers, as well grant funding partners as to the characteristics of the beef x dairy industry, especially the resources requested and needs to conduct further research to make progress in this growing sector in New York State. It was published on the Cornell Cooperative Extension Northwest New York Dairy, Livestock and Field Crops Team website on July 12, 2023, and was shared to both the CCE Northwest NY and CCE South Central NY Teams' blogs. The publication was also adapted to an accessible format and later published in accordance with Cornell University policy on the Cornell eCommons Library website on September 22, 2023. The publication uses attractive and informative graphs, tables and images to report dairy farmers' use of beef sires in their herds, criteria in selecting dairy animals to breed to beef sires, and sire selection criteria. It serves as valuable insight into the farmer management practices of producing, raising, marketing and selling beef x dairy cattle. Additionally, a summary of results led to establishing the "5 Keys for NYS Beef x Dairy Industry Viability", which are reported on page 27. Survey data was summarized and results were written equally by the authors, and the publication was designed and created by the main author using Canva. Though there was not a way of recording its reach from where it was published, the publication was distributed via email to 30+ statewide dairy and livestock extension educators, a list of 300+ industry professionals, and the 107 farmers who contributed data. Additionally, the publication was used as a major reference in a farmer grant proposal to study beef x dairy management practices and economic analysis on-farm, that was submitted in the Fall of 2023. The project was funded and is set to begin

in 2024. Link: https://nydairyadmin.cce.cornell.edu/pdf/impact_ny/pdf210_pdf.pdf

WELCOME HOME: GARDENING IN TENNESSEE

Seth Whitehouse
Extension Agent
UT Extension
Clinton

Whitehouse, S*[1], Bumgarner, N*[2], Ary, B*[3], Duncan, A*[4], Gunter, J*[5], Ludwig, A*[6], Mote, M*[7], Reeder, T*[8], Rose, M*[9], Rumble, L*[10], Scott, C*[11], Stefanski, J*[12], Treadway, H*[13], Upchurch, G*[14], Sykes, V*[15]

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[2] Associate Professor and Residential and Consumer Horticulture Extension Specialist, University of Tennessee, Knoxville, Tennessee, 37996
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[4] Digital Certification and Training Program Coordinator, University of Tennessee, Decherd, Tennessee, 37324
[5] Extension Agent, University of Tennessee, Jamestown, Tennessee, 38556
[6] Associate Professor and UT Extension Stormwater Specialist, University of Tennessee, Knoxville, Tennessee, 37996
[7] Extension Agent, University of Tennessee, Murfreesboro, Tennessee, 37129
[8] Extension Agent, Tennessee State University, Franklin, Tennessee, 37064
[9] Extension Agent, University of Tennessee, Greeneville, Tennessee, 37745
[10] Extension Agent, University of Tennessee, Knoxville, Tennessee, 37902
[11] Horticulture Extension Specialist, University of Tennessee, Jackson, Tennessee, 38301
[12] Extension Agent, University of Tennessee, Murfreesboro, Tennessee, 37129
[13] Extension Agent, University of Tennessee, Chattanooga, Tennessee, 37416
[14] Extension Agent, University of Tennessee, Crossville, Tennessee, 38557
[15] Assistant Professor and UT Extension Variety Trialing and Agroecology Specialist, University of Tennessee, Knoxville, Tennessee, 37996

In 2022, Tennessee experienced its largest population increase in one year since 2007 with nearly 90,000 people moving to the state (Tennessee State Data Center), and more are calling the state home every day. Whether they have lived in Tennessee for 10 days or 10 years, Tennessee residents are keeping with the nationwide trend of taking up gardening for the first time or with newfound vigor (This Old House). These trends are leading people to seek out locally relevant horticulture resources and education. To meet this need, the University of Tennessee Extension Residential and Consumer Horticulture team developed Welcome Home: Gardening in Tennessee to provide both new gardeners with a firm research-based foundation for their horticultural endeavors and to introduce them to Extension. The agents and specialists on this team worked together to author, edit, publish, and promote this publication. Welcome Home features information on Tennessee climate and soils, home food production, managing turfgrass, woody plants, and herbaceous ornamentals. In the fall of 2023, the team debuted the publication alongside a 5-part educational series. Participants in 32 counties received the first printed copies of the publication and used it as a resource for the webinars and in-county hands-on demonstrations. Over 70% of participants who utilized the publication were non-traditional clients of Extension. UT Institute of Agriculture Marketing and Communications printed 3,000 copies of the publication for distribution in 2023. The digital version of the publication has reached 15,169 people to date. URL: https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/PB1919.pdf

Regional Winners

FIELD CROP INSECTS, 2ND ED.

Adam Sisson
Integrated Pest Management Extension Specialist
Iowa State University
Ames

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Field Crop Insects, 2nd Edition, is a publication produced by Extension entomology and integrated pest management specialists at Iowa State University (ISU). Insect pests present a significant challenge to farmers every year, causing reductions in corn, soybean, and alfalfa yield. Insect pests can also reduce the quality of grain, seed, and forage. The purpose of Field Crop Insects, 2nd

Edition, is to aid farmers, agronomists, extension agents, and others in understanding and addressing insect pest issues. It includes essential insect identification, scouting techniques, and foundational management strategies, as well as the fundamental biology of insects and their effects on crops commonly grown in Iowa and surrounding areas. There are more than 50 pest and beneficial insects included in this 80 page publication. The 1st Edition of this guide was available in 2012 and was completely redesigned for 2023 to include alfalfa pests and the new insect threat known as soybean gall midge, along with 175+ images, illustrations, and tables. Information on crop scouting and degree days is included, along with a defoliation estimation guide for reference. A PDF version was created to adhere to e-accessibility standards. Publications can be ordered as individual printed copies, boxes of 25 copies, and as PDFs from the ISU Extension Store at https://store.extension.iastate.edu/Product/13725. The new guide was made available in July 2023, and more than 860 copies have already been distributed to community colleges, agribusiness companies, ISU Extension Field Agronomists, and others.

BULLETIN E-3427 INTRODUCTION TO RENTING FARMLAND

Jonathan LaPorte
Farm Business Management Educator
Michigan State University Extension
Cassopolis

LaPorte, J*[1]
[1] Farm Business Management Educator, , Cassopolis, Michigan, 49031

Distribution: 200 (direct email), online analytics indicate 750+ readers since publishing on 3/30/2023

Educator's Role: Primary author and developer
Description: After their knowledge as a farmer, land is arguably a farm manager's second most vital asset. Whether they raise crops or livestock, all production activities can be traced back to the need for land. This need makes securing access to farmland a critical part of managing a farm business.

For beginning farmers, renting farmland is a common method of establishing a farm business. Compared to purchasing farmland, renting is often much more affordable and is a good fit for farmers with limited startup funds. Renting also allows them to trial their enterprises without the high investment and long-term commitment required for purchasing.

But negotiating to rent farmland can be challenging and overwhelming. Other farms may be competing for that same property. Landowners may not fully understand production activities or the ways they influence land values. Market trends might create pressure to offer high rent payments. Newer farmers may also feel uneasy about sharing details of their farm business.

This publication offers guidance on how to navigate through the rental process and reduce anxiety that often comes with it. The bulletin reviews starting points for determining value and factors affecting farmland value. It also presents ways of finding average county rental rates and types of lease agreements. The document also offers guidance on approaching rent negotiations with landowners. From preparing for first-time meetings to setting the stage for easier renewal conversations.

FARM INSURANCE: COVERING YOUR ASSETS

Robert Moore
Attorney/Research Specialist
Ohio State University
Delaware

Moore, R*[1]

[1] Attorney/Research Specialist, Ohio State University Extension, Delaware, Ohio, 43015

Farm insurance is the most important risk management tool available to farmers to offset potential losses and liability. Unfortunately, insurance policies are complicated, tedious, and little understood and therefore get too little attention from farm owners. This publication provides a basic explanation of the key provisions in a farm policy and how to interpret those provisions to better manage farm liability. Additionally, guidance is provided as to how to select an insurance agent and work with the agent to ensure the entire farming operation is adequately covered against losses and liability. The publication includes the following topics:

- Structure of an Insurance Policy
- Types of Coverages
- Choosing an Insurance Agent
- Dealing with a Loss
- Payout Determinations
- Co-Insurance
- Appealing Coverage Determinations
- Unique Activities That May Not Be Covered

The objective of the publication is to make the reader competent enough about farm insurance policies, so they know the appropriate questions to ask of their insurance agent and to understand the answers.

The publication is available online at farmoffice.osu.edu and has been provided to approximately 150 attendees at various presentations. The publication was prepared as a printed document and made available online as a pdf file. Robert Moore, the primary author, researched, wrote, and prepared the publication. Attorneys Zach Ishee, Samantha Capaldo and Jeff Lewis provided review, input and editing suggestions.

MARYLAND ANIMAL WASTE TECHNOLOGY PROJECT REPORT

Jennifer Rhodes
Principal Agent, Agriculture & Food Systems
University of Maryland Extension
Centreville

Rhodes, J*[1], Lansing , S[2], Dill, S*[3], Hendricks, M[4], Everts, K[5], Hassanein, A[6], MacDonald, J[7], Nunn, N[8], Moyle, J*[9], Thilmany, E[10], Semler , J*[11]

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[4] Associate Professor; Director at SIRJ Lab, University of Maryland, College Park, Maryland, 20742
[5] Professor and Director, University of Maryland - Wye Research and Education Center, Queenstown, Maryland, 21658
[6] Associate Research Scientist, University of Maryland, College Park, Maryland, 20742
[7] Research Professor, University of Maryland, College Park, Maryland, 20742
[8] Assistant Director, Harry R. Hughes Center for Agro-Ecology Inc., Queenstown , Maryland, 21658
[9] Principal Agent and Extension Specialist , University of Maryland Extension, Salisbury, Maryland, 21801-164
[10] Faculty Specialist, University of Maryland, College Park, Maryland, 20742
[11] Principal Agent, University of Maryland Extension , Boonesboro, Maryland, 21713

This educational publication summarizes a research project funded by the Maryland Department of Agriculture (MDA) to evaluate the effectiveness of the Animal Waste Technology Fund program. The project aimed to assess animal waste generation in Maryland, identify suitable projects for AWTF support, and address environmental concerns like excess nitrogen and phosphorus. The research team, led by Stephanie Lansing from the University of Maryland (UMD) and including various UMD Extension agents, analyzed data, evaluated technologies, and formulated recommendations for the AWTF program's improvement.

This publication targets Maryland agricultural producers (over 500 reached through winter extension meetings with physical copies and flash drives), policymakers, and environmental agencies interested in sustainable animal waste management practices. This work has been instrumental in helping Maryland legislators better understand issues surrounding animal waste practices during the most recent legislative session.

The publication informs stakeholders about the AWTF's role in supporting farmers and achieving environmental benefits while identifying opportunities for future program enhancements.

Agent/Educator Role: University of Maryland Extension agents and educators played a crucial role:
- Industry Connection: Facilitating communication with producers to understand their needs and challenges.
- Data Collection: Gathering and analyzing data on animal waste generation, AWTF-supported technologies, and environmental concerns.
- Stakeholder Interviews: Interviewing farmers, technology developers, and policymakers to gain insights on the AWTF program.
- Content Creation: Contributing to the research report's writing and editing for clarity and relevance to the target audience.
- Distribution: Participating in winter extension meetings to distribute the report and answer producer questions.
- Distribution: Over 500 physical copies and flash drives containing the report have been distributed directly to producers through winter extension meetings.

Full publication along with a translation is available here https://extension.umd.edu/resource/animal-waste-technologies/

INVASIVE PLANTS AND NATIVE ALTERNATIVES FOR LANDSCAPES

Michele Bakacs
County Agent II/ Associate Professor
Rutgers Cooperative Extension
North Brunswick

Bakacs, M*[1], Errickson, W*[2]

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Legislation has been proposed in New Jersey that would prohibit the purchase, sale, distribution, and import of certain invasive plants without a permit. New Jersey is one of only a few states without regulations controlling the propagation and sale of invasive plants. A needs assessment survey of nursery growers and landscape professionals further identified native plant alternatives for commonly grown invasive ornamental plants as a top priority for Extension resources that could help stakeholders increase their production and marketing of native plants. In response, in August 2023 Rutgers Cooperative Extension developed new resources for nursery growers, landscape professionals, and the public, including the publication titled "Invasive Plants and Native Alternatives for Landscapes". This publication provides an overview of the problem, how invasive plants spread, options for removal in the home landscape, and tables listing suggested native alternatives. It is available at https://njaes.rutgers.edu/fs1353/ and as a printable version by request. It has been accessed 2,397 times and used to educate over 400 nursery employees, landscapers, and Extension volunteers. This publication was a collaboration between Agriculture and Natural Resource Agents Michele Bakacs and William Errickson, who worked together to develop, write, and produce the document.

SOYBEAN GROWTH STAGES AND MANAGEMENT TIPS

David Moseley
Soybean Specialist
LSU AgCenter
Alexandria

Moseley, D*[1], Stephenson, D[2], Padgett, B*[3], Price, T*[4], Villegas, J*[5], Parvej, R*[6], Conger, S*[7], Watson, T*[8]

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[4] Associate Professor, LSU AgCenter, Winnsboro, Louisiana, 71295
[5] Assistant Professor, LSU AgCenter, Alexandria, Louisiana, 71302
[6] Assistant Professor, LSU AgCenter, Winnsboro, Louisiana, 71295
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[8] Assistant Professor, LSU AgCenter, Baton Rouge, Louisiana, 70803

The publication "Soybean Growth Stages and Management Tips" was published in September 2023 to help educate the clientele on identifying the different growth stages of soybean. The publication was created near harvest season which helped the readers understand the proper growth stage to apply harvest aids. The publication was also made available in time to distribute at fall and early spring county meetings. The LSU AgCenter Soybean Specialist collaborated with other LSU AgCenter scientists to describe the soybean growth stages and to give management tips for the different stages. The intended clientele for this publication is anyone that has an interest in accurately identifying and communicating the different soybean growth stages. The publication was published on the LSU AgCenter webpage by the authors. To date, the online publication has had 384 views. The publication was also printed and approximately 200 copies have been shared at county meetings.

OREGON STATE UNIVERSITY EXTENSION AGRICULTURAL TOURISM

Melissa Fery
Small Farms Extension Agent
Oregon State University
Eugene

Comerford, A*[1], Comerford, A*[2], Sorte, B[3]

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[3] Extension Economist (retired), Oregon State University, , Oregon,

There is confusion and contention about offering agritourism activities on farmland in Oregon. Claims of benefits for adding agritourism like adding additional revenue streams, creating new jobs, selling more agricultural products, leading to farm succession, and educating the public about agriculture are hard to quantify. The report was produced for stakeholders in the tourism and economic development sectors as well as community leaders to begin to have fact-based discussions around these ideas and how agritourism impacts local economies. Total economic impact, number of farms participating in agritourism, employment, visitation, sales, motivations are all documented in this publication. Melissa and Audrey gathered the funding to hire a retired economist, Bruce Sorte, and pay for access to the IMPLAN modeling system. Funding partners include local Extension service districts, Travel Oregon, economic development organizations, and local tourism. Melissa and Audrey provided the connection to the local farm operations and knowledge of the different types of agritourism being conducted. The two also helped write and distribute the producer survey to ground-truth the IMPLAN models. Bruce ran the numbers through the IMPLAN models using the survey numbers as well as the 2017 Census, creating the data that was the foundation of the report. The publication was written and revised by the three authors collaboratively and peer reviewed by seven economists nationally. The report was designed by Oregon State University College of Agriculture Communications Team and published by OSU Extension Communications. To date, 15 hard copies of the report have been distributed to local elected officials and have been viewed online by 238 individuals since February 2024.

MASTER GARDENER INTRODUCTION TO LANDSCAPE DESIGN

Rowe Zwahlen
Extension Assistant Professor
Utah State University Extension
Castle Dale

Zwahlen, R*[1], Powell, J[2]

[1] Extension Assistant Professor, Utah State University Extension, Castle Dale, Utah, 84513
[2] Landscape Architecture and Environmental Planning Specialist, Utah State University Extension, Logan, Utah, 84322

This chapter is part of Utah's Master Gardener Training Manual which was extensively revised and rewritten in 2023. The manual is available to approximately 500 current Utah State University Extension Master Gardeners and is used as part of their training course. The Landscape Design chapter was completely rewritten by Rowe Zwahlen (current NACAA member) and Jake Powell. They each provided 50% of the content knowledge and writing of the publication. The authors also created the chapter illustrations, diagrams, photos, and case-study site plans.

THE INLAND PACIFIC NORTHWEST PASTURE CALENDAR

Steve Fransen
emeritus Forage and Extension Agronomist
Washington State University
Prosser

Fransen, S*[1], Arispe, S[2], Bohle, M[3], Brazee, B[4], Duggan, S[5], Fleenor, R[6], Hudson, T[7], Koenig, R[8], Jensen, S[9], Llewellyn, D*[10], McGregor, I[11], Neibergs, S[12], Norberg, S[13], Reid, I[14], Sagers, J[15], Shewmaker, G[16], Tanner, C[17], Wang, G[18], Westerhold, A[19], Willmore, C[20], Moore, A[21]

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[4] Range Conservationist, USDA-NRCS, Kealakekua, Hawaii, 96750
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[6] Rangeland Management , USDA-NRCS, Spokane, Washington, 99206
[7] Rangeland and Livestock Management, Washington State

University, Ellensburg, Washington, 98926
[8] Soil Scientist, Washington State University, Pullman, Washington, 99164
[9] Livestock, Range and Pasture , University of Idaho, Marsing, Idaho, 83639
[10] Livestock Specialist, Washington State University, Davenport, Washington, 99122
[11] Livestock, Forage and Irrigation, Oregon State University, Klamath Falls, Oregon, 97603
[12] Economist, Washington State University, Pullman, Washington, 99164
[13] Forage Specialist, Washington State University, Pasco, Washington, 99301
[14] Retired USDA-NRCS, USDA-NRCS, Portland, Oregon, 97232
[15] Extension Educator, University of Idaho, Rigby, Idaho, 83442
[16] Emeritus, University of Idaho, Kimberly, Idaho, 83341
[17] Dept of Crop and Soil Science, Oregon State University, Tangent, Oregon, 97389
[18] Forage Agronomist, Pennsylvania State University, University Park, Pennsylvania, 16802
[19] Economist, Kansas State University, Manhattan, Kansas, 66506
[20] Livestock and Forages, University of Idaho, Shonshone, Idaho, 83352
[21] State Resource Conservationist, USDA-NRCS, Portland, Oregon, 97232

Our team of 21 PNW faculty from three Land Grant Universities (LGR's) and three state USDA-NRCS scientists received a WSARE PDP grant to develop the Inland PNW Pasture Calendar for agents, conservationists, rangeland specialists, district conservationists, faculty, crop consultants, nutritionists, and forage / livestock producers. This PNW bulletin focuses on predicting plant and root growth through 10 pasture grass growth periods, biweekly for the full calendar year, on 14 regional Major Land Resource Areas (MLRA's) to mitigate overgrazing of greater than 23 million acres (93,078 km2) of rangeland, irrigated and non-irrigated pastures in Washington, Oregon, and Idaho. Our goal is to optimize sustainable grazing management based on growth periods in diverse PNW locations. The first 40-page contents of our bulletin include eight introduction chapters, which develop the foundational science-based fundamentals so advisers and producers can monitor expected pasture growth on 'average / dryland' or 'optimal / irrigated' regional pastures. The remaining 100-pages include 17 appendix chapters focused on, but not limited to; integrating range and tame pastures, matching animal demands with pasture productivity, soils, species, pasture growth and development, grazing behavior, how grazers impact the environment, grazing philosophies, grazing to limit rangeland fires, to burn or not burn pastures, pasture irrigation resources, and pasture economics and insurance for PNW producers. Finally, the last chapter is the appendix. Even though this bulletin was recently released (March 2024), it will be distributed through the three LGU Extension publication offices, will be available through the USDA-NRCS Field Office Technical Guides (FOTG), USDA-FSA and state conservation district commission offices. Online availability allows all clientele, to include but not limited to; WA Cattlemen's Association, WA Dairy Federation, WA Hay Growers Association, Washington Farm Bureau, Oregon Cattlemen's Association, Oregon Dairy Farmers Association, Oregon Hay and Forage Association, Oregon Sheep Gowers Association, Central Oregon Hay Growers' Association, Oregon Forage and Grassland Council, Oregon Farm Bureau, Idaho Cattle Association, Idaho Dairymen's Association, Idaho Hay and Forage Association, Idaho Wool Growers, Idaho Farm Bureau, and many tri-state county-based agricultural groups, to have free access to this PNW 708 at any time. The link to access this bulletin is: https://pubs.extension.wsu.edu/inland-pacific-northwest-pasture-calendar.

State Winners

NORTH CENTRAL	
Kansas	Sandra Wick
NORTHEAST	
Connecticut	Jennifer Cushman
SOUTHERN	
Florida	Vanweelden Matthew
Georgia	Brenda Jackson
North Carolina	Jenny Carleo
Puerto Rico	Sofía Macchiavelli Girón
South Carolina	Susan Lunt
WEST	
Arizona	Michael Chamberland
California	David Haviland

Website/Online Content

National Winner

HAMILTON COUNTY, TENNESSEE - AGRICULTURE & NATURAL RESOURCES WEBSITE

Haley Treadway
Agriculture & Natural Resource Agent
University of Tennessee, Knoxville
Chattanooga

Treadway, H[1]

[1] Agriculture & Natural Resource Agent , , Chattanooga, Tennessee, 37416

https://hamilton.tennessee.edu/agriculture-and-natural-resources/

The Hamilton County website is a shared tool amongst all county agents in the local office to promote, engage, and educate the Hamilton County public on Extension Programs. As the only ANR staff member of Hamilton County, the agriculture & natural resources portion of the website is solely managed by me. From entomology, soil testing, livestock, horticulture, ag business, and more, this corner of our site is very dynamic. Wordpress is the host site for this resource and once I developed a working competence with this tool, it became quite a project to comprehensively revamp this section of our website for the first time in nearly a decade. Our website is a living resource that is constantly updated with various tools, publications, notifications, programs, and more. The pages are focused on simplicity and visual appeal with custom-sized and curated photos/graphics to fit WordPress' digital parameters. Much time and effort is taken to develop this website, but we have learned of its effectiveness due to the sheer volume of calls and emails that we receive indicating a client having visited one of our newly developed pages which then prompted whatever question they may have. Our Ag and Natural Resources pages link to external sources whenever possible for our client's convenience as well as to maximize search engine optimization. The intention behind digital resources is to create an effective environment for beginner producers and the more experienced agriculturalists. For example, 'entomology' > 'beekeeping' > 'beekeeping resources' has caught the attention of youth clients to advanced apiculturists alike with basic publications linked and more sophisticated tools available. The website approach is very efficient and modern as newer generations emerge, people generally prefer to Google an answer vs. call an office. This means that with updated information regarding programs, we are maximizing opportunities to reach more audiences and delivering information directly and immediately.

National Finalist:

ELEVATED EQUINE WEBSITE

Ashley Best
County Extension Coordinator/ANR Agent
University of Georgia
Covington

Best, A*[1], Wassel, B*[2], Stewart, R[3], Jackson, B[4]

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[2] County Extension Coordinator/ANR Agent, University of Georgia, Zebulon, Georgia, 30295
[3] County Extension Coordinator/ANR Agent, University of Georgia, Lincolnton, Georgia, 30817
[4] County Extension Coordinator/ANR Agent, University of Georgia, Chatsworth, Georgia, 30705

University of Georgia (UGA) Cooperative Extension is uniquely poised to meet educational needs of Georgia's 250-million-dollar equine industry and to make a difference in the lives of equestrians of all ages. The Elevated Equine website is a resource for horse owners and professionals provided by UGA Cooperative Extension. The purpose of the website is to provide a centralized hub of research-based equine management information produced and compiled by UGA Extension agents for horse owners and enthusiasts. The site features 60 posts and 15 content pages stemming from four header pages: Meet the Team; The Leading Rein; Resources, and Events. Meet the Team introduces the four agents that develop the main content for the newsletter, website, and upcoming equine events. The Leading Rein tab provides ADA accessibility for articles that were originally only found in print PDF version of the award-winning equine newsletter. The Resources page holds archives from three different virtual programs, highlights commonly used UGA Extension publications and provides helpful links to other supplemental resources. The Events page chronologically lists equine related events happening in Georgia, including UGA Extension and 4-H events, virtual educational programs, and community events from Georgia equine industry stakeholders. Ashley Best is the lead agent responsible for content topics and overall design. Robyn Stewart is primarily responsible for converting print articles contributed by Ashley, Brooklyne and Brenda to blog posts and publishing them. The website was published on June 21, 2023. Since, there have been over 3100 site visits from 10 different countries and over 6145 page visits. This suggests that visitors are exploring the site and accessing multiple pages. As this

Elevated Equine website continues to grow in relevancy and accessibility, it will become the leading source of information and resources for meeting the needs of Georgia's horse industry.

Regional Winners

COVER CROP CONSIDERATIONS: A FARMER'S PERSPECTIVE

Nicole Haverback
Galva

Haverback, N*[1], Curry , R*[2]

[1] Watershed Outreach Associate, University of Illinois Extension, Galva, Illinois, 61434
[2] Agriculture and Agribusiness Educator, University of Illinois Extension, Galesburg, Illinois, 61401

At the 2023 Farm Progress Show, three Illinois farmers, Norm Deets, Chad Bell, and Cliff Schuette, sat down to discuss their experiences with cover crops and conservation practices in a live interview for the Illinois Nutrient Loss Reduction Podcast, which was then written as a post for the Nutrient Loss Reduction Blog. From their diverse locations across the state, each farmer shared insights on the role of cover crops in enhancing soil health and combating erosion in this post. Norm Deets, operating in northwestern Illinois, outlined his transition from traditional no-till farming to integrating cover crops, particularly cereal rye, into his practices. Chad Bell, operating in west-central Illinois, emphasized the need to control soil erosion and retain nutrients on his farm, which includes corn, soybeans, wheat, and a hog operation. Similarly, Cliff Schuette, farming 40 miles east of St. Louis in southern Illinois, emphasized the value of diverse cover crop mixes in improving soil biology and reducing the reliance on traditional erosion control measures. The farmers shared insights on cover crop challenges, including termination timing and chemical selection. Ultimately, their experiences reveal the importance of cover crops in addressing soil erosion and nutrient loss, with implications for soil health, biodiversity, and nutrient cycling. The blog post and their conversation provides valuable insights and considerations for farmers navigating cover crop adoption. https://go.illinois.edu/FPS_CoverCrops

USING HUSKERHORT.COM TO EDUCATE NEBRASKANS

Elizabeth Exstrom
Extension Educator
Nebraska Extension
Grand Island

Exstrom, E*[1]

[1] Extension Educator, Nebraska Extension, Grand Island, Nebraska, 68801

Newspaper columns have been a tried-and-true way to communicate with clientele, but the number of area newspapers and subscription holders is on the decline. A new way to engage with area residents was implemented to supply the public with timely, science-based information regardless of whether or not the town has a local or regional paper. HuskerHort.com is a blog that is written and produced by Nebraska Extension Educator Elizabeth Exstrom which allows clientele access to science-based information in an easy-to-use format. The objective of this blog is to educate central Nebraska's horticulture enthusiasts on a wide range of topics including wildlife, plant pathology, entomology, growing vegetables, tree planting and pruning, as well as other timely topics. Huskerhort.com began in 2013 to offer the area public access to Nebraska Extension horticulture information without a newspaper subscription or limiting online views of articles. Exstrom authors a newspaper column for area papers and then adapts the content to suit the style and requirements of the blog, which is housed on the wordpress.com platform. In May of 2023, HuskerHort.com was expanded to offer posts in both English and Spanish due to the diverse populations in several Nebraska communities. Between March 2023-March 2024 the blog received 5,883 views from 4,110 visitors with over 90,875 lifetime views. Additionally, 95 subscribers receive notifications when new blog posts are posted. The blog can be found at http://huskerhort.com.

CURATING HORTICULTURE RESEARCH FROM SOUTH DAKOTA STATE UNIVERSITY

Kristine Lang
Brookings

Lang, K*[1], Berndt, H[2], Green, J[3]

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[2] South Dakota State University, Brookings, South Dakota, 57007
[3] South Dakota State University, Brookings, South Dakota, 57007

The South Dakota State University Extension Horticulture Research website was developed within the last year to curate all local food and cut flower research updates from the SDSU Extension Horticulture team. This has become an important website for highlighting annual research updates from vegetable and cut flower trials conducted by graduate and undergraduate students, and it is also the space where collaborative research with SDSU McCrory Gardens is communicated. The target audience for this webpage includes commercial producers, green industry leaders and staff, Master Gardener volunteers, and anyone who is passionate about gardening and science. The content creation is crafted by the SDSU Extension Horticulture team, and SDSU Extension Educational Technology team members curate the website.
https://extension.sdstate.edu/tags/horticulture-research

PESTICIDE SPRAYER CALIBRATION, USE AND CARE

Amy Papineau
Extension Field Specialist, Food & Agriculture
UNH Cooperative Extension
Brentwood

Papineau, A*[1], Hamilton, G[2], Perra, T[3]

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[2] Extension Specialist, emeritus, UNH Extension, Milford, New Hampshire, 03055
[3] Administrative Assistant, UNH Extension, Brentwood, New Hampshire, 03833

Pesticide applicators look to Cooperative Extension for guidance on how to make the most effective and efficient use of their valuable spray equipment. Applicators recognize that proper calibration and care has a big impact on how effective pest control sprays are in controlling target pests and on achieving target application rates. When a sprayer is not performing as intended, the results can be costly and potentially hazardous to people and the environment. To help applicators know how to use and care for their equipment, and to know how variables in use and care impact efficacy and efficiency, UNH Extension has developed a large collection of resources that provide guidance and education. These resources exist in various formats, including fact sheets, videos, worksheets, webinars, and online classes, presenting information in multiple ways to meet individuals' unique learning styles and to present information from multiple perspectives. Extension Specialist, Amy Papineau, and retired Extension Specialist, George Hamilton, worked together to find all the available resources produced and distributed by UNH Extension and to compile the full collection in one easy to navigate webpage. Prior to development of this page, resources were scattered across many disjointed branches of the UNH Extension website, and some were not posted on the website at all but were only accessible through an internet search. Amy Papineau developed the layout and authored the text of the webpage, providing short 1-2 sentence descriptions of each resource to familiarize users with the available content and to help users find the topics that apply to their operations. The resources are organized by sprayer type, allowing users to see all the available resources that will help them with the particular type of equipment they are using. Tricia perra manages webpage edits and additions.

With all resources hosted on a single webpage, information is easy to find and Extension specialists are able to direct clients to the full collection with a single link. This collection of resources has been promoted through the UNH Extension Agriculture Update newsletter, reaching approximately 6,500 inboxes, and on the UNH Extension Facebook page with 12,000 followers.
https://extension.unh.edu/blog/2024/01/pesticide-sprayer-calibration-use-care

PRODUCE SAFETY ALLIANCE WEBTOOL FOR EPA-LABELED SANITIZERS FOR PRODUCE

Elizabeth Bihn
Director, Produce Safety Alliance
Cornell University Dept of Food Science
Geneva

Clements, D[1], Stoeckel, D[2], Way, R[3], Acuna-Maldonado, L[4], Villarreal Silva, M[5], Melville, T[6], Ramos, T[7], Fisk, C[8], Wall, G[9], Woods, K[10], Bugingo, C[11], Bihn, E*[12]

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This Produce Safety Alliance (PSA) sanitizer webtool was designed as a resource to help produce growers, extension educators, and others review Environmental Protection Agency (EPA)-labeled sanitizers. Sanitizers used in water prevent cross-contamination during certain pre-harvest, harvest, and postharvest activities, including treating irrigation water, cleaning and sanitizing food contact surfaces, and maintaining the quality of produce wash water. Navigating labels and selecting a sanitizer based on those specific uses can be challenging. This resource reviews the labeled uses of over 100 EPA-labeled sanitizers and allows the user to search, sort, and compare specific products based on several factors, including labeled uses, active ingredient, efficacy statement, and Organic Materials Review Institute (OMRI) listing. Direct links to the EPA label, product label, and manufacturer's contact information, when publicly available, are also included. This resource was developed to supplement the standardized PSA Grower Training Course, in response to growers' requests for recommendations on choosing a sanitizer. The PSA Sanitizer webtool is an integral part of a group of sanitizer resources developed by the PSA to help growers meet the requirements of the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) as well as buyer food safety requirements. The PSA sanitizer webtool can be found online at: https://resources.producesafetyalliance.cornell.edu/sanitizer/. Clements coordinated development, led updates, incorporated focus group feedback, and gave final review. Clements, Stoeckel, Ramos, Bugingo, and Melville searched for sanitizer labels. Stoeckel reviewed labels, gave technical feedback, and reviewed for accuracy. Way developed the web tool infrastructure. Bihn co-led the focus group with Clements, provided structural suggestions, and final input on technical decisions. The webtool has been viewed 519 times since being released to the public in January 2024. The webtool and lessons learned during the development of this resource, have been highlighted during PSA webinars, produce safety conferences, and trainings. A previous version of the PSA sanitizer list, originally released with limited functionality as an Excel file, was the most accessed resource on the PSA website with 5,085 accessions since 2017. Clements, Bihn, Wall, Fisk, Stoeckel, and Woods developed the original Excel tool.

PENN STATE GREEN INDUSTRY TEAM ALERTS: TIMELY INSIGHTS AND MULTIMEDIA-RICH CONTENT DISSEMINATION

Tom Butzler
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Penn State
Mill Hall

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[17] Extension Educator, Penn State Extension, Leesport, Pennsylvania, 19533
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Penn State Extension's Green Industry Team convenes monthly to discuss various topics, such as marketing efforts and administrative updates, followed by sharing firsthand observations gathered during site visits, phone consultations, and email correspondence. These insights form the basis of the "Green Industry Current Issues" alerts, promptly disseminated to industry professionals within two days of each meeting for timely updates. Each alert topic is short, typically two to three paragraphs, but includes links to fact sheets for further exploration. Additionally, the electronic format includes rich multimedia content, such as photographs and videos. The October 2023 issue of the Green Industry Current Issues (https://extension.psu.edu/2023-green-industry-current-issues-for-october) covered several topics, including European Hornets. A photo, a link to a video showcasing hornet activity, and access to an in-depth Penn State Extension fact sheet accompanied a brief overview. These alerts are a vital resource for professionals in the field, providing up-to-date information and multimedia content to enhance understanding.
The distribution of these alerts is facilitated through a dedicated listserve, ensuring broad accessibility and timely delivery to industry professionals. This strategy has proven effective, as evidenced by engagement metrics; the October issue alone garnered views from 402 individuals.

FORAGE DROPS - AN EDUCATIONAL FORAGE AND LIVESTOCK CHANNEL

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Blackville

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Forage Drops was created by Dr. Liliane Silva on December/2020. The goal is to develop timely and weekly educational content on forages and livestock-related topics for Extension clientele. From 2020 to August 2021, Dr. Silva posted Forage Drops videos on Alabama Cooperative Extension System channels where Silva was a Postdoctoral Fellow. Since January 2022, Dr. Silva has developed a multi-channel social media effort for Forage Drops expanding her project to pages on YouTube, Facebook, LinkedIn, and Instagram. Dr. Silva is responsible for developing and managing content for Forage Drops and currently, she uses the resources to continue to develop educational content and to provide research updates regarding her research studies and program, and programming activities (Extension publications, etc.). The reach and engagement of her pages currently average 240,000 people/year. She has over 270 subscribers on YouTube and over 420 on Facebook and Instagram. She continues to focus on developing content and has been able to reach several states and countries. The address for Forage Drops on YouTube is https://www.youtube.com/channel/UC2fj2-Vnat-_GR6rFmLz8Ag

AGRICULTURE PRODUCTION AND SOILS CALCULATORS

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In 2023, Dr. Casey Matney, in collaboration with University of Alaska Fairbanks Cooperative Extension Service communications team developed a website for calculators that could be used in agriculture production and soil development. The site hosts updated calculators that allow users to: calculate stocking rates, convert and interpret values of nitrate in forages, calculate pasture and wildland seeding rates, and help farmers and gardeners interpret soil test results. The website contains seven pages that provide interactive and synchronous calculations that the public can use on smart phones, tablets, and personal computers.
https://www.uaf.edu/ces/agriculture/calculators/

NORTHEASTERN ARIZONA AGRICULTURE FACEBOOK PAGE

Anita Thompson
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Taylor

Thompson, A[1]

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Northeastern Arizona is culturally diverse and very rural, and has unique agricultural communities. The area includes parts of Coconino and Greenlee counties, as well as all of Navajo and Apache counties. Four tribal affiliations have lands in the area, including Hopi, Dine', White Mountain Apache, and Zuni. While raising livestock such as sheep, goats and cattle is what the area is best known for, there is also row cropping, small-scale market farming, greenhouses and lavender production. Most producers have conventional operations, but there is rising interest in organic and biodynamic practices. Having a way to communicate information and events has been a challenge with all the agricultural diversity. To assist in the communication a Facebook page was created that did not serve one specific group, but instead serves everyone involved in agriculture in northeastern Arizona. When the Facebook page was started in 2022, it was slow to gain followers and traction in the local communities. Over time, the page has built up to 597 followers, reaches over 1000 viewers per week, and post engagement can range from five people to fifty people, depending on the topic. Our most popular topics are fact sheets on plants that are toxic to livestock, followed by posts on seed starting and poultry. The page also shares upcoming events from other Extension departments and occasionally from other state extensions if they are relevant to the geographic and climactic challenges of the area. For the future, the page will continue to share agricultural information that is relevant and supportive to northeastern Arizona farmers and ranchers.
https://www.facebook.com/northeasternazagriculture

SLUG (AND SNAIL!) WEEK – A SOCIAL MEDIA CAMPAIGN FOR WET OREGON GARDENERS

LeAnn Locher
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Slugs are one of the most common pests for Oregon gardeners gardening in wet, Western Oregon areas. During the spring, slugs are visible and create damage in home gardens that is easily treatable. A social media campaign was launched during the time of year gardeners would be seeing slug damage. Content included repurposing existing web content into appropriate social media content, as well as developing original content.

Recent research by OSU slug specialists has been widely published regarding the effectiveness of yeast as bait for attracting slugs. However, this research had not been translated into home use. Using the ingredients and ratio used by our OSU slug specialist, I demonstrated, step by step and with original photos, how to replicate this approach in a home garden. This multi-image post on Facebook and Instagram was the most popular content of the Slug Week campaign, generating 142,200 impressions. Over the course of one week, May 22-May 26, 2023, 33 posts were made on the OSU Extension Master Gardener social media accounts. 19 on Facebook, 15 on Instagram, plus 20 stories on Instagram. These posts recorded impressions of 474,581, with the most popular content, by far, being the demonstration of applying the OSU slug research for the home gardener. For the first time, we were

demonstrating the interpretation of this new slug research from OSU to home gardeners.

All content was written in plain language, and appropriate for the use in social media, including the use of memes, humor, along with deep science interpretation and options. Posts were built upon science from the College of Agriculture and the OSU Slug Portal, but made appropriate for short sharing in social media and included links to reference for more information.

Hashtags #SlugWeek and a visual brand were used to make the campaign easy to find and to meet people where they were: in their Facebook and Instagram feeds. Different styles of posts, from videos, carousels, still photos and reels were developed, to encourage the algorithm to reach as many followers as possible, and to deliver different learning options to viewers.

https://www.instagram.com/p/CslrazPvLUH/?img_index=1
https://www.instagram.com/p/CsoOJ-Wv_MP/?img_index=1
https://www.instagram.com/reel/CsjEqdWhOAV/
https://www.facebook.com/share/GRhhxZcp4yLDbiKB/?mibextid=WC7FNe

State Winners

NORTH CENTRAL	
Kansas	Sandra Wick
Ohio	Mark Badertscher
Wisconsin	Heather Schlesser
NORTHEAST	
Maryland	Paul Goeringer
SOUTHERN	
Alabama	Melissa Voynich
Florida	Taylor Clem
Kentucky	Kristin Hildabrand
North Carolina	Liz Joseph
Oklahoma	Kennedy McCall
Texas	Matt Garrett

Learning Module/Notebook

National Winner

FARM AND RANCH LEARNING LAB KIT

Shelly Dee Jepsen
Professor and State Specialist, Ag Safety and Health
Ohio State University Extension
Columbus

Jepsen, S*[1], Murphy, D[2], Wright, J[3], Bowman, T[4]

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[4] Graphic Designer, The Ohio State University, Columbus, Ohio, 43210

The Farm and Ranch Safety Learning Lab Kit is our answer to experiential learning and making learning about agricultural safety tactile and fun for youth. Packaged in a canvas tote (26” long x 20” high x 7” wide) there are durable, reusable, hands-on resources, with content that is scalable for teaching and evaluating youth of all ages and skill levels. Materials are printed on heavy stock with clear, easy-to-read lettering and are color-coded for easy organization. An inventory list on page 203 of the Educators Resource Materials Set identifies all components. Many activities include polystyrene tags for youth to identify parts and name images. This unique, hands-on approach allows youth to make a selection, change it, and if necessary change it again while working out the answer. The posters are double-sided, and ideal for educators to be effective at explaining answers so the participants learn and remember information. The topics include: risk factors, points of peril, PPE, hand signals, tractor operation, SMV placement, implement attachment and driving with an implement, skid steer and front-end loader controls, charging a battery, and more. Also included is the publication, National Farm and Ranch Safety Leader’s Guide, with over 300 pages of content and activities, many of which complement the content of this Learning Lab. Perfect for 4-H clubs and tractor club activities, FFA chapters, Ag in the Classroom activities, skillathons, and agricultural association activities; the Learning Lab Kit is an excellent method of involving youth in challenging, learn-by-doing activities. It bring lessons to life! For NACAA judging purposes, a pdf of the Educator’s Resource Materials Set is uploaded to show the kit’s contents. To view a link to the visit: https://extensionpubs.

osu.edu/farm-and-ranch-safety-learning-lab-kit/ The lead author Dee Jepsen was responsible for creating and pilot testing the activities, while including student assistants in the Departments of Agricultural Systems Management and Agricultural Communications, Education, and Leadership. The OSU production team provided technical design, print layout, and graphic coordination. The publication was funded by a USDA-NIFA grant (award 2016-41521-25879/2017-41521-27067).

National Finalists:

PLANNING FOR EMERGENCY LIVESTOCK TRANSPORT RESPONSE (PELTR) HYBRID LEARNING

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University of Wisconsin Madison Division of Extension
Medford

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[4] State Outreach Beef Specialist, University of WI-Madison Division of Extension, Bloomer, Wisconsin, 54724

Livestock transportation is critical for Wisconsin's food supply and is highly visible to the public, with animals transported between farms, points of sale, and processing facilities. Many first responders lacked experience with roadway incidents involving livestock trailers and asked us for training. The course was an in-person, day-long program before 2020 and included our original PowerPoint presentations and fact sheets. We converted PELTR to a hybrid program (online modules and a half-day in-person session) in response to meeting restrictions because of the COVID-19 pandemic. In addition to the original content, the online modules include our recorded videos, note pages, quizzes, and supplemental materials. To accommodate learning styles, participants received a hard copy manual of the materials. Stuttgen, Schlesser, and Seefeldt organized the Canvas Learning Management System (https://canvas.wisc.edu/courses/400316) curriculum and we administered the online discussions and grading. Halfman developed and led the in-person multi-deck livestock trailer tour and with another co-author, facilitated tabletop scenarios. Throughout the program, we encourage participants to share the information and skills learned with other local responders and to develop their response plans. To date, 52 people have taken the course. In 2023, we surveyed the 27 participants from the four November 2021 to October 2022 classes and we learned how they currently use the information and their suggested course improvements. The Retrospective Evaluation of the Hybrid PELTR Program included with this submission summarizes the results. Twenty-one participants at two October 2023 sessions self-reported an average 1.4-point increase in knowledge about PELTR topics using a 5-point Likert scale, ranking excellent at 5 points and poor at 1 point. Changes in knowledge about how the trailer design impacts extrication from a wrecked trailer and safety concerns regarding roadside containment scored the highest points, 2.20 and 1.63 points, respectively. Take-home messages included "how differently cattle and animals behave and how their size makes them dangerous; learning how to contain livestock to prevent secondary crashes; learning how first responders triage the scene and about their chain of command; and planning for how to move the animals and carcass disposal.

THE BASICS OF EQUINE NUTRITION WORKBOOK ENHANCES HORSE OWNER UNDERSTANDING AND CONFIDENCE IN EQUINE NUTRITION

Robyn Stewart
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Research indicates horse owners are particularly interested in learning about horse health and nutrition, often turning to veterinarians, the internet, and written or virtual sources for information (Hartmann et al., 2017). Since 2020, the UGA Horse Owner's Webinar Series aims to address both the learning method and content needs of horse owners through evidence-based equine education. A participant workbook was created following the 2023 Basics of Equine Nutrition series, available here: Basics of Equine Nutrition Workbook.pdf, to provide information on equine nutrition to course participants. It was also used to offer foundational knowledge to participants in the 2024 Applied Equine Nutrition series. The author was responsible for translating the recorded webinars into core concepts, writing the workbook,

designing learning activities, and sourcing supplemental materials. The document consists of five content chapters containing specific learning objectives, links to webinars and resources, key concepts, and practical applications of core equine nutrition principles. The final chapter contains worksheets from each chapter to assess reader understanding of the content as well as a walk-through to assist readers with analysis of their horse's diet. Since its launch in 2023, the workbook has been viewed 2,332 times and shared via hard copy or email to over 475 individuals. The workbook was published on the Elevated Equine Website and via Facebook post, which has reached 36,684 people with 98 shares and 3,045 engagements. Feedback from participants via private correspondence and a Qualtrics survey revealed unanimous agreement (100%) on the workbook's organization, visual appeal, accuracy, relevance, trustworthiness, and user-friendly language. Participants reported improved understanding of equine nutrition, increased confidence in making nutrition decisions, and a better grasp of how to feed their horses. One participant expressed gratitude, stating, "It has been super helpful for guiding me around tweaking my 30-year-old hard keeper's diet. It's nice to know the 'why,' and being able to trust that the info is good/trustworthy/researched is SO valuable." In response to the positive feedback and use of this resource, a second workbook covering the 2024 Applied Equine Nutrition series is currently being written.

Regional Winners

EMERGENCY RESPONSE TO ACCIDENTS INVOLVING LIVESTOCK VIRTUAL TRAINING

Mike Metzger
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The Emergency Response to Accidents Involving Livestock (ERAIL) program is focused on providing resources and training for individuals that potentially could be involved in responding to an accident where farm animals are involved. This 12-module virtual training (https://mediaspace.msu.edu/media/ERAIL+Online+Course+Video/1_iy6g7a3b) provides participants with the information needed to respond to these types of accidents effectively and efficiently. Following this training, participants will have a better understanding of the types of situations that can occur with accidents involving animals, animal handling and behavior, incident command and accident response, along with the types of tools and equipment needed during an accident response. To date, over 700 first responders have attended ERAIL training with virtual training as one of the training options. ERAIL training, preparedness and access to appropriate resources have allowed for efficient and successful responses to accidents on several occasions in Michigan as first responders utilized most of the equipment contained in the ERAIL response trailer and applied what they had learned through previous trainings to a real-life scenario. In the end, the real success lies with the involvement of all the different organizations and individuals within those organizations working together as one to bring a resource such as the ERAIL training and trailer to communities to help ensure public safety related to the accident scene, aids in mitigating animal welfare concerns and services first responders as well as the animal agriculture industry when responding to accidents involving livestock.

FOUNDATIONS OF SHELLFISH FARMING COURSE AND AQUACULTURE VIDEO PLAYLIST

Stacey Stearns
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Storrs

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Foundations of Shellfish Farming is an extension training course for new and prospective farmers and those who simply seek to learn more about aquaculture practices and techniques. Topics covered include: how to establish and operate a shellfish business; leasing and permitting requirements; considerations for gear, vessels, and facilities, shellfish biology, aquaculture techniques and best practices, and risks involved in farming shellfish. Although the course will concentrate on Long Island Sound waters within the jurisdiction of Connecticut, the topics and practices covered are applicable in the Northeast United States and potentially beyond. The course was piloted in 2023 and is now in its second offering. An online, self-paced course is now under development. The purpose of the course is to provide students the foundation necessary to become successful in commercial aquaculture.
The Connecticut Aquaculture YouTube Video Playlist was created in 2024 as an outreach tool for engaging Connecticut residents, students, youth and families about social, cultural, environmental and economic aspects of aquaculture. In addition to the videos created by the team, other relevant videos developed by partner organizations are added (though not included in the list below). Additionally, segments from these videos have been incorporated into the Foundations of Shellfish Farming extension training course, giving students more experiential classroom learning.

These projects help us work towards the programmatic goal of increasing aquaculture production, and ultimately a future in which aquaculture supplies food, jobs, and economic and cultural benefits in Connecticut and beyond. The program is sponsored by Connecticut Sea Grant, UConn Extension, and the Connecticut Department of Agriculture. Partners included Defining Video and Photo, and farmers, researchers, and resource managers across Connecticut.

'MORE THAN WORDS' PRODUCE SAFETY ILLUSTRATIONS

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Geneva

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The More than Words (MTW) project is a resource to help trainers effectively communicate key food safety concepts without the use of text. This resource contains 21 illustrations and supplemental teaching notes to support English- and Spanish-speaking trainers teach complex regulatory and scientific concepts to produce growers, packers, employees, and other industry members. This resource was developed for those working with limited literacy growers, visual learners, and growers that speak a language where there is no translation of the PSA Grower Training manual. MTW is intended to supplement the PSA Grower Training Course, the standardized curriculum for the Food Safety Modernization Act Produce Safety Rule. The illustrations can be used to promote interaction and discussion during the training. They cover various produce safety topics, including worker training, cleaning and sanitation, soil amendments, flooding, and other postharvest practices. Each illustration contains a downloadable set of teaching notes to support educators and ensure accurate, effective representation of the illustration. The teaching notes include key teaching points, relevant references to the FSMA Produce Safety Rule, and suggestions for where to use the illustrations in the PSA Grower Training Course. The development process for these illustrations started with a survey of PSA Trainers to help prioritize topic areas for development. An ad hoc committee of educators and two grower focus groups provided feedback on the draft illustrations. The MTW illustrations and teaching notes are available in both

English and Spanish. The resource can be found online in English: https://cals.cornell.edu/produce-safety-alliance/resources/trainer-resources/more-words-illustrations and Spanish: https://es.producesafetyalliance.cornell.edu/curso-capacitando-al-instructor/recursos-para-instructores/mas-alla-de-las-palabras/. The MTW website has been viewed 1,351 times in English and 70 times in Spanish. The complete set of illustrations and teaching notes were finalized in English in late 2023 and in Spanish in early 2024. Wall developed the concept and survey for input from PSA Trainers. Wall and Clements coordinated project and communications with illustrator, Anni Matsick. Bihn, Clements, Wall, and George provided input to illustrator. Clements and Bihn organized ad hoc committee and focus groups for feedback. Clements, George, Bihn, Acuña-Maldonado, and Villarreal Silva developed teaching notes. Acuña-Maldonado and Villarreal Silva provided translations.

FOREST DENDROLOGY: A STUDY GUIDE FOR FLORIDA FFA FORESTY TEAMS COMPETING IN THEIR DISTRICT AND STATE COMPETITIONS

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Florida Cooperative Extension
MacClenny

Lamborn, A*[1]
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The purpose of this learning module is to support Florida Future Farmers of America (FFA) Forestry Team advisors and their students who may lack the knowledge and skills to identify trees. It was created to supplement classroom lessons and the experiential learning that takes place locally in the Baker County Extension Arboretum as a take-home study guide. The objectives of this learning module are to improve tree identification skills among middle and high school FFA forestry students, prepare teams for their district and state competitions, and improve individual scores (first, second, or third overall) in the forest dendrology section of the contest. I began this project as a series of fact sheets which were completed and compiled into a printed bound notebook to create the learning module in 2023. It was prepared using Canva, an online graphic design tool, using Canva images, original photos taken by myself, and original photos used with permission (primarily from Bugwood.org). I designed the layout and formatting, and edited all photos and images to remove backgrounds, enhance visibility of leaf characteristics, and clearly show relationships between leaf divisions and leaf arrangements. The learning module has been used by two local FFA advisors and 16 students to prepare for their district competition. Results include five students that placed individually (first, second, or third overall) in the forest dendrology section and one middle school team earning first place overall in the district competition to advance to the state contest. Additionally, advisors from two neighboring counties contacted me to request the study guide after seeing it at the district contest. Link to PDF: Forest Dendrology Study Guide or drive.google.com/file/d/1idfXE3ightB5kbt-Tdqiz0pCjGGt51gE/view?usp=sharing

CERTIFIED LAWN CARE PROFESSIONAL PROGRAM

Anna Duncan
Extension Specialist
University of Tennessee
Decherd

Duncan, A*[1], Brosnan, J[2], Stefanski, J*[3], Mote, M*[4], Reeder, T*[5], Whitehouse, S*[6], Cooper, C*[7], Garrett, J*[8], Carr, T[9], Pritchard, B[10], Dickson, K[11], Horvath, B[12], Bumgarner, N*[13], Sorochan, J[14]

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[9] Graduate Student, University of Tennessee, Knoxville, Tennessee, 37996
[10] Graduate Student, University of Tennessee, Knoxville, Tennessee, 37996
[11] Research Scientist, University of Tennessee , Knoxville, Tennessee, 37996
[12] Professor, University of Tennessee, Knoxville, Tennessee, 37996
[13] Associate Professor and Extension Specialist, University of Tennessee, Knoxville, Tennessee, 37996
[14] Professor, University of Tennessee, Knoxville, Tennessee, 37996

The demand for well-trained residential turfgrass management professionals is far outpacing the current supply. To address this critical need in workforce development, the University of Tennessee Extension Certified Lawn Care Professional course was developed to provide a strong foundational education for anyone looking to begin or bolster their career in turfgrass management. This online course includes 11 instructional modules that cover the foundational basics of turfgrass management from species identification to environmental management as well as the practical aspects of equipment maintenance and safety. Participants receive a certificate of completion that is valid for two years and can be renewed thereafter. The development of this course was led by Anna Duncan, the Digital Certification and Training Program Coordinator for University of Tennessee Plant Sciences. Duncan planned, recorded, and edited all educational videos; developed assessments; curated supplemental resources; and built the course site. Other team members including departmental faculty, agents, and specialists contributed to course development by teaching on video and recording voice-overs. Team members and peers reviewed the course to ensure content accuracy and a positive user experience. Since the course launched in the Spring of 2023, 126 participants from 14 states have enrolled, including 26 Extension agents taking the course for professional development credits. Participants have given the course an average rating of 4.8 out of 5 and provided comments such as, “I thought this was a great introduction of the basics of turf for a beginner coming in new to this field or even for field veterans. Excellent work!” and “Good information, presented in a digestible form.” 95% of participants indicated they are likely or extremely likely to implement the practices taught in the course. We acknowledge the length of this course when viewed in its entirety and aim to respect the time of our judges. Therefore, two modules, Module 5- Soil Fertility and Module 6- Water Management, are the focus of the submission. Please feel free to sample any material from other modules as well. The course can be accessed at tiny.utk.edu/UTCLCP. Login information will be given to the award chairs for judging.

LEARNING MODULE/NOTEBOOK AWARD: SCRUB: SCIENCE CREATES REAL UNDERSTANDING OF BIOSECURITY CURRICULUM

Betsy Greene
Extension Horse Specialist
University of Arizona
Tucson

Greene, B*[1]

[1] Extension Horse Specialist, University of Arizona, Tucson, Arizona, 85721-0090

Science Creates Real Understanding of Biosecurity (SCRUB) curriculum provides hands-on activities to teach livestock owners about biosecurity, since their animals may be at risk every time they travel or come in contact with new animals. By educating livestock owners on disease transfer, disease spread potential can be decreased. The curriculum has been professionally printed, but is freely available online (https://extension.arizona.edu/pubs/scrub-science-creates-real-understanding-biosecurity) and provides all information needed for any instructor (with or without biosecurity and animal knowledge) to conduct the lessons. SCRUB was developed for 10-18-year-old youth but has been effectively incorporated into trainings for all ages of livestock industry members. Module 1 focuses on cleaning and disinfecting, with hand washing effectiveness, and typical barn surfaces cleaning activities. Module 2 explores direct/indirect disease transfer incorporating a simple, but powerful activity showing speed of disease transfer between animals, introducing zoonosis, fomites, and vector concepts. Module 3 addresses types, effectiveness, and proper handling/storage of vaccinations, using a cooler building activity. Module 4 ties previous lessons together with disease prevention strategies in animal facilities. In spring 2023, a pilot project evaluated pairs of 4th grade students (9-10-years-old) answering two qualitative questions (What does biosecurity mean? and How can animals pass an illness to another?) before and after a SCRUB hands-on lesson. Of the 75 completed surveys, 85% (n=64) of paired students surveyed showed an improved ability to define biosecurity after the lesson. Even where the pre-response was correct (19%), the post response was correct but different (39%), providing some additional detail or adding the term “vector” (2%), thus, 63% of student pairs surveyed improved their ability to describe how animals can pass illness. This curriculum has been taught to 4-H youth/adults, tribal ranchers and youth, horse owners, county agents/specialists, Oklahoma and Massachusetts Agriculture teachers, and even CDC Veterinarians/Epidemiologists, with the difficulty level adapted based on audiences. B. Greene and K. Hiney are

primary authors, equally responsible for approximately 90% of content, design, editors, and they have tested and utilized this curriculum at a national level. This project was supported in part with USDA/NIFA funding. It has been distributed to over 1,000 people since publication.

NORTHWEST NEW MEXICO NEW FARMER TOOLKIT

Bonnie Hopkins
County Extension Agent/Agriculture
New Mexico State University
Aztec

Medlock, W*[1], Medlock, W[2], Foster, A[3]

[1] County Extension Agent/Agriculture, NMSU CES San Juan County, Aztec, New Mexico, 87410
[2] Program Coordinator, New Mexico State University, CES San Juan County, Aztec, New Mexico, 87410
[3] Program Coordinator, New Mexico State University, Aztec, New Mexico, 87410

Northwest New Mexico's local food system faces several challenges, including an aging farmer population, loss of agricultural lands, and farmers' access. Historically, farming skills were passed down from generation to generation. However, we are now observing first-generation farmers who may not have had the luxury of inheriting farmland and learning skills and knowledge from their upbringing. Therefore, it is paramount to equip these aspiring farmers with a comprehensive resource to set them up for success. The Cooperative Extension service in San Juan County, NM, recognized the need to foster the next generation of farmers to sustain our local food system, environment, and public health and created the Northwest New Mexico New Farmer Toolkit.

The purpose of the NWNM New Farmer Toolkit was to create a working document for new farmers in Northwest New Mexico for essential business planning for their new farm operation. The tool kit was utilized and expanded in a six-week "New Farmer Training" program in spring 2023 and 2024. The toolkit is broken down into categories that align with the in-person training and contains additional resources to expand the business planning process for participants. Each section includes a workbook area for ideas and brainstorming to assist each new farmer best. The toolkit provides guidance for farmers to identify and address unique challenges to their operations through a holistic approach to identifying a wide array of information and goals.

The handbook was printed and bound into a class binder so participants could include printed class materials and other resources weekly. The toolkit addresses issues specific to the NWNM region of New Mexico, including Land Access, Soil Principles and Health, Integrated Pest Management, Irrigation Planning, Crop Systems Planning, On-Farm Food Safety, and Business Planning. In total, 62 New Farmer Training participants have utilized the toolkit, which has been distributed to an additional 45 community members by request.

THRIVING HIVES: THE BEEKEEPER'S ANNUAL JOURNAL

Andree Walker Bravo
Director for County Operations
Utah State University
Salt Lake City

Walker Bravo, A*[1], Gunnell, J*[2]

[1] Director for County Operations, Utah State University Extension, Salt Lake City, Utah, 84190
[2] USU Extension Professor, Utah State University, Logan, Utah, 84322

This beekeeping journal organizes apiary information at your fingertips, along with monthly tasks and tips to help beekeepers be successful with their hives.

State Winners

NORTH CENTRAL	
Kansas	Shad Marston
NORTHEAST	
Maryland	Paul Goeringer
Pennsylvania	Cassie Yost
SOUTHERN	
Kentucky	Macy Fawns
North Carolina	Becky Spearman
South Carolina	Charly Greenthaler
Virginia	Tom Stanley
WEST	
California	Dustin Blakey

Published Photo

National Winner

OSU EXTENSION AGRICULTURAL TOURISM

Audrey Comerford
Agritourism Coordinator
Oregon State University
Salem

The photograph depicts a group of adults learning how to make a dried flower wreath on a flower farm in the Willamette Valley. This is an educational activity that falls under the umbrella of agritourism and teaches the public how to use certain farm products. By doing this, the flower farm can extend their season by drying cut flowers to sell for wreath making. Classes such as this are fun and educational, connecting the public with working lands and Oregon agricultural products. The photograph was published in An Initial Economic Impact Estimate of Agritourism in Oregon's Willamette Valley as an example of on-farm education and agritourism. The publication is for industry, community leaders, and decision makers and is available online through the OSU Extension catalog as well as in printed PDF copies. The online version can be found at this link: https://extension.oregonstate.edu/catalog/pub/em-9421-initial-economic-impact-estimate-agritourism-oregons-willamette-valley The report has been published since February 8, 2024 and has had 244 individual views during that time.

National Finalists:

MONARCH BUTTERFLY ON SUNFLOWER

Jessica Bessin
Horticulture
Universtiy of Kentucky
Harrodsburg

This photo of a newly hatched monarch butterfly stretching her wings in the morning sun on a sunflower was taken on September 7th, 2023 using an IPhone 13 Pro. The agent originally took it to commemorate the occasion of releasing the butterfly with her young son. The picture was ultimately used in two ways. 1.) An article was written in January, 2024 From the Ground Up horticulture newsletter. The article focused on seed catalogs and the joy that gardening can bring. The newsletter reaches 490 residents of Mercer County, Kentucky, primarily homeowners and some commercial growers with timely information on horticulture topics. The newsletter was also posted to the Mercer County Extension Horticulture Page (366 followers) and the Mercer County Extension Page (2,611 followers) 2.) This image will be used again this upcoming summer to advertise a Monarch butterfly workshop. The impact of this photo shows the beauty of these incredible creatures and the need for planting pollinator friendly plants.

HORT Q&A: FLOWERING BULBS

Carla Smith
Ext Ed Horticulture/4-H
Oklahoma State University Extension
Shawnee

This photo was published in the Shawnee News Star, both in print and for online viewing in conjunction with an article on when to plant spring flowering bulbs for local community education. It was published on September 28, 2023 with a print reach of 6,000 subscribers plus online viewing. The caption simply read - Photo Credit: Photo by Carla Smith. I took the photo with an android cell phone camera during a master gardener field trip to a local commercial flower farm. The photo was taken on March 30, 2023 in Harrah, Oklahoma at Oklahoma Tulips Flower Farm. I have worked with this producer as an advisor for his agritourism u-pick operation. Although tulips are treated as an annual here, the farm caters to professional and amateur photographers, clients of all ages, local florists, spring brides, and the Tulip Mania event at Myriad Gardens in Oklahoma City. Because of our climate, flower farms take a big risk here. Many are small operations and there are not very many of them, making photos incredibly sought after by photographers and the farm a very special place to visit.
The link to the online photo and article:
https://www.news-star.com/?s=Carla+Smith++When+to+plant+spring+flowering+bulbs&ct_post_type=post%3Apage%3Awcag_scan
The link to the online photo only: https://www.news-star.com/2023/09/hort-qa-flowering-bulbs-2/

DUALITY OF CHRISTMAS TREES

Timothy Waller
Agriculture & Natural Resources County Agent III
Rutgers
Millville

Christmas trees are an incredibly important horticulture crop to many throughout the United States, yet public understanding of the trials and tribulations growers experience over the 7+ years it takes to go from seedling to sale is often missed. The photo here, "Duality of Christmas Trees" shows the visually striking juxtaposition of a harvest-aged, mature Canaan Fir (Abies balsamea

var. phanerolepis) tree, and the damages inflicted due to Phytophthora (root disease) in combination with environmental stress. This tree is growing only a few hundred feet from the Appalachian Trail in northwestern NJ, linking these two culturally important, American heritages. Nationwide, Christmas tree production is regularly challenged by species of Phytophthora and other root diseases, which can be further exacerbated by climatic variation and increasing temperatures. Consumers associate Christmas trees with winter months, yet these plants can be severely impacted by sudden freeze and frost damage, events that are becoming more and more unpredictable during early spring seasons. Conifers are often slow to show the true extent of their damages, which is especially true regarding root water relations. Adding to the duality, Phytophthora, a 'water-mold', can rapidly move through plantings during flood events, but can also gain a foothold in drought conditions, further weakening trees. This image is focused on a cone, or hope for the future, which underpins the entirety of Extension. The photo was published on the Rutgers Plant and Pest Advisory Christmas Tree Edition here: https://go.rutgers.edu/ogtqh8os to the 131 subscribers. This image has also been used in extension education sessions, most notably at the Winter 2024 New Jersey Christmas Tree Growers Association meeting, attended by 80+ growers, when presenting 'Phytophthora In's Out's Do's and Don'ts' keynote seminar based on recent pathogen mapping and trial data conducted by Tim Waller and William Errickson of Rutgers Cooperative Extension.

Regional Winners

CALENDAR MAY 2024

Shad Marston
County Extension Agent
K-State Research and Extension
McPherson

This photo was taken June 5, 2023 during the Educa-Fun Youth Day Camp. This day camp was free to attend and involved learning activities for children ages 9-12. Campers participated in cooking and STEM activities along with learning about all the different projects 4-H has to offer by visiting the different stations. This day was about all things 4-H and this photo helped capture the moment of a 4-H junior leader describing his beef project to future members. In the picture, Isom Marston was talking about his Charolais heifers. The children got to ask question about the animals. This picture was then selected to be on the cover of the McPherson County, K-State Research and Extension 2024 Calendar, representing the month of May 2024. The calendar was picked up from the printers on Dec. 20, 2023. This photo helps paint a picture of youth learning from older members of 4-H. Getting exposed to new projects that some youth never get to experience. This calendar informs our community with all the events here is McPherson County, throughout the year. This calendar is just another way of using pictures to tell the story of K-State Research and Extension. We use the pictures to show all the different activities that take place in Family and Consumer Science, 4-H Development and in the field of Agriculture. 500 calendars were printed with the option of printing more, if needed. Our office has handed these calendars out during events that took place in January and February, with few stationed by our front door for pick up, throughout the year.

LIVING WEED EXHIBIT AT CARRINGTON REC

Gregory Endres
Extension Cropping Systems Specialist
NDSU Extension
Carrington

The photo displays North Dakota State College of Science and Bismarck State College agricultural students taking a weed identification quiz using live plant exhibits on July 21, 2023 at the North Dakota State University Carrington Research Extension Center (CREC). Photo caption: "College students taking weed identification quiz." The annual event provides field training for 40-45 students for credit on crop, crop pest (including weed identification and control) and soil management subjects. The author organized the event, served as host and co-instructor, and captured the photo. The photo was published on July 23 with an article describing educational uses of the weed exhibit in the CREC's Center Points blog. Title of the blog was "Living weed exhibit at Carrington REC". The web link for the article and photo: https://www.ndsu.edu/agriculture/ag-hub/impact-stories/living-weed-exhibit-carrington-rec-0. Currently, there are 1299 subscribers to the weekly blog including farmers, crop advisers, Extension staff and other persons with agricultural interests.

BLISTER BEETLE TAKING FLIGHT

Patrick Wagner
Entomology Field Specialist
SDSU Extension
Rapid City

The photo was taken during a visit to a producer's farm in Butte County, South Dakota. It was published on June 12, 2023 in an article that I wrote for the SDSU Extension website: https://extension.sdstate.edu/blister-beetles-are-active-south-dakota. The estimated outreach for this article was 30,865 unique individuals. Furthermore, the article was circulated in the June 13th edition of the SDSU Extension Pest & Crop Newsletter: https://igrow.cmail20.com/t/j-e-ehtkix-auhhldklu-v/. The newsletter is distributed via email to approximately 3,000 unique subscribers each week. The primary audience was alfalfa growers in South Dakota during the 2023 growing season. Blister beetles feed on the leaves and blossoms of alfalfa, and contain a toxic chemical called cantharidin. They pose a health concern for livestock that consume hay bales containing whole or partial blister beetle bodies. Hay that is infested with blister beetles can cause mouth sores, digestive issues, and kidney damage. High concentrations of cantharidin may be fatal in some cases, especially with horses. The purpose of the published photo and article was to raise awareness of blister beetles, including how to identify and effectively manage an infestation.

HANDS TO LARGER SERVICE

Jennifer Cushman
University of Connecticut
Farmington

The photo was captured as a UConn Extension Intern engaged in Positive Youth Development with a 4-H program participant during a week-long urban 4-H program at the county 4-H Education Center. The primary audience for this photo included 4-H volunteers, perspective 4-H families, university administrators, and grant donors. Annually, UConn Extension reaches over 288,000 people through its various marketing efforts. The photo was posted on Extension's social media (see below), and had 73 likes, five shares, and two saves. It reached 640 accounts, engaged 79 accounts, and generated 20 profile activities, including two follows. This image is being used in various print materials by Extension and the College's Dean's office, with reach in the thousands. The photo was taken as part of the Sustainable Community Food Systems 4-H Summer Program on June 29th, 2023, by Jennifer Cushman and shared with communications for distribution and inclusion in print materials and posting on July 14, 2023. It is also on Extension websites, with over 146,000 users, annually. Jennifer Cushman - Photographer, Distributor, and 4-H Educator on-site and Program Coordinator
The original photo was published on 7/14/23 on Instagram with the caption: Weekend read for you: Our summer newsletter welcomes new team members, shares plant clinic information, and upcoming events. Read it online at: s.uconn.edu/summer-news

DELMARVA TRIALS GIANT MISCANTHUS FOR SALT-INTRUDED AND FLOODED LAND

Haley Sater
Agent Associate – Agriculture and Food Systems
University of Maryland Extension
Salisbury

Photo caption: Giant miscanthus growing among flooding and aquatic weeds during a trial of the plant on marginal lands conducted by the University of Maryland Extension.
From the Article: "Giant miscanthus, a sterile hybrid perennial, is showing promise for growing on flooded and salt-intruded land in a University of Maryland Extension trial. A University of Maryland trial has shown that the plant's carbon stocks can be harvested in the winter and used for poultry, dairy and equine bedding, according to Jon Moyle, Extension poultry specialist with University of Maryland. Globally, giant miscanthus is used to produce biomass fuel pellets, paper plates and other items.
Maryland's study plots were planted in 2021, and giant miscanthus reaches its peak growth after the third year. So, researchers do not yet have an accurate harvest yield for miscanthus in marginal lands — land subjected to consistent crop loss due to salt water intrusion, flooding, drainage issues, high water table or deer damage.
Even though the study is not complete, researchers are confident in the plant's value."
Published: Aug 31, 2023 in Lancaster Farming
https://www.lancasterfarming.com/farming-news/conservation/delmarva-trials-giant-miscanthus-for-salt-intruded-and-flooded-land/article_99447180-472b-11ee-8bd5-4bf6ab0f1e22.html

PENNY THE CALF

Erin Jones
Live Oak

This photo was taken on January 19, 2021, on the authors family farm in Gilchrist County, Fl. The equipment used was a Nixon D900. This picture has been used in multiple handouts, prints, and presentations. 1) Beef Cattle Nutrition 101 Fact Sheet utilized at the 2023 NFLAG Livestock and Forage Field Day. The targeted audience

are livestock and forage producers of all types. The fact sheet was printed and handed out to those in attendance of roughly 50 people, July 20th, 2023. 2) This picture was used in a Power Point presentation entitled " Beef Cattle Nutrition" on slide 13, the author conducted this presentation that described the different levels of nutritional requirements during stages of beef cattle's lives on July 20th, 2023. 3) This photo was also used in a written article for the UF/IFAS Suwannee County Extension Office Center Pivot Newsletter Vol. 16 Issue 3 July-August-September 2023 Pg. 11. The Center Pivot Newsletter was emailed out to 451 individuals on the Suwannee County email list and a total of 45 printed copies were handed out to individuals walking into our extension office. 4) This photo was utilized in a Power Point presentation entitled "Livestock Breeds" used by the author to share knowledge of various breed of livestock with the Suwannee County 4H Livestock Judging Team. This presentation was headed out to the team to help them study at home. The presentation was printed and handed out to 20 kids at practice. The following link can be used to view some of the presentations the photo was used in, https://www.dropbox.com/scl/fo/t14o4wq4gpmywxpruo7vu/h?rlkey=wioqjn4twqn4hdbfxvfeso6kp&dl=0. The premises of this photo is to highlight the curiosity and elegance of a young beef calf. The growing calf shows alertness of its surroundings checking out the photographer. This picture can be used in various presentations, eye catching flyers, or even demonstrations of breeds or identification practices.

ROOT LEACHATE TREATMENT INCREASED MELON PLANT GROWTH IN LOW DESERT GROWING CONDITIONS

Philip Waisen
Dr.
UCCE Riverside
Palm Desert

Vegetable field soils in low desert valleys of California are characterized by soil organic matter (SOM) content below 1%. This is attributed to high summer soil temperatures burning SOM to negligible levels, especially when the soil is undergoing bare fallow. Because SOM accommodates soil-dwelling beneficial microbes to perform important ecosystem services like decomposition, low SOM can compromise microbial activity and overall soil health. One way to address this challenge could be to condition planting beds with root leachate as pre-plant treatment. Root leachate is composed of sugars that can recruit and nourish microbes or be a source of microbes to inoculate and jumpstart microbial activity in SOM-deficient soils in the low desert. In addition, root leachate treatment can induce systemic resistance against a wide range of diseases or break the dormancy of weed seeds, survival structures of soilborne pathogens, and nematodes which can be controlled by pre-plant chemigation. A field trial was conducted to examine with and without tomato root leachate treatments on melon in Coachella Valley, Riverside, CA. Root leachate treatment significantly increased canopy cover by 4%. The published photo shows visual differences in melon plants as affected by root leachate treatment; the left row was treated with root leachate and the right row was not treated. The findings were published in UC Imperial County Ag Briefs 26(6):83-87 reaching more than 500 subscribers to the Ag Briefs. The Ag Brief can be accessed here. In addition, a YouTube Shorts taken from the opposite end of the field was posted on June 7, 2023, raking in 1,328 views and 23 likes. More research is needed to dissect the mechanism and optimize the application but root leachate treatment appeared to be a promising organic option for the growers in the desert.

State Winners

NORTH CENTRAL	
Iowa	Carter Oliver
Minnesota	Shane Bugeja
Ohio	Beth Scheckelhoff
NORTHEAST	
Pennsylvania	Daniela Roland
SOUTHERN	
Arkansas	Kyle Sanders
Georgia	Holly Anderson
Louisiana	Mariah Simoneaux
Mississippi	Eddie Smith
North Carolina	Margaret Ross
South Carolina	Paul Thompson
Tennessee	Rachel Painter
Texas	Rebecca Coward
Virginia R	ebecca Roberts

Event Promotional Package

National Winner

AGRICULTHER WOMEN IN AG CONFERENCE

Crystal Ashalintubbi-Shipman
Ext Ed Ag/4h
Wister

Ashalintubbi-Shipman, C*[1], Ellis, G[2]

[1] Ext Ed Ag/4h, Oklahoma State University, Wister, Oklahoma, 74966
[2] Editorial Communications Coordinator, Oklahoma State University, , Oklahoma,

In the 2022 Census of Agriculture, it was reported that 36% of US ag producers were female. That is an increase of 6% from just ten years prior. However, even though it isn't uncommon for women to be ag producers, the majority of the ag programming is geared towards male producers. Many women, especially those new to the profession, are uncomfortable asking questions in a male dominated setting. To combat this, we wanted to host an event geared specifically towards female producers. While women in ag conferences aren't a new concept, many are held in the more urban areas. We saw a need to host a women in ag conference with hands-on learning opportunities geared specifically towards women in a location convenient for them to attend. To meet this need, we organized the AgricultHER Eastern Oklahoma Women in Ag Conference held in Wilburton, OK. The conference offered a variety of topics ranging from hay testing to cattle birthing simulations. The program marketing package was developed by Crystal Ashalintubbi-Shipman with the assistance of OSU Ag Communications Services and included a flyer, a news release, and a social media graphic. The flyer and social media graphic were created by Crystal and were shared across multiple counties and social media platforms with a total reach of 10,635. Crystal was interviewed for the news release, provided relevant information, and helped connect the author with a local producer. The news release was shared on Oklahoma State Extension's website, local newspapers, and social media platforms. We had 75 participants that ranged in age from 16-65 and had a day full of learning and fellowship!

National Finalists:

NDSU EXTENSION: DICKEY COUNTY PRIVATE APPLICATOR PESTICIDE CERTIFICATION

Breana Kiser
Dickey County Extension Agent
North Dakota State University
Ellendale

Kiser, B*[1]

[1] Dickey County Extension Agent, , Ellendale, North Dakota, 58436

As the private applicator season draws near, the NDSU Extension Agriculture and Natural Resources agent, Breana Kiser, starts to prepare for the training season by informing the local farmers and ranchers of those expiring in 2024. Applicators will receive a postcard notifying them that they are expiring and saving the dates for the upcoming training year. The poster will be displayed around the entire county for all needing to receive their recertification, and it will also allow new applicators to attend the training to become certified. The trainings are promoted on social media from the NDSU Extension: Dickey County Facebook page and X (Twitter) accounts. The office will create a Facebook event and include the following header for each event date. Farmers and Ranchers who are part of the Bi-Monthly Ag Newsletter will also learn about the upcoming training from the promotion on the first page of the January-February edition, authored by Breana Kiser. Breana Kiser creates all the graphics and promotional pieces for the training.

EQUINE FIRST AID WORKSHOP

Laura Kenny
Equine Educator
Penn State
Collegeville

Kenny, L[1]
[1] Equine Educator, Collegeville, Pennsylvania, 19426

This promotional package was prepared by Laura Kenny, Montgomery County, Pennsylvania, for an Equine First Aid Workshop on September 30, 2023. The workshop was designed by the Penn State Extension Equine Team to teach horse owners how to take their horses' vital signs and body weight, learn about emergencies and when to call the vet, and practice leg wrapping. The objective was to give horse owners the skills to monitor their horses' health so that they can spot a minor health issue before

it becomes a major problem, requiring the costly services of an emergency vet. The event filled to capacity, which was 30 participants due to the hands-on nature of the activities. It was promoted using paper flyers which were posted in the county Extension office, social media posts for the Penn State Extension Equine Team Facebook page, and a press release which was sent to local equine publications. This particular Facebook post reached 7,394 people. The author wrote and designed each item using Microsoft Word and Canva.

PROMOTING THE AZ/UT RANGE LIVESTOCK WORKSHOP & TOUR

Melanie Heaton
Assistant Professor Ag and Natural Resources
Utah State University
Panguitch

Heaton, M[1], Brischke, A*[2], Scow, B*[3]

[1] Assistant Professor Ag and Natural Resources, , Panguitch, Utah, 84759
[2] Area Associate Agent, Agriculture & Natural Resources, University of Arizona, , Arizona, 86401
[3] Professional Practice Extension Assistant Professor, Utah State University, Hurricane, Utah, 84737

Initiated in 1978 due to tension between grazing permittees and public land managers on the Arizona Strip, the AZ/UT Range Livestock Workshop & Tour has reached over 11,500 participants in 45 years. University of Arizona and Utah State University Extension faculty, who oversee the workshop, increased attendance for the three-day event from 178 attendees in 2001 to 391 attendees in 2011 by reaching local ranchers through advertising, appealing science-based education, and improved vendors and door prizes. Attendance stayed near this level and peaked at 425 in 2019, but in-person participation was slow to recover after Covid-19. Through a targeted promotion package, attendance averaged 409 in 2022 and 2023. Promotion of the Range Livestock Workshop & Tour starts with a detailed flyer that is mailed to 176 grazing permittees, emailed to over 300 past participants and contacts, and posted on Facebook and Instagram throughout southern Utah and northern Arizona to reach over 2,000 people. The flyer contains a QR code that directs participants and sponsors to a website which contains sponsor information, ticket sales, and detailed agendas and contact information. This website was visited over 415 times before the workshop. Finally, 275 printed proceedings, distributed to participants, detail the agenda, sponsors, and presentations at the workshop so those who attend can reference education gained and contacts made through the event. The effectiveness of promoting the AZ/UT Range Livestock Workshop & Tour results in an audience made up of 60% ranchers, 95% of whom report that it has benefited them economically. Attendees, who annually report owning over 6,000 cattle, rate the average quality of the workshop and tour a 4.5 out of 5 and report a 48% increase in knowledge of presented topics. An average of 45% of evaluation respondents report attending the workshop for six years or more, indicating not only the educational effectiveness of the program, but also the relevance and success of the promotional package.

Regional Winners

EMERGENCY RESPONSE TO ACCIDENTS INVOLVING LIVESTOCK (ERAIL) IN-PERSON TRAINING

Casey Zangaro
Swine Production Educator
Michigan State University Extension
Alma

Zangaro, C*[1], Ferry, B*[2], Guthrie, T*[3], Metzger, M*[4], Bacigalupo Sanguesa, P*[5], Okkema, C*[6], Jaborek, J*[7], Fronczak, S*[8]

[1] Swine Production Educator, MSU, Alma, Michigan, 48801
[2] Swine Extension Educator, MSU, Michigan
[3] Equine Extension Educator, MSU, Michigan
[4] Small Ruminant Extension Educator, MSU, Michigan
[5] Dairy Extension Educator, MSU, Michigan
[6] Dairy Extension Educator, MSU, Michigan
[7] Beef Extension Educator, MSU, Michigan
[8] Environmental Management Extension Educator, MSU, Michigan

The MSU Extension Emergency Response to Accidents Involving Livestock (ERAIL) program is a comprehensive training and response program focusing on responding to accident events involving livestock. These efforts protect the safety of first responders at accident scenes and the public traveling the roadways and promote the welfare of the animals involved. The ERAIL training is an intensive hands-on program focused on animal behavior, handling, tools and equipment, and containment. On October 24th, 2023, an ERAIL training was held at the Michigan State University Pavilion. The first part of this training included the following topics: an overview of the Michigan ERAIL program, animal behavior, handling and caring for compromised animals, and mortality management. The hands-on session focused on increasing first responders' confidence when working with livestock in a controlled environment. With the involvement of local producers, cattle, pigs, sheep, and bees were provided

for the training for the animal handling sessions. Also featured were a tour of an ERAIL response trailer and various transportation trailers to familiarize participants with what they may see during an accident response. This ERAIL training event attendance was at capacity, with over 70 people attending the October training. They join the over 700 participants trained through the ERAIL program. Participants reported gratitude for the knowledge and skills they gained. Evaluation data concluded that 96% of participants indicated increased skills. Over 90% of the training participants suggest they are more comfortable around livestock and confident in their abilities. 100% of participants are aware of response resources that are available to them. Participants from the training plan to work with their local emergency departments to develop a response plan, work towards procuring a response trailer, integrate the ERAIL training into their yearly instruction, and gather supplies to be prepared for accidents of this nature. A participant's quote: "Without me going to the ERAIL Training, without this opportunity, I would have been lost, it would have been a situation that went from bad to worse, the training, is what made the difference in the response."

FUNDAMENTALS OF FEEDING THE COW WEBINAR SERIES

Erin Laborie
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Laborie, E*[1]

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Feed costs are often the largest category of expense for cow-calf producers in Nebraska. Understanding how the cow's nutrient requirements change throughout the year and how to cost-effectively meet the cow's nutrient requirements with the feed resources available can greatly influence an operation's bottom line. A team of Nebraska Extension beef systems focused Educators organized a four-part webinar series for beef cattle producers focused on the fundamentals of cow nutrition and how to economically evaluate feed options. By offering the option of a webinar series, producers unable to get away from the operation for a day long program still have the opportunity to participate in an online educational experience in the evening following chores. A multi-faceted marketing approach was used to promote the webinar series to a broad audience of beef cattle producers and allied industry personnel statewide and nationally. A flyer was created to distribute through local newsletters, producer email communications, and stakeholder gatherings. A social media graphic was shared on various social media platforms including paid advertisements on the UNL Beef Facebook page with a post engagement of 100 and reach of 1,926. A news release was written and published in local newspapers and the UNL BeefWatch newsletter, which was picked up and further distributed through other media sources. The course was limited to 35 participants and filled up quickly. Due to continued interest, an additional course is being offered, which has filled up as well. Post-survey responses (n=16) indicated 100% of producers plan to make changes on their operation as a result of participating in this webinar series. One participant commented, "I really liked that it is zoom based. It's hard to get away to attend conferences. I appreciated the "real life" examples discussed. I will absolutely do another program if you offer one!"

FARM PULSE: CROP INSURANCE & GRAIN MARKETING HYBRID COURSE

Katie Wantoch
Farm Management Professor of Practice
UW-Madison Division of Extension
Menomonie

Wantoch, K*[1], Bachand, M[2]

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[2] Farm Management Project Coordinator, UW-Madison Division of Extension, Menomonie, Wisconsin, 54751

Crop farmers may be frustrated with the variability of commodity markets, prices of crop inputs, and practices affecting both crop yield and quality. The Farm Pulse: Crop Insurance & Grain Marketing hybrid course was developed to assist farmers with estimating their cost of production, evaluating crop insurance products, and reviewing grain marketing tools that might best align with the farm's grain marketing plan. The online course is available in Canvas, UW-Madison's online learning management system, and participants follow a case farm throughout the series of eight modules, completing hands-on, interactive activities while learning about the topics of risk management, crop insurance, and grain marketing. In-person and virtual meetings were scheduled between January and March 2024 for participants to review the course material, discuss with other participants, and apply the information to their farm. Farm Management Outreach Specialist Katie Wantoch and Project Coordinator Michelle Bachand designed marketing materials to promote enrollment in the course. An event page (https://farms.extension.wisc.

edu/farm-pulse-crop-insurance-and-grain-marketing/) on the UW Extension Farm Management Program website was created to promote the course, provide details, list in-person and virtual meeting dates, and link to the online registration. A press release about the course was sent out to agricultural media outlets. A two-page promotional flyer (attached) was distributed at Wisconsin winter crop farmer and agriculture professional meetings and conferences. Campaign url's were created for the QR code and the shortened website link utilized in the flyer, which were accessed by 37 users. Multiple postcards and newsletter images were designed for mailings by Extension educators. Finally, images were designed for social media posts for the Extension Agriculture Institute Facebook page. The Facebook post (attached) had a reach of 753 with 6 shares of this post. A total of 14 farmers and agriculture professionals enrolled in the Farm Pulse: Crop Insurance & Grain Marketing hybrid course. In a post-meeting evaluation, participants reported they learned about the purpose and value of risk management practices, the importance of calculating their farm's cost of production, and the crop enterprise tool to assist with calculating their farm's cost of production.

CREATING LEADERSHIP AND PROFESSIONAL DEVELOPMENT THROUGH EXTENSION INTERNSHIPS

Andrea Franchini
Baltimore

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Extension's Workforce Development Summer Internship is providing multidisciplinary and leadership skills to address complex socio environmental issues across agriculture and natural resource disciplines. The University of Maryland Extension (UME) is seeking undergraduate student applicants interested in careers in agriculture. Multiple students will be selected for this ten-week full-time internship, which includes a competitive salary and opportunities to interact with agricultural leaders and Extension specialists. Interns will participate in an experiential learning and professional development opportunity while exploring Extension careers, applied research, and non-formal education outreach. Apply today! visit https://go.umd.edu/extensioninternships. Promotional Video is too large to upload and can be found at https://youtu.be/4Q-C1EiVObA?feature=shared

NURSERY IPM ROUNDTABLE DISCUSSION

Timothy Waller
Agriculture & Natural Resources County Agent III
Rutgers
Millville

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Grower to grower conversations are often far more revealing than the questions or commentary at lecture-based Extension education sessions. The Nursery IPM Roundtable Discussion event was developed to 1) foster grower led discussions, 2) promote Extension resources, 3) collate grower suggestions, and 4) provide an opportunity for continuing education units for growers in a more thought-provoking format. The event was held in February, before the rush of the spring season (March – May), in efforts to prompt the discussion of time sensitive management considerations and to 'plant the seeds' of collaboration for future nursery IPM trainings. Promotion took the forms of visiting local growers with whom issues had been resolved (solutions) and those with ongoing issues (need for solutions), distribution of flyers at educational events including the NJ Agricultural Convention and Tradeshow nursery session (n = 35 attendees) and at a near-by industry-led grower meeting (n = 85). The flyer was also displayed at two local nursery suppliers, shared on the Rutgers Plant and Pest Advisory blog (PPA) (n = 1,051 subscribers), the Cultivating Cumberland Newsletter (CCN) (n = 582), and event details were shared via a listserv maintained by the agent (n = 210). Thirty-two nursery and greenhouse operations signed up for the roundtable discussion, half attended. At the meeting growers were asked if they would like to sign up for the CCN (73% signed up on site), Master Gardener Newsletter 'What's Growing On' (47%), PPA (47%), and agent's listserv (53%). A post event survey indicated that 93% of growers found this format valuable, and 100% indicated they would attend again. Three operations offered to host later events. Notable metrics included 67% stating trainings in Spanish were 'very' important, growers asked for more disease (100%) and insect (80%) diagnostic training, and 86% wanted more information on chemical use patterns. Others commented on the need for pest and disease pocket guides/calendars in English and Spanish. Taken together this was an excellent first step in promoting grower-led discussions where Extension professionals are viewed as team members.

BASICS OF HIGH TUNNEL PRODUCTION WORKSHOP

Kim Rowe
Hope

Rowe, K*[1]

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The Basics of High Tunnel Production Workshop was created to address the growing need for production information as approvals for high-tunnel structures though the USDA-NRCS EQIP program are growing in the county and was in response to prioritization of high tunnel production education by the Hempstead County Extension Council the previous year. The flyer featured in the event promotion packet was the author's original design and creation, and it served as the basis for social media marketing with appropriate size modification. Flyers were printed in-house and displayed throughout the county at businesses frequented by farmers and were available at the USDA-NRCS office for visitors to take as well. With no local radio station, social media, an e-newsletter, and print news were the primary media utilized to bring attention to the event. The Facebook post featured in the packet was the first of several posts about the event and served as an effective marketing tool as well, reaching over 9,000 people and having over 600 engagement reactions on the initial post. Subsequent posts continued to gain traction for the event as they were shared by neighboring county agents and reaching well beyond the local audience. A news article was written by Arkansas Cooperative Extension Service newswriter Ryan McGeeney and was picked up by news outlets throughout the state. It can be read here: https://www.uaex.uada.edu/media-resources/news/2023/march/03-16-2023-ark-high-tunnel-workshop.aspx. The news article contained a link to the public event calendar website: https://calendar.uada.edu/?trumbaEmbed=view%3Devent%26eventid%3D165279699 where people could view info and register online as did the Facebook posts. Nearly 70 people from all over the state and Northeast Texas attended the workshop, and according to post-evaluation results, more than 65 percent of participants indicated their knowledge of high tunnel production significantly increased at this workshop, and 88 percent indicated the information delivered will potentially result in a change of practice in their farming operation. In response to the success of this event, a full-time high tunnel educator was hired to serve producers throughout the state.

2ND ANNUAL SC WOMEN IN AGRICULTURE CONFERENCE

Charlotte Maxwell
Extension Agent
Clemson Cooperative Extension
Conway

Maxwell, C*[1], Pohlman, J*[2], Scott, S*[3], Coleman, K[4], Baillie, C*[5], Funkhouser, B*[6], Sweatt, E[7], Pressley, F[8], Mikell, H*[9], Steele, J*[10], Starnes, A*[11], Bolt, M[12], Davis, B*[13], Floyd, B[14], Petitgout, L[15]

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[4] REC Director, Clemson, Columbia, South Carolina, 29229
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[7] Extension Agent, Clemson, Darlington, South Carolina, 29532
[8] Extension Agent, Clemson, Florence, South Carolina, 29505
[9] Extension Agent, Clemson, Manning, South Carolina, 29102
[10] Extension Agent, Clemson, Orangeburg, South Carolina, 29115
[11] Extension Agent, Clemson, Chesterfield, South Carolina, 29709
[12] T. Ed Garrison Arena Director, Clemson, Pendleton, South Carolina, 29670
[13] Extension Agent, Clemson, Bamberg, South Carolina, 29003
[14] Extension Agent, Clemson, Conway, South Carolina, 29526
[15] Associate Agriculture Education Director, Clemson, Lowrys, South Carolina, 29706

The SC Women's Agricultural Network (SC WAgN) Committee of Extension Agents and personnel was assembled in 2020 to revive and refocus women in agriculture programming across the state. One event that the Committee has introduced is the Annual SC Women in Agriculture Conference. The goals of the Conference are to create a space for individuals to cultivate relationships; to provide opportunities for participants to connect with leaders in the agriculture community of South Carolina and to educate participants on a variety of agricultural topics. The first conference in 2022 was a success, but November conflicted with many other events. The 2nd Annual SC Women in Agriculture Conference was held

January 19 and 20, 2024 in Florence, SC. In preparation for the Conference and to advertise the new time of year, Committee member Jaime Pohlman designed a postcard to be dispersed throughout the state at events and in high traffic county offices. 500 postcards were printed and handed out. The postcards had a QR code that the potential participants could scan to receive up to date conference information from our website. Jaime also created a graphic to introduce the conference speakers on the SC Annie's Project Facebook and SC WAgN Instagram. Committee member Charley Maxwell posted these and other Committee members shared the posts to boost the reach. The total social media reach for the Conference speaker posts was 11,673. Charley also sent out a Conference registration push to the 920 SC WAgN newsletter subscribers. The same registration link was provided through all event promotion materials and was clicked 444 times. Participation in the Conference more than doubled from the first year with 110 in attendance. 92% of the participants indicated that they would attend again in the future and 100% increased knowledge in each of the 15 breakout sessions that were offered. The promotional pieces were successful in increasing Conference participation, which resulted in participants cultivating connections and knowledge to better their farms and land.

LIVESTOCK AND RANGE MANAGEMENT SERIES

Courtney Mitchell
Agriculture Agent
New Mexico State University
Mosquero

Mitchell, C*[1]

[1] Harding County Program Director, Extension Agent, NMSU Harding County Cooperative Extension, Mosquero, New Mexico, 87733

Harding County, New Mexico is one of the 15 most rural counties in the United States with around 600 people calling it home. Cattle ranching is an imperative component of Harding County and its economy. The USDA, National Agricultural Statics Service, estimated that there were around 20,000 head of cattle in the county for the years 2022 and 2023. Based on the 2021 New Mexico Census of Agriculture, sales from cattle and calves topped $13,000,000 in Harding County, ranking it 16th in terms of market value in the state. Based on a needs assessment from 2018, 67% of participants indicated profitable livestock was very important or important to the needs of the county. In early 2023, an interest survey completed by community members indicated that range management and range cattle nutrition were topics of interest. Extension held a series of workshops focused on beef production focusing on Beef Quality Assurance (BQA), range cattle nutrition during calving (cancelled due to weather), and range management. To promote the series, a flyer was created and distributed via e-mail to 123 individuals and posted on Facebook seven times with a reach of 1,062. A total of 11 producers attended workshops. One producer became newly certified in Beef Quality Assurance. Three producers renewed BQA certification. One producer earned CEUs to maintain BQA certification. Attendees indicated learning the importance of BQA and techniques to follow BQA practices. Producers also acquired and learned to use tools during drought.

State Winners

NORTH CENTRAL

Kansas	Sandra Wick
Minnesota	Susanne Hinrichs
Ohio	Carrie Brown
South Dakota	Heather Gessner

NORTHEAST

Connecticut	Jennifer Cushman

SOUTHERN

Alabama	Melissa Voynich
Florida	Morgan Pinkerton
Georgia	Brooklyne Wassel
Kentucky	Kendal Bowman
Mississippi	Kelby King
North Carolina	Celine Richard
Tennessee	Alaina Boyd
Texas	Jordan Voges
Virginia	Mackenzie Gunn

Bound Book/eBook

National Winner

OHIO FOREST PESTS: FIELD GUIDE

Amy Stone
Extension Educator
Ohio State University
Toledo

Stone, A*[1], Draper, E*[2], Smith, K[3], Macy, T[4]

[1] Extension Educator, Ohio State University, Toledo, Ohio, 43615
[2] Extension Educator, Ohio State University, Geauga County, Burton, Ohio, 44021
[3] Program Coordinator, Ohio State University, School of Environment and Natural Resources, Columbus, Ohio, 43210
[4] Forest Health Program Manager, Ohio Department of Natural Resources, Division of Forestry, Columbus, Ohio, 43229

Ohio's forests face numerous challenges to their health, the ecological benefits they provide and ultimately, their future existence. The Ohio Forest Pests: A Field Guide is a combination of a text and photographic resource, created to aid in the identification of forest pests and developed to be used in the field to aid in the correct diagnosis both in our urban and rural forests. Users can reference the field guide to confirm their suspicion, or key out common pests.

Authors incorporated growing degree day (GDD) information when available to increase awareness, utilization, and implementation of plant phenology and GDD.

Four thousand copies were printed using Renewable Resources Extension Act (RREA) monies and distributed at Ohio Woodland, Water and Wildlife Conference; Ohio Parks Recreation Association Conference; Ohio Chapter of the ISA Conference; Northwest Ohio Woodland Owners Association; Ohio Green Industry Association's Conference; and OSU's Green Industry Short Course. Additional books were distributed at hands-on diagnostic programs for green industry professionals, Extension staff and volunteers, and municipal forestry and public service departments. Eighty-eight Extension offices were provided copies for use in the offices.

The book is divided by deciduous and coniferous hosts, then further broken down into diseases (foliage, root, stem and trunk, and vascular) and insects (foliage feeders, stem and trunk, and galls). Color-coded headers further provide organizational structure for easy reference.

Common and scientific names, major host(s), key features and control/management options is included for each pest. Over 200 photographs were included in the book, and 47 photos or line drawings were part of the pictorial glossary.

Text was written and edited by the authors, and photographs were credited to authors, colleagues, and images from bugwood. John Nagy who is an OSU Alumni worked on the layout and design.

Program evaluations were very positive and captured comments that included: "Very excited to use and apply the new Ohio Forest Pests Field Guide," and "The field guide was "the bomb!" We also received face-to-face feedback that was very positive. Many participants have also reached out via email after using the book in the field and expressing their appreciation for the book.

National Finalists:

VIRGINIA GREENHOUSE OPERATOR'S TRAINING MANUAL

Edward Olsen
Consumer Horticulture Specialist and Extension Master Gardener Program Director
Virginia Tech
Blacksburg

Olsen, E*[1], Latimer, J[2]

[1] Consumer Horticulture Specialist and Extension Master Gardener Program Director, Virginia Tech, Chesterfield, Virginia, 23113
[2] Professor, retired, Virginia Tech, Blacksburg, Virginia, 24061

The Virginia Greenhouse Growers Association (formerly the Virginia Flower Growers Association) has collaborated with Virginia Tech faculty to produce a Greenhouse Operators Training Manual since 1995. The book has gone through four editions with the latest edition (4th) being produced in 2011. Beginning in 2019, Dr. Joyce Latimer began the process of editing the 5th edition. Upon Dr. Latimer's retirement in 2022, I resumed and finished the process of editing. In July 2023 the completed 5th edition became available. The recently released 5th edition (July 2023) reflects thorough revisions by industry and university experts, ensuring the information remains current and relevant for today's greenhouse operators. This comprehensive manual, with its 15 chapters and

35 individual units, study guide, and practice exam, serves as a cornerstone for the Virginia Greenhouse Operators Certification, by equipping individuals with the necessary knowledge and skills for successful greenhouse management; as well as a valuable resource for educators by supporting high school horticulture programs with a comprehensive curriculum on greenhouse operations. On average the Virginia Greenhouse Growers Association sells approximately 100 copies (printed or digital) of the book a year. As editor, I oversaw the review and update of individual chapters by chapter authors, formatted the book, and produced the cover. Currently available as a digital download, a printed version is being explored.

Regional Winners:

CORN AND SOYBEAN FIELD GUIDE, 2ND ED.

Adam Sisson
Integrated Pest Management Extension Specialist
Iowa State University
Ames

Sisson, A*[1], Mueller, D[2], Anderson, M[3], Dean, A[4], Hodgson, E[5], Licht, M[6], Mallarino, A[7], Munkvold, G[8], Rice, M[9], Robertson, A[10], Tylka, G[11]

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[2] Extension Plant Pathologist, Faculty, Iowa State University, Ames, Iowa, 50011
[3] Extension Field Agronomist, Iowa State University, Ames, Iowa, 50011
[4] Extension Entomology Specialist, Iowa State University, Ames, Iowa, 50011
[5] Extension Entomologist, Faculty, Iowa State University, Ames, Iowa, 50011
[6] Extension Cropping Systems Specialist, Faculty, Iowa State University, Ames, Iowa, 50011
[7] Extension Soil Fertility and Nutrient Management Specialist, Faculty, Iowa State University, Ames, Iowa, 50011
[8] Plant Pathologist, Faculty, Iowa State University, Ames, Iowa, 50011
[9] Affiliate Faculty in Entomology, Iowa State University, Ames, Iowa, 50011
[10] Extension Plant Pathologist, Faculty, Iowa State University, Ames, Iowa, 50011
[11] Extension Nematologist, Faculty, Iowa State University, Ames, Iowa, 50011

The Corn and Soybean Field Guide (CSFG), 2nd Edition, is a bound book produced through a collaboration of Extension workers across disciplines at Iowa State University. Specialists in agronomy, entomology, plant pathology, soil science, and weed science were asked to contribute expertise. The result is a 236-page pocket-sized guide that combines corn and soybean integrated pest management information in one publication for ease of use by corn and soybean farmers, agronomists, and crop scouts. It contains newly updated text and images that provide the tools for identifying insects, diseases, and disorders of corn and soybean in the Midwest. Identification of issues in the field is the first step towards determining an appropriate management strategy. The guide also contains information on developmental stages, pesticide decisions, and other production-related topics. This publication is constructed of durable, weather-safe materials to withstand regular use in the field. The 1st Edition of this guide was developed in 2016 and was completely redesigned for 2023 to include crop issues like tar spot and soybean gall midge, along with 300+ images, illustrations, and figures. A PDF version was also created to adhere to e-accessibility standards. Guides can be ordered as single printed copies, boxes of 25 copies, and as PDFs from the ISU Extension Store at https://store.extension.iastate.edu/Product/14743. The new CSFG was made available in October 2023, and more than 1,500 copies have already been distributed to community colleges, seed and agribusiness companies, ISU Extension Field Agronomists, and others.

EFFICIENT USE OF AGRICULTURAL WATER MANAGEMENT THROUGH SUSTAINABLE PRACTICES IN HORTICULTURAL CROPS (USO EFICIENTE DEL AGUA DE RIEGO EN FINCAS DE HORTALIZAS Y OTROS CULTIVOS)

Sofía Macchiavelli Girón
University of Puerto Rico - Mayaguez
Santa Isabel

Macchiavelli Girón, S*[1]

[1] Assistant Agent of Extension, University of Puerto Rico-Mayagüez, Santa Isabel, Puerto Rico, 00757

Climate change in the Caribbean region has led to increased air and soil temperatures, amplified frequency and severity of extreme weather events, and heightened risks of floods and severe droughts. These shifts disrupt natural processes within forest, urban, coastal, and agricultural ecosystems. Water availability disruptions due to droughts, shortened rainy seasons, elevated temperatures, and natural disasters necessitate farmers to adopt more efficient water management practices. Studies indicate that substantial agricultural losses from natural disasters prompt farmers to consider adopting new agricultural practices. Harvesting, storing, efficiently

utilizing, and conserving water in agricultural soils emerge as resilience strategies against climate change impacts in Puerto Rico. The document provides practical recommendations for minimal water requirements for select crops, alongside common water storage methods for vegetable and other crop production. It also discusses physical and digital tools aiding farmers in making informed irrigation decisions, utilizing data and measurements to reduce the likelihood of inefficient irrigation applications. Moreover, it briefly outlines drip irrigation systems and their advantages concerning water distribution and energy efficiency compared to other irrigation methods. Lastly, various conservation strategies are presented to increase water retention in agricultural soil and enhance plant access to water.

CONCEPTS AND RESEARCH-BASED GUIDELINES FOR SOUTH CAROLINA FORAGE SYSTEMS

Liliane Severino da Silva
Forages Specialist
Clemson University
Blackville

Severino da Silva, L*[1]

[1] Forages Specialist, , Blackville, South Carolina, 29817

The livestock industry is one of the most important agricultural activities in South Carolina. Forages are the primary feed source for livestock due to the favorable climatic conditions for forage plant growth, a wide range of adapted forage species, and regionally available nutrient sources (e.g., poultry litter). Perennial grasses are the primary forage species used, and bahiagrass (Paspalum notatum), bermudagrass (Cynodon dactylon), and tall fescue (Festuca arundinacea) are widely planted. In this context, it is crucial to develop educational resources to provide agricultural educators and producers with aiming to improve their knowledge on management practices, sustainability, and ways to enhance feasibility of forage and livestock systems. This handbook is a multi-disciplinary collaboration among 12 faculty and Extension Specialists from Clemson University and Clemson university Cooperative System. This book was peer-reviewed by Dr. Lynn Sollenberger (Distinguished Professor, University of Florida), Dr. Don Ball (Emeritus Professor, Auburn University), Dr. Gleise Medeiros (Assistant Professor, University of Alberta), Dr. Erick Santos (Postdoctoral Fellow, University of Alberta), Mr. Brian Beer (Senior Livestock and Forages Agent), Mr. Beau Sorenson (Grazing Plan and Outreach Specialist of South Carolina Forage and Grazing Lands Coalition), and Mr. Gary Ward (Executive director of South Carolina Forage and Grazing Lands Coalition) for their contributions through revision of this guide. This project was developed by Dr. Silva in collaboration with the co-authors listed and supported through partial funding from the SC Forage and Grazing Lands Coalition (SCFGLC) and SC SARE. To date, over 500 copies have been distributed for free to Extension agents, NRCS offices, and producers in South Carolina. All funding was converted in printed copies and the Dr. Silva's goal is to make sure those seeking knowledge are able to acquire resources for free.

PESTS OF HEMP IN UTAH

Marion Murray
Integrated Pest Management Specialist
Utah State University Extension
Logan

Murray, M[1], Zesiger, C*[2], Gale, J*[3]

[1] Integrated Pest Management Specialist, Utah State University, Logan, Utah, 84322
[2] Extension Assistant Professor, Agriculture & Natural Resources, Utah State University, Odgen, Utah, 84404-3100
[3] Extension Associate Professor, Agriculture Economic Development, Utah State University, Richfield, Utah, Richfield

Pests of Hemp in Utah was initiated in after hemp was legalized in 2018 and hundreds of new growers entered the market. A team of researchers from Utah State University delivered a survey to hemp growers in Utah and found a desperate need for accurate pest identification and pest management content. At the time, information on hemp pests included only non-academic and non-local sources which contained several inaccuracies that confused producers. Over a 3-year period, the USU team visited hemp farms in Utah to photograph and document this crop's major and minor pests. The team identified 78 unique insects in 252 samples that were mostly either beneficials or insects of no consequence. The team also identified 8 plant pathogens from 59 samples and determined that most symptomatic hemp plants were affected by a range of environmental conditions rather than pests.

The full-color, 155-page hemp pest guide includes the team's findings of 13 beneficial insect groups, 28 arthropod pest groups, 11 plant disease groups, and 4 abiotic disease groups, plus approved pesticide tables grouped by pests controlled. After printing and distributing the book, the team surveyed hemp growers again in 2022 (including those that had stopped growing hemp prior to the survey date) and found that losses from plant pests decreased by 47%, familiarity with hemp pests increased by 960%,

and pest monitoring increased by 25%. Pests of Hemp in Utah is now the authoritative, research-based tool for hemp growers in the Intermountain West region, filling information gaps on hemp pest activity and management.

State Winners

SOUTHERN

Florida	Cindy Sanders
Georgia	Blake Carter
Kentucky	Kendal Bowman
North Carolina	Paige Burns
Tennessee	Alaina Boyd
Texas	Jordan Voges

PRESENTATIONS

2024 NACAA

109th
Annual Meeting
and
Professional Improvement Conference

Dallas, Texas

4-H AND YOUTH PROGRAMMING

BUILDING A 4-H LIVESTOCK JUDGING PROGRAM FROM THE GROUND UP: IMPACTING YOUTH THROUGH LEARNING EVALUATION SKILLS AND PUBLIC SPEAKING

Sawyer Fonnesbeck
Assistant Extension Educator
University of Idaho
Malad City

Fonnesbeck, S.[1]

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The talents and passions of a single person can impact many when shared. The heart of the 4-H youth organization is the sharing of talents and passions from the people who volunteer as leaders. In Oneida County, Idaho, a need was identified in the area of livestock judging. Two leaders who were passionate about livestock judging were recruited by the 4-H office in 2022 to start this program. No other 4-H livestock judging programs existed in any neighboring counties, so these leaders built it from the ground up. Although only three youth were initially interested, this program has grown to more than ten youth being enrolled in the 2023-2024 year. Multiple other youth attended day-camp/seminars which were held on this topic over the past two years. All youth involved have gained knowledge about livestock anatomy, conformation, carcass identification and carcass quality. They have also improved their public speaking skills through learning how to give oral reasons and gained confidence in making and defending a decision. Through this entire process, the club leaders have gathered resources together from a variety of sources to provide accurate and valuable information for the youth to learn from. Many of the youth involved in livestock judging have expressed that this program has aided them when they picked out animals for a 4-H livestock project for the county fair.

This new program in Oneida County has gathered interest from other Extension Educators in Idaho. Relationships have been built and more is being done to gather knowledge and resources to aid other new livestock judging 4-H programs around the state. Through continued efforts, it is hoped that livestock judging will gain popularity among the youth in Idaho. It not only provides animal science knowledge, but it also develops team building opportunities and speaking skills.

UTAH 4-H HORSE AMBASSADORS: TRUE YOUTH ADULT PARTNERSHIPS

Jessie Hadfield
Utah State University
Nephi

Hadfield, J[1]

[1] Extension Associate Professor Professional Practice, Utah State University Extension, Utah, 84648

Based on survey results in 2018, one of the biggest holes in Utah 4-H's horse programs was the lack of youth leadership and involvement. To address this concern, the Utah 4-H State Horse Ambassador program was developed. This initiative involves selecting a team of high school aged youth state-wide, providing them training and resources, and facilitating genuine youth-adult partnerships to promote the horse program. Over the past six years, this program has achieved remarkable success and has impacted 4-H programs throughout the Nation. Our innovative training approaches effectively equip youth to assume leadership roles within the horse program and develop crucial professional skills beneficial beyond graduation. Utah 4-H State Horse Ambassadors have seen many accomplishments including creating resources that have helped youth feel more prepared for the State Horse Show Knowledge test and increasing youth participation in the Utah 4-H State Horse Rules Meeting by 600% since 2020. They have received recognition and gained a national presence and have been invited to teach workshops at the American Youth Horse Council Symposium in 2022 and 2024. This program is easily adapted to other project areas and could be used to increase youth engagement and leadership skills in any 4-H program.

COOP TO PLATE: GROWING YOUTH & CHICKENS IN THE SAME MISSION

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The average American is at least three generations removed from agriculture and 34% of the population

doesn't even have a pet at home, leading to a large disconnect between youth and animal agriculture. However, the Baker County agriculture agent and 4-H youth development agent recognized that there is a developing interest in where food comes from and producing your own food at home, striking up an idea for a youth-centered program. Ten youth were given the opportunity to each take five meat-type birds home and raise them on their own for 8 weeks, coming back as a group on processing day to learn how to harvest their birds. Many of these families had limited experience with animals, therefore the agents developed an in-depth online course for them to follow along and learn at their own pace. The online course consisted of an introduction and 8 educational modules with text, videos, and interactive quizzes to monitor participation and knowledge gain. This course not only gave them the necessary information to complete the project, but also exposed them to other agriculture topics, like the commercial chicken industry, raising meat birds for profit, and alternative meat poultry. The last module, processing your birds, prepared the youth for harvest day, exposing them to what the process will look like and the steps they will participate in. The agents and many volunteers helped lead the youth during harvest, teaching them not only the steps involved in processing but also PPE, food safety, knife safety, and more. Youth completed a project book to outline their cost per pound of meat compared to the grocery store products in addition to describing the lessons learned from the project. Coop to Plate is expanding in 2024 with 25 participants, returning participants will serve as mentors for new youth on processing day. Although this is a youth-centered project, the agents noticed that the adults were heavily involved, often learning themselves how to raise the meat birds and process them, this has spurred the development of future adult-centered classes on raising and processing meat birds.

WORKFORCE DEVELOPMENT AT THE MILK BAR

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Forty Central New York teens gained marketable work experience and a greater understanding of the importance of agriculture in our state's economy while staffing the popular Milk Bar at the Great New York State Fair, held in Syracuse from August 23-September 4, 2023. Recruited primarily from Cayuga and Onondaga Counties, the teens – who ranged in age from 14 to 19 years – sold and served over 285,000 cups of cold refreshing chocolate, white and strawberry milk to fairgoers through workforce training program coordinated by Cornell Cooperative Extension (CCE).

With a strong record in youth development through its 4-H programs and a presence in counties across the state, CCE was well-positioned to turn the Milk Bar's staffing needs into a unique workforce training opportunity for local teens. Before the fair opened, teens took part in paid training that covered food safety practices, basic customer service skills, and job-related tasks for each position. Field trips to a large dairy farm and a sheep dairy in Central New York introduced teens to agriculture and increased their knowledge of food systems and dairy practices.
With coaching and supervision by the CCE managers, teens gained experience in customer service and cashiering, and practiced good communication with members of the public of all ages, and with other team members. One teen said, "I learned how to communicate with management… working at the Milk Bar. Going from a customer to a worker, I learned a lot." In a survey given at the end of the employment period, teens were asked what skills they learned or improved upon during their Milk Bar summer employment. Respondents cited improvement in time management skills, learning to work with adults, leadership skills such as identifying tasks that needed to be done and following through with them, talking with the public and with young children, handling money and working together on a team. This workforce development program allowed teens to receive on the job training and begin to build their resume and references with experience earned through Cornell Cooperative Extension Cayuga County.

4-H GRAB AND GO EMOTIONAL WELLNESS AND MINDFULNESS LESSONS FOR YOUTH

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The National 4-H Council partnered with the All-State Foundation and the authors to create the 4-H at Home Emotional Wellness and Mindfulness lessons. The lessons provide experiential learning activities for youth and require minimal materials to create a safe space for social-emotional learning. The series include six lessons: Meditation Bottles; Stress Less; Expressing Emotions; Healthy Friendships; Digital Vision Boards; and Bouncing Back. The series provides downloadable lessons at no cost that can be used in a variety of settings, including classroom, club, or individually.

These lessons were developed in response to the COVID-19 pandemic to help children, youth, and families build social-emotional awareness and communication skills. Protective factors are conditions or attributes in individuals, families, and communities that promote the health and well-being of children and families. Six protective factors for children and youth are nurturing and attachment, knowledge of parenting for child and youth development, parental resilience, social connections, concrete supports for parents, and social and emotional competence. The lessons help educators and family members to support the emotional, wellness, and mindfulness growth for youth by providing interactive activities and conversation starters. Each lesson concludes with a "test your knowledge" section. The activities are available at https://4-h.org/clover/activities/emotional-wellness/ and https://4-h.org/clover/activities/learning-the-power-of-mindfulness/ At the national level, the quality indicator for these lessons is shown by the number of interactions with the lessons. The CLOVER data from April 14, 2023 – March 14, 2024 shows that the six lessons have had combined pageviews of 2753 and 105 downloads. Within the county, the authors have used the lessons with 4-H camp counselors, camp participants, and with FFA chapters. 98% of the 248 participants surveyed shared that they learned something that positively impacted their mental well-being. 94% of survey participants reported that they would use what they learned to help a friend.

The presentation objectives are for participants to learn: how to access the free online resource; how to use a digital platform for education; how to implement the lessons with youth, children, and families; how to increase social-emotional learning within existing programming; and how mental health programs can be cross-programmatic.

STARTING FROM THE BOTTOM: HOW TO REVITALIZE AND GROW AN INACTIVE 4-H PROGRAM

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Calhoun County is a small, rural county in the Florida Panhandle. Historically, many families were involved in agriculture, lived on small farms, and were involved in the local 4-H program. However, that tradition faded over time, the county Extension program stagnated, and by 2019, the Calhoun County 4-H program had dwindled to 0 clubs, 5 active volunteers, and 9 youth. Due to the overwhelming positive benefits of 4-H on youth development, revitalizing the county 4-H program was a priority for the Board of County Commissioners, UF/IFAS Extension Administration, and the new CED (hired in fall 2019). The CED and the District 4-H Regional Specialized Agent began a county 4-H program review in October 2019. This review found clear program deficiencies in volunteer recruitment, club involvement, non-club program activities, and overall visibility in the community. The review also outlined benchmarks to be met, including a minimum of 5 new active clubs, 5 new volunteers recruited annually, 5 summer day camps, and 50 youth enrolled in 4-H. During the search for the next 4-H agent, emphasis was placed on hiring a motivated, outgoing individual with a love for youth and community. After identifying and selecting the new agent, she and the CED developed a strategic plan based on a local needs assessment for resetting and growing the program. The plan included a comprehensive outreach campaign, increased community/in-school presence, reimplementation of the 4-H club model, volunteer recruitment initiative, and a tiered sponsorship program to improve program funding. The Calhoun County Extension team has successfully revitalized the county 4-H program

over the past three years. There are now 11 active clubs (0 in 2020), 84 volunteers (1580% increase), 60 youth registered in clubs (567% increase), 739 youth enrolled in other 4-H projects (over 1/3 of all county youth), and the program is receiving $2,700 in ongoing annual community sponsorships. By developing a strategic plan based on local needs assessment, hiring well, and providing the new agent with mentoring and other resources needed to be successful, the 4-H program has become a thriving hub of youth education and life skills development in Calhoun County.

EGGSPLORING SCIENCE: 4-H EMBRYOLOGY PROGRAM IGNITING LEARNING IN SCHOOLS

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Seventy-eight percent of Volusia County Public Schools carry Title I status, a reflection of the high number of students facing economic challenges. This socioeconomic backdrop magnifies the urgency of addressing STEM (Science, Technology, Engineering, and Mathematics) education disparities, which pose a substantial threat to the nation's capacity to bridge education and poverty divides. In response to these challenges, a school-based embryology program has been devised to actively nurture scientific curiosity and instill an understanding of life sciences among students. The objective is to immerse youth in 5 local schools per semester in the journey of embryonic development, fostering a hands-on and captivating learning experience. This initiative addresses the immediate needs of STEM education. 4-H and Agriculture agents plan to provide teacher training, classroom kits and curriculum to teachers. The program will consist of 5 teachers in the Volusia County schools for each of the spring and fall semesters. Extension provides an educational google site with resources for the project. Lessons will be from Eggcellent Adventures in classroom Embryology. The program started this spring semester and had its first 5 pilot schools, a total of 10 adults and 120 youth, currently going through the program. As the program ends at each school, the teachers will be provided guidance on applying for classroom grants from outside organizations to secure their own embryology supplies for future use along with a 4-H curriculum. The 4-H embryology program stands out as a forward-thinking and successful approach to motivate a new cohort of students with scientific literacy. By combining theoretical knowledge with hands-on experiences, the initiative creates a dynamic learning environment that not only enriches the curriculum but also instills a lifelong appreciation for the wonders of life sciences.

BUILDING BETTER BULLDOGS: A 4-H PARTNERSHIP TO BUILD A SCHOOL CULTURE OF SOCIAL EMOTIONAL WELLNESS

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This session will highlight the Better Bulldogs Mental Health Education Project (BBBMHEP); a collaborative effort between OSU Extension Hardin County and Ada Schools to create a culture of social emotional wellness. The Ada community has faced an increased amount of trauma, including the tragic deaths of three students and an increase in documented suicide attempts. School administrators realized a need for a culture shift in the district that prioritizes social-emotional wellbeing. School administration reached out to OSU Extension to meet this need. BBBMHEP includes annual Youth Mental Health First Aid® certification training for all new staff, Teen Mental Health First Aid® certification training for all Sophomores, a six-week in-school special interest 4-H Club for all 8th graders using the national peer reviewed Your Thoughts Matter 4-H project, and a six-week in-school special interest 4-H Club for all 6th graders using the national peer reviewed Your Feelings Matter 4-H project. Three hundred and thirty-four students of the 876 students in grades K-12 have participated. School administration, counselors, and faculty have noted a shift in student willingness to discuss mental health and engage in critical conversations to help others.

Research from the National Council of Wellbeing shows that youth who receive education on mental wellbeing and have at least one caring adult outside of their nuclear family are less likely than their peers to develop mental health disorders. The BBBMHEP is a model partnership

between 4-H and a school district to provide those protective factors and have a positive impact on school cultures. Replication of the program in additional school districts can shift the culture of an entire county or community. The program has built trust between 4-H and the schools, opening the door for expanded programming both in school and afterschool.

This session will be a combination of presentation-style teaching, group discussion, and hands-on activities. Session participants will leave with tools to replicate the program in their own communities. Session objectives: Provide an overview of BBBMHEP; Share successes and lessons learned; Share impact stories; Provide resources for program replication; explore modifications for community clubs and afterschool programs.

DEVELOPING 360-DEGREE VIDEO TO EDUCATE YOUTH AUDIENCES

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As Ohio's demographics shift toward suburbanization and the agricultural community becomes a minority, there is a growing need to educate non-farm audiences, especially the youth. Recognizing this, Ohio State University (OSU) is leveraging technology to create engaging and immersive content using 360-degree media. OSU Extension is employing virtual reality to educate youth and urban audiences about Ohio's vital agricultural industry. With agriculture being Ohio's largest industry, employing one in every 7 workers and contributing over $124 billion to the state's economy, comprehensive education on farming and the food sector is crucial. OSU Extension's Agriculture and Natural Resources program has developed a 360-degree video curriculum with a focus on crop production, Ohio's food manufacturing, and the employment impacts of the state's agricultural industry. Two of our most popular videos, "Wheels at Work" and "Breadth of Agriculture in Ohio," cater to families with younger kids. "Wheels at Work" provides an in-depth look at the equipment used in Ohio's farms, covering the production processes of major crops like corn and soybeans, as well as hay. The "Breadth of Agriculture in Ohio" delves into the rich history, natural resources, the diversity of agriculture commodities, food manufacturing, and agriculture's impacts on Ohio's employment. To reach the non-farm audience, these videos premiered at the 2023 Ohio State Fair, where over 7,356 people, including 3,901 kids and 3,455 adults, experienced them during the 12-day event. The curriculum was also presented at the Ohio FFA convention and Farm Science Review reaching an additional 3,444 individuals, including an additional 2,613 kids and 831 adults. Online evaluations indicated a positive impact, with 96.92% of respondents learning something new and 92.96% feeling immersed in the videos. Remarkably, 62.32% of participants had no prior involvement in OSU Extension programming, highlighting the success of this immersive approach in reaching new audiences and effectively conveying the importance of agriculture.

This session will focus on development and implementation of the video footage, and theater experience. We will also examine the success/challenges of using the 360-degree video curriculum to educate youth audiences.

BOTANY LAB: HANDS-ON HORTICULTURE FOR 4-H HOMESCHOOLED YOUTH

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Responding to the request of 4-H parents seeking hands-on horticulture curriculum to supplement their botany unit in homeschool learning, prompted the creation of the Orange County 4-H Botany Lab program The objective was to deepen students' botanical knowledge through interactive lab-based activities.

The Botany Lab comprised eight, two-hour sessions over six months, covering topics such as plant cellular structure, vascular systems, and plant anatomy. Each Agent developed their lesson's lab report, PowerPoint

presentation, and experiment. Students engaged in hands-on activities during sessions and received lab reports for continued learning at home. Participants were charged $80 for the series, which covered the budget of $100 per lab for expenses. To balance the long-term commitment of teaching labs, as well as to draw on the expertise of the Orange County horticulture agents, the teaching responsibility was split between two 4-H agents, two horticulture agents, and one botany specialist 4-H volunteer.

On average, 80% of the twelve youth participants exhibited enhanced understanding through active participation in discussions, labs, and field activities. Their ability to apply knowledge in practical settings underscored the effectiveness of the program.

The Botany Lab program yielded promising outcomes, highlighting the effectiveness of experiential learning in deepening understanding and engagement among homeschool students. By addressing the gap in hands-on botanical education, the program not only enhanced individual learning but also contributed to broader educational practices. These findings advocate for the integration of interactive, experiential approaches in educational settings to foster deeper comprehension and application of complex scientific concepts, thus empowering youth for lifelong learning and contributing to their holistic development.

BEEF CATTLE CLINIC: REVAMPING THE YOUTH ANIMAL PROJECT

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In Northeast Florida, beef projects are a popular activity for youth to become involved in agriculture and participate in livestock shows across the state. Through raising steers and heifers, youth can learn about animal agriculture, become involved in their communities, and develop professional skills such as responsibility, setting goals, and decision-making. However, these opportunities for growth can be blurred and overshadowed as youth participate in their projects over multiple years and go through the motions. With an established livestock community in Northeast Florida, many youths show animals from a young age and become burnt out and lose sight of the purpose of livestock shows. This trend has been observed through a decreased participation in livestock clinics and workshops. The North Florida Beef Clinic was a collaboration of Clay and Bradford livestock and 4-H agents to provide a semiannual, hands-on, engaging educational workshop to re-inspire youth and their intentions with their animal projects. Industry experts were brought in as guest speakers to present a more advanced perspective on topics in the show world, such as grooming, nutrition, and showmanship skills. The clinic was held biannually in December after initial weigh-ins and in the spring before fairs beginning in December of 2021, and continuing into 2022 and 2023. Extension agents, industry representatives, and other speakers covered a variety of topics at these events, where participants were encouraged to bring their animals for individualized guidance and hands-on instruction. Since the first clinic in 2021, attendance has consistently improved. 134 youth participated in the Beef Clinics over 5 total events. 78% increased their knowledge in a variety of topics and 81% of participants intended to use the knowledge and skills gained to inform their feeding, grooming, and management program (48 survey responses). Participants were well represented in show and showmanship champions in the Bradford and Clay County Fairs from 2022 to 2024. Utilizing hands-on, advanced education in youth beef cattle projects has helped re-engage youth in their animal projects and revamp the development of skills that animal projects offer youth in Northeast Florida.

MUSTANGS GROW PUMPKINS: FARM TO TABLE AND EVERYTHING IN BETWEEN

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Effingham has a rich history rooted in agriculture production, having produced vegetables and crops as early as the late 1700's. Based on the USDA farm report, since 2017 small farms have increased by 37% totaling 254 farms in the county. Though the number has increased, geographically the locations of the farms have primarily been seen to originate in the Northern and most rural part of the county. Effingham County has a population of

nearly 70,000 individuals, and of that, 26.5% are persons under 18 years of age. It is extremely important to educate the youth in the county in its history, as well as make it a priority to educate students on where their food comes from, and the agriculture industry. The Southern portion, including the city of Guyton and Rincon, has seen severe reduction in agricultural land and farms over the last decade. The limited farmland and agricultural exposure for students in that part of the county, give those students a different experience with agriculture than the students on the North side. South Effingham Middle School (SEMS) is located in between Rincon and Guyton, Georgia. The location is prime to start making strides to educating the youth in the community on agriculture, since they are the students furthest removed. At SEMS, each grade (6th - 8th) has an overarching PBL (Problem Based Learning) that they must work towards addressing and solving throughout the school year that links the agriculture standards. In 2022-23 and 2023-24, at least one grade level has worked on the pumpkin patch project at Honey Ridge Agricenter. The collaborative efforts between SEMS and the local ANR Agent have yielded a successful pumpkin garden this school year, leaving a lasting impact on both the educational environment and the broader community. Through initiative, students witnessed the entire pumpkin growth process, gaining insights into horticulture, teamwork, and sustainable agriculture. The garden serves as an outdoor classroom, offering hands-on learning experiences that foster an appreciation for the environment and community pride. The thriving pumpkin patch stands as a testament to the positive transformation when Extension, schools, and communities unite.

AGRICULTURAL ECONOMICS & COMMUNITY DEVELOPMENT PRESENTATIONS

LEVELING UP BEEKEEPERS TO IMPROVE BUSINESS SUCCESS

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Background: Many beekeepers start out by bartering and trading honey products; then as they establish and grow their operations, they eventually move into selling honey and value-added products at local markets. In 2021, Florida updated its cottage food law to increase the volume of sales that can be made by selling honey bottled in a home kitchen. The updated law also offers more marketing flexibility by allowing online and mail-order sales of cottage food products. Many of these hobby/sideline beekeepers, however, are not equipped with the necessary knowledge of business planning, marketing, and regulations that coincide with producing and selling value-added products from the hive. There are very few existing resources to help beekeepers acquire this knowledge. A cohort of 30 Florida beekeepers were selected to participate in the “Leveling Up” beekeeping business program run by the UF/IFAS Honey Bee Lab. Objective: Leveling Up is a two-year program aimed at helping this cohort transition their beekeeping hobby into a sideline or full-time business, by developing a business plan and learning how to supplement their income through the production of value-added hive products. Methods: Participants interact with this program via monthly Zoom meetings, periodic in-person workshops, online courses and discussion boards, and through one-on-one consultations with program leaders. Results: 100% of participants have created a lean startup business plan; 83% increased their ability to develop a comprehensive 3-year business plan and 97% increased their ability to complete financial statements for their businesses. After the first workshop, 97% of program participants reported high or very intention to develop a 3-year business plan, to implement that plan in their business, and to complete financial statements.

Conclusion: Through a combination of both in-person and remote interactions as well as both collaborative and independent work, the cohort has made significant progress in the development of beekeeping businesses that are legal, sustainable, and profitable. Moreover, the content developed for this small group of beekeepers will remain as a resources for other beekeepers developing businesses in Florida and around the U.S.

ECONOMIC IMPACTS OF FEBRUARY 2024 WILDFIRES IN OKLAHOMA

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In late February 2024, wildfires swept Oklahoma, consuming over 170,000 acres, with 152,000 acres burned within four Western counties in just 2 days. As a part of the response, Oklahoma State University Extension initiated preliminary economic damage assessments. These assessments furnished timely information to media outlets, county commissioners, and response agencies. This presentation outlines the methodology and crucial data parameters utilized for the preliminary damage assessment. Key categories of assessment include the costs associated with pasture restoration, fence repair/replacement, valuation of lost livestock and hay, expenses for emergency animal care, and the financial ramifications of residential property and infrastructure loss. Considering Oklahoma's regional diversity, tailored strategies for refining damage assessments will be examined. Furthermore, the presentation will address the ongoing evolution of assessment methodology, aiming for a comprehensive economic impact evaluation, and monitoring the recovery progress in affected regions.

KITCHEN TABLE CONVERSATIONS FOR OHIO WOMEN IN AGRICULTURE

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The program aimed to increase educational opportunities for women in agriculture throughout Ohio. We accomplished this task by working with women farmers, our Ohio Women in Agriculture team, and extension professionals to identify the needs and wants of the target audience. Kitchen Table Conversations (KTC) is a creative twist that uses an informal and conversational approach around the farmhouse kitchen table that is supported by peer-to-peer learning and fosters a learning network environment. Educational topics are geared around key farm management, community, and controversial topics of the given time. Strategies to educate the audience have transformed from virtual in 2020 and 2021 to hybrid in 2022, with three sessions each year, to in-person in 2023, with six sessions as a "progressive kitchen table" at six topical sites during the Farm Science Review. We utilize multiple teaching methods, embrace a safe harbor environment, and encourage audience participation. Through these teaching strategies, we have reached 144 individuals in the program over four years. The change in presentation styles and marketing has allowed an increase of 73% in participation from 2020 to 2023. These educational activities were marketed in 2023 through multiple channels such as email (1010 members), social media (1200 followers), blog postings (372 posts), personal contact, flyers, and brochures. The program participants indicated that the information gained helped increase productivity, mental health, and marketing. The participants' increased knowledge is a valuable indicator of success as they reach out to Ohio Extension professionals during the year and participate in other OSU Extension Ohio Women in Agriculture Learning Network events and programs.

THE POWER OF EFFECTIVE PARTNERSHIPS

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The Ormond Scenic Loop and Trail, spanning over 35 miles, winds through some of the most captivating and ecologically diverse landscapes in coastal central Florida. This area offers immediate access to multiple water bodies, various parks, as well as barrier island dunes, and beaches. However, it faces threats from development, increased traffic, aging tree canopies, and natural impacts. In response, the Volusia County Council launched the ReGrow the Loop initiative in June 2023, led by the University of Florida/IFAS Extension Volusia County office, and supported by state and local partners invested in the Ormond Scenic Loop and Trail. This initiative aims to educate residents of the loop on the importance of restoring and enhancing the natural beauty of the loop. The objective of this presentation is to showcase how Extension established partnerships to effectively engage residents. In collaboration with these partners, we organized over twenty educational events, both formal and in-formal. The partners were instrumental in providing expertise and topic relevancy. In addition to these events, social media posts and blogs were created to educate residents about invasive species. Partners embarked on in-person outreach to encourage residents to commit to the ReGrow the Loop pledge, indicating their intention to implement practices to restore and protect the natural resources of the loop. Monthly partner meetings were held to review initiative progress, social media engagement and pledge counts, share organizational updates, and plan future events. The ReGrow the Loop initiative, through partnerships, notably engaged over 500 individuals from nine different cities throughout the county, with 70% actively participating in multiple events, and 209 committing to the pledge. This demonstrates a widespread dedication to the program. These collaborative efforts widened resource availability, strengthened community ties, that created, and rekindled new and existing partnerships that boosted the initiative's outreach. Collectively, these strategies have been pivotal in showcasing the effectiveness of united community actions towards the ReGrow the Loop mission. With partner buy-in they can continue to support and maintain the enthusiastic interest of this pilot program.

SENIOR CITIZEN CENTER COMMUNITY GARDEN AND LUNCH AND LEARN SERIES

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The county senior citizen community garden was started in 2021 as a project for an extension intern. I oversee the management of the community garden and help organize volunteers when needed. The community garden is small but its impact amongst the senior community is huge. Many of the elderly population lack access to fresh produce. This is due to pricing and availability; thus, fresh produce is lacking from many seniors' diets. Produce grown from the garden is taken to the senior citizen center to allow them to have access to healthy fresh produce. Additionally, the county health agent, Deborah Alvarenga and I host a monthly lunch and learn series at the senior center where we demonstrate a recipe with produce from the garden and talk about nutritional benefits and how the produce is grown both in the home garden and commercially. In 2023, the community garden provided 380 lbs. of produce or 1,216 servings of vegetables to the senior center. Also, 96% of seniors increased their knowledge of the produce industry in Texas and added more fresh produce to their diet as a result of the lunch and learn series.

BRIDGING COMMUNITIES: COUNTY FARM TOUR

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The agricultural industry is the silent engine of the Volusia County economy as the demand for sustainable and locally sourced products continues to grow. For 42 years, Farm Tour has served as an educational and immersive opportunity for individuals and communities to connect with the agricultural roots of the county. The objective was for participants to increase knowledge and awareness of agricultural enterprises, sustainable practices and their economic impact to Volusia County. The University of Florida/IFAS Extension office and the Volusia County Farm Bureau have partnered with eight local producers to highlight their farming techniques, products, and passion for agriculture. The tour was organized with four stops on the west side and four stops on the east side of the county from small in size to large operations. The tour encompassed a range of agricultural activities, including crop cultivation, livestock management, and agro-processing. Farmers and agricultural experts guided participants through the production processes. The tour offered interactive demonstrations, displays and onsite commerce that offered an understanding of farming techniques and value-added products to purchase, creating a bridge between consumers and producers. 2023 farm tour was a success with 155 people exploring at least one of the featured stops. A post evaluation was conducted, with 25% participation. Evaluation results indicated 97% of respondents stated that due to attending the farm tour they have increased their knowledge of the agricultural and environmental practices and 97% are more aware of the value of agriculture and natural resources added to their community. Thirty-five attendees reported that they shared the information they learned at the farms with others. Farm Tour created a space for dialogue, collaboration, and appreciation of the agricultural heritage, contributing to the sustainable development of the local farming community. It also serves as a platform for promoting agro-tourism, encouraging local economic growth, and strengthening the bond between rural and urban communities. The tour not only provides an opportunity for participants to purchase fresh, locally grown produce but also promotes awareness of the economic impact of supporting local agriculture.

BEYOND THE MIDWAY: BUILDING PARTNERSHIPS WHILE EXPLORING EDUCATIONAL OPPORTUNITIES AT COUNTY FAIRS

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Annually, the Volusia County Fair extends an invitation to county schools for student field trips, which are typically self-guided and lack substantial educational value. Recognizing this as an opportunity for collaboration with the fair board, the UF/IFAS Extension office aimed to enhance these tours in 2023. Our objective was to offer approximately 100 youth a diverse array of educational activities and exhibits during the fair school tours, thereby supporting the fair while promoting 4-H and other Extension programs. Teachers, students, and parent/guardian chaperones embarked on a walking tour of the Volusia County Fairgrounds, guided by Extension agents. Emphasizing education, our focus areas included the large and small animal livestock barns, horticultural exhibits, and the honey bee display. Through facilitated discussions, reflections, and group activities, we enriched the learning experience. Additionally, 4-H members showcased their

animal care and management expertise by exhibiting their animals, further educating their peers. The 2023 fair tour attracted 150 youth and adult volunteers, strengthening our relationship with the Volusia County Fair Board and garnering positive feedback from participants. Looking ahead to 2024, we plan to extend the school fair tours over two days and broaden the topics to include a segment on coastal ecosystems, along with highlighting the home skills area. Furthermore, we aim to conduct follow-up assessments with teachers to gauge the interest of 2023 tour attendees in participating in the fair this year. The fair tour provided teachers, students, and their parent/guardians with an enriching and interactive educational experience. This collaboration not only reinforced our partnership with the Volusia County Fair but also enhanced our presence within the community.

NEED AND FINANCIAL FEASIBILITY OF COOPERATIVES TO COORDINATE SHEEP GRAZING UNDER SOLAR ARRAYS IN THE NORTHEAST UNITED STATES

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The United States has experienced a significant policy shift towards solar energy as states aim to reduce carbon emissions. Agrivoltatics is a system to pair grazing sheep to control shading of solar arrays to maximize energy production, benefiting both farmers and array operators. Grazing sheep under solar arrays increases farm income through vegetative management services and drives a need for more sheep. The increase in supply calls for a coordinated and collaborative response to maximize farm returns. Negotiating individual contracts at scale is highly inefficient. A cooperative approach can provide significant transaction cost savings. A Qualtrics survey was conducted with useful information collected from 603 farmers from 46 states with primary analysis of 392 farmers in 12 Northeastern states to quantify the need for contract negotiation, insurance, mobilization, and shepherding services. Those already participating in solar grazing demonstrate consistently strong and higher support for cooperative solar grazing services driven by concerns of travel distance to monitor sheep and time and equipment for supplemental mowing. Interest in becoming a member-owner of the cooperative was highest among active solar graziers (65%) and new/beginning farmers to sheep farming (68%). Ten-year financial modeling assumes a base set of input parameters that allows for a detailed analysis of costs of a cooperative to provide such services and identifies minimum lease payment rates required from solar array for financial success. Under the baseline scenario, the minimum lease payment required by the cooperative to provide these services to farmers is $590/acre. Assuming the same lease payment, the individual scenario does not project a positive cash balance until the end of year 6. Results of this work were shared through 3 in-person focus groups and 2 webinars sponsored by the American Solar Grazing Association attended by 120 persons. Survey summary information and guide to organizing a cooperative were shared with trade associations and a database of 900 sheep farmers in 12 states. Farmers suggest the cooperative prioritize contract negotiations and insurance to build trust and confidence of the organization to provide other services in the future.

THE PEARLS AND PITFALLS OF CONDUCTING AN AGRITOURISM ECONOMIC IMPACT STUDY

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There is confusion and contention about offering agritourism activities on farmland in Oregon. Claims of benefits for adding agritourism like creating new jobs, adding additional revenue streams, selling more agricultural products, leading to farm succession, and educating the public about agriculture are hard to quantify. Stakeholder groups have been asking for data to prove these concepts about how agritourism impacts farms and the rural economy. In 2023, OSU Extension Service undertook an economic impact study project focusing on Oregon's most agriculturally diverse and populated region, the Willamette Valley. The first step was seeking local funding from economic development, tourism, and university partners to hire a lead economist experienced with similar studies, familiar with agriculture production and confident using the IMPLAN modeling program. Our team researched other approaches and studies conducted in the United States. Survey and interview questions were developed to ground-truth the IMPLAN data and were disseminated to farms in the nine-county study

area. The results from the surveys and interviews were used in combination with the 2017 Census of Agriculture to adjust components of the IMPLAN models. Without a clear definition of agritourism, it was difficult to determine what should be included in the study. For example, we included farm stands and U-pick operations, but the Census agritourism data only includes activities. The study provided some surprises. Producers that diversify with agritourism potentially spread almost half of their gross and net revenues between the wholesale and agritourism portions of their operations. Agritourism contributes significantly to the local economy, in both dollars, direct sales exceed over $985 million and employment, approximately 11,000 jobs. We learned that in the study area, 66% of agritourism customers are local people living within 50 miles of the farmers, the remaining traveling for a day trip or overnight visit. The motivations that farmers shared for starting an agritourism enterprise focused on income and education.

NAVIGATING THE AFTERMATH OF MICROBURST IN A FLORIDA FERNERY

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Situation: On February 4th, 2024, Pierson, FL, experienced a devastating microburst, impacting 88 acres of cut foliage fern operations with six inches of marble-sized hail and strong wind gusts for over 20 minutes. This event led to significant damage to four commercial nursery operations, including flattened structures and canopy collapses. The next day, the commercial horticulture agent was notified and visited the affected sites, where growers sought assistance from Extension services to recover from this natural disaster. Objectives: Within a year following a localized microburst event, UF/IFAS Extension, in collaboration with partners, will successfully secure and distribute financial aid to at least three significantly impacted growers, thereby contributing to their recovery and the stabilization of the local agricultural sector. Methods: Following the chain of command, the County Extension Director, Central District Director, the UF Extension Disaster Educator representative, and the UF Dean of Agriculture were contacted to strategize support for affected growers. Within 12 hours of the weather event, the agent supplied on-site photos and drone footage, documenting the extent of the damage. The agent continued contact with the growers to stay diligent with reporting deadlines to secure financial support. This evidence was shared, along with details of the impacted growers, with the Volusia County Farm Bureau, and Florida Farm Service Agency (FSA). These actions prompted support from the USDA Rural Development office, ensuring a comprehensive approach to securing additional funding for recovery efforts. Results: Thanks to our efforts, the FSA has dedicated funds from the Emergency Conservation Program (ECP 2024). Affected growers received assistance totaling $25,000 for cleanup initiatives within three months of the microburst event. Furthermore, affected individuals can apply for the Emergency Relief Program (ERP), a special emergency bill scheduled for filing in 2026, to address revenue losses. Additionally, a Florida Senator has pledged legislative support. Conclusion: Collaborative efforts by partners quickly secured financial aid for impacted farmers, offering vital support for recovering from losses. This funding helped repair saran structures and sped up construction projects and clean-up efforts, effectively reducing additional crop damage and supporting the recovery efforts.

FARMING IS A BUSINESS: PROACTIVE EDUCATION TO TEACH FLORIDA FARMERS HOW TO DEVELOP OR IMPROVE THEIR AGRICULTURAL OPERATION

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Background: U.S. Bureau of Labor Statistics data shows that approximately 20% of new businesses fail during the first 2-3 years. Farmers are particularly susceptible to failure as they are often knowledgeable in crop management but lack resources or experience managing businesses. Many farmers may also have new business

opportunities, such as agritourism in Florida, that require them to have strong business skills to pursue. Because of this, farmers seek resources to help them make good business decisions in farm management. Objective: Provide practical farm business education in Florida through workshops to increase knowledge and intent of adoption of best practices on topics related to farm business management and agritourism so that farmers achieve success in their business. Methods: Four educational events were planned (2 in-person, 2 Zoom), conducted, and evaluated by UF/IFAS Extension agents to provide education to beginner farmers (68 participants) to facilitate essential tools and strategies to help them develop their agricultural operation's farm business plan. Two of these workshops focused on general introductory business topics, while the other 2 focused on Florida agritourism options. Topics included business and marketing plans, laws and regulations, and best management practices. The workshops were interactive, and farmers were provided with examples of real and hypothetical farm business models. Results: Surveyed participants (n=25) reported the following increase in knowledge: 54% developing a farm business plan or 43% marketing plan, 36% assessing farm resources, 40% laws and regulations, and 37% best management practices. Eighty-one percent of survey participants reported their intent to implement what was learned, 100% reported they would develop a farm business plan, 95% reported that they would create a marketing plan, and 80% reported they would implement some type of agritourism. Conclusion: Providing workshops on farm business and other related topics could help farmers make better management decisions and have a financially sustainable agricultural enterprise. By providing business training, UF/IFAS agents can play a major role in the economic development of the communities they serve. Providing educational experiences such as these workshops can help beginning farmers understand their roles as business owners, preparing them for the challenges they will face.

FARM PULSE: CROP INSURANCE AND GRAIN MARKETING - A HYBRID CANVAS COURSE FOR WISCONSIN FARMERS

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Wisconsin farmers are experiencing prolonged farm stress due to challenges from variability of markets, prices of inputs, and new technologies and practices affecting both crop yield and quality. This stress has contributed to beginning crop and retiring dairy farmers re-evaluating their financial situation and business plans. Farm Pulse: Crop Insurance and Grain Marketing is an online course with in-person meetings for farmers interested in learning the importance of risk management, crop insurance, and grain marketing. The project leveraged existing relationships and focus group results with these audiences to support the curriculum development. Farm Pulse reviewed previously drafted curriculum, updated and adapted materials into a more relevant format for use in-person, as stand-alone videos, and an online course. In addition, new material was developed to assist farmers with estimating their cost of production and evaluating crop insurance products. Farmers attended regional kickoff meetings to increase awareness on these topics before enrolling in the Farm Pulse on-line course, which includes video segments, interactive quizzes and activities, a case study example, and application exercises. The online course builds participant's knowledge of evaluating risk management, calculating cost of production, crop insurance products, and production and price risk management tools for grain marketing. Farmers progressed through the online course while also participating in in-person meetings. This hybrid approach to delivering the curriculum assisted participants in increasing their knowledge of topics before meeting with Extension educators and fellow farmers. The in-person meetings included simulation games that also provided for hands-on experience in using grain marketing tools. Hands-on education and opportunities to try using these tools in a simulated setting assisted with the adoption of these tools and practices in their own farm business. This session will highlight the results of the 2023-2024 course delivery, including the steps to develop this curriculum by the project team. The Farm Pulse curriculum will assist farmers in identifying production and marketing risks

of their farm business in order to assist them in making decisions that will improve their farm profitability. This material is based upon work supported by USDA/NIFA under Award Number 2021-70027-34694

AGRICULTURAL ISSUES PRESENTATIONS

URBAN SOIL HEALTH ASSESSMENT POPULARIZATION IN RURAL UTAH

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With a population of only 7800, Kane County, Utah, has over 70.5% of the residents with a garden with at least two vegetable/flower beds. In a rural Utah county where over 95% of the land is public land, homeowners with small-acreage of well-maintained yard/garden is a long-lasting and popular tradition in the community.

The tradition of maintaining flower/vegetable gardens endures up-to-date gardening knowledge that can be publicized in the community through USU Extension programs. However, the knowledge to assess soil health does not match the other knowledge.

No records of soil samples were masked taken across the urban area of Kane County and tested for the recent decade. Starting in 2022 spring, with the $2000/year funding from the Kane County Commission, USU Extension-Kane is starting the soil health assessment program: a free-to-all program that covers fees for soil sampling, shipping, and sample testing; then, if needed, the soil reports were read with clients individually along short lectures on other techniques to improve soil health. The topics focus on soil salinity control and solving, soil fertility improvement, composting, cover crops, and mulching. The information provided during these short consulting sessions is science-based, mostly from factsheets published by extension specialists from USU and other Intermountain West land grant universities. Over 200 samples were collected in all urban areas of Kane County from 2022, 2023, and 2024. The sample depths were 6-10 inches, and USU analytical labs tested all samples for soil texture, pH, salinity, phosphorous, and potassium. By mid-2024, Kane County urban soil's general soil health database should be established preliminarily with geographic data.

According to the post-event evaluation, 95% of participants agreed that their overall experiences with the program were very good or excellent and were satisfied with the information provided by the program. All (100%) participants had much better knowledge of soil health. They would like to participate again in 2-5 years. While over 80% of the participants would apply the new knowledge to their gardens and gardening activities.

KITCHEN TABLE CONVERSATIONS

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The program aimed to increase educational opportunities for women in agriculture throughout Ohio. We accomplished this task by working with women farmers, our Ohio Women in Agriculture team, and extension professionals to identify the needs and wants of the target audience. Kitchen Table Conversations (KTC) is a creative twist that uses an informal and conversational approach around the farmhouse kitchen table that is supported by peer-to-peer learning and fosters a learning network environment. Educational topics are geared around key agricultural issues and controversial topics of the given time. Strategies to educate the audience have transformed from virtual in 2020 and 2021 to hybrid in 2022, with three sessions each year, to in-person in 2023, with six sessions as a "progressive kitchen table" at six topical sites during the Farm Science Review. We utilize multiple teaching methods, embrace a safe harbor environment, and encourage audience participation. Through these teaching strategies, we have reached 144 individuals in the program over four years. The change in presentation styles and marketing (lead author 100%) has allowed an increase of 73% in participation from 2020 to 2023. These educational activities are marketed through multiple channels such as email (1010 members), social media (1200 followers), blog postings (4 posts), and personal contact. Additionally, flyers and brochures were shared through email with

OSU Extension professionals (~570 employees) to distribute to their local audience and venues. The program participants indicated that the information gained was far more valuable for their operation and helped increase productivity, mental health, and marketing. However, the participants' increased knowledge is a more valuable indicator of success as they reach out to Ohio Extension professionals during the year and participate in other OSU Extension Ohio Women in Agriculture Learning Network events and programs.

AN EXTENSION EFFORT IN ADOPTION OF BEST MANAGEMENT PRACTICES IN AGRICULTURE FOR WATER QUALITY RESTORATION IN SUWANNEE VALLEY REGION TO ACHIEVE TARGETS OF FLORIDA BASIN MANAGEMENT ACTION PLAN

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Florida's basin management action plan (BMAP) is a framework for water quality restoration by reducing pollutant loading in water bodies. In the Suwannee Valley region, which has a concentration of 62 first- and second-magnitude springs and 113 lesser magnitude springs, farm fertilizer is a major contributor (~68%) of nitrogen load and requires efficient management. The aim of our Extension work is to reduce agricultural nitrogen load by 5.8 million pounds per year by 2035 in the Suwannee Valley region through adoption of best management practices (BMPs). Three major nitrogen intensive crops in the Suwannee Valley region are Hay (~80,000 acre), corn (~50,000 acre), and vegetables (~20,000 acre). Extension agents are engaging with the farmers through various on-farm trials to demonstrate efficient ways of nutrient management. 4Rs of nutrient management which includes right place/rate/source/time along with proper irrigation management has been demonstrated through trials. Use of controlled release fertilizer (CRF) is being promoted to prevent nitrogen leaching. We also promote the use of cover crops to scavenge leftover nitrogen and for better soil health. The 4Rs trial on corn using Y drop method has covered 12 farms (~900 acre) in the last 4 years. A 15% reduction in nitrogen application (40 pounds) through Y drop showed no statistical yield difference. If adopted on 50000 acres of corn, it can lead to a nitrogen load reduction of 2 million pounds and savings of ~$1 million. On-farm demonstration of CRF in watermelons involved 12 farms in the last 4 years showing its benefit and adoption. Hundred watermelon farms are tested every week for nitrogen and potassium level using sap-petiole meter for in-season nutrient application saving million pounds of nitrogen. Fifteen farms in the region are cooperating with large scale cover crop trials and adoption. The information about BMPs in different crops is disseminated to growers through on-farm trials, field days, beginning and end of the season crop update meetings, factsheets, weekly updates, and other Extension events. The program serves as a model that could be replicated across the country for effective crop nutrient management and reducing nitrogen load in water bodies.

EDUCATING PUBLIC LAND GRAZING PERMITEES THROUGH THE CENTRAL UTAH GRAZING EXPO

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The majority of the State of Utah (63.1%) is owned by the federal government. Much of this federally owned property is rangeland which has traditionally been grazed by livestock. Since the passage of the Taylor Grazing Act in 1934 the grazing of federally owned lands has been administered through a permitting process. Livestock producers who qualify can obtain a permit to graze their livestock on federally owned lands. As the demand for the resources available on federally owned lands has increased, conflict between ranchers who graze livestock on federally owned lands (permittees) and other interests have developed. This conflict has resulted in tensions between livestock permittees and the federal land management agencies who manage the federal land. In the last couple of decades these tensions have resulted in numerous high-profile disputes. Central Utah has experienced a significant amount of these tensions. Extension personnel became concerned that some of these tensions could get out of control in Central Utah and decided to create the Central Utah Grazing Expo (Expo). The purpose of the Expo was to bring livestock producers, land management agencies and the general public together to educate them with science-based knowledge. The Expo consists of classroom-type presentations as well as in-the-field experiences. The presentations are designed to provide accurate information, and the field tour is designed to help participants see the application of science-based principles on the ground. The combination of science-based information and on-the-ground application in a group setting where differing points of view are presented with consistent facts has contributed to increased understanding of all points of view and helped reduce conflict over these issues in the Central Utah area.

REVIVING WOMEN IN AGRICULTURE PROGRAMMING IN YOUR STATE TO MEET UNDERSERVED AUDIENCES

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We hear some statistics repeated about the current and future state of agriculture and land: the amount of land owned and managed by the Silent and Boomer generations that will be transitioning to the next generation, people wanting local food and returning the farm, and the increasing number of women who are primary operators. Are we, as Extension Agents, recognizing the shift in audience and adapting to learn and meet their needs? In South Carolina alone, the number of female producers increased by roughly 25% between 2012 and 2017, and in the 2022 census, the number of female hired managers increased by 22%. The growing audience of female producers prompted the revitalization of the SC Women's Agricultural Network (SC WAgN) to serve as a dedicated group of Extension personnel to address and meet their needs. The SC WAgN Committee of Agents and personnel across program teams was formed in 2020 and the group has rebranded and worked to offer collaborative programming. Three statewide women-focused programs already existed in the state at the time- Annie's Project (Agribusiness), Ladies Engaged in Agriculture Development (LEAD, Livestock & Forages), and SC Women Owning Woodlands (WOW, Forestry & Wildlife). An initial needs assessment was sent out in October 2020 to contacts from these programs and the initial SC WAgN list. This needs assessment also served as an interest survey to learn more about our audience. 186 individuals completed the survey, and 58.2% had never attended a Clemson Extension program focused on women in agriculture. With the initial needs assessment and discussions from the committee members, the group started planning programs that would interest farmers of all experience levels, scales, and enterprises. In the last four years, SC WAgN has held three nine-episode seasons of Webinar Wednesday Lunch & Learns, offered farm safety events and farm tours, started a statewide women in agriculture conference, and launched new social media campaigns. The SC WAgN list has grown from 91 individuals to 944 and counting. The purpose of this presentation will be to discuss and share methods of reaching audiences that have not traditionally attended Extension programming.

THE ART OF DEVELOPING LONG TERM RELATIONSHIPS WITH SPONSORS

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"You win with people!" This quote is attributed to legendary Ohio State University Football Coach Woody Hayes, and this statement is true for Extension professionals. Developing and maintaining relationships and relevance is essential to the success of all Extension professionals and Extension programs. Establishing strong relationships with all stakeholders is vital for Extension to remain relevant in the quickly changing world of information and education. Among these relationships, our association with program sponsors holds particular significance. Whether these sponsors are local businesses or nationally recognized companies, each brings a unique set of objectives to the programming-sponsorship partnership. In the pursuit of successful sponsorships, OSU Extension places emphasis not merely on securing a one-time sponsorship or financial support. Instead, the focus is on strategic relationship development, acknowledging the distinct roles each partner plays in advancing the overall relationship and ensuring the long-term success of the partnership. Over the years OSU Extension has developed many relationships but one of the most lasting has been with Nationwide Insurance. Nationwide has been a long-term impactful partner with OSU Extension in developing local and state agriculture and youth development programming. In this session, with both educators and sponsors, we will explore strategies for establishing enduring and meaningful partnerships with programming sponsors. The process involves crafting a sponsorship journey that starts with building awareness and interest in the program, progressing through stages of consideration, and ultimately identifying common areas of interest. This approach takes into account the distinct objectives of both partners and emphasizes post-program engagement. The overarching goal of this session is to help Extension Educators create a positive experience that strengthens the long-term collaboration and relationship between potential and long-term sponsors.

THE IMPACT OF A FARM TOUR ON CONSUMER TRUST IN FOOD SOURCE AGRICULTURAL PRACTICES

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The divide between American consumers and those providing food for their tables is significant. Consumers are looking for the next revolution in food and health. Non-GMO, hormone-free, organic – how do these terms impact the trust relationship between the consumer and food producer?

In an effort to build understanding with consumers, a core team of producers and agencies set out to tell the story of agriculture through an interactive advocacy event. Partnering with key stakeholders, a family farm was transformed into a walking display of food production systems, offering 17 education stations and a healthy breakfast supported by over 350 volunteers from our agriculture community. Nearly 3,000 participants gained a deeper understanding of how their food is grown, processed, and brought to market in a matter of hours on a Saturday morning in June. From the greenhouse to the plate, guests witnessed the science, sustainability, and stewardship that goes into raising crops and livestock for consumption and byproducts. At the end of the event, participants were offered a survey that measured the impact of the event's key messages: 1. Consumers can trust their food source, 2. Farmers provide quality care for animals, and 3. Farmers practice good environmental stewardship including protecting water quality. The event's outcomes indicated increased consumer knowledge of their food source, strengthened community ties, and a renewed appreciation for the agriculture community. This educational model can serve as a blueprint for other extension professionals. By integrating food safety, agricultural production, and volunteer development, this event can leave a significant impact on any community it enters. The presentation will provide a framework of the process and strategic partnerships it takes to put on an event of this magnitude. Attendees will walk away with the core knowledge necessary to replicate this educational experience in their community.

WASHINGTON STATE UNIVERSITY VOUCHER PROGRAM

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Agriculture is known to be a dangerous occupation full of potential stressors like weather, changing economic markets and machinery breakdowns, requiring flexibility and adaptability when external and internal resources might already be scarce. When stressors start to compound, many farmers experience excessive stress and feel overwhelmed, making it hard to move forward to positive solutions. High levels of stress and easy access to means, such as guns or poisons, contribute to high rates of suicide in agricultural workers. To prevent agricultural suicides, Washington State University Extension, in collaboration with the WSU Psychology Clinic and a private foundation donation created the WSU Voucher Program https://extension.wsu.edu/skagit/free-therapy-voucher-program/. In June of 2021, Extension Professor Don McMoran developed a partnership with Dr. Conny Kirchoff of the WSU Psychology Clinic, starting the voucher program that allows agricultural workers to receive up to six telehealth counseling sessions at no cost. To receive services, participants call the WSU Psychology Clinic at (509) 335-3587, mention the Farm Stress Counseling Program, and provide their name, phone number, and email to set up an appointment. The Clinic then asks participants to complete intake paperwork at https://psychologyclinic.wsu.edu/

Special accommodations are provided to farmers, ranchers and farm workers whose primary language is Spanish, using translation services, and participants without internet access, using telephone options. To date, the program has been utilized by nine (9) participants, with an uptick of numbers after specific efforts were made to advertise the program. In addition, work on decreasing stigma around farmer mental health through direct promotion at fairs, workshops and conferences, brochures, and video material has helped increase participation.

A marketing campaign is planned to encourage more farmers, ranchers and farm workers to utilize the WSU Voucher program and decrease stigma around mental health in this community. Participants had the following comments: "I am so glad you are focusing on us (agricultural community);" "This has helped me determine what is most important for me and using my values moving forward;" "Reaching out to other people in my farm community was a life saver."

AGRICULTHER: A SOCIAL MEDIA CAMPAIGN HIGHLIGHTING WOMEN IN AGRICULTURE

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According to the US Census of Agriculture, there were 67,425 Arkansas agricultural producers in 2022. Only 39% of those were female, and that's just producers. That number doesn't include the women who contribute to agriculture in other ways both on and off the farm and ranch. AgricultHER was created to showcase and celebrate women contributing to Arkansas agriculture. The campaign's main goal is to bring awareness to the women who have stayed in the shadows for too long because of the challenges and barriers they face in the agricultural industry.

AgricultHER launched in June 2023, and I recruited my daughter and colleague, Jessica Wesson, to be a fellow team member on this project because of her background in agricultural communications. As a team, we set up interviews with women we know personally and travel to their operation to film. Each month, one woman is featured through approximately 4-10 videos about her contribution to Arkansas agriculture. They are shared on AgricultHER's social media pages and posted to the White County Extension website.

Since starting the project, we have always asked our interview subjects what challenges they face. Answers vary, but some of the most common obstacles are weather, capital investments, labor shortages, disease, and other environmental challenges. However, most ladies we talk to say that their biggest challenge is overcoming sexism in agriculture.

This project is still in the early stages, but we have seen some impressive results. Our social media platforms include Facebook, Instagram, X, and YouTube. Overall, our videos reached 16,594 people in nine months. Our audience is mostly female, aged 35-64.

We believe this social media campaign could be easily implemented in regions across the country. Based on our campaign impact results, we recognize that this issue is of great interest to the public. According to National Geographic, "Gender-specific obstacles—such as lack of access to land, financing, markets, agricultural training and education, suitable working conditions, and equal treatment—put female farmers at a significant disadvantage before they ever plow a field or sow a seed."

AGRONOMY & PEST MANAGEMENT PRESENTATIONS

ARTICHOKE VARIETY AND NUTRIENT TRIALS FOR FLORIDA PRODUCTION

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The globe artichoke (Cynara cardunculus) is a large thistle crop of the Asteraceae family, native to the Mediterranean. The harvested and edible component being an immature flower bud, born as several shoots and stems throughout the plants annual (or in some regions, perennial) life cycle. With production dominated by California, Florida can provide a new commodity for southeastern growers that is fresher while reducing our carbon footprint. Globe artichokes have not been a traditional crop in the state of Florida, even as a garden variety. This study demonstrates the need to focus on varieties for the subtropics. We evaluated the best performing artichoke variety in addition to the retail favorite by curb appeal. Within a farmer's market survey, more than 80% of shoppers voted for 'Green Queen' amongst five other varieties (Imperial Star, Green Globe Improved, etc.). It also represented the highest yielding, at 12,707 lbs/acre, followed by 'Imperial Star' at 11,484 lbs/acre. An artichoke was valued at $4 each globe, while the flower was $5 per stem during the Mother's Day market. The demand continues from chefs and newly transplanted retail shoppers. In addition to variety assessments, we compared the yield of controlled-release fertilizers with fertigation. The goal being to provide nutrient recommendations for numerous production systems, and varieties preferred by local retail market shoppers.

DETERMINING BEST AGRONOMIC PRACTICES OF TEFF GRASS IN IDAHO

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Teff (Eragrostis tef) is a niche forage in the state of Idaho that is increasing in popularity. Many basic agronomic practices have yet to be evaluated under Idaho growing conditions. Field experiments were conducted in Kimberly, Idaho in 2019 and 2020 to evaluate the effects of planting date, cutting height, and planting rates. Teff was planted in mid-May, early June and mid-June. Three different cutting heights were recorded at 4 inches, 6 inches, and 9 inches after the first cut. All plots were harvested the same on the second cut. Two different planting rates were evaluated: standard seeding rate (5 lbs./acre) and lower seeding rate (2.5 lbs./acre). Plots were planted as a split plot with 4 replications.

On average, growing conditions were optimized in 2019 compared to 2020. At the lower seeding rate there was a significant difference between 1st, 2nd and 3rd plantings where yield decreases with each subsequent planting event. Earlier planting yielded more than later plantings at the lower seeding rate. At the higher seeding rate there is no difference between the mid-May and early June planting events, but they both yielded significantly higher than the mid-June planting. It can be concluded that earlier planting improves crop yield, especially when planting at low rates. If planting is delayed, higher planting rates will help sustain yields.

TEACHING THE GOOD AND BAD OF COVER CROPS

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This statewide program is designed to educate Extension agents, USDA staff, and mentor farmers on cover crop benefits in row crops, vegetable crops, and sweet potato. Main objectives are to increase basic knowledge of cover crops; improve comfort level of people influencing farmer decisions; demonstrate crop management and termination methods; and disseminate information helpful in making management decisions. A key focus is to highlight positive and negative aspects of incorporating cover crops into any management plant. Demonstration plots are established at multiple locations across Mississippi and are the cornerstone of field days and other training events. Field days begin with a classroom style setting to discuss basic information such as: soil health, water quality, species attributes, establishment methods and potential insect and nematode issues. In-the-field training offers walking discussions on 40 plots of various cover crop mixes and field equipment. Attendees were provided with thumb-drives containing related journal and trade articles. A pre/post assessment as a single survey was used to evaluate each field day. When asked if cover crop benefits justify expenses, only 29% strongly agreed pre-training but 70% strongly agreed after training. Similarly, 19% strongly agreed to being comfortable recommending cover crops but 63% strongly agreed post-training. Majority of attendees were likely to: use cover crops (73%), recommend cover crops (72%), and to host demonstration plots (75%). Respondents estimated maximum cost-per-acre to justify cover crops between $5 and $200. This was highly dependent on next cash crop with agronomic crops being much lower than high-value horticulture crops.

EXTENSION ENABLES THE EXPANSION OF A LEPIDOPTERAN MONITORING NETWORK

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The Ohio State University began utilizing a network of Extension Educators to help monitor peak flights for the western bean cutworm (WBC) (Striacosta albicosta), whose larvae are a pest of agronomic crops, in 2016. This pest was monitored each year from 2016 to 2021. Participation in the monitoring network grew from 60 traps in 15 counties in 2016 to 100 traps in 27 counties in 2021. In addition to monitoring for WBC, six additional lepidopteran pests of agronomic importance were added to the monitoring network in 2022 and 2023. These pests included black cutworm (Agrotis ipsilon), true armyworm (Pseuduletia unipuncta), European corn borer (Ostrinia nubilalisi), including Indiana and New York variants), corn earworm (Helicoverpa zea), and fall armyworm (Spodoptera frugiperda). The trapping network was coordinated through the Department of Entomology and conducted by county-based Extension Educators who collected data and maintained traps. Bucket traps or wing traps contained a corresponding pheromone lure for each species. Educators recorded weekly moth counts during the monitoring season. Pest updates were provided weekly via the Ohio State University Extension Crop Observation and Recommendation Network (C.O.R.N.). This network allowed team members to inform producers and encourage them to scout and make timely pest management decisions. The network has demonstrated the importance of monitoring for pests of interest as population numbers vary from year to year, resulting in changes in pest management practices. Trends in peak flight numbers for pests in Ohio, including resulting outbreaks, outreach efforts, and plans for the monitoring network will be discussed in detail.

THE FLORIDA SUGARCANE VARIETY CENSUS: A TOOL FOR DOCUMENTING ADOPTION OF NEW SUGARCANE VARIETIES

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Sugarcane in Florida is produced on approximately 400,000 acres of land in rotation with leafy vegetables, sweet corn, and rice. Along with maintaining high yields, disease management continues to be one of the primary issues for sugarcane producers in southern Florida, and is one of the driving factors of the state's collaborative breeding program. To document trends in new high-yielding and disease-resistant sugarcane varieties adopted within the sugarcane industry, extension faculty with the University of Florida compile and release sugarcane acreage data in the annual Florida Sugarcane Variety Census. The primary objective of the annual Florida Sugarcane Variety Census is to provide variety and acreage trends to clientele to assist in their decision-making process for which varieties should be planted or phased out in subsequent growing seasons. From 2016-2023, a total of eight census reports have been published and distributed to sugarcane growers in southern Florida. Reports include several statistics including total sugarcane acreage, acreage by soil type, crop age, and planting style (fallow versus successive), as well as trending varieties. Sugarcane varieties that comprise at least 1% of the total sugarcane acreage in Florida are labeled as "principal varieties", and additional statistics on these varieties are included for growers to track the increasing or decreasing planting trends. Each year after the conclusion of the sugarcane harvest season, a "Sugarcane Harvest Recap" workshop is held to discuss information and other findings from the census. This annual workshop is attended by approximately 80 growers and mill operators each year. Information published in the census has been instrumental in increasing the adoption of high-yielding, disease-resistant sugarcane varieties by over 25%. The Florida Sugarcane Variety Census continues to be an important decision-making tool for growers, and can act as a model for other cropping systems within the United States.

DEPOSITION RESULTS OF DIFFERENT STYLE SPRAY TIPS AT VARYING SPEEDS AND ALTITUDES FROM AN UNMANNED AERIAL SYSTEM

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The application of pesticides with a UAS has become a popular practice over the past few years within crop production. The ability to carry larger volumes of liquid onboard, reduced costs, and simple operation has attributed to the increased popularity. Additionally, the increased number of fungicide applications in corn due to the tar spot disease has shown that the demand for aerial applications of all types has increased with UAS pesticide application technology providing the opportunity to meet the increased demand. The challenge of applying pesticides with a UAS is understanding the performance and efficacy of applied products. Limited information exists in terms of field performance using different nozzle styles, flight heights and flight speeds. Therefore, the objective of this study was to compare different nozzle styles and their performance in terms of coverage and droplet size for an UAS sprayer. A frame was constructed out of dimensional pine lumber with the dimensions of 10' High by 31' wide. The frame had 3 different heights of 5', 10', & 15' where water sensitive cards were placed 15" apart along each 31' row for a total of 36 cards per pass of the UAS sprayer. Three different nozzles were tested: Turbo TeeJet, Turbo TeeJet Air Induction, and the TeeJet XR. Additional treatments were two ground

speeds 15 and 20 mph. All tests were replicated 4 times. A Hylio110 equipped with for all tests. After each pass, water sensitive cards were collected, placed in a sealed bag, and then transported to a lab for analysis with a DropScope scanner. Means and variations were then computed for each nozzle at each card position of the swath. Results indicated that the applications by the UAS sprayer with non-air induction nozzles had significantly smaller droplets, but better coverage compared to an air induction nozzle. For applications within corn canopy, the droplet size and coverage were more consistent at the ear leaf than a tradition ground sprayer.

FUNGICIDE EVALUATION FOR WHITE MOLD SUPPRESSION IN OHIO SOYBEANS

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White mold (Sclerotinia sclerotiorium) has long been present in northeast Ohio and is the primary yield limiting pathogen of soybean in this region. Disease has been detected each year since 2016 at varying severity levels, with widespread outbreaks observed in 2020 and 2023. Cultural practices such as 30-inch row spacing, lower plant populations, and resistant varieties have been adopted by most growers. On-farm research trials were conducted in 2022 and 2023 to evaluate the effectiveness of fungicides on the suppression of white mold. Strip trials were conducted using a random block design with a minimum of three replicates for each treatment. Treatment plots were approximately two acres. Fungicides Aproach (picoxystrobin), Endura (boscalid), Revytek (mefentrifluconazole/pyraclostrobin; 2022 only), and Viatude (picoxystrobin/prothioconazole; 2023 only) were compared to non-treated control strips. Fungicides were applied at the R1 growth stage at labeled rates for white mold suppression in 100' spray passes. Incidence and severity ratings were collected approximately five weeks post application. Treatment plots were harvested two full combine header passes (80') in the center of the plot and yield was measured using a certified weigh wagon at harvest. White mold pressure was moderate in 2022, and high in 2023. No significant difference was observed in any of the fungicide treatments compared to the non-treated strips for incidence or severity in 2022 and 2023. Yield was significant ($P<0.05$) for Aproach and Revytek in 2022, and not significant in 2023. Application costs in 2022 were not recovered despite yield increase for either Aproach or Revytek. Although plant health benefits likely contributed to increased yield in 2022, neither Aproach or Revytek reduced the incidence or severity of white mold relative to non-treated controls.

ENHANCING PEANUT PRODUCTION IN THE SUWANNEE VALLEY: A COMPREHENSIVE EXTENSION PROGRAM FOR SUSTAINABILITY AND PRODUCTIVITY

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Statement: The peanut industry plays a vital role in the Suwannee Valley Region of North Florida, a key agricultural area spanning eight counties. With over 100 independent farms covering more than 42,000 acres and generating annual revenues of approximately $37.8 million, the industry significantly contributes to the region's socio-economic landscape. The collaborative efforts of county and regional extension faculty are crucial in supporting peanut producers through educational and support services, addressing the dynamic challenges posed by evolving technologies and scientific advancements. Objective: The primary aim of this program is to provide peanut producers in the Suwannee Valley with access to cutting-edge research and methodologies to boost sustainability, productivity, and profitability. This includes guidance on selecting appropriate cultivars, managing pesticide applications efficiently, and optimizing harvest

timing to ensure crop maturity. Methods: A Row Crop Working Group was established to offer timely and regionally relevant information to producers. A comprehensive program comprising on-farm and research-led small plot trials, extensive site visits, workshops, clinics, and field days was developed. The program focuses on proactive and collaborative evaluation of pesticide products, comparison of peanut varieties, and optimization of harvest timing, supported by industry stakeholders like the Florida Peanut Federation. Services such as scouting, soil, tissue, and nematode sampling are provided, at no cost to the farmer. Impact: In 2023, the program attracted 301 attendees to its production meetings and field days. Scouting services were provided for approximately 4,500 acres, saving producers a total of $45,000. Additionally, 40 samples were sent to diagnostic clinics, saving $1,600, and pod blasting for 20 producers over 5,000 acres led to increased yields with an economic impact of $625,000. Extension Education: The program serves as a model that could be replicated in any region or for any commodity requiring support for effective production methods. Through this initiative, growers are empowered with the knowledge and tools necessary for modern agricultural practices, underscoring the program's significant role in enhancing the productivity and sustainability of the peanut industry in the Suwannee Valley Region.

NEMATODE COMMUNITY AND PLANT GROWTH RESPONSE TO ROOT LEACHATE TREATMENTS ON FRUITING VEGETABLES IN LOW DESERT OF CALIFORNIA

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Tons of vegetable crop residues are generated every cropping season in California's 'Winter Salad Bowl'. Soil-dwelling microbes decompose and release nutrients that are held in organic form to plant-available form for subsequent crops. An ideal soil contains 5% of soil organic matter (SOM), where microbes are accommodated to perform ecosystem services like decomposition. In southern desert valleys of California, however, SOM content is below 1% attributed to scorching summer temperatures burning to negligible levels. This is low that microbial activity and overall soil health can be compromised. One way to stimulate microbial activity would be to condition the soil with root leachate pre-plant treatments. Root leachate contains sugars that can recruit and nourish beneficial microbes, serves as a source of microbes by inoculating planting beds to jumpstart microbial activity, and can break dormancy of weed seeds or survival structures of soilborne pathogens to be controlled by pre-plant chemigation. Two field trials were conducted to examine the effects of root leachates on cantaloupe and pepper in Coachella Valley. In Trial I, 6-week-old cantaloupe transplants were planted on 70 m × 1 m raised beds. Treatments included with or without tomato root leachate treatment and replicated 4 times in a randomized complete block design. The root leachate was prepared by running 19 L of water through 4 potted tomato plants and water collected was applied through drip one week after planting. In Trial II, tomato and pepper root leachates were used on pepper crop. In Trial I, tomato root leachate increased cantaloupe canopy and nitrate-N in the soil ($P \leq 0.05$), and numerically increased beneficial nematodes including bacterial feeders, omnivores, and total nematodes. In Trial II, pepper root leachate significantly increased chlorophyll content ($P \leq 0.05$), and numerically increased leaf nitrogen content and bacterial-feeding nematodes. These results suggest that root leachate treatment is stimulating microbial activity in SOM-deficient soil as reflected by increased beneficial nematodes. An increase in microbial activity increased nitrate-N in the soil and subsequently increased plant growth. More research is needed to dissect and understand the mechanisms, but these findings point to a potential organic management option for the growers in the desert.

FOUNTAIN GRASS - FRIEND OR FOE?

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Johnsongrass, sericea lespedeza, multiflora rose, and perilla mint are examples of plants introduced to Missouri for forage, erosion control, or as ornamentals that have become troublesome weeds for producers. In fall of 2016, a pasture field in Cape Girardeau County, Missouri, had

an unidentified grass that cattle would not graze. Working with University of Missouri (MU) State Weed Specialist and MU State Horticulture Specialist, the grass was identified as Chinese fountain grass, Pennisetum alopecuroides. This was the first reported site of this ornamental in a Missouri field. In the fall of 2016, I wrote an article for the Mid-America Farmer Grower magazine to raise awareness of this potentially invasive ornamental to farmers and ranchers. In collaboration with MU State Weed Specialist, an on-farm herbicide efficacy trial was conducted, in 2017, to help identify management options. Treatments included seven herbicides, mowing, and an untreated check. Fountain grass control data was collected at 4, 10 and 21 weeks after application. Results indicated that glyphosate was the only effective control. Mowing was not a viable management option due to the plant's ability to produce seed close to the ground. In 2018 and 2019, a greenhouse study was conducted on seed viability after glyphosate treatments 1-month and 1-week before frost. Results indicated that glyphosate reduced germination to less than 1%, regardless of application timing. Subsequent educational efforts led to identification in four additional counties across southern Missouri. Ongoing educational efforts have included articles and presentations across the state. As of 2023, 10 Missouri counties have confirmed fields of fountain grass. This invasive species has also been identified along roadsides. In 2023, I was contacted by a University of Arkansas Extension agent about management options of fountain grass in northeast Arkansas pastures. With the increasing number of locations, a more robust research project will be conducted by the MU State Weed Specialist in 2024.

EVALUATING WINTER ANNUAL/SUMMER ANNUAL FORAGE ROTATION IN NE IOWA

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Interest in grazing cover crops and winter annuals has increased in recent years. Research on grazing winter and summer annuals in Iowa has been concentrated in southern Iowa, but because of differences in growing conditions, data on growth potential from the northern half of the state is needed. Similar interest has been developing on utilizing summer annuals to maximize production during the summer slump of Iowa pastures. The research component of this project is designed to measure and demonstrate the applicability of a winter annual - summer annual forage rotation in northern Iowa at the Northeast Research and Demonstration Farm at Nashua. The educational component focused on the synergy of incorporating annual forages into the farming operation to manage production risk associated with weather extremes, diversify the cropping system, control cow grazing costs, and improve soil health. A winter annual- summer annual forage rotation can be used to break up the traditional corn - soybean rotation and produce 7-11 tons per acre of forage biomass on a dry matter basis per year. On-farm demonstration field days were held at 15 locations and information was presented at 15 other meetings directly reaching 732 producers. An additional 8800 social media contacts were made through YouTube, FaceBook, blogs, and podcasts. Dry conditions in the fall of 2020 and again in the fall of 2022 through 2023, limited germination and early growth. The drought in the spring of 2023 prevented germination of the summer annual so only a single harvest was taken on September 5, 2023. The 47-year average rainfall for the farm for April – November is 30.8 inches but from April – November 2023 there was only 13.8 inches of rainfall significantly reducing summer annual yields. The variation between years indicates a double cropping system is very dependent on adequate rainfall for forage establishment and growth, as seen by the loss of the August harvest in 2023 where only half the average rainfall was received compared to 2021 and 2022.

ANIMAL SCIENCE PRESENTATIONS

IMPROVING PRODUCTION EFFICIENCY THROUGH CATTLE REPRODUCTION WORKSHOPS

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Ranchers in southern Utah and northern Arizona expressed a need for training in cattle pregnancy diagnosis. Veterinary service in the area is limited or non-existent and producers wanted hands-on training in diagnosing their own cattle. In 2008, cooperative extension faculty from the area procured funding from local conservation districts and provided a successful cattle pregnancy diagnosis workshop. After backlash from the Utah Veterinary Medical Association (UVMA) because the workshop was not taught by a licensed veterinarian, organizers established goals of following current laws and regulations while continuing to meet the needs of ranchers by providing needed programming. Since this time, the cattle reproduction workshop is held every year for one to two days in September, a favorable time for ranchers in the area, and addresses desired topics such as reproductive diseases, artificial insemination and synchronization, calving, castration and implanting, nutritional aspects of reproduction, calf health, and improving reproduction efficiency. Since the beginning of the workshop in 2008, 907 participants increased their knowledge of cattle reproduction. The workshops average 61 participants who manage 5,435 head of cattle. Organizers accumulated funding of over $31,000 to make the event free to ranchers. Over 94% of participants evaluated the workshop as “excellent or higher” over the past six years. Of those who attended, 71% implemented at least one reproductive management practice because of knowledge gained from the workshops and 63% reported improved conception, shorter calving season, and higher percentage of live calves in their herds. Effective evaluation of the cattle reproduction workshop results in programming that successfully improves economic stability for ranchers in rural Utah and Arizona.

LONGHORNED TICKS AND THEILERIA CAN CHANGE THE WAY WE GRAZE CATTLE IN THE UNITED STATES

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There is an emerging animal health threat that may fundamentally change how we graze cattle in the United States for the foreseeable future. The invasive Longhorned tick has shown the ability to kill cattle as large as a full-grown bull from blood feeding, kill calves in as fast as five days on the animal, and transmit a protozoal disease, Theileria orientalis IKEDA, which has no treatment, can exist as an asymptomatic carrier, and has an estimated 5-10% fatality rate. This is just one of the challenges faced by producers, their families, and their animals from the spread of tick-borne disease. If we include the data from Lyme disease in Oho alone, there has been a 10x increase in Lyme cases diagnosed in the past 10 years with our most diagnosed cohort being our children aged 5-9 and 10-14 years old. The Longhorned tick was first discovered in high numbers on a farm in New Jersey in 2017. Since then, it has rapidly expanded to 19 states and counting, affecting nearly the entire eastern half of the United States. The Longhorned tick is the vector for Theileria so where the tick goes, so goes the disease. The key to producer awareness is an Integrated Pest Management approach that includes robust educational programs that promote awareness on scouting, treatment options, and tick phenology. This educational outreach is well-received by producers. At the 2022 Beef and Forage Field Night, tick information/awareness was the single most important thing 23 of 34 (68%) of producers reported learning about. This educational outreach has proven effective at saving the lives of cattle, with three producers being able to scout, identify, and treat their herds in with no loss of life after tick programs in their county. This presentation will detail the state of Longhorned ticks, the impact of Theileria in cattle, and where you can find information to create your own program to impact the lives of cattle and the economic sustainability of cattle production for your producer clients.

CONNECTION AND EDUCATION: THE CATTLEMEN'S ROUNDTABLE

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The "Cattlemen's Roundtable" extension program is an initiative addressing the educational needs of local cattlemen through informal discussions. Recognizing the dynamic challenges faced by individuals in the cattle industry, the program is designed to deliver relevant and timely information through a monthly roundtable format. The unique aspect of the "Cattlemen's Roundtable" is the informal structure, providing an open platform for cattlemen to engage with University of Florida specialists directly with the producers leading the direction of the discussion. These sessions cover a diverse array of topics crucial to the cattle industry, including agronomy, economics, beef quality assurance, nutrition, herd health, and general industry trends. The choice of venue adds a strategic dimension to the program. The event is conducted at the local livestock market on a nonsale day. The roundtable topic is introduced by the presenter who then opens the floor for questions from the audience. The discussion lasts for 45 minutes. The brevity of the event is conducive to the lunch hour of the cattlemen. Conducting the monthly roundtable sessions at the local livestock market reinforces the relevance of the information shared and also establishes a sense of community among participants, fostering networking and collaboration. Based on the post-reflective survey participants indicated a 51% increase in knowledge. Behavior changes could lead to economic impacts due to nutrition and forage selection on various ranches. The most notable changes include increases in pregnancy rates and heavier weaning weights. In essence, the "Cattlemen's Roundtable" extension program demonstrates a successful model in addressing the educational needs of local cattlemen in an informal setting and learning environment. Both the presenters and the participants appreciate that the roundtable leads to timely and relevant topics and questions. Continued education in the beef cattle industry leads to progressive and positive changes sustaining the industry and its success.

COMPARATIVE ANALYSIS OF BEDDING SOURCES USED IN COMPOSTING PEN-PACK CATTLE MANURE

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Ohio cattle producers have several bedding sources to choose from when bedding in confined animal housing systems. Among them are sawdust, wheat straw and cornstalk fodder. According to USDA-NASS 2018 data, Fulton-Henry-Williams Counties, Ohio are home to nearly 60,000 head of cattle and calves annually. It is estimated that over 90% of the manure produced on these farms is in the bedded pack or solid form. This multi-site, on-farm study sought to evaluate the impact of these bedding sources on nutrient density in composted pen-pack cattle manure. Additional goals of the study were to measure pre- and post-composting weights and volume as to encourage producers to transport nutrients to more distant fields.

The research involved each farmer weighing manure before and after composting, turning compost with a commercial compost turner in a windrow, intensely sampling each windrow, and then transporting the nutrients to a desired low phosphorus field. Several replicated agronomy trials were conducted. Case studies were used for economic analysis of the process. This presentation will summarize the results from 20 sites over three years in Fulton and Henry Counties in Ohio. Preliminary aggregated data shows a straw-based compost has a significantly higher phosphorus and potassium density, whereas, sawdust-based compost has a significantly higher total nitrogen density. After only an average of eight weeks of composting, manure volume was reduced by 28% and weight was reduced by 53%. The impact of the research informs cattle producers of the increased nutrient density based on bedding source and the increased value that composting manure provides to an operation. Several cooperators have made changes to their manure handling procedures to benefit from

the knowledge gained from this research. To date, this research has been shared across seven Extension outreach events involving 396 clients.

FLORIDA BULL TEST

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Developing bulls is a challenge for mid-sized and smaller producers. The Florida Bull Test (FBT) was founded (2000) in response to these challenges. The FBT allows producers to consign purebred bulls to a performance test at the cost of development (no profit) while gaining critical production data. Objectives: The objectives of the FBT are: 1) to provide consignors data to improve their operations, while economically developing bulls; and 2) to provide cow/calf producers with bulls that will enhance genetic, and 3) use the data from bulls consigned as an educational tool. Methods: The FBT is governed by a committee of consignors, Extension specialists/agents, and producers that set requirements and standards. This includes index requirements for the sale. The FBT is an on-farm test located at the North Florida Research and Education Center. Over the multi-phase test consignors receive performance data on bulls, educational consultations, and training. At the end of the 112-day test qualifying bulls (based on performance index) can be sold at the FBT sale. The sale provides a marketing platform for consignors, offering buyers a place to purchase bulls screened through an unbiased third-party (Extension). Results: Over three years, 69 consigners from four states consigned 328 bulls, with 225 being sold to producers in four states. The average herd size of the buyers is 105 head and 70% of buyers are repeat customers. Buyers rank FBT data as a key purchasing decision. Consignors (88%) rank the integrity of the data to their management as a reason for consignment. An increase of $500 or more to bull's value was indicated by 63% of consignors. A survey of buyers indicated that the average service life of a FBT bull is 4 years siring 17 calves a year with an average increase of $67 per calf sired by bulls from the FBT as compared to those sired from bulls from other sources. Impact: The FBT provides an unbiased performance evaluation of bulls. Consigners utilize the data to improve genetics in their own herds. Since 2000 there have been 2,217 bulls consigned and sold through the FBT with an impact of $10,100,652.

ADVANCED SHEEP AND GOAT NUTRITION SCHOOL

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The Advanced Sheep and Goat Nutrition School workshop was designed to help small ruminant producers learn fundamental nutrition concepts and teach them how to put those concepts into practice balancing rations. The objective of the workshop was to teach sheep and goat producers strategies to better manage nutrition within a flock or herd. The purpose of the workshop was to explain basic principles of ration balancing, review nutrient requirements for sheep and goats, discuss how to interpret a forage analysis report, and explain how to configure a grain mix and how to balance a ration utilizing one of two different computer programs. Two workshops were held across the state, one in eastern Pennsylvania and one in western Pennsylvania. Post evaluations indicated that 100% of participants learned something new, 100% learned a moderate to significant amount, and 100% planned to make changes to their operation. Participants also indicated in the post evaluation that 79% planned to use the software to balance rations for their flock or herd and 43% planned to have forages analyzed. Follow up conversations with several participants conducted at least 6 months after workshops indicated that producers were using the computer software programs. As a result of balancing rations, they decreased feed costs, increased rate of gain and increased the value of lambs. One producer who finishes lambs noted that he uses the software to help him work more effectively with his local feed mill to substitute lower cost grains into his

grain mixes. This decreased feed costs by $300 for the year. This also increased weight gains and improved the quality of lambs which increased income by approximately $5,500. Another producer made adjustments to rations that resulted in increased weaning weights. Lamb value increased by approximately $35 and income from the sale of lambs increased by approximately $1,750.

BEEF CATTLE SERIES: 101 & 201 EDUCATIONAL CATTLE WORKSHOPS FOR BEGINNING, VETERAN, AND ESTABLISHED CATTLE FARMERS

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Over the last five to ten years, middle Georgia has experienced farm turnover. UGA Extension and the Natural Resource Conservation Service have seen a drastic increase in cattle management questions. There have been approximately 40 new farmers moved to the area and about 80% of the current farms have experience turnover. This has led to the need for an increase in beef cattle management programming. The purpose of the Beef Cattle Educational Series is to meet the educational needs of cattle producers. The programs were hosted to provide the necessary background information to start or take over a beef cattle cow/calf operation. The program series' original objectives were to cover the basics of beef cattle production management but grew to cover more advanced topics in the 201 class. The topics ranged from forages to animal science: Getting Started (GATE Card, FSA Programs, Record Keeping), Economics/Market Outlook, Grazing Systems for Cattle, Conservation Practices, Testing: Soil, Forage, Litter, Etc., Planning Your Grazing System (Establishment, Renovation, Management), Weed Management/Sprayer Calibration, Structural Practices/ Equipment, Cattle Nutrition/Selection, Herd Health, Reproduction/EPDs. Since origination, our Beef Cattle Educational Workshop series has been a success with over 300 participants throughout all courses: 65% beginning farmers, 14% veteran farmers, and 21% established farmers. Participants were not expected to attend all sessions, but majority chose to. Participants ranged from multiple counties including but not limited to: Upson, Lamar, Pike, Monroe, Crawford, Spalding, Coweta, Toombs, and Chatham. The series grant sponsor made it possible for each attendee (first night of BC101) to get free soil samples. With those results, they were able to help come up with a game plan for pasture renovation, establishment, and management throughout program. As a result of the program series, 100% of the participants have continued to utilized FSA, NRCS, and Cooperative Extension in their perspective counties and many schedule regular check-ins regarding available educational materials, testing, and arrange site visits with their local offices.

PREGNANCY DIAGNOSIS PROGRAMMING FOR BEEF CATTLE PRODUCERS

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Fertility failure in beef cattle herds can be a major economic loss to farmers. To improve farmer knowledge, comfort level with new technology and options, and increase farm profitability, the Lee County, Virginia Extension Office working with the Lee County Livestock Association and Dr. Mercadante from Virginia Tech to host a Cow Reproduction Bootcamp with 24 participants. The program used a combination of classroom and hands-on. Farmers learned more about reproduction and pregnancy detection options. The Cattle Reproduction Bootcamp taught farmers how to collect blood and use chute side pregnancy tests. Pregnant and open reproductive tracts were also utilized to teach farmers. Participants were given an evaluation at the conclusion at the event. Ninety-five percent of participants shared that their confidence in making reproduction decisions had increased. In addition, all participants shared that they would be incorporating skills and knowledge that they obtain from the course in their farms.

SMOKING AND GRILLING FOODS

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In 2019, Extension Educators with Family and Consumer Sciences and Ag Livestock programming expertise developed and implemented the "Smoking and Grilling Foods" program for consumers. At this five-hour pilot program, twenty-two participants were offered educational content focused on meat science and selection, keeping food safe, United States Department of Agriculture (USDA) meat quality grades, and cooking methods. Following the pilot program, participant feedback contributed to the adaptation of the program into a two-part workshop to accommodate the lecture, demonstration and hands-on components of the program. To date, this program has been offered six times and educated 146 adult participants in southwest Idaho. Participants receive lecture, demonstration, and hands-on education where they can trim, season, and cook their own tri-tip and pork loin meat cuts. In addition, a live brisket trimming demonstration is performed during the workshop, and a fully cooked brisket is sampled at the completion of the workshop, along with the other smoked food samples such as cheese, pepper jam, and cheesecake. This program structure contributes to knowledge, skill and confidence-building in participants. A major factor in the success of this program is the multi-disciplinary approach that has coupled a Family Consumer Science Educator with food safety passion and expertise and an Ag Livestock Educator passionate about meat science and smoking/grilling meat. In-person and virtual train the trainer professional development regarding this program has been offered 7 times with 227 total participants from 35 different states. Collaborative program pieces, including marketing materials, program structure, implementation considerations and program impact will be shared. This presentation will equip participants with ideas and tools to develop similar and other multi-disciplinary programs.

EQUIPPING AGENCIES FOR LIVESTOCK WELFARE AND EMERGENCY RESPONSE THROUGH EXTENSION PARTNERSHIPS

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Limited training resources are available to agencies that respond to livestock neglect, animal welfare, neighborly disputes, and emergency situations with production and hobby agricultural producers. Agency employees must have general knowledge and understanding of common livestock species and behavior, management and production practices, and legal considerations when responding to these needs. Land grant universities and Extension are uniquely poised to provide needed education and training to these agencies due to the knowledge, expertise, and facilities they possess. This session will explore the mechanics of how Extension can collaborate with these agencies to establish an informed and science-based approach to animal care and management. Such a collaborative effort stands to benefit both producers and the animals under their care, fostering a win-win scenario for all stakeholders involved. Three programmatic models of success will be shared: Livestock Education and Certification for Agricultural Law Enforcement, Livestock/Equine Welfare Skills Assessment Certification, and Large Animal Emergency Response Programs. Since their inception, these programs have trained and certified approximately 800 participants, equipping agency personnel with the necessary tools to handle diverse situations involving livestock. These examples showcase the potential of inter-agency collaborations through models that can be replicated in other regions.

EARLY CAREER DEVELOPMENT PRESENTATIONS

TABLE THOSE GREAT RESOURCES – LEVERAGING INDUSTRY EVENTS AND TRADESHOWS

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'Tabling' at industry and professional association led tradeshows and meetings are excellent opportunities to share your Extension deliverables and generate the impact data so critical to many of our promotional pathways. We will discuss how to approach these groups and the resources you may be able to offer in return, as this should be a collaborative endeavor. Real experiences related to offering speaking sessions geared towards continuing education units (CEUs), modification of lecture topics to meet their clientele's needs, serving on educational committees, or cross promotion opportunities will be explored. In return, we will discuss the importance of a 'Tabling Kit' and the types of deliverables and Extension materials worthwhile considering. Experience has taught this is much greater than the most recent fact sheet, rather think in terms of representing Extension as a whole and the vast resources a stakeholder can access. We will also ideate on event specific deliverables that can be used to drive stakeholders to future events, ongoing Extension programming, related programs such as Environmental Stewards or Master Gardeners, and gathering critical impact data and comments or suggestions related to the deliverables or programming. 'Tabling' is often overlooked but should be seriously considered for professional development in addition to the overriding dogma of being part, not separate from, our stakeholder communities.

BRIDGING COMMUNITIES: COUNTY FARM TOUR

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The agricultural industry is the silent engine of the Volusia County economy as the demand for sustainable and locally sourced products continues to grow. For 42 years, Farm Tour has served as an educational and immersive opportunity for individuals and communities to connect with the agricultural roots of the county. The objective was for participants to increase knowledge and awareness of agricultural enterprises, sustainable practices and their economic impact to Volusia County. The University of Florida/IFAS Extension office and the Volusia County Farm Bureau have partnered with eight local producers to highlight their farming techniques, products, and passion for agriculture. The tour was organized with four stops on the west side and four stops on the east side of the county from small in size to large operations. The tour encompassed a range of agricultural activities, including crop cultivation, livestock management, and agro-processing. Farmers and agricultural experts guided participants through the production processes. The tour offered interactive demonstrations, displays and onsite commerce that offered an understanding of farming techniques and value-added products to purchase, creating a bridge between consumers and producers. 2023 farm tour was a success with 155 people exploring at least one of the featured stops. A post evaluation was conducted, with 25% participation. Evaluation results indicated 97% of respondents stated that due to attending the farm tour they have increased their knowledge of the agricultural and environmental practices and 97% are more aware of the value of agriculture and natural resources added to their community. Thirty-five attendees reported that they shared the information they learned at the farms with others. Farm Tour created a space for dialogue, collaboration, and appreciation of the agricultural heritage, contributing to the sustainable development of the local farming community. It also serves as a platform for promoting agro-tourism, encouraging local economic growth, and strengthening the bond between rural and urban communities. The tour not only provides an opportunity for participants to purchase fresh, locally grown produce but also promotes awareness of the economic impact of supporting local agriculture.

TIPS FOR SUCCESSFUL SUBMISSIONS TO THE JOURNAL OF THE NACAA

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The Journal of the NACAA is an ideal place for members to share the results of their scholarly work, experimental research, or outreach programs. However, authors sometimes run into difficulties during the submission, review, and/or revision processes. This means they may miss the deadline for publication of their article. This presentation will explain the process and provide some practical guidelines to enhance an author's chances of successful publication. Attendees should also bring their questions for discussion after the presentation.

ENGAGING POTENTIAL EXTENSION DONORS AND SPONSORS

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There are many skills necessary for successful Extension programming, including seeking sponsorship dollars. As new employees are hired, it is critical they receive effective training on how to find and properly engage with potential donors. The onboarding of new employees often does not adequately address the topic and can lead to difficult situations. Fundraising requires specific efforts in the program planning phase and can lead to conflict or stress within the planning team. There are many considerations when looking for both monetary and in-kind contributions. It is common for Extension agents to simply try to cover actual program expenses with no cushion for unexpected overruns and this is evident in the way sponsor requests are made or in the way the program looks. Too often, the success of the event can be limited by a lack of resources. It is imperative that a solid budget with a plan for securing resources be developed early in the planning period. Proper preparation for the in-person meeting to request sponsorship can ease tension in the room and lead to a great visit. However, not every employee is comfortable in that role, so making sure the right person delivers the request can help. Proper attire, timing and attitude are just a few of the successful keys. Printed resources seeking donors can help to clearly outline the need and various giving levels. This presentation will cover the essential elements of fundraising and will include lessons learned from a major capital campaign.

YOU NEED BOUNDARIES: PROTECTION FROM EXTENSION BURNOUT

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The most valuable resource an Extension agent has is his or her time; however, the many demands on agents' time can lead to feelings of overwhelm, underutilization, and can ultimately lead to burnout. It is important to learn how to protect time and set firm boundaries with coworkers, family members, clients, volunteers, leaders, and stakeholders. Setting boundaries and enforcing those boundaries can help agents prioritize workloads and spend their most valued resource doing the work that matters most to them. As a County Extension Director, I give this presentation to new agents upon hire and to all agents in my office as a yearly reminder of how to implement and maintain boundaries. This presentation focuses on how to set boundaries, why boundaries are important, how to identify where boundaries are needed, and goes through scenarios that often occur in Extension so audience members can practice boundary setting. Preventing burnout starts with the agent, and this presentation will teach agents how to take control of their time and say no to activities, events, and time zappers that can cause stress, feelings of inadequacy, and lowered productivity.

BUILDING SUCCESS TOGETHER: THE TRANSFORMATIVE POWER OF PEER MENTORING FOR EARLY CAREER AGENTS

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A hiring freeze that resulted from the 2020 Pandemic led to ten new Extension Agents across programmatic areas starting work for UF/IFAS Extension's Northeast District between April and September of 2021. They completed the UF/IFAS New Agent Academy in the fall of 2021 and are submitting mid-career review packets in the spring of 2024. In the Spring of 2023, these 10 agents identified a need for support and collaboration among peer agents going through the promotion process. A plan was developed to meet monthly beginning in September through February when mid-career reporting packet submissions were expected. This group's goal is to provide peer-to-peer mentoring and expand the mentor base of all agents involved. Also, the group hopes to deepen the professional support and camaraderie of the agents involved to reduce agent turnover in the first six years of service. A series of five monthly dates were identified and scheduled. Agents divided up dates and planned individual agendas where participating agents could have time for shared wisdom and mentorship from tenured agents familiar with the promotion process, have an opportunity for reflection and feedback from peers, and have dedicated time to work on their report. After the success of the initial five meetings, the agents involved decided to continue meeting on a semi-annual basis to further develop as a group. Additional plans include extending the invitation to participate to all early career agents in the district and offering support to those who form their own cohort specific group. The group's primary outcome has been reduced anxiety over the mid-career review process for the agents involved. Additionally, the group's interactions have strengthened the relationships between participating agents and expanded professional opportunities for cross-programmatic collaboration. Long-term, the group hopes to show an impact in the retention rates of early career agents in extension.

EMPOWERING EDUCATION: IMPLEMENTING A PROGRAM IN SCHOOLS IN YOUR COUNTY

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A school-based embryology program has been developed to actively foster scientific curiosity and instill a deep understanding of life sciences among students. The objective is to immerse youth from five local schools per semester in the captivating journey of embryonic development, providing a hands-on and engaging learning experience. This initiative directly addresses the pressing needs of STEM (Science, Technology, Engineering, and Mathematics) education. The process of introducing a program into schools involves several crucial steps to ensure successful implementation and seamless integration into the educational environment. Beginning with research and planning, 4-H and Agriculture agents identified specific goals and learning objectives, determining the logistical requirements of the program. The next pivotal step was to garner support from school administrators, teachers, and parents, emphasizing the educational benefits and relevance of the embryology program. The program was meticulously developed including the creation of a Google site to provide both teachers and students with easy access to program

resources. Securing funding and resources was imperative to provide teacher training, classroom kits, and curriculum materials. By presenting a clear roadmap for the implementation of the program, early career educators will be better equipped to develop and execute their own educational initiatives in schools effectively.

EFFECTIVELY PROMOTING YOUR EXTENSION PROGRAM

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How can Extension compete for our farmers' time and attention when they are pulled in so many directions? As Extension Agents we need to incorporate a marketing plan into our outreach efforts. It is no longer viable to simply be a trusted resource. We now need to be known as a trusted resource. A strategic and wide-reaching Program Marketing Plan can help promote our efforts in a meaningful way that will increase participation in our programs and further our educational reach. A marketing plan goes beyond using social media as a marketing tool. We need to thoughtfully execute our marketing efforts in a way that proves to our clients that taking the time to participate will be worth it. This presentation will teach the basics of event marketing and help participants consider their "Customer Value Proposition", Marketing Mix (Product, Price, Place and Promotion) and give tips on how they can efficiently and effectively market programs to their target audience. This presentation will use real-world examples from my experiences as an Agricultural Agent. It will be interactive and encourage attendee participation in the dialogue. Participants will gain a better understanding of how to effectively market their Extension programs including practical ideas that they can use immediately upon returning to their home states after the conference.

THE VALUE OF ON-FARM DEMONSTRATIONS FOR AGENT GROWTH

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Land grant universities are a three-legged stool comprised of research, education, and extension programs. Each component is necessary in achieving the land grant university mission, and there is no better example of this symbiotic relationship than on-farm demonstrations. The UF/IFAS Extension Peanut Team has developed a model for on-farm demonstrations that serves as a key opportunity for early career (EC) development. Objectives: The objectives of this model are 1) to establish a network between producers and EC Extension faculty; 2) use on-farm demonstrations to train agents who are inexperienced in specific production areas; and 3). use on farm trials to expose EC agents to applied research. Methods: Partnerships for on-farm demonstrations are between a specialist, extension agent, and producers. The research component is overseen by the specialist including the trial design, data collection and analysis. The Extension agent finds a host location, bridging the gap between researcher and producer while creating an opportunity for relationship development with stakeholders. The agent will work to collect samples/data on-farm, interacting with both the producer and the specialist. Results: This model has been proven in the on-farm trials used for peanut variety testing. Over the past eight years, Extension faculty worked with a state specialist to collect peanut cultivar performance, fungicide, and nematicide data in large plots managed by farmers. UF/IFAS Extension faculty have worked with state specialists to complete an average of 8 trials each year. These demonstration trials function as a platform for programming, facilitating producer interaction and education on both an individual (host) and group (field day; farm tour) level. In addition, faculty who are inexperienced in peanut production have achieved better understanding of field practices and an ability to better understand and interact with county and regional extension personnel as well as with growers.

Simultaneously, EC agents have generated content for publications and scholarly work critical for their promotion and growth through the trials. While on-farm research may seem lofty for EC agents, it is an effective platform to train EC agents in a field setting, while they develop relationships with producers, and expand their knowledge of key production concepts.

HORTICULTURE & TURFGRASS PRESENTATIONS

GARDENING WITH MUSCADINES: EXPLORING LEARNED FLORIDA-FRIENDLY LANDSCAPING™ PRINCIPLES AND SUSTAINABLE PRACTICES ACROSS PLANT GROWTH CYCLES

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Two educational workshops were designed to assess acquired skills throughout the muscadine grape plant growth cycle. The initial workshop took place during the muscadine harvest season in August, serving as an introduction to muscadines. Participants engaged in hands-on activities, including harvesting muscadines, sampling their flavors, and familiarizing themselves with these alternative edible habitats. Each participant had the opportunity to take home a propagated portion of their preferred muscadine variety. Following this workshop, all 15 participants expressed a commitment to adopting recommended gardening practices, commonly referred to as “best management practices,” for cultivating muscadine grapes. Furthermore, they indicated their intention to incorporate these practices into their landscapes. When asked about which Florida-Friendly Landscaping™ (FFL) principles they would integrate while growing muscadines, the majority identified Fertilize Appropriately (14 participants), Right Plant Right Place (13 participants), and Mulch (11 participants). The second workshop, held during the planting and pruning season, attracted 19 participants, including four who attended the initial session. Participants were asked to identify FFL skills they had acquired, with the most commonly cited being Fertilize Appropriately (12 participants), Right Plant Right Place (10 participants), and Mulch (10 participants). A vast majority of attendees (18 participants) expressed their intent to incorporate muscadines into their landscape following this workshop. Additionally, there was notable knowledge enhancement in pruning (18 participants), training (14 participants), and planting (13 participants). A follow-up survey will be conducted after one year to assess any behavioral changes participants have made in their landscapes as a result of attending these workshops.

ARE NATIVE PLANTS ALWAYS THE BEST CHOICE?

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Native trees and shrubs are perceived as superior to introduced woody species for a variety of reasons, most of which are not supported by peer-reviewed research. In 2015 I published an analysis of the literature comparing native and nonnative woody plants in terms their influence on landscape biodiversity. This paper has been downloaded thousands of times since then: statistics from ResearchGate alone report over 4000 downloads and research interest score of higher than 97% compared to all research items housed on the site. An Extension fact sheet was also developed to assist home gardeners, Master Gardeners, and Extension faculty and staff in addressing the often-contentious topic of native vs. nonnative plants in gardens and landscapes. Even with this peer-reviewed, science-based information readily available to the public, the continued bias towards a natives-only landscape results in a reduced plant palette with fewer resources to support beneficial wildlife.
This presentation will present a more informed and successful approach to plant selection than simply looking at place of origin. The goal is to make this information more visible at the state and county level, so that Master Gardeners are using science-based recommendations, and that Extension faculty and staff can help address these community concerns within their own county and state.

GRAFTED WATERMELONS AS A SOLUTION FOR FUSARIUM WILT AND OPTIMIZING SPACING FOR YIELD

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Fusarium wilt, caused by Fusarium oxysporum f. sp. Niveum, poses a significant threat to watermelon production in Maryland, with limited fungicide options available. Grafted seedless watermelons offer a promising solution. University of Maryland Extension conducted trials evaluating the performance of grafted watermelons under fusarium pressure, identifying Carolina Strongback as a resilient rootstock. However, grafted seedless plants cost significantly more than traditional seedless plants, but because they exhibit more vigor than traditional seedless plants they may not need to be planted at the same density. This study focuses on the impact of plant spacing on yield, using grafted seedless plants where Fascination was used as the scion and Carolina Strongback as the rootstock. Experiments were conducted in 2022 and 2023 in two Counties in Maryland, St. Mary's on the Western Shore, and Wicomico County on the Eastern Shore. For both sites, both years transplants were grown in plastic with drip in an RCBD design with 4 blocks. There were three treatment levels of spacing near, medium, and far. Results from 2022 showed at both sites the medium spacing treatment of 6' between plants yielded the highest. However, in 2023 no statistical differences in yield were observed between treatments at the Wicomico site and the closest spaced treatment yielded the highest at the St. Mary's site. Both years, it was found that the farther spaced treatments yielded more pounds of melon per plant because the melons were statistically larger than those in the closer spaced treatments. Additionally, we found that the farther spaced treatments were ready to harvest earlier than the closer spaced melons with higher population density.

RUTGERS JAPANESE STILTGRASS PROJECT: VOLUNTEER SCIENCE IN ACTION

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Japanese stiltgrass (Microstegium vimineum) is an invasive weed species that has become problematic in lawns and detrimental to a variety of landscape types across New Jersey. Stiltgrass rapidly grows, seeds and spreads competing with desirable ornamental and native species. Control of stiltgrass requires an integrated approach of cultural and chemical means. Management techniques need to be timed for the most efficient and effective control. Yet, little is known about the temperature and timing required for stiltgrass germination and seed emergence. Rutgers Master Gardeners (RMG) and Rutgers Environmental Steward (RES) volunteers with known populations of Japanese stiltgrass were recruited to participate in a project to document germination and seed emergence. In 2023, 142 participants from 14 counties in New Jersey were trained through a webinar on the identification and biology of stiltgrass and the materials and methods of the project. A subset of attendees committed to monitoring their stiltgrass infestation site multiple times per week in spring and late summer. Thirty-six were able to identify stiltgrass and upload images of the seedlings germinating in diverse microclimates and recorded germination date. Twenty-four volunteers recorded seed emergence data and uploaded images. Volunteers who mis-identified stiltgrass were informed to help increase their knowledge and skill in identifying stiltgrass and similar species. This program will be repeated in 2024 and 2025 for data replication. The temporal data of germination and seed emergence collected by the volunteers will be compiled and published to improve Japanese stiltgrass management recommendations. This project demonstrates the impact of facilitating volunteer data collection to inform control strategies of an invasive and detrimental weed species.

PROPAGATING NATIVE PLANTS FROM LOCAL GERMPLASM

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Native plants are increasingly being used in ornamental landscapes throughout the United States due to the ecosystem services they provide, and the reduced inputs required for their production and maintenance. Furthermore, native plants propagated from local germplasm may be best adapted to a specific eco-region's growing conditions. However, the supply of locally produced native plants remains limited, despite being in high demand. To support this growing segment of the green industry, propagation trials were conducted to begin developing standardized protocols for both vegetative cuttings and seed propagation of locally collected native ornamental plants, with Rutgers Master Gardeners actively participating in the project. Soft and green wood cuttings of 20 different native plant species were collected from various locations in Central New Jersey during the 2023 growing season. The cuttings were dipped into rooting hormone and planted into a well-drained medium. The cuttings were then placed under a misting system to prevent them from drying out. Roots formed in 4 to 12 weeks depending on the species. Once the plants had successfully established a root system, they were potted up into larger containers and removed from the mist tables. The number of plants that successfully rooted for each species was compared to the total amount attempted to determine success rates using this propagation method. Several species, including Viburnum dentatum, Sambucus nigra, Clethra alnifolia, and Cephalanthus occidentalis, were highly successful, and recommendations can be made for their vegetative propagation. Other species had a lower success rate and will require additional development of their protocols before recommendations can be made. In the fall, seeds of native plants were also collected, processed, and sown according to their individual requirements for seed propagation. All propagation methods and success rates were documented and compiled as a resource for growers who may be interested in propagating native plants.

EFFICACY OF TURF ORGANIC HERBICIDES

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In 2019, a law went into effect in Montgomery County in central Maryland prohibiting the use of synthetic pesticides on home lawns. In order to provide additional information to the lawn care industry in the county, organic herbicide efficacy trials were conducted in fall 2022 and summer 2023. In 2022, chelated iron, ammoniated soap of fatty acids, and caprylic acid + capric acid were included. While fall is not an ideal application timing for contact herbicides, chelated iron (regardless of rate) provided statistically similar control to the standard treatment of 2,4-D + dicamba + MCPP + carfentrazone, suggesting that chelated iron may have a role in an organic weed control program for lawns. The summer 2023 trials focused on corn gluten for pre-emergence large crabgrass (Digitaria sanguinalis [L.] Scop) control and chelated iron for post-emergence broadleaf weed control. Unfortunately, a cooler spring resulted in delayed crabgrass growth; data collected in July showed variable amounts of crabgrass across plots. Three rates of chelated iron (12.5, 25, and 50 fl oz/1000 sq ft) at three application intervals (3, 4, and 6 weeks) were applied. White clover (Trifolium repens L.) was the predominant weed across all plots. At the end of the study, treatments provided varying levels of percent clover reduction. Research will be continued in 2024.

SEASON EXTENSION OF DAY-NEUTRAL STRAWBERRIES IN WESTERN OREGON

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This trial (2021-2023), conducted at Oregon State University's North Willamette Research and Extension

Center, evaluated the growth and production of day-neutral strawberries developed under low and high tunnels to expand the harvest season and potential for fresh market production in Western Oregon. The trial evaluated two cultivars ('Albion' and 'Seascape') grown under low tunnel, high tunnel, and low tunnel under high tunnel (double tunnel) compared to open field (control). In the fall of 2021, the first planting of bare-root strawberries was established, followed by a second planting in spring 2022. Plants were grown in raised beds with plastic mulch and two drip lines per row. The field was maintained using standard industry practices for day-neutral cultivars and organic production practices. Fruit was harvested twice per week at 75% or greater ripeness, then sorted into marketable fruit and cull. Data collection included air temperature, yield (total, marketable, and cull), fruit quality (average weight and brix), crown diameter, and runner production. Results from the 2022 season show that low tunnels significantly raised the total marketable yield (1,013 g/plant) compared to double tunnel (794 g/plant), high tunnel (783 g/plant), and open field (732 g/plant). 'Albion' produced a significantly higher marketable yield for the total season compared to 'Seascape' (890 and 771 g/plant, respectively). In the fall harvest season, 'Albion' significantly increased yields compared to 'Seascape' (346 and 244 g/plant marketable yield, respectively). Fusarium spp. was detected in the southwest corner of the high tunnel in the late summer and fall of 2022 and later spread to other parts of the field, which impacted 2023 results. While there were no significant differences in total marketable yield between tunnel treatments in 2023, the results showed that low tunnels, high tunnel, and double tunnel treatments produced significantly less cull compared to open beds (72, 64, 63, and 113 g/plant, respectively). The results of this trial demonstrated tunnel production can increase the total and marketable yield of day-neutral cultivars and extend the harvest season, providing Oregon's strawberry producers with an opportunity to harvest and sell a crop outside the traditional harvest season.

INCORPORATING BINGO IN AG PROGRAMMING

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Bug Bingo was created for a Conservation Field Day for third and fourth graders in 2010 and has been taught every year since. The challenge was creating a 25-minute lesson that could be repeated eight times in one day with each session remaining consistent and covering the same information at an outside venue. Bug Bingo fulfills those requirements and eliminates speaker fatigue and confusion about what has been covered in a particular session. Laminated pages with pictures of 30 different insects have basic information about each insect written on the back. Corresponding bingo cards were created and laminated. Dried beans are used to cover the squares when insect pictures are shown. The youth guess the insect identification then we talk about beneficial insects versus pests. They love playing until it is time to switch sessions. Conservation Field Day is for third and fourth graders so observations of impact can be made when students return the next year and remember the insect identification and if they are beneficial or a pest. It is easy to change the bingo card to other ag topics like weeds, livestock, or safety equipment. Coworkers can use the game with little knowledge of insects, and it has become popular with specialists around the state for youth activities. It is not just popular with younger kids; I have also used it for FFA field days and adult garden groups. Program impacts include increased knowledge of common insects, beneficial insects and pests, problem solving skills, and helping eliminate fear of insects that might bite or sting.

CULTIVATING RECOVERY: HORTICULTURE THERAPY IN VETERANS ADDICTION INPATIENT AND OUTPATIENT PROGRAMS

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Veterans struggling with addiction and Post Traumatic Stress Disorder (PTSD) often find solace and support in specialized inpatient recovery programs. This presentation explores a unique facet of recovery at a Veterans addiction inpatient facility, where Horticulture Therapy (gardening) is integrated as a valuable coping skill. Initiated by Master Gardeners from the University of Nevada Extension Southern Area Master Gardener Program in September 2022, this therapy has proven to be a transformative

experience for Veterans.

The gardening sessions are designed to be immersive and hands-on, fostering a sense of ownership and responsibility among the Veterans. Each week, discussions precede practical activities, allowing participants to engage in the garden's care and maintenance. Notably, a designated leader is assigned each week, mirroring practices in other living spaces, reinforcing accountability and leadership skills.

Beyond therapeutic benefits, Veterans actively partake in the cultivation and consumption of produce from the garden, enhancing their connection to the natural world and promoting a holistic sense of well-being. This successful inpatient program is now expanding to include outpatient services, with off-site garden beds providing an additional avenue for Veterans' involvement.

This presentation delves into the profound impact of Horticulture Therapy on Veterans' recovery journeys, shedding light on the innovative strategies employed, the community-building aspects of shared gardening, and the potential for expansion to benefit a broader spectrum of Veterans seeking comprehensive addiction recovery.

NEBRASKA EXTENSION SPECIAL GARDEN PROJECT

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The Nebraska Extension Special Garden Project originated as a way for youth from across the entire state of Nebraska to gain an interest in gardening, try growing new and unusual vegetables and flowers, obtain the education necessary to be a successful beginning gardener, and learn about the wide range of plant-science related careers. This statewide, hands-on experience allows youth to try growing different plants with their families while gaining life skills. The project focuses on a different flower or vegetable each year. The plant is selected for a unique characteristic that is slightly different than normal. A multi-page educational newsletter publication covers fun plant facts, history, planting basics, growing methods, plant care, common disease and insect problems, harvest and storage tips, plant science-related careers and county fair exhibiting tips and additional ways youth could exhibit is also included. A paper evaluation/link to an online evaluation accompanied the seeds and newsletter. Over the past 14 years the Nebraska Extension Special Garden Project has distributed over 23,600 packets of seeds and educational materials to youth in all 93 counties across Nebraska. Youth learned important skills and gardening practices including weed identification, irrigation frequency, and insect control. They also planned how they could improve practices the following season including amending the soil and utilizing mulch for weed control. Extension Educator Elizabeth Exstrom selects, sorts, distributes the seeds and the educational resources with the youth across the state.

EVALUATION OF SYSTEMIC SPRAY PROGRAMS TO REDUCE ONION CENTER ROT

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The growth of the Vidalia onion industry in Georgia has allowed it to be become a large economic driver in Southeast Georgia, with an estimated farmgate value of $120 million. Onion growers in this region face many disease challenges, both bacterial and fungal. One of the most economically important bacterial diseases is Center Rot (Pantoea spp.) This is the leading cause of loss in Vidalia onions each year. These losses can range from 5 to 10%, and even total losses in severe years in some fields. Given the large economic impact of the Vidalia onion industry in Georgia and the influence of center rot losses, determining effective treatments for this disease is critical for producers. Three years of data were collected by local

agriculture agents to evaluate efficacy of four systematic treatment approaches to center rot: low input, growers standard, high input, and organic. The objective of the study was to determine which approach to center rot control was most effective for growers. Agents planted Vidalia onion varieties 'Pirate' or 'Century' in 20-ft plots consisting of 4 replications of each treatment with a 3-ft bare-ground buffer between each plot. Natural infection was relied upon for center rot contamination. Each of these treatments were applied with a backpack sprayer calibrated to deliver 33 gal/A at 40 psi through TX-18 hollow cone nozzles. Treatment applications were made based on the input levels during the growing season. Center rot bulb symptoms were assessed 14 days after harvest following incubation at 28° C and 50% relative humidity. Marketable yield, input costs, and total revenue were calculated for each treatment. Based on three year field assessments we observed that integrated management practices had an impact on marketable yield. The 'high input' treatment revenue was $1237.00 more per acre than the 'growers standard' even with similar infections. Organic treatment was also $367.00 more per acre than 'grower standard' and on average had a 9.04% increase in center rot incidence. Overall, the 'high input' treatment led to greater revenue returns.

PROFITING FROM CULTURAL DIVERSITY: EXPLORING CUT MARIGOLD FLOWERS AS A NEW CROP FOR FLORIDA

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Situation: According to the U.S. Census Bureau, Florida ranks #1 in domestic migration and #2 in international migration with 1,218 people moving in per day. This presents a unique opportunity for exploring alternative markets such as ceremonial flower usage. Marigold flowers hold cultural significance in Asian, Hispanic, and Hindu traditions, prompting us to investigate their potential as a profitable crop for cut flower growers. Objectives: 1) Out of six cultivars, two will show potential for cut flower production as trialed in a Spring extension field study and 2) One cultivar will yield more marketable flowers than others implying greater profitability. Methods: We conducted a field trial with six marigold cultivars, evaluating flower diameter, yield to identify promising options for cut flower production. Marigold flowers were collected and measured at maturity every second week throughout the Spring trial. Results were statistically analyzed through regression analysis. Results: Among the six marigold cultivars tested, Garuda Yellow, Garuda Deep Gold, and Oriental Deep Gold exhibited the largest flower diameters, measuring 7.73mm, 7.57mm, and 7.18mm, respectively. In contrast, Mayan Orange had the smallest diameter at 5.99mm. Although Garuda Deep Gold produced the largest flowers, it yielded the least in quantity. Oriental Deep Gold and Sumati Orange were the most prolific in terms of flower yield. Our findings were shared with growers and the public, highlighting the market potential, and recommending strategic cultivation of multiple cultivars to maximize profits and accommodate seasonal demand. Conclusion: The beauty of the marigold flowers contributes to their popularity indicating a potential interest nationwide. We recommend planting more than one cultivar to stretch the season and maximize profitability. This study underscores the economic and cultural opportunities associated with marigold production, offering growers a pathway to tap into a lucrative niche market while honoring and preserving diverse cultural traditions.

USING MASTER GARDENER PHONE LINE DATA TO DETERMINE CHAPTER TRAINING NEEDS

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Basic Master Gardener training focuses on basic gardening topics. But is basic training meeting the community's needs? It can be difficult to determine which topics would most benefit the local home gardener community. Analyzing EMG phone data (Answer Line or Hot Line) to determine the most common public call-in topics can help identify potential MG program knowledge gaps and CEU opportunities. We evaluated 3.5 years of data, which totaled 1,515 Hotline queries. These queries were categorized into 8 main topics, Trees, Ornamentals, Turf, Irrigation, Veggies, Turf, General Information, and

Miscellaneous. General Information included calls about soils and soil testing, pesticides, and pruning. There were not enough calls about these topics to justify splitting them into separate categories. Miscellaneous calls were about the Master Gardener Program itself or issues that neither Master Gardeners nor Extension deal with (such as well testing). Surprisingly, 25% of the calls were about Trees. Irrigation and General Information were both at 16%, with Ornamentals close at 14%. The remaining categories were <10%.

While Master Gardener training often emphasizes home vegetable gardening, in our county 392 of the over 1500 calls were about trees; only 113 calls were about vegetable gardens. The data revealed the average Master Gardener training and CEU recommendations were not meeting homeowners' needs, at least based on phone calls. This information will help guide chapter EMG CEU opportunities and future EMG training. This technique is not region or event specific and can be used to evaluate data from any outreach event, such as workshops or Farmer's Market surveys, to determine what gardening expertise the local community needs. When an EMG chapter focuses on identified areas of community interest for their outreach, homeowners and gardeners will have greater and more meaningful interactions with the local EMG chapter. This in turn helps generate more impact data to guide the local Cooperative Extension Office with funding requests and community visibility.

LEADERSHIP AND ADMINISTRATIVE SKILLS PRESENTATIONS

LEADING FROM THE MIDDLE

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The term "Leading from the Middle," coined by author Scott Mautz, encompasses the skillset to lead in every direction, from community, to colleagues, and above. In the context of Extension, leading from the middle is a strategic approach to our work that empowers us to create positive change within our organizations and communities. Extension leaders can be incredible drivers of change and engagement; however, it can be challenging to lead while navigating the intricacies of the community dynamics. In many situations, the role of Extension is akin to middle management, engaging in direct hands-on involvement with our community's needs, but without formal authority over change. As leaders and educators in our communities, we often bridge the gap between knowledge and practical application. Extension is viewed as a trusted source of unbiased information to a wide variety of clients including youth, homeowners, farmers and ranchers, local and state government, businesses, and more. As the world and our communities evolve, so do the challenges faced by Extension educators. Effective leadership skills provide us with the ability to adapt to change, foster collaboration, and create more meaningful programs to address emerging needs. In this session we will discuss the characteristics of effective leaders, balancing leadership and management, developing leadership presence, credibility and trust, and how we as Extension professionals can "lead from the middle."

LEADING THROUGH CHANGE AND INNOVATION

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In today's challenging climate, effective leadership requires navigating change of all kinds. This became especially relevant when the COVID-19 pandemic fundamentally altered our world and our work environments overnight. Teams were expected to pivot quickly, finding new ways to engage stakeholder audiences amid a global crisis that impacted everyone. While life has mostly returned to normal, technological advances, such as the advent of artificial intelligence (AI), have emerged, transforming society and challenging the status quo. If anything has transpired as a lesson in the last five years, it's that there will always be new challenges and opportunities to face,

and a critical ability for any leader is guiding teams through those challenges effectively. Five key skills are necessary for a leader to successfully bring their team through a period of change to thrive in a new reality:

Embracing Change: Change is inevitable, whether driven by external forces (shifts in audience needs, stakeholder needs, technological advancements) or internal needs (process improvements, cultural shifts). Leaders must champion adaptability, encouraging teams to view change as an opportunity rather than a disruption.

Innovation Imperative: Innovation fuels growth. Leaders who cultivate a culture of creativity and experimentation empower their teams to think beyond the status quo. By fostering an environment where calculated risks are encouraged, breakthrough solutions emerge. Failure should be celebrated, not feared, as it is a sign of a culture that encourages this innovation.

Navigating Resistance: Change often meets resistance. Effective leaders anticipate this and address it head-on. Communication, empathy, and transparency are essential. Leaders must articulate the "why" behind change, assuage fears, and actively listen to concerns.
Leading by Example: Leaders who model agility, curiosity, and resilience inspire their teams. By embracing change themselves, they set the tone for organizational adaptability. Innovation becomes contagious when leaders embody it.

Measuring Impact: Innovation without impact is futile. Leaders must define success metrics, track progress, and celebrate wins. Whether it's streamlining processes, creating new approaches to programming, tangible outcomes matter to stakeholders and funders.

PROVIDING AND RECEIVING ADEQUATE FEEDBACK

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Whether we know it or not, we provide feedback to people all the time, whether it's reviewing a local business online, disciplining our children, reviewing our employees/team's performance during the last project or annual evaluation; all these situations are providing feedback to another person or business. People regularly give feedback to employees, employers, family members, coworkers, or people in their community. Feedback is best if it is specific, timely, and actionable. People being evaluated need to know (1) what is expected of them and (2) whether they are meeting those expectations. Regular feedback is required to help answer these two questions. Feedback is also crucial to helping with "continual improvement" – the idea that we can always strive for ways to make our programs and ourselves better. There are three different types of feedback: positive, negative, and re-directional, and all three can be used in different situations. Each feedback has a different reason for its use. This session will highlight each of the three scenarios and teach you tips and tricks for providing and receiving better feedback from all the people in your life. Remember, feedback is a gift!

ARE LEADERS BORN OR BRED?

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The perennial debate surrounding leadership often revolves around the question: Are leaders born or bred? This abstract explores this inquiry through the lens of three prominent theories: the skills approach, trait approach, and behavioral approach to leadership. The skills approach emphasizes the importance of learned competencies in effective leadership. Leaders, according to this perspective, are made through acquiring and honing specific skills such as problem-solving, communication, and strategic thinking.

Proponents argue that anyone can become a leader through dedicated practice and development of these skills, regardless of innate qualities. In contrast, the trait approach suggests that certain inherent characteristics predispose individuals to leadership roles. Traits like intelligence, extroversion, and emotional intelligence are believed to be inherent qualities that differentiate leaders from non-leaders. This perspective implies that leadership is largely predetermined by one's genetic makeup, suggesting that leaders are indeed born, not made. Meanwhile, the behavioral approach focuses on observable behaviors rather than innate traits or acquired skills. It suggests that effective leadership is not necessarily tied to specific traits or skills, but rather to behaviors exhibited by individuals in leadership positions. Leaders are defined by their actions, such as their decision-making style, ability to motivate others, and adaptability to different situations. From this viewpoint, leadership can be cultivated through intentional changes in behavior, implying that leaders are both born and made, depending on their willingness to develop and adapt. In conclusion, the question of whether leaders are born or bred remains multifaceted, with each approach offering unique insights into the complex nature of leadership development. Understanding the interplay between inherent traits, acquired skills, and observable behaviors is crucial in unraveling the enigma of leadership emergence and effectiveness.

USING OFFICE CULTURE DEVELOPMENT TO STRENGTHEN INTRAOFFICE COMMUNICATION

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Over the course of six months, the Gadsden County Extension Director (CED) focused a office culture development strategy to strengthen and enhance office communication and camaraderie. Over the past three years the Gadsden County Extension Office agents and staff grew from five to twelve people. This rapid growth left the team with a need to move through the storming, norming, and forming process. Each employee operated in their program silo, and more work was needed to create a deeper cohesion for the office agents and staff. Over the course of six months, the CED worked with personality testing, office culture learning, culture mapping, culture goal setting, and office culture advancement planning. Through out this process, the team came up with plans, goals, and guiding office protocol for office culture that created a new sense of team work. The CED let the agents and staff work through this process, and only helped as a guide through the process. The process was a great success and led to new collaborations and intraoffice activities.

EXTENSION EMPLOYEE RETENTION ANALYSIS THROUGH STAY INTERVIEWS

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Employers have experienced high rates of employee turnover, and Extension systems are not immune from the aftershocks of the "great resignation". Ohio State University Extension is currently experiencing higher than average turnover, particularly among employees who have been with the organization for less than five years. Exit interviews are a common tool used to gather data on the employee experience, but this data is limited because it represents the experience of those who have already elected to leave the organization. To better understand the factors that may drive employee retention, stay interviews were conducted with Ohio State University Extension employees in 2022. This study aimed to describe the factors that keep Ohio State University Extension County Educators with the organization for five or more years, as well as negative factors that may lead to employee turnover in the future. Stay interviews have been shown to serve as a great retention tool when used to identify gaps in staff support and professional development. This can improve job satisfaction and organizational commitment, which in turn may reduce the likelihood of employee loss. This qualitative exploratory study utilized a grounded theory approach with a constructivist worldview. Data gathered from the interviews were transcribed first, and then entered and coded in NVivo software. The original codebook will be based on question themes. From the data, themes and sub-themes were developed. This

presentation will summarize the findings from the stay interviews and recommendations on how to improve employee retention.

WHAT WE'VE LEARNED FROM OUR TRANSITION TO ADMINISTRATION

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Is administration for me? Both of us have thought of this possibility during our combined 50-plus years of experience as county-based Extension Educators. We served both the Extension organization and our programmatic profession in various ways through committee leadership, supervisory duties, team leader, reviewer, educational advisor to industry, community partner, mentor, and more. Over time, our focus on servant leadership led us to these new roles. Within just a few weeks of each other, we transitioned to interim state administrative leadership positions. We both took on these roles to support the profession and OSU Extension as a whole. While our paths have been different, we both grew our skillsets in similar ways. In our new roles, we serve as part of the leadership team that guides the future of OSU Extension and the 800+ colleagues we work with and for each day. Our new titles include Associate Chair in the Department of Extension and Assistant Director for Agriculture and Natural Resources. Our responsibilities as educators-turned-administrators include guiding Educators through promotion levels, assisting faculty as they navigate promotion and tenure processes, building relationships across the department and college, managing the operations of the agriculture and natural resources program in Ohio's 88 counties, championing the collective aspirations of our colleagues, and driving positive change for the future of OSU Extension. This presentation will describe our paths to administration, our administrative structure, highlight our challenges and successes, and provide tips for other Educators interested in assuming statewide administrative responsibilities.

CREATING AN EXTENSION INTERNSHIP PROGRAM

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The next generation of the agriculture workforce will face complex socio-environmental problems across agricultural and natural resource disciplines. To address this need University of Maryland Extension (UME) launched a summer internship program to provide meaningful and technical skills for the future through a USDA NIFA grant. Annually, seven interns, paired with mentors, gain hands-on experience in applied research and Extension activities, participate in training, and build networks. The internship is a ten-week, full-time program with objectives to 1) Provide experiential learning opportunities in Extension and agricultural research to undergraduate students, including those at community colleges and underserved institutions 2) Develop internal hiring and mentorship skills in UME Faculty; 3) Increase the career-readiness and leadership skills of student interns, and 4) Increase the number of students from these institutions continuing their education and entering the agricultural workforce. To date UME has hosted 16 undergraduate interns from 12 institutions (4 Two Year Colleges, 2 Historically Black Colleges and Universities (HBCUs)). Pre-internship orientation and training begin before the intern's start date in preparation for success when engaging in UME activities. Weekly connections are two hours long, containing ten career readiness modules and a guest lecture series of industry professionals. Interns are required to complete a weekly blog post and a final presentation. These activities are designed for the interns to reflect on their internship experience and create supporting materials for their professional resumes and networks.

Evaluations report increased knowledge in the following areas: Critical Thinking/Problem-Solving skills increased by 47%, Oral/Written Communication skills increased by 26%, Teamwork/Collaboration skills increased by 16%, Information Technology Application increased by 15%,

Leadership skills increased by 15%, Professionalism/ Work Ethic skills increased by 20%, Career Management skills increased by 17 % and Global/Intercultural Fluency increase by 9%. As a result of this internship: 75% plan to continue higher education, 87% plan to graduate from their current degree program, and 75% plan to explore agriculture career options. In the six months following the internship, 100% of interns reported YES to using critical thinking, oral/written communication, teamwork/ collaboration, and professionalism/ethics skills they developed during the internship.

BUILDING ORGANIZATIONAL CAPACITY FOR EMERGENCY PREPAREDNESS: A TEAM APPROACH TO SERVE THE COMMUNITY

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Our state has experienced multiple devastating hurricanes and tropical storms since 2016. This can cause widespread, long-term flooding and power outages that often result in significant and costly damage and can leave employees involved in the response feeling ill-equipped and overwhelmed. In response, our State Extension secured a $150,000 NIFA Smith-Lever grant to develop four geographically dispersed, small teams to build our capacity for readiness, response, and recovery from natural disasters and emergencies.

Team members span across the three program areas (FACS/ANR/4-H). An introductory 3-day training was held to provide foundational disaster preparedness training. The training included table-top disaster scenarios; a partner panel (Department of Agriculture, State Emergency Management Agency, State Department of Public Health, State Department of Behavioral Health); discussion about the critical nature of the first 72 hours after disaster; and creation of Continuity of Operations Plans (COOPs).

Members also completed FEMA ICS 100; County Coordinator training on COOPs; Heirs' property; Community Emergency Response Training (CERT); and drone training (15 drone units purchased and distributed statewide). Thirty-five members attended initial training, Heirs Property, and CERT. Team leaders facilitated COOP training within each district. Twelve people attended drone training. Nine members attended the 2022 National Extension Disaster Education Network (EDEN) meeting, and 15 members attended and helped plan the 2023 EDEN Conference hosted in Savannah, GA.

Evaluation of the project showed significant progress in building Extension's capacity for emergency response, including members' increased confidence in their ability to respond to emergencies, confidence in their ability to create a COOP, and belief in the team's capability to respond to a disaster. Additional impacts: A team member used CERT CPR training to save a life; Strengthened partnerships with local/state/federal emergency officials; 157 Counties Updated COOPs statewide; Secured a 2-year FTE CDC public health fellow to focus on emergency preparedness who supports SE [including 100 miles of STATE coastline, most prone to severe weather/storm surge and tidal flooding]; Drone operator training to help document grower damage and losses resulted in FEMA disaster declarations in 29 counties; Hosted the 2023 EDEN conference; and another round of grant funding was awarded (2023-2025).

CULTIVATING POLITICAL SUPPORT TO GROW SUCCESSFUL PROGRAMS

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Extension is the essential component in solving the issues that face our counties and states. County agents are the key to political success and funding at the local, state, and national level. Understanding the political process

at the university, local, and state level is foundational to being a successful Extension leader. This seminar explores how and why some Extension systems increased in state support, and what Extension Professionals can do to cultivate support and funding from their state and local governments.

As a case study, In Arizona, extension faculty partnered with state legislative leaders address one of the most critical issues facing the state, water. As a result, the Arizona Extension successfully created $62 million water irrigation program that has worked with county agents to conserve over 36,000 sf of water annually. By building success programing and partnerships at the county level the Arizona Extension has become a trusted resource to state policy leaders. As a result, the state legislature has increased baseline funding for Extension by over 102% and has funded $116 in additional funding for land grant programs over the past two years. The county-based principles and tactics that lead to the success in the Arizona and other extension systems can be reproduced in any county and in every state.

NATURAL RESOURCES/ AQUACULTURE PRESENTATIONS

UTAH SMALL FARMS WATER QUALITY GRANT PROGRAM

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As Utah's population continues to grow, water becomes a limiting resource. Properly managing animal waste is crucial for safeguarding water quality. Utah State University (USU) Extension launched the Small Farm Water Quality Improvement Project in 2020 to address this challenge. Over the past four years, the project has provided funding to small-scale agriculture producers, enabling them to enhance water quality on their farms and ranches. While larger farms and ranches already benefit from available resources, smaller operations often lack the means to improve water quality. This grant program bridges this gap, ensuring that all farmers have the opportunity to contribute to cleaner waterways by providing funding to improve water quality on their farms. Producers can apply for up to $10,000 for their projects and must provide a 20% in-kind match. Priority is given to projects that have the most impact. Water quality projects are variable in nature; thus, it is hard to quantify the exact improvements and load reductions resulting from projects. However, many water quality improvements have been recorded due to projects funded through this grant program. One project relocated livestock pens and infrastructure out of a waterway. In another project, fencing was installed to exclude livestock from a riparian corridor. Pre- and post-measurements showed that total coliform, E. coli, turbidity, and alkalinity decreased in the waterway after project completion. As a result of the Small Farm Water Quality Improvement Project, 19 water quality improvement projects have been completed for a total reimbursement of $169,360. Another 12 projects have been accepted and are in progress to be completed by the fall of 2024. These 12 projects represent another $116,497.80 of funding to be reimbursed this year. As a result of our outreach and education on nonpoint source pollution, we've expanded the grant's reach from four counties to statewide. In 2023, we targeted 4-H and FFA youth in these efforts, and two of the 12 projects currently underway are youth-directed. In this presentation, attendees will learn how to adapt this project to other regions, improving water quality nationwide one farm at a time.

CULTIVATING CONSERVATION FOR MARYLAND AND DELAWARE'S HISTORICALLY UNDERSERVED FARMERS

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Navigating conservation practices and programs can be confusing and intimidating, especially for farmers who do not yet have a relationship with sponsoring agencies. The USDA identifies four groups of farmers as "Historically Underserved (HU)"—Beginning; Socially Disadvantaged; Veterans; and Limited Resource. Despite earmarked provisions and services, HU farmers' involvement with agencies and enrollment in conservation programs remains lower than desired. "Cultivating Conservation" is an educational effort to increase knowledge of conservation opportunities particularly among HU farmers. The program strives to improve the environmental and economic performance of agricultural lands and build capacity of local partners to develop and implement effective projects. University of Maryland Extension partnered with the Agriculture Law Education Initiative, University of Delaware Cooperative Extension, Natural Resources Conservation Service, and Soil Conservation District offices to develop and teach programs. Curriculum discussed conservation practices, programs, and sponsoring agencies, how conservation fits within farm planning, conservation contractual agreements, and included opportunities such as touring conservation service centers and meeting local conservation professionals. Programming reached 99 participants at in-person and virtual workshops and 239 participants at other events. Workshop participants completed pre-class, end-of-class, and follow-up surveys. Participants were 67% female and 33% male; 5% Asian, 19% Black or African American, 67% White, and 9% Two or More Races. Participants' primary interests included crops (33%), livestock (22%), and value-added products (18%), and 39% of participants hoped to start farming soon or were farming <1 year. Ninety-eight percent of workshop participants said the program was good or excellent. Participants reported gaining a significant increase in knowledge following the program in: using USDA Web Soil Survey tool (37% gain), what federal, state and local agencies to contact (28% gain), contractual obligations and expectations (40% gain), and the role of conservation in a farm production plan (27% gain). All respondents of the follow-up survey took some action following the workshop: 88% reviewed literature about various programs available, 81% reviewed Web Soil Survey for their property, 53% contacted their county NRCS office, 69% implemented a conservation practice, 38% visited a USDA service center or participated in tours, and 64% began or created a conservation farm plan.

CITIZEN SCIENCE ACADEMY

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Many large-scale research problems are difficult for scientific teams to address due to funding, time, or other resource limitations. Citizen Science (CS) offers a solution by allowing the public, including those without formal research training, to voluntarily participate in data collection. One significant challenge for CS is the communication gap between researchers and participants regarding project availability and data collection needs. This gap makes it difficult for formal and informal educators seeking science, technology, engineering, and mathematics content or hands-on lessons, as well as science enthusiasts eager to contribute, to find opportunities for CS participation. University of Georgia Extension is well-positioned to bridge this gap by facilitating connections between researchers and the community to advance scientific discovery while meeting local needs. Citizen Science Academy, a comprehensive day-long course, was created by Pike and Spalding County Extension agents to introduce eager citizens to engaging projects. Program objectives were for participants to identify a variety of CS projects suitable for educational curriculum or personal interest, describe implementation of a chosen project, and create a regional network of passionate citizen scientists to help with scientific

research. While the course was intended for teachers and homeschool educators, it welcomed educators and science enthusiasts of all kinds. The morning session of the program focused on introductions of local CS projects including Great Southeast Pollinator Census, Bluebird Monitoring, Georgia Adopt-A-Stream, and Invasive Species Reporting by guest presenters. In the afternoon, participants selected one CS project to learn more about, sparking engagement and individualization of the course to their interests and needs. The Academy has served 21 participants over 13 hours of programming. Eighty-nine (89%) of post-program participants reported they intended to participate in CS within six months. Follow-up surveys revealed that those participants did participate in CS Projects and the other 11 % of the participants also engaged with SC projects. There has been 100% participation in CS projects by program attendees since November 2023. One participant stated, "This workshop has given me excellent resources to take back to my classroom." The program will continue to be offered annually to meet the ever-evolving need of CS.

VIRTUAL FENCING IN THE CANYONLANDS

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In 2021, a wildfire devastated thousands of acres in the La Sal mountains near Moab, Utah, burning miles of Forest Service pasture and allotment fences, along with hundreds of acres of quaking aspen on the Dorry Allotment. The rancher who holds the federal grazing permit, or permittee, was mandated to allow the pasture to rest for a minimum of two growing seasons and repair all fences. Additionally, the permittee was required to prevent cattle from accessing stands of quaking aspen regrowth and areas still in recovery from the fire. By 2022, it was projected that replacing 10 miles of barbed wire fence would incur a cost of $26,400 per mile, totaling $264,000 on the Dorry Allotment. In an effort to seek cost-effective alternatives, Vence, a virtual fencing company, was invited to present their product to ranchers of Southeastern Utah. The estimated cost for virtual fencing was $12,000 per communication tower and $50 annually per cow for collars and batteries, amounting to approximately $17,000 for 100 cows. Consequently, the Dorry and the Camp Jackson Permittees opted to experiment with virtual fencing. Utah's Grazing Improvement Program offered to help fund the experiment. Following its implementation in 2023, a full grazing season was successfully completed. On average, the permittees found that the battery life only lasted 6-9 months which added an expense of $10 per cow in addition to the time it takes to replace the batteries. Early in the trial the permittees also had problems with collars falling off of cows. Vence is working on increasing battery performance and has worked with the ranchers to replace and upgrade faulty parts. Virtual fencing proved to be useful for locating cattle and keeping them within the appropriate boundaries and out of aspen regrowth. This resulted in much more effective use of the ranchers' time and efforts and positive feedback from the Forest Service and the public. Its successfulness has prompted both permittees to use virtual fencing again in 2024 and to expand its use to other herds.

WATERERS AND WATERING SYSTEMS: A HANDBOOK FOR LIVESTOCK PRODUCERS AND LANDOWNERS

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Water is an essential requirement in any livestock operation and sometimes the limiting factor for expansion, grazing covers, or rotational grazing. Navigating through watering options to find a workable, financially feasible solution to livestock watering needs can be frustrating for ranchers. There are many choices, and some options are not compatible with available land, labor, and/or capital resources. How do we find the best water source in each scenario? "Waterers and Watering Systems: A handbook for livestock producers and landowners" has been updated. In May 2024, the updated handbook was provided to all 105 County/District Extension Offices, Kansas State University Watershed and Livestock Specialists, all 105 County Conservation Districts and/or Natural Resources Conservation Service Field Offices, and to all Kansas Department of Health and Environment Watershed Restoration And Protection Strategies (WRAPS) groups in the state. "Waterers and Watering Systems" is a perennial favorite Kansas State Research &

Extension publication and sections include: wintertime watering; blue green algae; and remote water level monitoring. In addition, chapters have been updated and expanded including: pumps, pipelines, storage, and solar systems. Visit the Kansas State Research & Extension bookstore at https://bookstore.ksre.ksu.edu/pubs/s147.pdf to download the entire handbook. In addition, visit the Kansas Center for Agricultural Resources and the Environment (KCARE) website at https://www.kcare.k-state.edu/pubs/watering_handbook.html to download individual chapters and view a photo gallery to help illustrate the various sections of the handbook. The photo galleries are arranged in the same order as the handbook sections, with specific topics on each gallery page. Videos showcasing waterer installation using tire tanks, placing lines through pond dams, heavy use protections areas and more are available on YouTube. This presentation will share how to use the handbook and the new educational materials to assist landowners and/or tenants with their livestock watering needs.

WEED WRANGLES: COMMUNITY-DRIVEN SOLUTIONS IN ACTION FOR INVASIVE SPECIES MANAGEMENT

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The University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Extension and the East Central Florida (ECF) Cooperative Invasive Species Management Area (CISMA) task group spearheaded two community-driven workdays, or "weed wrangles," targeting education and removal of two important invasive plant species: water primrose (Ludwigia hexapetala) and Brazilian peppertree (Schinus terebinthifolia). On the St. Johns River in Brevard County, 15 volunteers and five airboats were deployed to survey for and remove water primrose, a regional priority early detection/rapid response (EDRR) species. In addition, Brazilian peppertrees, which are Category I invasives, were targeted in Volusia County along the Halifax River at Sunrise Park in Holly Hill. Thirty-five volunteers representing diverse CISMA partners participated, demonstrating proper removal strategies, and emphasizing the significance of collaborative engagement in invasive species management. Workdays encompassed three key components: targeting priority species, involving partners in removal techniques and species identification, and engaging the broader community in invasive species removal for educational purposes. Initiatives contributed to the overall ECF CISMA mission of managing and surveying invasive species, particularly priority control of EDRR species. By involving both UF/IFAS Extension and CISMA partners and the public, we achieved tangible results in removing invasive species and fostered a sense of environmental stewardship. Two-hundred forty pounds of Ludwigia was successfully removed from the St. Johns River, while 60 cubic yards of peppertrees were removed from Sunrise Park in Holly Hill. Hands-on experiences in removal techniques and species identification enhance public awareness and empower communities to actively participate in protecting their local ecosystems. These community-driven efforts play a crucial role in preventing and managing invasive species and safeguarding the ecological balance and biodiversity of the East Central Florida region and beyond.

CONSERVATION FOR GENERATIONS

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Hunting and fishing is critical to wildlife conservation in the U.S. In 2016 there were 11.5 million anglers/hunters, representing a decline of 2.2 million from 2011 (U.S. Fish and Wildlife Service). The aging trend of this population causes a need for youth to become involved. Objectives: To address these issues the Conservation for Generations (C4G) was developed with the objectives to: 1) increase the knowledge of conservation, 2) increase the number of youth who participate in natural resource management (NRM) and conservation minded hunting/fishing, and 3) provide platforms for multigenerational interactions that will increase mentorship of youth in conservation, while encouraging the aging populations to continue to participate conservation activities. Method: Formal and informal learning events facilitate multigenerational knowledge dissemination, science based NRM training, and build a network of mentors for youth/new conservationists. This program model is based on volunteer led experiential learning activities that are hands-on in a field setting. Example events include: a Big Doe Contest, Fishing Tournaments, Live Wildlife Demonstrations, etc. were adults' team up with youth or inexperienced adults to hunt/fish following educational

training. Results: Post-program survey data indicates that 84% of participants applied knowledge gained for actual practice change, 100% increased their understanding of the National Conservation Model, 94% increased their efforts to take youth hunting/fishing because of what they learned through C4G, and 100% of participants feel C4G reaches a critical audience and increased their quality of life. Additionally, 45% of all participants have never used Extension, or attended an Extension event, making it an effective model for reaching non-traditional clients. Not including social media reach, a total of 27,076 participants have been educated, 26 scholarships to purchase lifetime hunting licenses have been given to youth and $36,545 of funding has been generated. Conclusion: This program develops the next generation of conservationists, a critical component for population management and wildlife viability in an ecosystem. Additionally, the program increased the participation of youth in conservation-based hunting/fishing, increased client's knowledge of NRM and created a source of funds to purchase lifetime hunting/fishing license for youth. This strengthens the future of conservation in this region.

SUSTAINABLE AGRICULTURE PRESENTATIONS

PASSION FRUIT: AN EMERGING CROP IN FLORIDA

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Background: From 2020 to 2023 agricultural land prices and production costs increased significantly in Florida and especially so in North Central Florida. Consequently, these economic conditions create substantial challenges for new farms to begin and existing farms to expand. Passion fruit is an emerging crop that can be grown on small acreage in the region, opening new agricultural opportunities. Objective: The combination of sustainable production methods and marketing research can help small farms begin, grow, and become profitable with passion fruit production. Methods: In order for growers to plant passion fruit as new crop on their farms, they must know the market potential of passion fruit. Until now, no recent passion fruit marketing research has been conducted by UF/IFAS. A sensory evaluation of passion fruit was conducted to evaluate public perceptions and buying interest. A production guide has been published to support current and prospective growers. Two production meetings and field tours have been held from 2022 to 2023 where participants provided needs assessment surveys. Additionally, growers are directly supported with a recurring site visits, diagnostic services, and regular updates to on-going research. A SARE and SEEDIT grant have supported passion fruit crop development beginning in 2023. Results: Small farms (N=12) in North Central Florida have planted passion fruit or are in the process of planting small acreage. Small farms have harvested passion fruit after one year of planting and some have initially achieved profitability. Sensory evaluations were completed (N=111) and indicated very strong favorability of the flavor and aroma as well as an interest in buying passion fruit products and fresh fruit. Conclusion: Growers that are seeking alternative crops, particularly for small to medium acreage, now have the option of passion fruit. It is an emerging alternative crop that has significant growth potential to generate profitability for Florida and similar growing regions.

SOIL HEALTH SMALL SUPPORT GROUPS

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Growers seeking a regenerative agriculture path are often trying outside the box ideas not widely accepted by other growers in their neighboring area. They also may be unaware of other growers in the area or state trying similar practices. In serving an eight-county area due to several vacancies, the author interacted with growers trying similar practices, or with like-minded thinking, who didn't know of each other. These growers often felt frustrated, alone, and stuck when their ideas didn't work. During the winter of 2020, the author connected nine growers in a three-county area to form a "soil health small group". The growers called it their "soil health support group". The goals were to build connection, trust, support, and vulnerability in sharing successes and failures to "fail forward faster". The growers didn't know each other but knew the author and chose to trust the process. Three meetings were held that winter via zoom followed by a September driving tour of the growers' farms. Impacts and Outcomes since December 2020 include: the creation of 3 area soil health small groups, yearly driving tours to view farms, one large combined meeting in December 2023 (30 individuals from a 7-county area), growers sharing

equipment across county lines, growers supporting one grower's seed cleaning business and purchasing cover crop seed from a few growers, the completion of 19 Nebraska On-Farm Research studies in the Regenerative Ag space, and growers have been asked to share their experiences and research at 11 Extension and Industry meetings. A few quotes from the growers include, "Thank you for inviting me into this experience!"; "I jokingly tell my wife I'm heading to my support group. However, I need and appreciate this support!"; "I just needed a push to keep going. Thank you for connecting us all."; "It is so refreshing to meet with like-minded individuals!". This presentation will share the process used, successes, and failures for other educators/agents to begin small grower support groups such as this.

BRIDGING THE GAPS THROUGH 'WRITING YOUR FARM FOOD SAFETY PLAN' TRAINING

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For producers to stay well-positioned in the market, they must understand food safety regulations, buyers' demands, and consumers' expectations, and comply with these requirements in a cost-effective manner. Failure of growers to be food safety compliant will result in increased vulnerability to food safety liability, loss of lucrative markets, or cause producers to exit the industry because of anxiety over the issue.
The WV Food Safety Training Initiative is an inter-agency partnership, to deliver food-safety training and producer assistance. Partners include WVU Extension Service, WVSU Extension, and the WV Department of Agriculture. Since 2016, we have trained 32 educators and over 400 producers in two critical areas: best management practices in food safety compliance (through the National Produce Safety Alliance Grower Training Program) and integrating these recommendations into a holistic risk-mitigation decision-making tool. A survey of 152 past trainees showed 85% felt previous trainings sufficiently outlined food safety risks, but 91% requested practical ways to address these risks; 86% requested assistance with produce safety plans; and 90% requested a simpler approach to record-keeping. 'Writing Your Farm Food Safety Plan,' is a response to growers' prioritized needs. We offered in person and online trainings that provided step-by-step instructions to help growers develop a customized action plan for their farm. The training focuses on documenting growers' food safety compliance efforts and provides a fully customizable manual with templates for planning, record-keeping, standard operating procedures, and guidance for GAP certification and FSMA compliance. Growers have used it to help jump-start their food safety action plans, reduce paperwork duplication, and prepare for successful third-party audits. Through this program, we have successfully increased the number of GAP Certified Farms in WV by 383% since 2016. Moreover, 100% of trainees indicated this training increased farm efficiency, controlled costs, and mitigated risks. This training program is available through Extension Foundation's online campus so other audiences may use it to adopt a holistic produce safety risk management program on their farms.

MONTANA BEEKEEPING AND POLLINATOR EDUCATION

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Honey bees and pollinators are of critical importance to global food production and play a major role in the success of Montana's primary industry, agriculture. Beyond the fascination and rewards from keeping bees, humans are deeply concerned about the wellbeing of bees and other pollinators. Colony collapse disorder and declining populations has spurred an interest in education regarding beekeeping, habitat preservation, restoration of beneficial insects, floral resource availability and the sustainability of modern agriculture. This desire for further information resulted in 23 targeted educational outreach events by MSU Extension Agents in Montana reaching 734 clients and the creation of a networking club of 84 people. The Agents responded by self-educating, keeping bees of their own, training to be local resources, and then offering a series of educational events across Montana. The approach was targeted to provide information relevant to the audience and with a focus on advancing beekeeping abilities from introductory to mastering beekeeping. The Bee Team has incorporated a multi-pronged approach to

providing education, resources, and outreach to audiences such as youth, educators, hobbyist beekeepers, pesticide applicators, and interested parties. Introductory short courses, hands-on field events and workshops, in-service learning instruction, innovative curriculum and tools, and the placement of a grant funded 6-colony beekeeping learning laboratory were developed to enhance learning. Topics covered included introduction to beekeeping, identification and management of pests and diseases, honey and wax production, pollinator friendly gardening, hive management, equipment and pollinators and pesticides. Evaluative surveys show that the top learning points were beginning beekeeping, pest management, improved awareness of honey bees and pollinators, and successful overwintering of colonies. On average participants increased their confidence in beekeeping by 39%, and their confidence in managing hive pests by 56%. Armed with their new knowledge, participants feel more comfortable diving into beekeeping, pesticide applicators have a better understanding of laws and regulations surrounding bees, youth are more secure around bees, and pollinator programs with government agencies are on the rise.

DEMONSTRATING THE ADVANCEMENTS OF AUTOMATED IRRIGATION TECHNOLOGY FOR ADOPTION IN FRUIT AND VEGETABLE CROPS

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In north-central Florida, I launched an educational program to introduce automation technologies to fruit and vegetable producers using drip irrigation systems, aiming to enhance efficiency and sustainability in crop management. My focus was on developing portable and adaptable automation technologies tailored to the region's specific challenges. I conducted demonstrations of these technologies at full production scale on collaborating producers' fields on a total of 80 acre annually. I showcased them at multiple annual events including three field days and two producer meetings, reaching over 300 producers and farm staff last year. Producers rapidly adopted the technologies, leading to collaboration between producers and industry to refine and develop them further based on real-world feedback. Initial program assessment data and scientific data suggested positive impacts on water conservation and nutrient efficiency. Automation allowed for more frequent, shorter irrigation events, reducing water usage and minimizing nutrient leaching. Producers also recognized potential cost savings, notably in labor efficiency, with significant reductions in labor hours per acre saving approximately 80 labor hours per 40-acre field. After these demonstrations the adoption of automation technologies expanded rapidly across the region, with 750 acres of 2000 total acres of watermelons in Gilchrist County and approximately 1200 acres of 7000 acres region wide. Despite our success, there remains a need for continued research to fully quantify our impacts and outreach to further adoption. Overall, my educational program has played a crucial role in promoting the adoption of automation in drip-irrigated crop production in north-central Florida. By addressing regional challenges and engaging producers through demonstrations and outreach, we have facilitated sustainable practices and increased efficiency in fruit and vegetable production.

REDUCING HERBICIDE INPUTS IN VEGETABLE PRODUCTION

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Chestertown

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An integrated weed management (IWM) approach is crucial in vegetable production due to the limited availability of herbicides registered for use in vegetables compared to row crops. Moreover, many herbicides do not offer full-season weed control, posing an increased risk of crop injury if not applied according to label instructions. This presentation addresses these challenges by highlighting two ongoing research projects focused on reducing herbicide inputs by growers through the implementation of IWM tactics. The first project investigates biosolarization, a soil disinfection technique similar to solarization but involving the addition of organic soil amendments before the solar heating process. Biosolarization has been shown to increase weed seed mortality and decrease soil pathogens. The study included four replicated treatments comprising of eggplant: 1) grown in living mulch + no-till, 2) interplanted with cover crops, 3) grown in solarized soil, or 4) interplanted with a cover crop and grown in biosolarized soil. Results indicated that biosolarized plots had the lowest mean number of broadleaf weeds throughout the growing season,

suggesting effective weed seed inactivation. However, biosolarization was not effective against vegetatively reproducing weeds like yellow nutsedge. The second study evaluated the weed-suppressing potential of a spring-seeded cover crop between plastic-mulched rows. Along with the weed control benefits, seeding a cover crop after bed formation offers growers more flexibility in cover crop adoption. The study consisted of a three-factor factorial, split-split plot design with four replications. The whole plot consisted of cover crop management method (clethodim, paraquat, roller-crimped). Subplots consisted of cover crop species (cereal rye, spring oats, cereal rye + spring oats, no cover crop), and sub-subplots consisted of residual herbicide treatment (fomesafen + S-metolachlor) or no residual herbicide. Results indicated that the presence of cover crops significantly reduced the mean number of weeds compared to plots without cover crops. Additionally, the presence of cover crops substantially increased cash crop yield, and the addition of a residual herbicide significantly increased full-season weed control. The preliminary results from both projects underscore the effectiveness of the evaluated IWM techniques. However, further research is necessary before making recommendations for grower adoption.

CONSERVATION THROUGH EDUCATION, DEMONSTRATION, AND IMPLEMENTATION

Donna Gentry
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The Louisiana Master Farmer Program (LMFP) was initiated in 2001 through a cooperative effort between the LSU AgCenter, Louisiana Dept. of Agriculture and Forestry, Louisiana Cattlemen's Association, USDA's Natural Resource Conservation Service (NRCS), and the Louisiana Farm Bureau Federation. This voluntary environmental stewardship program was developed for agricultural producers to focus on addressing sustainability, conservation, and improved water quality through education, demonstration, and ultimately implementation of Best Management Practices (BMPs). A producer must complete three phases to be awarded certification. These include: 1.) attendance of six hours of environmental education through classroom instruction 2.) attendance at a field day, field tour, soil quality workshop, or other function where conservation, soil health, or water quality is discussed and demonstrated 3.) development and implementation of a comprehensive conservation plan with technical assistance available from the Soil and Water Conservation District and NRCS.

Since its inception, 378 agricultural producers have completed certification or recertification, with just over 4000 participating in one or more phases of the program. Over the 23 years, the program has become successful mainly due to the support and cooperative effort from state and federal agencies, as well as all major commodity groups and industry. It has become the standard for environmental pro-activeness and a guideline for other states in the creation of their own programs. Through awareness, education, demonstration, and NRCS' cost-share incentives, producers have been able to positively address many of the soil and water quality challenges that agriculture is faced with.

TEACHING & EDUCATIONAL TECHNOLOGIES PRESENTATIONS

STAKEHOLDER ENGAGEMENT AND EXTENSION TEACHING WITH CROP MANAGEMENT CONTESTS

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The Florida Stakeholder Engagement Program (STEP) engages farmers and other agricultural stakeholders in friendly crop management competitions focused on water and nutrient efficiency and profitability. The purpose of this program is to engage stakeholders in shared experiences that will lead to improved crop management, farm profitability, and adoption of agricultural best management practices (BMPs) that protect water quality and quantity. Whereas traditional extension programs often treat clients as passive recipients of information, the STEP program creates active learning experiences for farmers, extension agents, researchers, policymakers, and industry representatives. It also allows participants to try out new management approaches without incurring costs or risks. In 2022 and 2023, the Florida STEP program featured corn management contests under the variable-rate, linear-move irrigation system at the University of Florida, North Florida Research and Education Center – Suwannee Valley. Each competing team was assigned four randomized plots and given control over several parameters, including corn hybrid variety, seeding rate, irrigation management, nitrogen management, insurance selection, and grain marketing. The teams competed for awards in two categories: (1) most profitable, (2) highest water-and-nutrient-use efficiency. Ten teams with 27 members competed in 2022, and fourteen teams with 36 members competed in 2023. The program also collaborated with 17 industry partners to provide technologies such as soil moisture sensors and drone imagery. Program evaluation surveys showed participants learned about fertilizer timing, using soil moisture sensors, and new perspectives on marketing and insurance. Asked if participation in the program would lead to any changes on their farm, 63% reported change in seeding rate, 88% reported change in nutrient management, 100% reported change in irrigation management, and 71% reported change in marketing. Participants especially liked the competition aspect, the risk-free environment to test different management strategies, and the ability to see how other teams chose to manage their corn crop. In 2024, crop management contests are planned for both corn and cotton. The Florida STEP program was adapted from a similar program for corn in Nebraska and can be replicated for other crops and regions.

ENHANCING EXTENSION EDUCATION: EXPLORING AI BASED IMAGE AND VIDEO GENERATORS

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The evolution of artificial intelligence (AI) has been unprecedented in its speed and potential impact. From chatbots and self-driving cars, to text and image generators, there are many different applications for this technology in our everyday lives. As citizens of a digital age and as educators it is important that we stay informed on the state of AI and remain open to using it as a tool in our work. Text, image, and video generators have the potential to aid educators in facilitating information quickly and efficiently.

Using videos as an Extension educational tool is becoming increasingly popular as we spend more time in digital spaces and appealing to diverse audience. However, video production can be time consuming, costly, and challenging. The emerging photorealistic AI video generators such as Runway, LTX Studio, and the upcoming Sora are opening doors to those who previously didn't have the skills to produce educational videos.

There are many AI based images, and video generators that are widely available online. Each offers a variety of built in tools such as automated transcripts, automated editing, script generation and video generation. The pricing varies with some being free and others costly. These tools can be used to help write and clarify scripts, develop hard to get or seasonal Agriculture education visuals or increase the efficiency of the editing process.

The nature of AI also poses larger questions about how we should move forward with technological advances safely. While these tools have the potential to help, they can also be used to cause harm. It is important to remain vigilant about the impacts that can stem from the use of AI. It important that the new technology be used to enhance Extension work, while we maintain academic integrity. This session will focus on the general state of AI development and the specific image and video generation

tools that can be used in education. We will dive into which tools work best and how to write prompts that can generate videos that can enhance an ANR presentation. We will also discuss the larger dilemma and safety concerns surrounding AI.

CONDUCTING A SURVEY AT A NATIONAL TRADE SHOW VS. SOCIAL MEDIA: THE GOOD, THE BAD AND THE QR CODE

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Bonifay

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Background: A team of researchers and Extension agents are working on collecting data as a part of a grant. To fulfill the grant's requirement for a survey, the agents and specialists developed a virtual survey that was distributed to people involved in cattle production. The objectives of this booth were to 1) collect survey responses from cattle producers across the nation and 2) determine if a national trade show was an effective and efficient platform for survey data collection in comparison to social media (SM). Methods: Following IBR approval, the survey was distributed using two channels: SM and at a tradeshow booth done at the National Cattlemen's Beef Association event in Orlando, FL, in 2024. All responses were digital. Responses were collected by distributing a quick response (QR) code linked to a digital survey supported by Qualtrics. At the tradeshow booth, business cards, display graphics, and fliers were used to distribute the QR code to tradeshow attendees. Social media posts were created and shared to pages and groups related to cattle production. Results: 539 survey responses were collected over 132 days. Of these responses, 309 responses were from SM, and 230 were from them he tradeshow. The average time spent on the survey was 12 minutes. Of surveys completed during the tradeshow, 76% of the completions were during tradeshow hours. Conclusions: Both the tradeshow and the SM distribution channels lead to successful data collection. If conducting a survey at a national tradeshow, attendees tend to either complete the survey request while at the event or not at all. There was little difference in the amount of time spent completing the survey, with participants spending 15 minutes at the tradeshow, 10 minutes outside the tradeshow, and 10 minutes on SM. Additional considerations should be taken to the cost per response. Travel, registration, and booth construction for the national tradeshow were approximately $7,000 ($30/response) whereas SM responses were free.

FROM WORDS TO WEEDS: BREAKING LANGUAGE BARRIERS FOR SUSTAINABLE LANDSCAPES IN FLORIDA

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Florida's environmental horticulture industry exceeds an annual worth of $10 billion and employs over 100,000 individuals in the state, of which 33% identify as Hispanic/Latino. The landscape sector, a dominant player in Florida's horticulture jobs, prioritizes high aesthetic goals in regularly maintaining plants. Based on historic practices, this industry often employs reactionary pest management focused on quick chemical solutions rather than long term economic, environmental, and social sustainability in urban ecosystems. Additionally, many landscaping jobs do not require formal certification or licensure, so training is often provided in-house by senior employees and through experiential learning. Within Florida's landscaping community, English and Spanish speakers often work side-by-side on multilingual teams which leads to unique

challenges in training those in the field. Despite the large Spanish-speaking population within Florida's landscape industry, language barriers can limit the adoption of more sustainable practices in the landscape as most materials and resources to assist in training new employees are only available in English. In 2021, a multi-county team of Florida extension agents received a United States Department of Agriculture, National Institute of Food and Agriculture grant to develop Spanish-language landscaping extension materials on best practices and integrated pest management for Florida. As part of this project, agents developed the "Basics of Landscaping in Florida, Conceptos Básicos de Paisajismo en Florida," a pocket-sized, waterproof booklet featuring science-based information and graphics side-by-side in English and Spanish. In early 2024, the agents published and printed the booklets, and began distributing through various landscape networks and extension programs across Florida. The team is currently implementing and evaluating the outcomes and impacts of this project. This presentation will discuss the team's methodologies and experiences in developing and disseminating bilingual training materials to Florida's diverse environmental horticulture industry and its potential applicability to other regions.

2024 AM/PIC SPEAKER PROFILES

Dr. Rick Avery
Texas A&M AgriLife Extension Director

Rick Avery, Ph.D., is the director of Texas A&M AgriLife Extension Service. As director of the largest Extension agency in the nation, Avery oversees agency programming in agriculture and natural resources, Family and Community Health, 4-H and Youth Development, and Community Economic Development.

Avery has an extensive background in both government relations and in government. Avery's Capitol Hill experience includes serving as an assistant for U.S. Senator Lloyd Bentsen and U.S. Rep. Greg Laughlin. Most recently he served as deputy director of the Brazos Valley Council of Governments. Avery's career in government also includes serving as county relations officer for the Texas Association of Counties, where he worked with elected and appointed county officials in all 254 Texas counties, providing technical support, continuing education and resource guidance to government operations.

At Texas A&M AgriLife, Avery previously served as AgriLife Extension's V.G. Young Institute director and Extension specialist, to provide continuing education to approximately 1,500 county officials annually through Institute schools.

While at V.G. Young, Avery spearheaded curriculum development for the popular Commissioners Court Leadership Academy, a two-year program that enhances the leadership skills of participating court members through advanced training and travel to explore innovations in local, state and federal government.

He also led development of the Commissioners Court Advanced Curriculum, a certification between AgriLife Extension, the County Judges and Commissioners Association of Texas, and the Texas Association of Counties.

A native of Needville in Fort Bend County, Avery was active in 4-H, FFA, and athletics. He earned a bachelor's degree in political science from Austin College and a master's degree in political science and doctoral degree in higher education administration from Texas A&M University.

Chancellor John Sharp,
Texas A&M University

John Sharp was appointed Chancellor of The Texas A&M University System by the Board of Regents in 2011.

As chancellor, Sharp leads one of the largest systems in the country with an annual budget of $7.8 billion and an enrollment of more than 153,000 students at 11 System universities. Additionally, under the System umbrella, there are eight state agencies.

Sharp earned a bachelor's degree in political science from Texas A&M University in 1972, where he was a member of the Corps staff of the Corps of Cadets, a member of the 1972 rugby team, and he was elected student body president. Upon graduation, Sharp was commissioned as a second lieutenant in the United States Army Reserve.

In 2018, Sharp was recognized as a Distinguished Alumnus, an honor given to Aggies who have achieved excellence in their professions and made meaningful contributions to Texas A&M and the communities. It is the college's highest honor awarded to former students.

In 1976, Sharp received a master's degree in public administration from Southwest Texas State University while working full-time with the Legislative Budget Board in Austin. In 1978, he opened a one-man real estate firm in Victoria.

Chancellor Sharp brings with him more than three decades of public service. He was elected to the Texas House of Representatives in 1978, and in 1982, he won a seat in the Texas Senate. Four years later, he was elected to the Texas Railroad Commission, and he was elected state comptroller in 1990 and re-elected in 1994.

Sharp is married to Diana (Atchison) Sharp. They exchanged vows on May 5, 2023. Between them, they have five adult children and six grandchildren.

Tiffany Dowell Lashmet, Associate Professor & Extension Specialist Agricultural Law

Tiffany Dowell Lashmet is an Associate Professor and Extension Specialist in Agricultural Law. She is located in the Department of Agricultural Economics at Texas A&M University. Tiffany grew up on a family farm and ranch in Northeastern New Mexico where her family raised sheep, cattle, alfalfa, wheat and milo. Tiffany has a B.S. in Agribusiness Farm and Ranch Management (summa cum laude) from Oklahoma State University and a Juris Doctor (summa cum laude) from the University of New Mexico School of Law. Prior to coming to Texas A&M, she was engaged in private practice, working at a complex litigation firm in Albuquerque, New Mexico.

Dr. Jeffrey W. Savell, Vice Chancellor and Dean for Agricultural and Life Sciences, Texas A&M University

In June 2022, Jeffrey W. Savell, Ph.D., was named by the Board of Regents as the vice chancellor and dean for Agriculture and Life Sciences.
He is a University Distinguished Professor, Regents Professor and E.M. "Manny" Rosenthal Chairholder in the Department of Animal Science at Texas A&M University.

In his long and acclaimed career at Texas A&M, he has taught many thousands of students. He has taught the introductory course in meat science, ANSC 307, teaching over 12,000 Aggies since 1982. He has also taught an undergraduate livestock and meat marketing class, and a graduate course in carcass composition and quality. He team-teaches a graduate and undergraduate course in the principles of Hazard Analysis and Critical Control Point, HACCP, and a freshmen class on Texas Barbecue. Savell has chaired or co-chaired over 150 graduate students who have become leaders in academia, industry and government. Recognition of his teaching accomplishments include the Association of Former Students at Texas A&M and the American Meat Science Association.

Savell's research efforts have been recognized by receiving numerous university, regional and national awards for individual and team efforts to solve key issues in the livestock and meat industries. Savell is a past president of the American Meat Science Association, serves on the JBS Advisory Team on Quality and Safety, is a member of the Meat Industry Hall of Fame, and was identified by Stanford University as among the top 2% of most-cited researchers in the world in 2021.

Savell earned his bachelor's, master's and doctoral degrees from Texas A&M in 1975, 1976 and 1978, respectively.

Julie Fox, Ph.D.: Director of Strategic Initiative and Urban Engagement, Department of Extension, The Ohio State University College of Food, Agricultural & Environmental Sciences

Fox joined Ohio State in 1998, developing Ohio's direct ag marketing team, and then joined the Ohio State Extension administrative cabinet in 2014. She was one of the first steering committee members for the National Urban Extension Leaders (NUEL) and a member of the Extension Journal Inc. Board of Directors. She is the principal investigator for Ohio State's Urban Ag initiative with the USDA Farm Service Agency. Her background includes working in Africa, Asia, Australia, and Europe. For fun, she managed her 200+ acre tree farm in the rolling hills of southern Ohio.

General Session:
URBAN AG OPPORTUNITIES FOR EXTENSION AGENTS

Expand your perspective on urban ag through an exploration of what we know and what we can do.

See how members of NACAA are uniquely positioned to make Extension and agriculture stronger along the urban-rural continuum.

Administrative Leaders Luncheon
URBAN AG INSIGHTS FOR ADMINISTRATIVE LEADERS

Gain insights on into what we know about the urban context of scale, diversity, complexity, and the urban-rural interface. Explore what we can do through urban strategies that focus on positioning, programs, personnel, and partners.

Dr. Manjit K. Misra
Director, USDA National Institute of Food and Agriculture
(Represented by Josh Stull - Stakeholder Affairs Officer)

Dr. Manjit Misra is the director of the USDA National Institute of Food and Agriculture, USDA's extramural funding agency in the Research, Education and Economics Mission Area.

Dr. Misra is a world-renowned scientist who has had a transformational impact on food security through the application of engineering principles to seeds, the most vital and fundamental element of food security. Prior to joining NIFA, he was the director of the Seed Science Center at Iowa State University, a position he held from 1991 to 2023. He also was the Endowed Chair of Seed Science, Technology and Systems.

Dr. Misra was sworn in to a six-year appointment as director of the USDA National Institute of Food and Agriculture on May 8, 2023.

NIFA invests in research, education and Extension at universities, research organizations and other partner organizations to develop innovative solutions for food and agriculture challenges facing the nation and the world.

Donnell Brown,
RA Brown Ranch

Donnell Brown is the fifth generation to own and manage the R.A. Brown Ranch, a family business since 1895, in Throckmorton, Texas. They raise registered Angus, Red Angus and SimAngus cattle and sell 600 bulls each October.
Donnell is a graduate of Texas Tech University. Prior to that, he served as President of the Texas FFA & as the National FFA President. He has served in a Strategic Planning capacity for four different breed associations as well as the National Cattlemen's Beef Association.

He and his wife Kelli are blessed with sons: Tucker, and Lanham. Together they are living their dream of raising cows, kids and Quarter Horses.

ANNUAL MEETING AND PROFESSIONAL IMPROVEMENT FUTURE CONFERENCE DATES

2025

Billings, Montana.....June 29-July 2

2026

Denver, Colorado.....July 11-15

2027

St. Paul, Minnesota.....September 12 - 17

2028

Atlanta, Georgia.....August 6-10