



Monmouth County Public Information

## Agent's Overview

Another record setting summer season in our Garden State is coming to a close. I was at an ag conference in Hotlanta, Georgia and came back to NJ temperatures 15 degrees higher with much more humidity – Whew! Even the ocean temperatures are super high ranging from 78 to 84 degrees down the coast; So there are no cool night breezes to give our plants a breather. We've had a lot of **heat stress on plants and people alike**; sunscald and sunburn as well. Even irrigation has not been such relief despite a few scattered showers.

**Meteorologist Dr. David Robinson** said that on 15 July days, an inch or more of rain fell somewhere in NJ. This included eight days with greater than 2" in spots and four days where a few locations exceeded 4". Statewide, the average rainfall was 6.85". This was 2.33" above average and ranks as the 14th **wettest July** since 1895. It was the wettest July since 2004, and the 4th wettest in the past 41 years. The northern half of the state (Mercer/Somerset/Union northward) averaged 7.27" (+2.49", 14th wettest), while the southern region averaged 6.77" (+2.38", 12th wettest). This all came in a month where the northern half of the state remained classified as being in moderate **drought (D1)** on the US Drought Monitor, with about half of south Jersey considered abnormally dry.

Our **summer issue of Changing Times is especially hot** as well; topic wise. We have so much farm news that our newsletter has expanded to 10 pages. So take a break, sip a cool lemonade under the shade tree and spend a little relaxation time reading through this issue. You'll find reports on our classic **Monmouth County Fair, the NJ State Ag Committee Tour and the upcoming Open Space Pace & Festival of Horses in Freehold.**

Research & Extension projects at **Rutgers Cream Ridge** station continue to bear fruit (and vegetables). Assessing the feasibility of new crops in central Jersey soils and climate helps our extension group and growers make more informed cropping decisions. Please read about the new **RU 250 Tomato, Rutgers Scarlet Strawberry and Lettuce and 250 All Star Peach.** Also, thanks to the **NJ Soybean Council** for funding our **Soil Health Survey** in the traditional soybean-corn rotation of western Monmouth.

Finally, there are new innovations in indoor greenhouse farming and the proposed **Cook Farm Market** as well as lots of other interesting tidbits for your reading pleasure. Call me if you have any questions or comments. Check the calendar for upcoming events and then back to work.

*Bill Sciarappa*

# NJ STATE AG VISITS MONMOUTH COUNTY FARMS

Members from the **New Jersey State Agriculture Committee, Assemblyman Bob Andrzejczak, Adam Taliaferro, Eric Houghtaling and Ronald Dancer**, visited 3 Monmouth County farms. The first was **White Birch** a well know favorite horse farm in Upper Freehold Township. **Steve Williams** gave the tour and explained all phases of the farm. The first part was the racing and then we went to the breed part and learned a lot about their operations and how the horse racing industry is not all about racing. They learned its about supporting farms growing hay and feed for horses and the race tracks to which the horses go. It was pointed out that horse racing in the state generates a lot of money and has many jobs from grooms on the race track to the farmer baling hay on his farm.



The second farm was the **Bullock Farm, Screamin Hill Brewery**, which is the only farm in NJ to have an on farm brewery in Upper Freehold. They showed the committee how they brewed the beer, and how they harvested most of the ingredients right from the farm for the beer. The third farm was **Kube Pak Greenhouses**. The committee was taken all through

the greenhouses and planting operations. It was very interesting on how they could take a small seed and produce beautiful hanging baskets.

On the tour many things were discussed labor, taxes, property, estate and how

raising minimum wages effects all of agriculture.

*Photo & article contributed by Anna Trapani*



## MC Fair Photos





## FOR IMMEDIATE RELEASE

On **Saturday, September 17, 2016**, the Open Space Pace will be coming back to **Freehold Raceway** in Freehold, New Jersey for its 5<sup>th</sup> annual Parade and Festival! The Open Space Pace is a nonprofit organization with a mission to celebrate the horse, New Jersey's official state animal, and to promote open space in our nation's most densely populated state, the great state of New Jersey. The Open Space Pace raises funds in support of non-profit organizations that promote open space in New Jersey.

The scheduled events for the day will **begin at 10:30 AM** with a parade of horses from the Monmouth County Hall of Records to Freehold Raceway. We are proud to announce that the **Grand Marshal for this year's event is New Jersey State Senator Jennifer Beck**. Senator Beck has continuously supported legislation that would expand casino gaming at racetracks that would increase purses for the horse racing industry resulting in a stronger equine industry and more open space. The parade features the **Freehold Township High School and Middletown High School North Marching Bands**, antique cars and various equine groups. Once at the racetrack, the festival begins with an opening ceremony followed by a wide variety of entertainment including a petting zoo, educational exhibits, live harness racing, vendor tables, food trucks and much more. Throughout the



day, the Open Space Pace will have several college scholarship drawings. Any college student in attendance with a valid student ID will be eligible to enter the drawing for a scholarship. The CentraState Healthcare Foundation will offer health screening and fitness demonstrations on stage throughout the day. A concert featuring **The Eddie Testa Band** will begin at 1pm followed by **Burlap to Cashmere** at 4:30pm.

The Open Space Pace has entertainment and activities that cater to all ages, so bring the whole family for a day of free, fun-filled excitement!

The Open Space Pace is a perfect event for many occasions and gatherings, including corporate parties, family reunions and many other types of social or professional gatherings. The Open Space Pace is an entirely **free event** thanks to the generosity made possible by its sponsors. We at the Open Space Pace greatly appreciate the work of our partner team as well as our sponsors. We continue to seek additional supporters of any kind. The event raises funds from sponsorships, ad journal sales, tailgate space sales and vendor booth sales. If you wish to support the Open Space Pace, or obtain more information, please **contact Brett Taft at 732-577-4059 or by email at [BTaft@umh.com](mailto:BTaft@umh.com)**

***We hope to see you at the event!***

# RCE R&D IN MONMOUTH COUNTY

## NJ SOYBEAN COUNCIL PROJECT GRANT TO RCE OF MONMOUTH COUNTY



The **NJ Soybean Council** has funded my grant proposal to assess **agricultural soil health** in a traditional and long-term **soybean-corn rotation**. Five Monmouth County farmers are participating. Soil samples are taken in the spring, summer and fall seasons to determine physical soil type, chemical fertility and their biological status. Tissue samples of nutrient uptake by the crops were also taken to determine nutrient amounts and eventually relate to crop yield. RCE Ag Assistants are shown sampling.

## RUTGERS 250 TOMATO TRIALS AT CREAM RIDGE & MASTER GARDENERS



Better spring weather in 2016 vs. 2015 led to better yields in comparing four cultivars; **Rutgers 250 anniversary cultivar, RU Schermerhorn, Celebrity and BHN-589**. Yields and fruit quality have been higher than 2015 especially with no blossom end rot. Weaving has worked slightly better than staking and caging. Master Gardener trials throughout Monmouth County mostly had good to excellent results. Size was moderate and taste was very good to excellent. Some internal yellowing was again noted but not as much a factor as the previous year.

## RUTGERS SCARLET STRAWBERRY TRIALS AT CREAM RIDGE



While we lost the large crown berries to 24 degree freeze, the secondary clusters were decent sized and tasted wonderful. Without fungicide sprays, botrytis affected many berries. **Farmers in Monmouth County** have also planted some **test acreage** with transplants obtained from **Kube-Pak Greenhouses in Allentown**.

## RUTGERS SCARLET LETTUCE TRIALS AT CREAM RIDGE & INDOOR PRODUCTION



Our spring lettuce trials in 2016 again compared four cultivars on white and black plasticulture. Yield and bolting were evaluated but more importantly **health benefits** are being analyzed in the Rutgers labs for **antioxidant levels and nutrients**. Great greenhouse results continue this year with **former RU Professor Gene Giacomelli** in Arizona. Also, excellent results with **Edible Gardens Greenhouses** in Bellvidere, NJ who signed an exclusive indoor cultivation contract.

## Rutgers 250: NJAES All-Star Variety of the Month

### Tree Fruit Featuring TangOs® Peach - July 5, 2016 by [Office of Communications](#)

The **Rutgers 250 All-Star Variety** for July 2016 is the ‘**NJF16**’ TangOs® peach! This tree fruit variety deserves the spotlight for its novel attributes that appeal to both consumers and growers. This beautiful peach is desirable to consumers because of its flat shape, 100% yellow color, and **deliciously sweet flavor**. What makes this peach so special for farmers and home gardeners is its resistance to environmental threats, high yields per tree, and good firmness for safe transportation. TangOs® and the Rutgers tree fruit breeding program are being featured as part of the New Jersey Agricultural Experiment Station’s (NJAES) [Rutgers 250 All-Star Varieties](#) celebration.

During the month of July, farmers typically start to see whether or not their crops will come to fruition. This can be a nerve-racking time of year, especially this year where tree fruits began to bloom earlier than usual due to a record-breaking warm winter. Tree fruits were flowering and preparing to bear fruit about one month earlier than average, sparking a lot of anxiety about frost vulnerability in New Jersey’s agricultural community during April and May 2016. Peach season spans [early July to mid-September](#) in New Jersey. However, due to the warm winter and early bloom followed by a **damaging late frost**, peach trees were severely impacted and only 50% of peaches are coming to fruition in some areas. At this point, it appears that peach yields across the state are likely to be impacted more than any other tree fruit. Fortunately, cold-hardy fruits like apples seem to be doing well, underscoring the importance of diversifying crops when attempting to produce fruit in an ever-changing climate like New Jersey’s.



Joe Goffreda standing in front of a new selection derived from a cross with ‘NJF16’, the variety invention that earned him the “Inventor of the Year” honor from the NJ Inventors Hall of Fame.  
Photo : Brandon Cantarella.



*Professor Joseph Goffreda, Rutgers NJAES tree fruit breeder, showing siblings Neel Jingar (SEBS 2013) and Puja Jingar (SAS 2019) how to cross-pollinate apples. Ag Field Day, 2016. Photo: Anna Molinski*

**Breeder Joseph Goffreda** has dedicated nearly three decades of research to the Rutgers New Jersey Agricultural Experiment Station tree fruit breeding program. Last year, he won an “**Inventor of the Year**” award from the New Jersey Inventors Hall of Fame for breeding a hybrid peach, ‘**NJF16**’. Marketed under the name **TangOs®**, this variety is less susceptible to pests and major diseases, particularly bacterial spot. Goffreda’s dedication to tree fruit breeding has been instrumental in the production of tree fruit in the Northeast. ‘**Gloria**,’ another NJAES variety of peach, blooms later than most peach cultivars and cropped well this year at the **Rutgers Fruit and Ornamental Research Extension Center in Cream Ridge**, New Jersey. Selective breeding for resistance to frost and new pests provides hope that the tree fruit industry in the Northeast will be able to survive and adapt to threats, including seasonality.

During the [Meet the Breeder Q&A](#) on Ag Field Day, Goffreda, who directs the Rutgers Fruit and Ornamental Research Extension Center, taught many eager children, adults, students, and alumni about tree fruit breeding. He brought pollen, blossoms and a sieve to demonstrate how to **cross-pollinate ‘Honeycrisp’ with ‘Sunicrisp’ apples**. He also brought plant plugs to show what tree fruits look like during the first year . growth. For more information:

[Rutgers Breeding](#) [What’s In Season](#) [Where to Find Rutgers 250 Plant Varieties](#) [Peach Tree Availability for Commercial Growers & Backyard Gardeners](#)

# Cook's Market



Now in its ninth season, the **Rutgers Gardens Farmers Market** has become an institution in need of a more permanent structure that expands its safety and function for the community, while also creating a landmark and gateway for Rutgers Gardens. An anonymous donor has challenged the Gardens to raise **\$150,000 in matching funds** to construct a sustainable structure to be called Cook's Market. This structure will convey the horticultural, ecological, and educational mission of the Gardens.

Cook's Market will provide a permanent structure and allow the market to run throughout the year. Programming will also connect with the development of the **new Student Farm at Rutgers Gardens**, allowing students to experience firsthand the full cycle of food production, from seed, to seedling, to the field, to harvest, and finally to the consumer.



In order to improve the visitor experience, future master plans include enhancing the **integration of academic teaching and research of University departments, such as Landscape Architecture**, with the community. Cook's Market is part of this vision, and together, they will bring cohesion to the Gardens and take visitors on a journey through time and nature. With your support, Rutgers Gardens is able to fulfill our mission to cultivate inquisitive minds, great plants, and inspire gardening through educational exploration and enjoyment.



For additional information, please contact:  
Melissa McKillip

[melissa.mckillip@rutgers.edu](mailto:melissa.mckillip@rutgers.edu)

Phone: 848.932.4214 [makeagift.rutgers.edu](http://makeagift.rutgers.edu)

## Old steel mill in New Jersey will soon be world's largest vertical farm

NEWARK, N.J. Stacks of leafy greens are sprouting inside an old brewery in New Jersey. "What we do is we trick it," said **David Rosenberg**, co-founder and chief executive officer of **AeroFarms**. "We get it thinking that, if plants could think: 'All right, this is a good environment, it's time to grow now.'"

AeroFarms is one of several companies creating new ways to grow indoors year-round to solve problems like the drought out West, frost in the South or other unfavorable conditions affecting farmers. The company is in the process of building what an industry group says is the world's largest commercial vertical farm at the site of an old steel mill in New Jersey's largest city. It will contain 12 layers of growth on 3½ acres, producing 2 million pounds of food per year. Production is set to begin next month.

**"We want to help alleviate food deserts**, which is a real problem in the United States and around the world," Rosenberg said. "So here, there are areas of Newark that are underprivileged, there is not enough economic development, aren't enough supermarkets. We put this farm in one of those areas." The farm will be open to community members who want to buy the produce. It also plans to sell the food at local grocery stores.

**Critics say the artificial lighting in vertical farms** takes up a significant amount of energy that in turn creates carbon emissions. "If we did decide we were going to grow all of our nation's vegetable crop in the vertical farming systems, the amount of space required, by my calculation, would be tens of thousands of Empire State Buildings," said Stan Cox, the research coordinator at The Land Institute, a nonprofit group that advocates sustainable agriculture.



*New Jersey Gov. Chris Christie, center at podium, addresses a gathering at AeroFarms, a vertical farming operation in Newark, N.J., in March. AeroFarms is now refurbishing an old steel mill in New Jersey and they say it will soon be the site of the world's largest indoor vertical farm. The company says their Newark facility, set to open in September, could produce 2 million pounds of food per year and help with farming land loss and long-term food shortages. Associated Press*

"Instead of using free sunlight as we've always done to produce food, vertical farms are using light that has to be generated by a power plant somewhere, by electricity from a power plant somewhere, which is an unnecessary use of fuel and generation of carbon emissions." Cox says that instead of moving food production into cities, the country's 350 million acres of farmland need to be made more sustainable.

**But some growers feel agriculture must change to meet the future.** "We are at a major crisis here for our global food system," said Marc Oshima, a co-founder and chief marketing officer for AeroFarms. "We have an increasing population by 2050, so we need to feed 9 billion people. We have increasing urbanization." Rosenberg also pointed out the speeded-up process. **"We grow a plant in about 16 days, what otherwise takes 30 days in the field."**

**Agent's note** - on a much smaller scale we have our own local aeroponics and hydroponics systems in Freehold (**Beyond Organics**), in Asbury Park (**Kula Farm**) & at the Rutgers **EcoComplex** in Bordentown.

1766-2016  
**RUTGERS**  
250

*Revolutionary for  
250 Years*



## A Historic 250th Anniversary Commencement

Marking Rutgers' 250th Anniversary, **President Barack Obama**, the 44th President of the United States, delivered the commencement address on Sunday, May 15, 2016, before more than 50,000 guests, graduates, faculty, and staff. Saying of Rutgers, "**America converges here,**" President Obama described Rutgers as "**one of the finest research institutions in America.**" He challenged graduates of "this intellectual melting pot" to work globally to solve problems and be civically engaged—"to have faith in democracy" and "shape our nation's destiny."

**Congratulations to the newest Rutgers graduates and welcome to the Rutgers Alumni family.** Relive the day and share your own memories (or experience the celebration for the first time!) as you explore these highlights and mementos of Rutgers' 250th Anniversary Commencement.

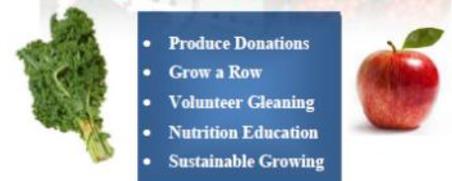


**Contacts:**  
**(732) 918-2600**

**Mychal Mills – Food  
Sourcing Supervisor**  
**732-535-1781**



### Farm Partnership Opportunities:



## Farm to Plate Program

### What is the *Farm to Plate* Program?

The FoodBank collects produce donations from farms that would otherwise go to waste due to overproduction, quality standards, or rejected loads. This food is then distributed from our warehouse to pantries or other agencies serving local families in need.

## MORRIS COUNTY HORSE CONTRACTS EASTERN EQUINE ENCEPHALITIS

*First Reported Case of 2016 (soon followed by cases 2 in Morris and 3 in Ocean County)*

(TRENTON) – An 8-year-old Morris County mare is the first reported case in 2016 of **Eastern Equine Encephalitis (EEE)**, a serious, mosquito-borne illness in horses. The horse had not been vaccinated against EEE and was humanely euthanized on August 13. EEE causes inflammation of the brain tissue and has a significantly higher risk of death in horses than West Nile Virus infection. West Nile virus is a viral disease that affects horses' neurological systems. The disease is transmitted by mosquito bite. The virus cycles between birds and mosquitoes with horses and humans being incidental hosts. EEE infections in horses are not a significant risk factor for human infection because horses (like humans) are considered to be "dead-end" hosts for the virus.

**"Horse owners need to be vigilant in vaccinating** their animals against diseases spread by mosquitoes," said New Jersey Secretary of Agriculture Douglas H. Fisher. "Vaccinated animals are much less likely to contract deadly diseases such as EEE and West Nile Virus." Effective equine vaccines for EEE and WNV are available commercially. Horse owners should contact their veterinarians if their horses are not already up-to-date on their vaccinations against both EEE and WNV.

EEE and West Nile virus, like other viral diseases affecting horses' neurological systems, must be reported to the **state veterinarian at 609-671-6400 within 48 hours of diagnosis.** The New Jersey Animal Health Diagnostic Laboratory is available to assist with EEE and WNV testing and can be reached at 609-671-6999 or via email – [jerseyvetlab@ag.state.nj.us](mailto:jerseyvetlab@ag.state.nj.us).

## CALENDAR



### RU Ready to Farm™

#### Module One: The Basics of Getting Started

3-Day Program includes: Class Instruction, Farm Tour & Demonstrations

Rutgers Cooperative Extension

New Jersey Agricultural Experiment Station

School of Environmental and Biological Sciences

Rutgers, the State University

Class Instruction: Rutgers Eco Complex

1200 Florence Columbus Rd, Bordentown Township, NJ 08505

1) Saturday, October 22, 8:00am-5:00pm

2) Wednesday, October 26, 2016, 6:00pm-9:00 pm

Farm Tours and Demonstration: TBD

3) November 5, 2016 8:00am-1pm meet at the farms TBD

Dress for outdoor activity for the farm tour day

\*Contact [hlubik@aesop.rutgers.edu](mailto:hlubik@aesop.rutgers.edu), [armstrong@aesop.rutgers.edu](mailto:armstrong@aesop.rutgers.edu) for more info\*

All participants receive a program certificate

Qualified undergraduates can register to receive one Rutgers University credit

#### Sept. 2016

17—Open Space Pace Parade & Festival. 10:30 am parade in downtown Freehold. [www.OpenSpacePace.org](http://www.OpenSpacePace.org)

17—Farm Aid Festival , Bristow, Virginia

20— Monmouth County Board of Ag—Freehold

21—NJVGA Meeting, 6 PM, Mt. Holly

28—Master Gardener Training—Insect & Disease Management. \$35. Ag Bldg. Freehold.

28— Ultra-Niche Crops Series: Plasticulture Strawberries.

3 locations. Call Jenny 609-465-5115.

#### Oct. 2016

5—Grown in Monmouth Update Meeting—Ag Bldg. Freehold, 7 PM RSVP [John.Ciufo@co.monmouth.nj.us](mailto:John.Ciufo@co.monmouth.nj.us)

17—Grown in Monmouth Culinary Contest. 5-7 PM Culinary Center. RSVP 732-431-7470.

18— Monmouth County Board of Ag—Freehold

22, 26 & 11-5. New Farmer Training. For more info

[hlubik@aesop.rutgers.edu](mailto:hlubik@aesop.rutgers.edu), [armstrong@aesop.rutgers.edu](mailto:armstrong@aesop.rutgers.edu)

23-27—National ESP Conference (Ag/Hort). Cape May.

#### Nov. 2016

17—FFA Career Event, Rutgers Cook Campus.

#### MONMOUTH COUNTY BOA

<https://co.monmouth.nj.us/page.aspx?ID=3065>

9/20, 10/18, 11/15, 12/20

#### BASIC PESTICIDE TRAINING

CORE 9 am-1pm - 9/20, 10/25/11/15, 12/6

3B - 9/13, 10/18

Category 13 School IPM - 10/11

3B - Held at Rutgers Cooperative Extension - Ag Bldg.  
4000 Kozloski Rd. Freehold, NJ 732-431-7260

#### Topics Covered:

Traditional & Organic farming, funding, & land opportunities  
NJ Organizations that provide support for beginner farmers  
Basic overview of farm business planning and recordkeeping  
Options for production of crops and raising animals

Regulatory issues and important considerations for beginners  
Future training opportunities and on-farm training  
Visits to 2 successful small farms with on-farm demonstration

Registration On-line at: [www.cpe.rutgers.edu/readytofarm](http://www.cpe.rutgers.edu/readytofarm)  
\$150 Adults, \$100 high school students, \$225 for 2 business partners or 2 family members, University Students register through Rutgers Class Registration for 1 credit 11 020 490 under Food Systems Practicum



Jersey Fresh Availability & Forecast Report <http://www.jerseyfresh.nj.gov/>

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Changing Times is produced and edited by Bill Sciarappa and Vivian Quinn  
[sciarappa@njaes.rutgers.edu](mailto:sciarappa@njaes.rutgers.edu)

Past Issues on the web <http://www.visitmonmouth.com/page.aspx?Id=3078>

RUTGERS COOPERATIVE EXTENSION MONMOUTH COUNTY  
New Jersey Agricultural Experiment Station

PO Box 5033, 4000 Kozloski Rd., Freehold, NJ 07728

Rutgers Cooperative Extension— Agriculture, Family and Community Health Sciences, 4-H Youth Development, Resource Management, and Marine Studies— welcomes this opportunity to send you the enclosed materials for your information and use. Educational programs and information are provided to all people without regard to sex, race, color, national origin, gender, religion, age, disability, political beliefs sexual orientation, or marital or family status.

Bill Sciarappa, County Agricultural Agent  
Extension Department Head

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