

Extension News

Winter (Dec-Jan-Feb)



Horticulture Agent, Nickie Munroe, with Citrus Identification Competition winners



4-H Agent, Darren Cole, with ICL Sponsor, Ward Gunter, and the Tractor Rodeo winner

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As the agriculture extension agent, I often have people ask me about the state of the citrus industry in Indian River County and how it is weathering the citrus greening storm. Based upon increased participation at two outreach events that we had this month, I would have to say that it is doing better than expected. In early January I helped organize the annual Agriculture Worker Safety Training Day where we have various educational sessions in English and Spanish designed to help employees work safely to prevent accidents, operate equipment in a mindful manner, be aware of their surroundings to avoid dangerous situations and to satisfy necessary training requirements for WPS, food safety and personal hygiene. Afternoon events consist of a Tractor Rodeo and Disease Identification Competition. For the first time in 5 years, there was an increase in registration with over 270 participants from 26 different companies—a 20% increase over last year.

Another event scheduled every January is the Florida Citrus Show at the Fenn Center in Ft. Pierce. This event provides the grower with the latest research on citrus production from research and industry experts. The two-day event was launched the evening before at the Indian River Citrus League Annual Banquet where the Tractor Rodeo Cup was awarded to IMG Citrus—who barely beat out the team from Bob Adair's Florida Research Center for Agricultural Sustainability. At all events, I saw an increase in participation and cautious enthusiasm based upon the results from some of the research presentations. There will not be a "magic bullet" to cure citrus greening but there is hope for the future as growers are given the tools to live with the disease. I was encouraged to know this, as were many others at the educational sessions. So, support our local citrus industry—visit the farmers' market where Countryside Citrus and Schacht Groves have a booth, stop by family packinghouses like Poinsettia Groves on US-1 and Peterson's off 66th Ave. and do not forget to buy your fresh fruit and juice each week to help keep this industry strong and vital in our community.



Taste testing new citrus varieties at the Florida Citrus Show

What Will Spring Look Like for Indian River County?

Lucky for us, spring is just around the corner

Although February is predicted to be a bit cooler than normal, we will still enjoy a relatively mild spring. The Farmer's Almanac seconds this by estimating milder temperatures and scattered showers from February 7th-15th but with cooler temperatures returning from the 16th through the 20th. We will end out the month with sunny and warmer temperatures taking that same great weather right into the 2nd week of March. I would not pack away the sweaters just yet as the Nation Weather Service is still predicting 1-2 nights of possibly freezing temperatures. Normally we would be concerned about an El Nino effect helping to push the colder temperatures from up north down to us, but it is not as strong as once predicted and so we seem to be off the hook for this year. Apparently, El Nino conditions usually would mean higher rainfall but this too is a bit uncertain due to the weak nature of this weather feature.

So, is it time to put in that spring vegetable garden? If you were a pragmatic optimist like I am, I would say not quite yet. We still have February to get through, however, this is the time to plan for that wonderful garden; work your soil, add mulch and compost and spend time looking through those seductive seed catalogs. If you wanted to get a head start on your garden, you can start seeds indoors and the seedlings will be just perfect by the time the warmer weather is here to stay.

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Agriculture News

Suspicious Cattle Deaths

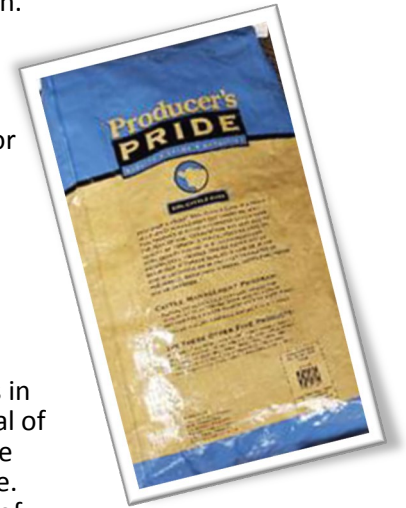
In January, the Florida Department of Agriculture and Consumer Services (FDACS) received multiple reports related to acute deaths in cattle. These deaths are being investigated by both the Division of Agricultural Environmental Services and the Division of Animal Industry. Local law enforcement agencies and veterinarians have also been involved in the ongoing investigation. While the specific cause has not yet been determined, these deaths may be related to feed consumption.

The product in question is Producer's Pride 20% All Natural Cattle Cube, lot number 8DEC22MUL2, manufactured by Purina Animal Nutrition, and distributed to forty (40) Tractor Supply Company stores in Florida and Georgia at the following locations:

Starke, **Fort Pierce**, Saint Cloud, Chiefland, Lake Wales, Sebring, **Okeechobee**, Eustis, Haines City, Newberry, Bradenton, Palatka, Wauchula, Zephyrhills, Deland, Lake City, Orlando, Arcadia, Dunnellon, Fort Myers, Saint Augustine, Live Oak, Jacksonville, Homosassa, Macclenny, Bartow, Perry, Groveland, Gainesville, **Cocoa**, Osteen, North Fort Myers, Loxahatchee, Crawfordville, Palm Coast, Hudson, Sarasota, Port Charlotte, Riverview, and Kingsland, GA.

Tractor Supply Company has voluntarily removed the product in question from their shelves in all 40 stores. In addition, Purina Animal Nutrition has initiated a voluntary market withdrawal of the affected product. Consumers may discard the product or return it to their retail purchase location for exchange or refund. There are no expected impacts to human health at this time. FDACS has collected product and cattle samples from across the state, and is in the process of conducting laboratory tests.

Veterinarians or producers who are aware of sudden unexplained deaths in cattle should contact the State Veterinarian's Office at 850-410-0900 (after hours for emergencies please contact 800-342-5869) or RAD@FreshFromFlorida.com. For feed-related complaints or concerns, please contact the Bureau of Inspection and Incident Response, Division of Agricultural Environmental Services, at 850-617-7996 or AESCares@FreshFromFlorida.com.



For Warm-Season Grasses, Winter is Still Here by Christine Kelly-B.

Availability of nutritive forages are important for animal health throughout the winter

Although the weather has warmed up recently, winter is still officially upon us here in the southern part of central Florida, and although the temperatures are nowhere similar to those up north, they are still affecting pastures in our area. Most of the acreage of improved pastures in Florida is bahiagrass, a warm-season grass that during cooler months begins to slow down growth when temperature begins to drop (<65°F). Warm-season grasses will brown and die back if the temperature reaches frost or freezing temperatures. At this point, there is little to no nutritive value in the grass for any type of grazing situation. Since this situation can exist in our area from anywhere from a few weeks to 3 months, alternative plans have to be made in order to supply enough roughage, protein and nutrients to maintain the health of the herd. It is too late to plant cool-season annual grasses, but there are a few management techniques that you can incorporate in order to minimize winter damage to pastures and help them get going in the spring.

- 1) Soil pH can be an indicator of how well plants can remove nutrients from the soil. Bahiagrass grows best at a pH of 5.5-5.6 and it is important to know if your pH is too acidic or too basic. Soil testing should be done every few years and now is a good time to start this practice.
- 2) Prevent overgrazing by reducing stocking rates and implementing rotational or strip grazing to avoid plant injury.
- 3) Animals should graze for shorter periods per paddock, with an increase in pasture resting intervals before the animals are allowed to return.
- 4) Apply 1st application of fertilizer in late March (specific amount dependent upon management objectives and fertilizer budget); this will help plants start growing when the temperatures warm up again. See "Getting the Most out of Bahiagrass Fertilization" (<http://edis.ifas.ufl.edu/ss469>) for more information.
- 5) Plan ahead to add cool-season grasses, grains or legumes to your management system for next year's fall/winter season.
- 6) Make an appointment with your local extension agent to help you plan your pasture management strategy.



Are You Interested In Growing Industrial Hemp?

If the answer is “Yes” please read the information below from Dr. Zack Brym, condensed by Christine Kelly-Begazo. See the complete article at <https://programs.ifas.ufl.edu/hemp/faqs/>. FDACS refers to Florida Department of Agriculture and Consumer Services.

How is hemp different from marijuana?

Hemp and marijuana are the same plant species, *Cannabis sativa*. They are legally distinguished based on their THC content, which is the psychoactive compound associated with 'getting high'. Hemp is *Cannabis sativa* with a THC content that does not exceed 0.3% by dry weight, while marijuana has a THC content greater than 0.3% (and as high as 20% depending upon the variety). Hemp is used for seed, fiber, oil, construction materials, and non-thc cannabinoids.

What exactly did the 2018 farm bill change for hemp?

The bill defines hemp as an agricultural commodity. This offers hemp farmers access to financing and crop insurance and removed trade barriers across state lines. The regulation of hemp production will be administered at the state level (FDACS) through state hemp plans submitted to the USDA. To our knowledge, FDACS has not yet submitted a plan to change the permitting guidelines for hemp production.

Is hemp legal to grow in Florida on private farms?

No. Currently, industrial hemp planting permits are only available to UF and Florida A&M universities. The 2018 farm bill directs the USDA to establish a process to regulate hemp at the state level. States are expected to submit state hemp plans on how state departments of agriculture will regulate and administer hemp production.

What exactly is the industrial hemp pilot project doing?

The UF/IFAS industrial hemp pilot project is working to identify varieties and planting recommendations that can be profitable for growers and remaining environmentally responsible. Most hemp seed and plant materials are coming from very different areas from Florida, so we have to start with variety trials to find marketable hemp that grows well in Florida’s diverse soils, climates, latitudes. Economic research is being conducted to find the input costs of growing hemp, expectations of hemp’s market value, and a breakeven point to recommend when hemp is an ideal crop. Research is also being conducted to determine its invasiveness due to its “weedy” behavior.

Can a private entity volunteer land to for the University of Florida’s hemp trials?

No. Currently all UF hemp research will be conducted on UF property. We have chosen several research stations in diverse locations across the state.

When can a private person, business, or entity grow hemp in Florida?

The state of Florida and FDACS will have to update the rules and regulations to allow private production of hemp. This timeline will likely be impacted by a state response to the 2018 farm bill.

How is it legal to grow sunn hemp?

Sunn hemp (*Crotalaria juncea*) is not hemp and is not in the cannabis family. It is in the bean family. Sunn hemp has no cannabinoids. This cover crop was used in India as a source for fiber, so it has ‘hemp’ in its common name.

Florida grew some hemp in WW2. Why can’t we just grow that hemp?

The hemp market of the 1940s was oriented around an exceptional demand for fiber to supply the US and allies with cordage and durable canvases for the war effort. Information about varieties grown then for fiber are not readily transferrable to the contemporary market for high oil, seed, cannabinoids, and specialty fiber.

For more information go to <https://programs.ifas.ufl.edu/hemp/>. Subscribe to the UF/IFAS Industrial Hemp Pilot Project newsletter at <https://programs.ifas.ufl.edu/hemp/newsletter/#>.

Horticulture News

Companion Planting for Improved Health in the Garden Bed by Yvonne Florian and Nickie Munroe










“Companion planting” has been around for centuries and is the practice of planting two or more different plant species near each other for mutual benefit. Companion planting can be done for several reasons; to conserve moisture in the soil, to repel insects or nematodes, to encourage pollinators to drop by and to shade tender seedlings until they are strong enough to fend for themselves. University of Florida research is of the opinion that companion plants do little to help or hinder plant success. However, a gardener’s own experience can be very different.

Companion planting can be done simply for repelling pests. When you plant basil or marigolds with tomatoes, they can confuse moth pests by their stinky nature. Several moth species lay their eggs on tomato and pepper plants. Moths and butterflies smell with their feet and can tell when they’ve touched down onto their favored plant. The pungent smell of marigolds can, theoretically, repel tomato horn worms and army worm moths. Marigolds grown, and then turned under before planting of food crops, such as tomatoes and peppers are said to confuse soil borne nematodes and breaking the parasitic cycle.



“Companion planting” can also be done to preserve soil moisture. When planting bananas, which normally like moist soil, research says to keep “a six-foot ring of bare soil around each banana mat.” This bare soil is prime real estate for all weed seeds in that moist, sunny environment. By planting a shallow-rooted crop, such as sweet potatoes, in that six-foot area under a thick layer of composted mulch, you can suppress weeds and harvest a second crop come winter, easily dug up from the mulch. For more information on growing sweet potatoes in the Florida Garden, please go to <http://gardeningolutions.ifas.ufl.edu/plants/edibles/vegetables/sweet-potatoes.html>.



Plant	Good Companions	Don't Plant With!
BEANS 	Sunflowers, cabbage, cucumber and strawberries	Onions, garlic or fennel
CARROTS 	Lettuce, chives, leeks, rosemary, sage and peas	Strawberries, fennel or cabbage
LETTUCE 	Carrots, beans, peas, pumpkin, squash, cucumber and melons	Cabbage, tomatoes or celery
CUCUMBER 	Radishes, peas, beets, corn, beans and carrots	Potatoes or sage
DILL 	Beans and lettuce	Cabbage, carrots, caraway, chili, bell peppers, fennel, lavender or potatoes
RADISH 	Chervil, cucumber and squash	Cauliflower, cabbage, turnips or Brussels sprouts
SPINACH 	Strawberries, beans and peas	No bad companions – easy!
TURNIPS 	Peas	Beans or potatoes
POTATOES 	Tomatoes, Marigold, beans, maize and the cabbage family	Pumpkin, cucumber, squash, melons, sunflowers or tomatoes

There are a few concerns though when thinking about companion planting. A gardener has to be aware of pest suppression, nitrogen fixation, climate cooperation, trap cropping, attracting beneficial insects and maintaining or increasing biodiversity. To learn more about these plant interactions see this blog written by Alachua County Master Gardener, Scott Schuppe, at <http://blogs.ifas.ufl.edu/alachuaco/2018/04/26/one-secret-to-organic-gardening-companion-planting/>. The list of cool-seasoned vegetables that can be grown in our area right now is very extensive, but no matter what you choose to plant in your garden just make sure that your family will enjoy eating them. For more information about what to plant seasonally in your lawn or garden, see the *Florida Gardening Calendar* at <http://sfyl.ifas.ufl.edu/lawn-and-garden/florida-gardening-calendar/>.

Have Questions About Your Lawn or Garden?

Trained Master Gardener volunteers are here to help!

Do you find gardening in Florida daunting? Want to know when is a good time to prune roses? Curious about what kind of bug you just saw in your bathroom? Well, it is the Indian River County Master Gardener volunteers to the rescue! IRC MG's provide answers to home garden and landscaping questions. Free services include plant disease diagnosis, insect and plant identification and basic soil testing. Clients can call the IRC Extension office in Vero Beach, or visit any of the four Plant Help Clinic locations. For more information about the Plant Help Clinics and Florida gardening, visit the IRC Extension website (<http://sfyl.ifas.ufl.edu/indian-river>) or the University of Florida Horticulture website (<http://hort.ifas.ufl.edu>). If you like to do the research yourself, you can visit the University of Florida document search website (<http://edis.ifas.ufl.edu>) or email our MG's at ircmg1@gmail.com. We are also on Facebook at **MasterGardenersIRCFloida** so come visit and like our page so you can be connected to timely researched-based gardening information for our area.

PLANT CLINIC LOCATIONS:

Vero Beach-IRC Extension Office
 1800 27th St., Bldg. B, 2nd Floor
 Vero Beach, FL 32960
Monday-Friday
 9:00am-12n and 1:00pm-4:00pm
 (772) 226-4340 x 1

Sebastian-North IRC Library
 1001 Sebastian Blvd. (CR512)
 Sebastian, FL32958
Every Wednesday
 10:00am-12n

Environmental Learning Center
 255 Live Oak Drive
 Vero Beach, FL 32963
1st Saturday of each Month
 10:00am-12n



February

	North	Central	South
Survives Transplanting	Beets, Broccoli, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive/Escarole, Kale, Kohlrabi, Lettuce, Peppers, Tomatoes	Beets, Collards, Eggplant, Endive/Escarole, Kohlrabi, Lettuce, Peppers, Sweet Potatoes, Tomatoes	Beets, Collards, Eggplant, Kohlrabi, Peppers, Sweet Potatoes, Tomatoes
Transplant With Care	Carrots, Celery, Mustard, Potatoes	Carrots, Celery, Mustard, Potatoes	Carrots, Mustard, Onions (bunching, shallot)
Use Seeds	Cucumbers, Onions (bunching, shallot), Peas (English), Radish, Squash (summer, winter), Turnips, Watermelon	Beans (bush, pole, lima), Cantaloupes, Corn (sweet), Cucumbers, Onions (bunching, shallot), Peas (English), Pumpkin, Radish, Squash (summer, winter), Turnips, Watermelon	Beans (bush, pole, lima), Cantaloupes, Corn (sweet), Cucumbers, Onions (bunching, shallot), Peas (English, Southern), Pumpkin, Radish, Squash (summer, winter), Turnips, Watermelon



What to Plant in your Vegetable Garden



March

	North	Central	South
Survives Transplanting	Arugula, Eggplant, Kohlrabi, Pepper, Sweet Potatoes, Swiss Chard, Tomatoes	Arugula, Chinese Cabbage, Kohlrabi, Pepper, Sweet Potatoes, Swiss Chard	Arugula, Chinese Cabbage, Endive/Escarole, Sweet Potatoes, Swiss Chard
Transplant With Care	Carrots, Spinach	Carrots, Celery, Spinach	Carrots, Celery
Use Seeds	Beans (bush, pole, lima), Corn, Cucumbers, Okra, Onion (bunching, shallot), Peas (English, southern), Radish, Squash (summer, winter), Watermelon	Beans (bush, pole, lima), Cantaloupes, Corn, Cucumbers, Okra, Onion (bunching, shallot), Peas (southern), Radish, Squash (summer, winter), Watermelon	Beans (bush, pole, lima), Cantaloupes, Corn, Okra, Onion (bunching, shallot), Peas (southern), Radish, Squash (summer, winter), Watermelon



Bee Buzz and Pollinator Points by Violet Krochmalny

To be or not to be, a bee – Artificial Pollination



With the ongoing hardship of bee colony collapse disorder and native habitat destruction severely reducing the population of native pollinators, researchers are diligently working on creating artificial pollinators, or “Drone Bees”. While artificial pollination is not a modern concept (think of Mendel and his thousands of hand pollinated pea plants), the approach of using robotic, aeronautic and photomicrographic technology is a relatively new development that is fascinating for some -- yet horrifying to others.

The methods of robotic pollen delivery vary from flapping wings and gel coated bristles to static electricity. Most challenges deal with the need for a lightweight power source that will last longer than a few minutes, the fragility of the models and the fact that the tiny robo-bees are currently only operated manually. What works in a controlled lab with human operators will need quite a few upgrades for use in large-scale outdoor fields with unpredictable environmental conditions.



Overlapping studies have investigated insect mobility, vision and instinctual/intelligent behaviors for the goal of “a highly versatile microrobot with the combined ability to walk, jump and fly” (from Design News article: Developing Artificial Bees to Replace the Real Thing; <https://www.designnews.com/electronics-test/developing-artificial-bees-replace-real-thing/90175855858781>). Drones not only can serve as crop pollinators, but can also scout for plant pests and deliver pesticides more accurately. The current swarm of research groups working on robotic drones include Microsystem Lab – Manchester University (UK), Delft University of Technology (Netherlands), National Institute of Advanced Industrial Science (Japan), Wyss Institute (Harvard University) and Charles Stark Draper Laboratory (Cambridge University).



The ethical dilemma, as many see it, is the question of where do you spend your research dollars? Saving and rehabilitating existing bees and their habitats or replacing them artificially? There are already areas in the world that are dealing with the reality of a shortage of natural pollinators. In China, human labor cost is currently less than renting bee colonies. Renting is a method used by many California almond orchards that transport over a million bee colonies during peak pollination season. In Southwestern China, apple and pear orchards are completely hand pollinated by farm workers to compensate for the lack of local wild bees.

According to Marla Spivak, an entomologist at the University of Minnesota, there are 20,000 species of bees in the world, each with a different body shape, behaviors and flight pattern that match specific flowers. For example, bumblebees match up well with tomato plants because they can “buzz” in the right frequency to release the enclosed pollen from the tomato flower. On the other hand, leafcutter bees fit better with alfalfa, which has a trigger that smacks the pollen onto the bee using a strike of the flower’s stamen when disturbed. Relying only on drones for pollinating targeted agriculture fields may result in a cost to wild vegetation because the robo-bees will not be programmed outside of their specific task.

In March of 2018, Walmart filed a patent for drone pollinators --- a sure sign of the times. Many scientists agree that artificial pollinators should be a supplement to wild pollinators rather than a replacement. Micro-bot research is also resulting in a myriad of technological advances, but as beekeeper Will Caverly points out in the May issue of *Bee Culture* magazine: “...it’s important to say that not one of the robots being proposed will make honey.”



Citrus trees will soon begin to bloom in our area helping hives get ready for spring after a long winter.

A graphic with a yellow border. At the top, it says "WHAT'S FLOWERING FEBRUARY in Florida?". Below this, there are two entries: "Bougainvillea" (Non-native, evergreen (Bougainvillea spp.)) and "Hong Kong Orchid Tree" (Non-native, evergreen (Bauhinia blakeana)). On the right side, there is a vertical banner that says "SOUTH". There are also some floral illustrations on the left side.

Master Gardeners Out and About

Busy Bee Customer Appreciation Day



Annual Awards & Holiday Party



Annual Awards & Holiday Party



Frogleg Festival in Fellsmere



Volunteers at the MG Booth during Garden Fest



Nickie Munroe, IRC Horticulture Agent, presenting at Garden Fest



Master Gardeners are trained volunteers that assist the horticulture agent, Nickie Munroe, educate homeowners and the general public about Florida-Friendly Landscaping and environmentally sustainable lawn maintenance. If you are interested in learning more about the Florida Master Gardener program in general, please visit the Florida Master Gardener website at <http://gardeningsolutions.ifas.ufl.edu/mastergardener/>. If you are interesting in training to become one of our illustrious volunteers in Indian River County, contact Nickie Munroe at lnmunroe@ufl.edu or (772) 266-4318.

4-H and Youth Development News

2018 Welcome Back Night by Darren Cole

The Indian River County 4-H program is established mainly on livestock science fair projects and in the belief that kids learn best by doing. Youth members complete hands-on projects in areas like animal science, agriculture and community service engagement, in a positive environment where they receive guidance from adult mentors and are encouraged to take on proactive leadership roles. Children can concentrate on one focus area or they can try a variety of programs throughout their IRC 4-H community club experience. Regardless of the project area, all IRC 4-H programs include mentoring by caring adults and career readiness as core elements.



In the efforts to introduce other STEAM-based (Science, Technology, Engineering, Art & Math) programming to IRC 4-H Program, a suggestion from the 4-H Advisory board was to have STEAM activities at the 4-H *Welcome Back* get-together this year. With that in mind, we formed a planning committee with club leaders to help with organizing and implementing this event. Six different stations were developed where the 4-H members would rotate every 15-20 minutes to experience different STEAM activities. The stations included Making Butter, Balloon Rockets, Catapults, Seed Germination, Team Building, and Team Building Sports.



The IRC Welcome Back Night was deemed a success, not just by the organizers but also by the parents and 4-H members alike. The agent and other Indian River County Extension staff received many compliments from satisfied parents. Overall everyone enjoyed the night and new experience into the STEAM world and the 4-H agent is looking forward to starting a 4-H STEAM club for Summer 2019.



4-H Members (and Leaders) in Action!



Workshop or Seminar Ideas?!



We are looking for ideas for workshops in 2019. We would like to hear ideas of what you are interested in and would be willing to attend. Please let us know what time would work best for most people---after school, 1/2 days when school is out, etc. Contact the Extension Office 772-226-4330 x 2 or dc32@ufl.edu and let us know what YOU are fascinated by.

Ethics Workshop by Darren Cole

The Youth Livestock Show Ethics and Animal Care Workshop defines livestock ethics and describes four questions that can be used to determine whether practices related to raising, training, and grooming youth livestock projects are ethical or unethical. The lesson describes several hypothetical situations and helps youth to apply and test these questions:

1. Does the practice violate Food and Drug Administration Law?
2. Is the practice fraudulent misrepresentation of the animal?
3. Does the practice compromise the welfare of the animal?
4. Does the practice relate to real world agriculture?

Christine Kelly, IRC Agriculture Agent, works with Cloverbuds on learning the ethical way to care for livestock projects.



Darren Cole, IRC 4-H Agent, observed while a group worked through a series of ethical issues.



The Florida Federation of Fairs believes that every youth livestock exhibitor should receive proper training and information for raising and showing a youth animal project. This training is mandatory for any youth showing at a designated fair by the Florida Federation of Fairs. They also believe that it is important the exhibitors understand:

- ◆ The purpose of youth livestock projects
- ◆ The importance of ethics in youth livestock projects
- ◆ Proper animal handling and management
- ◆ The difference between animal welfare and animal rights
- ◆ Be prepared to be an ambassador for animal agriculture

This workshop was designed to certify students to meet the mandatory certification requirements that will be in effect for the 2019 Florida Fair season. Certification is valid for a three (3) year period. On December

15, 2018, IRC Extension and 4-H Program hosted a regional ethics training. There were a total of 98 participants, 24 who were Cloverbuds, from Indian River, St. Lucie, Okeechobee, Palm Beach and Martin counties. Some of the youth participants had never had an ethics class and were not aware that some of their actions might be considered unethical with regard to animal welfare. Participants were also given tools and cues to use when faced with well-meaning spectators and visitors asking about animal welfare, youth fairs and livestock markets.



Cloverbud University by Darren Cole

Cloverbud members are the future of our clubs!

Join us for our First Cloverbud University workshop on Saturday, March 23rd, 2019, from 9am-11am at the Indian River County Extension Office. Cloverbud University is a new program for IRC 4-H that includes children who are five to seven years of age. Cloverbud U will be a bi-monthly, 2-hour session that will provide a variety of educational and recreational experiences in a non-competitive environment. A team of Indian River County Extension professionals have been working to update curricula and other resources to offer to Indian River County 4-H Cloverbuds to introduce them to the many opportunities that 4-H can offer as they grow within the program from kindergarten through high school. Education curriculum will include, but is not limited to, the following areas of interest to youth: animal science (farm animals, pets); communications and expressive arts (theater, textures); environmental education (insects, weather); family consumer science (nutrition, healthy eating, exercise); leadership and citizenship; plant science (gardening); and science and technology (bicycle, aerospace, robotics). Development and refinement of these resources will be ongoing. Register by emailing Josh Kutyna joshua.kutyna@ufl.edu or by calling the office at 772-226-4314.

Fruit and Alternative Crops News

Introducing Amir!

Join us in welcoming our new fruit and row crops agent

Dr. Amir Rezazadeh is the new Multi-County Fruit and Field Crops agent for St. Lucie and Indian River Counties. Dr. Rezazadeh's first day was February 4th as a Florida Extension agent; Amir and his family just moved from Mississippi in January. He has a strong horticulture background, with a B.S. in Horticulture from the University of Mazandaran, Iran; an M.S. in Horticulture from the Gorgan University of Agricultural and Natural Sciences, Iran; and a Ph.D. in Horticulture from Mississippi State University.



Dr. Rezazadeh's recent work experience as a PostDoc at MSU Coastal Research and Extension Center provided for his work with blueberries, blackberries, strawberries, and grapes. His doctoral focus was to understand the influence of environmental factors and cultural practices on the physiology and development of greenhouse crops. Amir's extension goal was to provide producers with relevant, researched-based information for the production of high-quality fruit and field crops using nutrients, water, and energy efficiency. Dr. Rezazadeh has invested time and energy in "learning the communication skills as a necessary key for a successful extension and outreach program." Amir will work directly with commercial fruit producers in Indian River and St. Lucie counties as well as assist urban horticulture agents and Master Gardeners with homeowner questions about growing and maintaining fruit in their yards.

Dr. Rezazadeh's office is located at the UF IFAS St. Lucie County Extension in Fort Pierce but he will be traveling up to Indian River County quite frequently.. If you would like to invite him to your grove or facility, please contact Christine Kelly in Indian River Co. (ckellybe@ufl.edu, 772-266-4316) or Ed Skvarch in St. Lucie Co. (eask@ufl.edu, 772-462-1660).

We are very excited to have Dr. R join our extension team!

What's in Season Now?

Look for these "Fresh From Florida" items in your grocery store during

February & March

Bell Peppers	Celery	Oranges	Squash
Broccoli	Eggplant	Papaya	Strawberries
Cabbage	Grapefruit	Peanuts	Sweet Corn
Carambola	Guava	Potatoes	Tangerines
Cauliflower	Lettuce	Radishes	Tomatoes
Mushrooms		Snap Beans	

Support Florida Farmers and buy local!



What is Coming Up Next?

February:

- 23rd Limited Commercial Landscape Maintenance Pesticide License Workshop (LCLM) hosted by Martin County. 482 CEU's provided. Contact Yvette Goodiel for more information (goodiel@ufl.edu).
- 26th New Technologies for Commercial Crop Production in Vero Beach. CEU's provided. Contact Christine Kelly for more information (ckellybe@ufl.edu).

March:

- 6th General Certification Standards (Core) Training & Testing for Pesticide Applicators for a Chapter 487 license, hosted by UF/IFAS Extension Indian River County. CEU's provided. Contact Christine Kelly for more information.
- 8th IRCYLH Show and Auction Check-in for Youth Exhibitors: swine weigh-in and check-in for poultry, horticulture, rabbit and cavy.
- 8th-17th IRC Firefighters Fair & IRCYLH Youth Show & Auction.
- 21st Spring Ranchers Forum at Yarborough Ranch, Geneva, FL. Contact Christine Kelly for more information.
- 22nd Green Industries Best Management Practices (GIBMP) Certification Training, hosted by UF/IFAS Extension Indian River County. CEU's provided. Contact Christine Kelly for more information.
- 27th 4-H County Events, Registration @ 5:30pm, Event: 6pm – 9pm.

April:

- 11th-14th Hibiscus Festival & Shopping Cart Parade, downtown Vero Beach.
- 13th-14th 4-H South District Horse Show, Okeechobee Fairgrounds.
- 17th Limited Commercial Landscape Maintenance (LCLM) Pesticide License Workshop hosted by Brevard County. Chapter 482 CEU's provided. Contact Bonnie Wells for more information (bcwells@ufl.edu).
- 19th Good Friday. Indian River County Extension office will be closed.
- 22nd Final 4-H Record Book due date. Club Leaders reserve the right to set a prior due date. Club leader will turn them into the IRC Extension Office by 4:30 PM.
- 23rd Ornamental & Turf Pesticide License Review Class hosted by St. Lucie County. Contact Ed Skvarch for more information (eask@ufl.edu).
- 27th 4-H District XI Events, 8:30am registration, 9:00am-12:00n

Cool Apps, Interesting Websites and New Factsheets

Agriculture:

- ◆ The Pollination Network gathers the growers with bee-needs and the best available beekeepers all in one accessible place. Connecting beekeepers and growers has never been simpler —one of the top apps for farmers and beekeepers alike. **Download:** <https://www.pollinationnetwork.com/>
- ◆ Farmers and ranchers can receive notifications from their USDA Farm Service Agency. Producers will receive text messages regarding program deadlines, reporting requirements, events and updates. Text "Florida" to FSANOW (372-669) for alerts from the state office, and "FLIndianRiver" to FSANOW for messages from a county office.
- ◆ Florida Automated Weather Network [ww.fawn.ifas.ufl.edu](http://www.fawn.ifas.ufl.edu)

Green Industry Professionals:

- ◆ Pesticide Licensing <http://sfyl.ifas.ufl.edu/hillsborough/professional-horticulture/licensing>

Homeowners:

- ◆ Florida Gardening Calendar gives gardeners a monthly guide for care and planting of landscapes and gardens, allows for selections between North, Central and South Florida http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/
- ◆ Florida-Friendly Landscaping APP Helps You Create Your Own Butterfly Garden <https://ffl.ifas.ufl.edu/butterflies>
- ◆ Is Your Industry Professional Certified? Find out by going to <http://aesearch.freshfromflorida.com/PersonSearch.asp> and putting in their last and first name and you will be able to see what license they carry.



Help Desk & Plant Clinic

Vero Beach Office

M-F 9:00am-n, 1:00-4:00pm
(772) 226-4324

Ircmg1@gmail.com

North County Library

Wednesdays 10:00am-12n



UF | IFAS Extension in IRC

Indian River County Extension Agents and Staff

"Who Ya Gonna Call?"

The Indian River County Extension agents are here for you! Extension agents are your direct link to science-based research straight from the University of Florida. For more information on Extension, or topics ranging from chickens to chinch bugs, send them an email or give them a call. Walk-ins welcome as well!



Christine Kelly-Begazo
County Extension Director
Agriculture Director
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ckellybe@ufl.edu



Darren Cole
4-H & Youth Development Agent
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Master Gardener Coordinator
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Multi-County Fruit & Field Crops Agent
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Office Manager
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Josh Kutyna
Program Assistant
Phone (772) 226-4330 x 6
joshua.kutyna@ufl.edu

Directions to IRC Extension

From U.S. 1 (coming from the north)

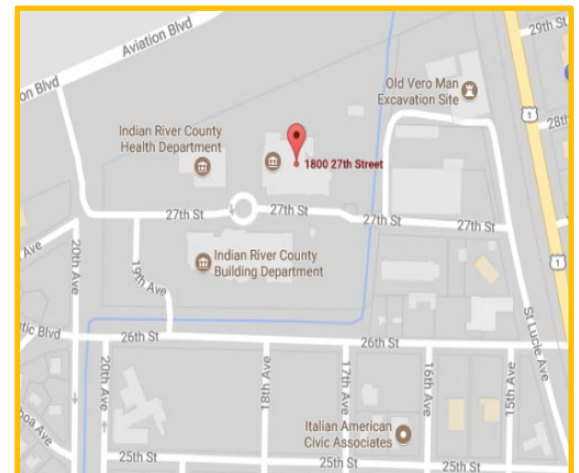
Heading on U.S. 1 south, turn right (west) at the light at 26th Street, follow to 19th Ave. and turn right (north) at entrance of IRC Administration complex. Turn right (East) at stop sign in parking area and continue through the roundabout. Building B is on the left just past the roundabout.

From U.S. 1 (coming from the south)

Heading on U.S. 1 north, turn left (west) at the light at 26th Street. Follow to 19th Ave. and turn right (north) at entrance of IRC Administration complex, continue with first instructions to Bldg. B.

From Interstate 95

Take Exit #147 onto Route 60 eastbound (20th Street) to Vero Beach. In approximately 6 miles turn left (north) at the light at 27th Ave. Turn right (east) at the next stop sign at Atlantic Blvd., follow to 19th Ave. and turn left (north) at the entrance of IRC Administration complex, continue with first instructions to Bldg. B.



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