



Winter 2020

MONMOUTH EXTENSION *Connection*

RUTGERS
NEW JERSEY AGRICULTURAL
EXPERIMENT STATION

Rutgers Cooperative Extension

Of Monmouth County

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Freehold, NJ 07728

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Monday through Friday

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Agriculture & Natural Resources

Ext. 7280



Master Gardener's Helpline

(732) 303-7614



4-H Youth Development

Ext. 7264

FCHS

Family & Community
Health Sciences

Family & Community Health Sciences

Ext. 7271

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4-H Adventures In Cultural Cuisine

Our Cultural Cuisine program not only nourishes our body but also fills our soul with an appreciation of what is new and yet familiar to us all. As we virtually travel from one country to another it's exciting to experience new foods and cultures in a relaxed atmosphere. Food brings us together as we prepare and enjoy the fruits of our labor without having to purchase an airline ticket.



Recently, our guest chef, Dr. Navin Boggs helped us discover the Flavors of India. We sat together family style and enjoyed the delicious meal that 4-Hers prepared. Earlier, we viewed a slideshow about Indian food and culture. We listened spellbound as Dr. Boggs spoke about growing up in India. New to many of us were the wealth of spices used in Indian cooking. Familiar to us all were the vegetables, meats and grains we share in common.

This commonality is present in all we prepare. For example, in August our guest chef was Fumika Yamaguchi, our 4-H Japanese Exchange Chaperone. She explained we would be preparing Okonomiyaki. What sounded so intimidating turned out to be a Japanese pancake. Different sauces, familiar ingredients and a different method of cooking all came together in a meal that each person in the room enjoyed – and we had fun doing it.

Cultural Cuisine classes, held 5 times yearly, are a truly a Rutgers Cooperative effort. While 4-H hosts the program, Family and Community Health science provides nutritional information. Monmouth County Agriculture and Master Gardeners support us with information on produce. Another partner in our program is "Grown in Monmouth". Many hands to stir the pot, but here in Monmouth County there are never too many cooks in our kitchen.

If interested in future programs please contact the 4-H Department. Does "Meatball Mania" or a Grilling Competition sound like something you would enjoy? Coming up on January 10th is "A Taste of Italy" program. On March 11th we will embark on our "Caribbean Adventure". A "Passport to Russia" culinary evening will transport us to the land of the Czars on May 21st. The welcome mat is out so please join us.

CEDM Remarks

At the November Monmouth Board of Agriculture meeting, Saul Vaiciunas from the New Jersey Department of Agriculture was invited to give a presentation on the spotted lanternfly. Secretary of the Board Ashley Reese said, “When I first heard about the Spotted Lantern Fly at the Hershey Convention, I knew that we needed to prepare and learn as much as we could before it made its way to Monmouth County.” Ashley then contacted the New Jersey Department of Agriculture, who then referred her to Mr. Vaiciunas. During his presentation, Mr. Vaiciunas shared that the NJ Department of Agriculture is currently monitoring the spotted lantern fly, and that there is a whole team dedicated to this issue. They are actively identifying areas where the spotted lantern fly has been reported and making site visits. Their team is also engaged in control measures when spotted lantern fly populations are found, in addition to removing its primary host, Tree of Heaven (*Ailanthus altissima*). Homeowners (or anyone who thinks they may have a specimen of spotted lantern fly) should contact Saul at the New Jersey Department of Agriculture. He can be reached at saul.vaiciunas@ag.nj.gov (609-406-6949). More information can also be found at the state’s SLF website, including handouts and training videos: <https://www.nj.gov/agriculture/divisions/pi/prog/spottedlanternfly.html> When asked his thoughts on the presentation that evening, Board President Randy Peck stated, “I thought the presentation was very educational and a very timely topic. Presentations like this could draw more of the industry into our meetings.”



The Monmouth County Board of Agriculture (MCBOA) meets once a month at the Monmouth Ag. Building, and all are welcome to attend. As Board Secretary Reese stated, “The networking, support, and educational programs held by the MCBOA and Rutgers Cooperative Extension are not only helping to fill my knowledge gaps, but are encouraging the success of my farm.”

All the Best,

Matthew Newman
County Extension Department Head, Monmouth Rutgers Cooperative Extension

AGRICULTURE and NATURAL RESOURCES

Hot Water Seed Treatment For Vegetables

Here at the Monmouth County Agricultural Extension office we are always striving to help our farmers have healthy plants. Each year we offer farmers the service of Hot Water Treatment for vegetable seeds, a critical management tool to help prevent the establishment of bacterial diseases. It's a free, non-chemical process used to eradicate bacterial plant pathogens on or within the vegetable seed.

Using disease-free seed is an important first step in management of many diseases, especially for small-seeded crops where seed-borne diseases are common.

Bacterial Leaf Spot of Pepper

- Bacterial leaf spot continues to be a problem in New Jersey.
- We have resistance in some pepper cultivars to BLS—mainly bell peppers.
- Hot water seed treatment is the best method for reducing the bacterial infections in seeds!



The treatment follows a strict protocol of times and temperatures for each crop to kill pathogens. This treatment is for raw seeds only, the treatment will destroy any seed pelleting and will wash off any fungicide that may have been applied to the seed. The treatment is suggested for seeds of eggplant, pepper, tomato, carrot, spinach, lettuce, celery, cabbage, turnip, radish and other crucifers. Seeds of cucurbits (squash, gourds, pumpkins, watermelons, etc.) can be damaged by hot water and thus are not to be treated.

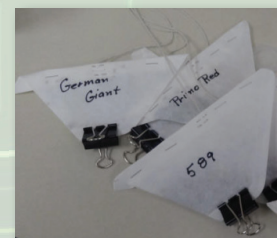
It's important to understand that one of the ways plant pathogens are introduced into a crop is seeds. In general, the earlier a pathogen comes in contact with the crop, the greater the potential for a serious disease problem to develop. This is why it is very important to start with "clean" seed.

Some seed companies provide hot-water treated seeds. You should verify with the vendor if they provided the treatment. Seeds should not be heat treated more than once. If the varieties you prefer are not treated you can bring them to the Monmouth County Agricultural Extension office. Hot-water treatment is easier, cheaper and more effective than trying to combat bacterial diseases in the field with chemicals.

To arrange a date to treat your seeds call Ag Associate Dennis McNamara 732-431-7260 ext. 7277
Or e-mail: Dennis.McNamara@co.monmouth.nj.us

Please bring your seed (un-pelleted) in labeled packages as described below. Or, if you wish, we have the fiberglass material available at our office for you to prepare the seed packages. You may wait for the seeds or drop off and return on the same day for pick-up. Please make sure that all seed packs are labeled (use a water proof method) with the variety or other code that you can identify. To package, you may use:

- Fiberglass screen envelopes (charcoal fiberglass screening)
- Nylon stockings
- Coffee filters, cotton bags, etc. See photos below for examples.



Growing High Tunnel Ginger In New Jersey



Photo Credit: Becky Sideman/UNH

Ginger (*Zingiber officinale*) is a perennial plant that is native to tropical regions of Asia and is grown commercially as an annual crop. Ginger is commonly used in many African, Asian, and Caribbean recipes or in herbal teas, and is sold fresh or dried and ground. What many people refer to as the “ginger root” is actually the “ginger rhizome,” which refers to the underground stem of the plant. The continental United States imports most of its ginger from other countries, or from Hawaii, but ginger can also be grown locally right here in New Jersey. Recently, farmers throughout the Northeast have been having success growing baby ginger in high tunnels. Fresh baby ginger is a unique product that is different than the mature ginger that is sold in grocery stores and has potential as an excellent niche crop for farmers markets, restaurants, CSAs, and other direct marketing customers.

Pre-sprouting the Seed Pieces

Growers interested in producing ginger typically order seed from ginger farmers in Hawaii in February. The seed pieces are sections of the rhizome, generally weighing 1 to 2 ounces each. When they arrive in late February or early March, seed pieces should be covered with 1-2” potting mix, peat, or coconut coir and sprouted in trays with a constant temperature of 75-85F. This allows the plants (which are a tropical crop) to get a jump start in our shorter growing season. Using heat mats for the pre-sprouting phase is recommended and has been shown to increase yields. The medium in the sprouting trays should be moist, but should not be over-watered. Shoots will emerge out of the medium and should reach 1 to 2 inches in height after 4 to 8 weeks. The ginger rhizomes will also grow roots during this period.

Planting the Seed Pieces in the High Tunnel

When soil temperatures in the high tunnel are consistently 55F or higher, the sprouted seed pieces can be planted into the soil. This is likely to be in late April or early May, depending on the season. Ginger is a heavy feeder and grows best with compost additions and supplemental nitrogen (100 lbs. N/acre before planting plus two additional applications of 25 lbs. N/acre during the growing season). A neutral to slightly acidic pH (approximately 6.5) is recommended and adequate calcium is important for the crop. Ginger seed pieces are planted 6 to 8 inches apart into a trench (approximately 8 inches deep) and lightly covered with a few inches of soil or compost so that the tip of the shoot is still showing.

Approximately 30 lbs. of seed will plant a 100 foot row. Just like potatoes, the plants should be hilled two or three times throughout the growing season as the shoots grow taller. Drip irrigation is recommended and fertigation can be supplied as needed.

Disease Management

Ginger is susceptible to bacterial wilt, bacterial soft rot, Pythium, and fusarium. Purchasing disease-free seed stock is the first line of defense against these problems. Soil-borne nematodes can also be a potential pest of ginger. Avoid planting in areas where other crops that are susceptible to these pathogens have been recently grown to further minimize disease pressure.

Harvesting Ginger

Baby ginger can be harvested 6 to 8 months after sprouting (October or November). The longer you are able to leave it in the ground, the bigger it will get. The leaves will begin to turn brown as temperatures drop and frost begins. Ginger plants can remain in the ground as long as there is at least one inch of green tissue still living above the rhizome, but many growers will harvest sooner. The plants are pulled from the ground using a digging fork and care should be taken not to damage the delicate skin of the rhizome. Trim the tops and roots and wash the rhizomes free of soil. Baby ginger is perishable and will store for about two weeks at 55F. Average yields of 5 to 6 lbs. harvested for every 1 lb. planted can be expected with proper growing methods.

If you are interested in growing ginger in your high tunnel this year and have any questions, or if you would like to share your experiences growing this crop, please feel free to contact Rutgers Cooperative Extension of Monmouth County.

Bill Errickson

Agriculture and Natural Resources Extension Agent

William.errickson@njaes.rutgers.edu

Ginger and Turmeric. University of Kentucky Cooperative Extension:

https://www.uky.edu/ccd/sites/www.uky.edu.ccd/files/ginger_turmeric.pdf

Effects of early season heating, low tunnels, and harvest time on ginger yields in NH, 2017:

https://extension.unh.edu/resources/files/Resource007161_Rep10344.pdf

5th Annual Home Garden Symposium

Presented by the Rutgers Master Gardeners of Monmouth County



Saturday, March 28, 2020

8:00 a.m. to 3:00 pm

Rutgers Cooperative Extension
Monmouth County Agriculture Building
4000 Kozloski Road, Freehold, NJ 07728

**Mark your calendars to join us for a day of
gardening presentations and demonstrations**





MASTER GARDENERS

Master Gardeners Celebrate 21st Graduating Class

TINTON FALLS, NJ – On behalf of the Monmouth County Board of Chosen Freeholders, Freeholder Lillian G. Burry congratulated the Rutgers Master Gardeners 21st graduating class of 32 individuals at the annual graduation ceremony held on Thursday, Nov. 21 at The Church of St. Anselm.

“The Master Gardeners have produced yet another special class of individuals who volunteer their time by beautifying our community and offering assistance to residents who have horticulturally-related inquiries,” said Freeholder Lillian G. Burry, liaison to Rutgers Cooperative Extension. “The Master Gardeners, as a whole, addressed more than 450 questions from the public at Garden Helpline tables at various events and 2,040 garden questions via phone, email or walk-in at the Agriculture Building Helpline room.” Since the first graduating class on Nov. 19, 1999, there have been 596 Master Gardeners trained in Monmouth County. Now that the 21st graduating class has completed their training, there are currently 256 active Master Gardeners who continue to volunteer their time to the County.



Photo caption: Freeholder Lillian G. Burry congratulated the Rutgers Master Gardeners 21st graduating class at the annual graduation ceremony held on Thursday, Nov. 21 at The Church of St. Anselm.

“I am delighted to announce that this year’s graduating class volunteered more than 750 hours in the Plant a Row for the Hungry garden, producing approximately 1,760 pounds of food,” said Freeholder Burry. “The food produced has been donated to Monmouth County food pantries such as the Open Door in Freehold and Lunch Break in Red Bank.”

Since the Plant a Row for the Hungry (PAR) garden started in 2006, 32,550 pounds of food have been produced and donated to local food banks, group homes, senior centers and soup kitchens. Besides the PAR garden, the Master Gardeners continue to be involved in over 25 community and donation gardens throughout Monmouth County where they grew and harvested over 21,850 pounds of food.

In conjunction with the Rutgers Cooperative Extension, the Monmouth County Master Gardener program seeks to educate everyone in horticultural topics, helps answer questions regarding gardening problems around the home, supports community and donation gardens and provides a speaker’s bureau to bring Master Gardener led discussions to local gardening clubs and other interested community groups around the County.

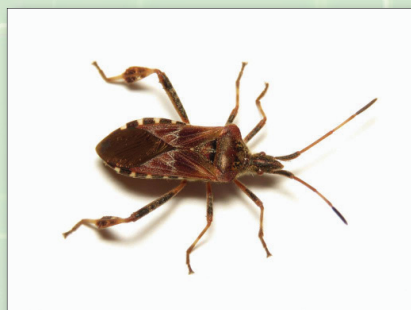
To learn more about becoming a Master Gardener or to receive an application, call 732-431-7260, ext. 7262 or go to www.visitmonmouth.com.

Horticultural Happenings

Throughout the state there have been reports of spruce, mostly Colorado blue spruce (*Picea pungens*), losing branches, browning out, and generally dying back. This spruce tolerates drought very well, and prefers the cooler, drier climate of their native Rocky Mountain home. New Jersey's humid and wet weather the past two years has not been too hospitable to spruce. We were pummeled with more precipitation in 2018 than any other year since record keeping began in 1895. 2018 made it into the record books with a statewide average of 64.09 inches of precipitation, according to David Robinson, the state climatologist at Rutgers University (The 30 year normal amount in NJ is 46.36 inches). This plus a very rainy spring in 2019 (there was a stretch between April and May where it rained 24 out of 27 days), really took its toll on spruce. Needle cast disease set in, exacerbated by warm weather, wreaking havoc on spruce in the landscape. At this point there's nothing that can be done except to prune out dead or dying branches. This will open up the plant to better air circulation and drying conditions which should help the spread of the disease next year, although preventative fungicide sprays may be warranted.



Recent articles/blogs/social media posts caused a flurry of inquiries on Helpline with homeowners concerned about 'kissing bug' invasions in their homes. The kissing bug (*Triatoma*) can carry a disease called Chagas, which is caused by a parasite. They are called kissing bugs because they often bite people and animals somewhere on the face, which can become infected. The good news is that we do NOT have kissing bugs in Monmouth County! What we do have are leaf footed bugs, also known as western conifer seed bugs. Leaf footed bugs DO NOT BITE, STING, or CAUSE ANY HARM TO HUMANS. They feed on developing cones of many conifers, and overwinter in the adult stage, seeking shelter in homes where they enter through window air conditioners, attics, and any crevice they can find. Insecticide applications are usually ineffective, so prevention is key! Check that all windows, doors, and exterior cracks are sealed properly to exclude these pests from entering the home. These are considered merely nuisance insects and



should cause no health concerns. We are happy to inspect them in our office to confirm their identity, but you can also do this by noticing the appendage on their hind legs. Kissing bugs do not have it, leaf footed bugs (hence the name) do.

Remember as you complete putting your yard to bed for the winter, the New Jersey Fertilizer Law blackout dates for applying Nitrogen and Phosphorous to the lawn is in effect for homeowners from November 15- March 1, which means if you missed your fall application it's too late this year. It's still an excellent time to have your soil tested through the Rutgers Soil Testing Laboratory, then come spring you'll be all set to apply the recommended amount of nitrogen, phosphorous, and potassium. It's important to note that according to this law, you are prohibited from applying phosphorous to your lawn unless a soil test that's no more than three years old recommends the need for it. Soil testing kits are available for purchase at the Rutgers Cooperative Extension of Monmouth County office. For more information about soil testing, go to the Rutgers Soil Testing website <https://njaes.rutgers.edu/soiltesting-lab/>

What Are Antioxidants And Why Are They So Important?

Randi Hardy, Intern, Rowan University

Sharese Porter, PhD, MPH, CHES Sr. Program Coordinator, Burlington and Monmouth County

If you're traveling down a juice aisle in the grocery store, you're likely to see the phrase "Rich in Antioxidants" boldly displayed on many products. Marketing strategies such as these have shaped consumer awareness of antioxidants and has increased the public's interest in them, but why do we look for this phrase and how do antioxidants benefit us?

Chemical reactions are constantly occurring in our body, where molecules are being built up and broken-down during a process, we call metabolism. During these reactions, some of the molecules become "unpaired". Which basically means that the negative charges of molecules do not have a positive "mate", making them unstable and potentially dangerous for our cells. This type of molecule is called a free radical. Excessive free radicals in the body can lead to many of the cells in our body to function improperly, leading to inflammation and chronic disease such as cancers and heart disease.

This is where the importance of antioxidants come in and why we want to include them in our diet. Antioxidants provide those unpaired molecules with a positive charge, so that they are no longer a free radical. By consuming antioxidants on a regularly basis, it prevents excess formation of free radicals, preventing oxidative stress and the risk for inflammation and chronic disease.

The safest and most helpful way to include antioxidants into your diet is from whole foods. Fruits and vegetables that are rich in pigment such as oranges, tomatoes, blueberries, and kale are going to contain a variety of antioxidants as well as vitamins and minerals. Be aware that heavily processed fruit juices and snacks that claim to be a good source of antioxidants aren't a substitute for whole foods. There is also little evidence to suggest that ingesting antioxidants by way of supplements has health benefits. In certain cases, these studies have shown the supplements to be harmful for some people. There are different kinds of antioxidants found in our food. For example, lycopene, found in tomatoes, Vitamin A and beta-carotene found in the rich orange pigment of sweet potato, and resveratrol found in the blue and purple pigments of blueberries and grapes. Other kinds of antioxidants include Vitamin E, selenium, and lutein. Each of these compounds have a specific role in the body and it is important to get a wide variety of them to ensure we are getting all the vitamins and minerals we need as well as reap the benefits of antioxidants. Other kinds of antioxidants include Vitamin E, selenium, and lutein.

Below are examples of some common and affordable foods rich in a variety of antioxidants:

Sweet Potato, Spinach, Strawberries, Raspberries, Dark Chocolate, Broccoli, Kale, Blueberries, Mushrooms, Tomatoes, Beans and Carrots



References:

Antioxidants Explained in Human Terms. Retrieved from

<https://www.healthline.com/nutrition/antioxidants-explained>

Antioxidants: In Depth. Retrieved from National Institutes of Health, National Center for Complementary and Integrative Health.

<https://nccih.nih.gov/health/antioxidants/introduction.htm>

Antioxidants: Protecting Healthy Cells. Retrieved from Academy of Nutrition and Dietetics

<https://www.eatright.org/food/vitamins-and-supplements/types-of-vitamins-and-nutrients/antioxidantsprotecting-healthy-cells>

Ingredient Spotlight: Butternut Squash

Butternut squash is a fruit that is sweet, nutritious and very similar to pumpkins in color and texture. While it is usually an item in the grocery store that may be overlooked, picking it up the next time you're there may be a beneficial addition to your diet. Butternut squash is a nutrient dense fruit where a one cup serving has more than your daily value of Vitamin A, Vitamin C, Vitamin E, and is a good source of fiber. The rich orange color tells you that it also contains phytonutrients such as beta-carotene. Phytonutrients are compounds found in fruits and vegetables that are not necessary for function, but when consumed regularly they may have added health benefits. Beta-carotene is known as an antioxidant which studies suggest may play a role in reducing the risks of chronic diseases. A well-rounded diet rich in phytonutrients ensures you get a variety of these phytonutrients as well as your daily intake of vitamins and minerals.

While it may look intimidating, preparing a butternut squash is simple. Begin by cutting it in half. To each half, slice off the outer layer. Scoop out the seeds, as you would a pumpkin, and proceed to dice into small pieces and place on a sheet pan with olive oil, salt, pepper. Bake at 375 degrees for 25 minutes and enjoy the diced squash on a salad, in a stir-fry, or enjoy on its own.

RECIPE: HEALTHIER MACARONI AND CHEESE

<i>½ lb whole-grain elbow macaroni</i>	<i>1 medium butternut squash, diced</i>
<i>1 small yellow onion, chopped</i>	<i>½ cup milk</i>
<i>¾ cup vegetable stock</i>	<i>1 garlic clove</i>
<i>1 cup Monterey jack cheese, shredded</i>	<i>1 cup mild cheddar cheese, shredded</i>
<i>1 cup muenster cheese, shredded</i>	<i>¼ cup breadcrumbs</i>
<i>1 tsp salt</i>	<i>1 tsp pepper</i>



Preheat oven to 375 degrees. Dice the butternut squash and onions then roast in the oven for about 25 minutes, until fork tender, with salt and pepper. While the squash is roasting, boil the pasta. Put the roasted squash and onions into a blender or food processor with milk, stock, onions, garlic, salt, and pepper, blend until smooth. Mix with the elbow macaroni off heat and then slowly mix in the cheeses. Transfer to baking dish and top with breadcrumbs. Place in the oven for about 15 minutes or until lightly browned on top.

References:

Is Butternut Squash Good for You? Calories, Carbs, and More. Retrieved from

<https://www.healthline.com/nutrition/butternut-squash>

Yu, N., Su, X., Wang, Z., Dai, B., & Kang, J. (2015). Association of Dietary Vitamin A and B-Carotene Intake with the Risk of Lung Cancer: A Meta-Analysis of 19

Publications. *Nutrients*, 7(11), 9309–9324. doi:10.3390/nu7115463



**Farmers Keep Our
County Green**

4000 Kozloski Road
Box 5033
Freehold, NJ 07728
732.431.7260

MONMOUTH COUNTY BOARD of AGRICULTURE

Calendar Items:

Regular meetings of the Board of Agriculture are held on the third Tuesday of every month at 7:30 pm (except June, July, and August).

Meetings are held at the Agriculture Building, 4000 Kozloski Road, Freehold, NJ 07728. We welcome all interested agriculturalist and industry supporters to join us for lively discussion on issues, challenges, and solutions in agriculture.



For nearly a century, the Monmouth County Board of Agriculture has assumed leadership in planning programs related to agricultural and rural issues. It has also worked hard to aid farmers in the development of the most profitable and sustainable types of agriculture, as well as help investigate and solve technical problems relating to crop production.

Additionally, the Monmouth County Board of Agriculture understands the need to foster the next generation of leaders in food, agriculture, and rural life. That is why it has and continues to support the FFA Chapters of Monmouth County—Allentown FFA, Freehold FFA, and the Monmouth County Career Center.

If you are interested in joining the Monmouth County Board of Agriculture, or learning more about the industry in our county, be sure to attend a meeting or reach out to one of its members. For more information, contact Secretary@MCBOA.org.

The Monmouth County Board of Agriculture invites you to our Annual Dinner for a night of celebrating agriculture across the county. The Dinner will be held on March 12th 2020 at the American Hotel in Freehold, NJ. The ticket price is \$50 per person. If you are able to join us, please RSVP by February 6 to Gary DeFelice, Treasurer (defelice83@aol.com).





4-H

Fall Cloverbud Day, Farm Appreciation

By: Amelia Valente, 4-H Program Assistant

Monmouth County 4-H has held a series of successful winter and summer Cloverbuds days for the youngest of 4-H members. These programs are designed for youth, in grades Kindergarten through 3rd grade, to get to know one another while learning life skills. For the first time, a Fall Cloverbud Day was held on November 2nd 2019 at Bullocks Farm in Cream Ridge, NJ. The program theme was Farm Appreciation and the objective of the program was to teach youth about the importance of Monmouth County farmers. This program took place on a beautiful fall day where members worked with teen



4-H counselors to learn about how a seed becomes a plant, the daily life of a farmer, and farm equipment. Members participated in several games and crafts including a scavenger hunt and making a scarecrow. The Bullocks provided a special hayride in which the family dog, Maggie, enjoyed following the wagon while the members enjoyed watching her happily run through the fields. The final activity was the exploratory farm jungle gym that included a hay bale maze, corn pit, hay bale slides, etc. There were fifteen (15) Cloverbud members, four (4) Teen members, three (3) 4-H leaders, and two (2) Master Gardeners who planned and organized this event. The next Winter Cloverbud Day is scheduled for February 2, 2020 which will have a Hearts and Friendship theme. 4-H members and their friends, whether they are 4-H'ers or not, are invited to attend!

2018-2019 4-H Livestock Apprenticeship

By: Amelia Valente, 4-H Program Assistant

Monmouth County 4-H offers members the opportunity to explore any type of project that interests them. Several members expressed interest in learning about livestock, but did not have the means to own these types of animals themselves. In collaboration with 4-H leaders who own livestock animals, the Monmouth County 4-H Livestock Apprenticeship was created. Members are paired with a sheep, goat, rabbit, or chicken depending on their preference and skill level. They have the responsibility of working with that animal over a series of six (6) months in order to form a bond together. Should the member complete the apprenticeship, they are then invited to participate in a capstone, to feature their project animal at the Monmouth County Fair. Those who have participated in this program feel accomplished, for they have gained skills in showmanship and animal care. Five (5) 4-H members participated in this project last year and it is the goal to have ten (10) members join for the 2020 season. The 2020 Livestock Apprenticeship is currently in review and will be offered to the members starting this spring.



Upcoming Events



2020

**Monmouth County
Board of Chosen Freeholders**

Thomas A. Arnone
Director

Susan M. Kiley
Deputy Director

Lillian G. Burry

Pat Impreveduto

Nick Di Rocco



**GROWN IN MONMOUTH & RUTGERS COOPERATIVE EXTENSION
UPDATE MEETING**

*February 19, 2020 - Monmouth County Agricultural Building
6pm*

CENTRAL JERSEY VEGETABLE GROWERS' MEETING

March 9, 2020 - Monmouth County Agricultural Building

8am-4pm

Pesticide Credits Available

CENTRAL JERSEY TURF & ORNAMENTAL INSTITUTE

March 11, 2020 - Battleground Country Club, Manalapan NJ

8am-3:30pm

Pesticide Credits Available

2020 RCE OFFICE CLOSURES

February 17, 2020

April 10, 2020

May 25, 2020

**A Special Thanks to the Board of Chosen Freeholders
and the County of Monmouth for printing.**

