



MONMOUTH COUNTY FAIR 2015

Wow what a great Fair ! We had wonderful weather throughout for a change. The displays, our Rutgers extension staff, volunteers, and their exhibits were outstanding, such as:

- ♦ The **BOA booth** had a real life set-up of "name the crop", literature and an active crew with **Pat Butch, Robin Bruins, Gary Defelice, Angelo and Anna Trapani** providing info, advocacy and signing up new Farm Bureau and BOA members.
- ♦ The **FFA section** had a ton of great vegetables and fruits for sale donated by a dozen local growers. FFA leader **John Neyhart** had each of 4 Monmouth County FFA schools get real agri-business experience and generate scholarship funds.
- ♦ **4H Youth Development** led by **Roberta Hunter** with **Virginia Krzyzanowski and Sabrina Brown** handling the exhibits, food and amazing animal sections. Whew!
- ♦ **Master Gardeners** booth led by **Diane Larson** and **Master Gardener team** was loaded with information and garden experts to provide the public with info on gardening, plants, insects, weeds and diseases.
- ♦ **Made in Monmouth/Grown in Monmouth** tent provided red storage bags and give-aways which promoted local ag including such favorites as Barlow's green-houses with flowers and vegetable transplants. Much, much more with **Park Service, USDA, NJDA**, etc.

Hope you got to join the show – if not, enjoy the photos.

Bill Sciarappa



Monmouth County Fair Continued

The Fair Theme from the Master Gardeners this year was Attracting Pollinators to the Garden. It tied in especially well with Deep Cut's pollinator display in the Home & Garden tent. Children were encouraged to make a mason bee house out of bamboo shoots to take home and hang in their yard to attract their own pollinators. A birdhouse, bathhouse, and hummingbird feeder were displayed among a garden of pollinator attracting plants that featured swallowtail butterfly larvae eating fresh dill and parsley. More crafts for kids were found at the Junior Master Gardener recruitment table. Hundreds of homeowners had their gardening questions answered at the gazebo, where Japanese beetles, rose slugs, and tomato diseases dominated the problems heard about.

Diane Larson, County Extension Horticulturist

"This year's Fair offered a wide variety of 4-H experiences that appealed to a diverse crowd. From old fashioned games like pie eating, watermelon seed spitting and potato sack races to contemporary activities such as modern pop art and robotics, fun was had by all". Special guest, Kirsten Jeannson, the New Jersey State 4-H Ambassador, crowned Monmouth County's 2015-16 Teen 4-H Ambassador's Jillian Haliskoe of Middletown and McKayla Tyrrell of Freehold at 4-H's opening night ceremonies. Both young ladies stress the importance of giving back to the community while promoting important life skills.

Virginia Krzyzanowski, 4-H Program Associate

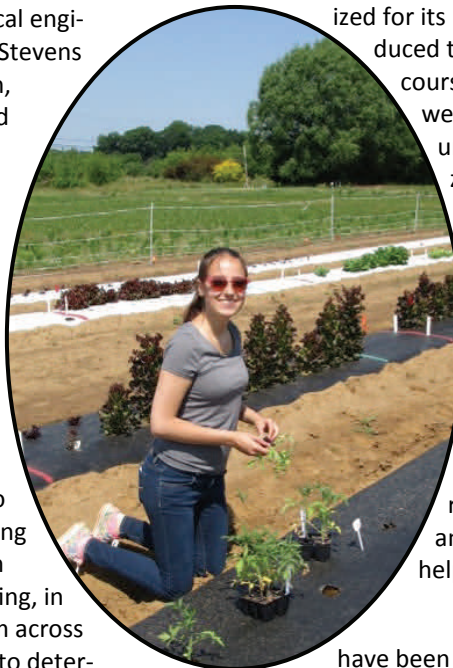
4-H'ers enjoyed many new events at this year's Monmouth County Fair including a Purina Feed Challenge, Rabbit Hopping demonstration and an extreme horse costume class. All new events are a combination of efforts from enthusiastic adult volunteers, can-do 4-H members and partnerships within the community. Community partners include; Purina, Harness Horse Youth Foundation, Rick's Saddle Shop, Puglisi Farms of Howell, The N.J. Showdeo Association, NJ Miss Rodeo Association, Bullock Farms, and Helmlinger Meadow Farm both of Cream Ridge. Special thanks to The Monmouth County Parks System and 4-H liaison Stephanie Hunt.

Sabrina Brown, 4-H Program Associate

Monmouth County Agriculture & Natural Resource Intern Rebecca Barresi

This past summer, I had the pleasure of interning at the Rutgers Cooperative Extension Office. For those of you who may not know, I am currently a chemical engineering student entering my junior year at Stevens Institute of Technology, located in Hoboken, New Jersey. Throughout my high school and college career, I have been extremely involved in agricultural sciences. I graduated from Biotechnology High School in 2013, where I was the president of our FFA chapter and participated in the Agriscience Fair. More recently, I have been tending gardens at both home and school.

These past couple of months at the office has been anything but boring; between the Rutgers Scarlet Lettuce trials to Solvita testing to the Rutgers 250 tomato project, every day brought a new and exciting challenge. One key project I was involved in was the continuation of the Solvita soil testing, in which the microbiology of soil samples from across the county was studied. This test allows us to determine the microbial activity in the sample in order to aid in diagnosing soil health. I also aided in the beginning of Solvita compost testing, a four hour test which determines the maturity of compost samples.



Beginning in May, the Rutgers Scarlet Lettuce field trials were in full bloom. Rutgers Scarlet Lettuce is characterized for its high contents of polyphenols and was produced through non-transgenic methods. Over the course of a couple of weeks, the lettuce plants were planted in the field at Cream Ridge, measured, and harvested. These harvests were frozen and are currently awaiting tests for polyphenol content, which is responsible for a plant's antioxidant properties. We hope to determine the effects that the environment of a field has on the polyphenol content in comparison to those that were lab-grown. Following close behind the Rutgers Scarlet Lettuce trials, the Rutgers 250 tomatoes were planted and put into testing. Here, I aided in the management of the plants and recording of data. We hope to harvest soon and taste test the different varieties in order to help pick the official Rutgers 250 tomato plant.

With these being just some of the projects I have been involved in, it is safe to say it has been busy in the office these past couple of months. This internship has not only allowed me to apply what I have learned from school thus far, but has also inspired me to apply what I have learned while working here to further my education and to tie my love of agriculture and chemistry together.

RCE Crop Research & Innovation



20 + aeroponic pods have been constructed at Reid's Sod Farm which are testing Rutgers Scarlet lettuces and strawberries in the fall.



The 2-year study of the Solvita Soil Test surveying Monmouth County farm soils expands to testing compost maturity and quality.



NJ - USDA blueberries are reaching new heights as urban farming takes to the rooftops.



At Rutgers Research & Education Center in Cream Ridge, four RU 250 cultivars are being trialed against standard round tomatoes.

Fast Tracking Soil Organic Matter - JUNE 30, 2015 by [J RABIN AND K BROWN](#)

Leaves. We like using un-composted municipal collected leaf mulch to improve soil organic matter. There are different ways to get it done. You can soil incorporate them, and then fallow the field in long rotations. It's economically challenging. You can surface apply leaves between rows of some standing row crops like potato and pumpkin cash crops. At the end of the season, incorporation of the decomposing leaves improves soil over years. It's labor intensive. But this is Jersey, where everything has to be done faster and fields have to pay their way. Last fall a grower from South Jersey asked, *"Can I speed up the process of increasing my soil organic matter using incorporated un-composted leaves, yet avoid crop deficiencies that result from nutrient tie-up?"*

He's talking about the temporary (one or two seasons) soil carbon:nitrogen ratio imbalance that occurs after adding 10-20 tons/acre of leaves that have a carbon:nitrogen ratio of 50:1 to a production field where the ideal ratio would be 10 or 12:1. What he doesn't say is that he's got enough to do as a grower without having to become an on-farm compost manager, too.

There's another way to harness the power of un-composted leaves to increase soil cation exchange capacity and organic matter: soil attributes which buffer nutrients against leaching, increase water-holding capacity, help reduce soilborne diseases, and contribute to higher yields of healthier crops. Using aged municipal leaves, i.e. windrowed leaves that have not been composted, but allowed to decompose for one year, this grower improved his Coastal Plains soils faster than a decade of cover cropping or years of fallowing.

Another Method

A decomposing pile of leaf mulch was applied about 4-inches deep and chisel plow incorporated in Fall 2013 to a field at our Rutgers Research and Extension Farm. The field had been cover cropped regularly with cereal rye, yet measurements of organic matter remained hard to budge on Aura gravelly sandy loam soil, typical for the area in our experience. Soybeans were drilled in 2014, and soil samples pulled in summer 2014 from the standing soybean crop. Six months after one leaf



mulch application, there was a 28% increase in cation exchange capacity and an 80% increase in soil organic matter (see table 1).

With this experience, we told the grower to give it a try. We sampled a large, intensively farmed (frequent double cropping) vegetable field of Sassafras sandy loam soil. Half the field received a 4 to 6-inch layer of aged municipal-collected leaf mulch in Winter 2014-2015 that was incorporated. The other half was not amended with leaves. Both were seeded in greens and herbs. In April, two soil samples (each sample a composite of six subsamples) were pulled from each half of the field. After one leaf mulch amendment, there was a 31% increase in soil cation exchange capacity and an 83% increase in percent organic matter (see table 2).

No crop nutrient deficiencies were observed in these fields.

Year-Old Leaf Mulch Gives the Best of Both Worlds

Here's our thoughts on why we've had good results from using aged leaf mulch. Stockpiling leaf windrows on-farm for a season after they are received from municipalities, allows time for partial decomposition. It is not necessary to actually compost leaf windrows in this situation. Breakdown via decomposition appears sufficient to avoid crop nutrient deficiencies from microbial inhibition of soil nitrogen.

Farmers can apply for [USDA NRCS NJ EQIP](#) cost-sharing assistance when adopting leaf mulch practices.

Table 1

Aura Gravelly Sandy Loam Soil	Cation Exchange Capacity (meq/100g)	Organic Matter (%)
Un-amended	6.9	1.0
Aged Leaf Mulch Amended	8.8	1.8
Change	+28%	+80%

Table 2

Aura Gravelly Sandy Loam Soil	Cation Exchange Capacity (meq/100g)	Organic Matter (%)
Un-amended	11.6	1.2
Aged Leaf Mulch Amended	15.2	2.2
Change	+31%	+83%

NEW JERSEY HOSTS TEACHER PROFESSIONAL DEVELOPMENT FOR AGRICULTURAL SCIENCE CURRICULUM

Agriculture Secretary Welcomes 18 Teachers from Five States, Including NJ

(ALLENTOWN) – **NJ Secretary of Agriculture Douglas H. Fisher** on July 27 visited Stone Bridge Middle School in Allentown where 18 agriculture teachers from five states including 11 from New Jersey were attending a 50-hour training course preparing them to teach a new rigorous, academic course on agricultural research.

The Curriculum for Agricultural Science Education (CASE) Institute was hosted by Rutgers University, Upper Freehold Regional District and the New Jersey Department of Agriculture, in cooperation with the New Jersey Department of Education from July 26 – 31. The participants are now certified to field test the “Agricultural Research and Development” course and were provided the curriculum and practical experience to teach the course after the five-day session. The teachers will report back to CASE on the course; any necessary adjustments will be made and then the course will be offered to all agriculture teachers.

“New Jersey is a leader in agricultural education and we are working to make the challenging CASE courses available to as many students as possible,” said Secretary Fisher. “We not only seen the benefits of CASE in the classroom, but understand that the skills CASE teaches are in demand in the job market. This new class is another tool our teachers can use to maximize student success.”

Agricultural Research and Development is the capstone course designed to culminate students’ experiences in agriculture. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students, enhancing critical thinking and teamwork skills.

The New Jersey agricultural education teachers who will field test Agricultural Research and Development in the coming school year are: Nichole Carroll of Cumberland Regional High School, Dan Delcher of Essex County Vocational School, Keely Ditzio of Salem County Vocational Technical School, Denise Emmons of Allentown High School, Erik Fargo of Somerset County Vocational and

Technical High School, Clare Kennedy of Bergen County Technical Schools, Lisa Ann Moschera-Chemigovets of Middlesex County Vocational and Technical Schools, Laura Pinhas of Sussex County Technical School, Kim Ann Szulecki of Ocean County Vocational Technical School,

Sara Cobb of Woodstown High School and Jennifeur Wilson of North Warren Regional High School. The course was taught by Liz Tinaglia (Minn) and Aaron Geiman (Md.) The CASE staff person was Melanie Bloom (Iowa).



CASE is an instructional system that provides intense teacher professional development and curriculum that is changing the culture of

agriculture programs, in our state and country. The CASE Program includes courses and lessons that build on each previous course/lesson coupled with inquiry-based lesson delivery style, leading students to a higher understanding of big-picture science, technology, engineering & math concepts in agriculture.

CASE is supported in New Jersey by the State Department of Agriculture, Office of Agricultural Education and State Department of Education, Office of Career and Technical Education. There are 22 New Jersey school districts offering one or more CASE courses: Introduction to Agriculture Food and Natural Resources; Principles of Agricultural Science – Plant; Principles of Agricultural Science – Animal; Animal and Plant Biotechnology; Food Science and Safety; Natural Resources and Ecology; Agriculture, Power and Technology; and Agriculture Research and Development. College credits for CASE courses are being earned from Rutgers University, Delaware Valley College, SUNY Cobleskill and several county colleges.

For more info NJ agricultural education program: www.jerseyageducation.nj.gov/ CASE program, visit: www.jerseyageducation.nj.gov/agriculture/ag_ed/classroom/case.html and www.case4learning.org

On **Saturday, September 19, 2015**, the Open Space Pace will be coming back to Freehold Raceway in Freehold, New Jersey for its 4th annual event! 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 Open Space Pace begins at 10:30 AM with a parade of horses from the Freehold Hall of Records to Freehold Raceway. We are proud to announce that the Grand Marshals for this year's event are **Mr. and Mrs. Eugene Landy**. Mr. Landy founded UMH Properties and Monmouth Real Estate Investment Trust, two New York Stock Exchange listed REITs. Mr. and Mrs. Landy have owned and bred Standardbred race horses for many years. They are proud supporters of the Open Space Pace as well as countless other equine and agricultural nonprofit organizations. The parade also features the Freehold Township and Freehold Borough High School Marching Bands. Once at the racetrack, the festival begins with an opening ceremony followed by a wide variety of entertain-

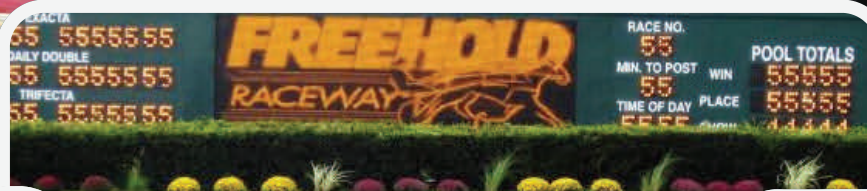
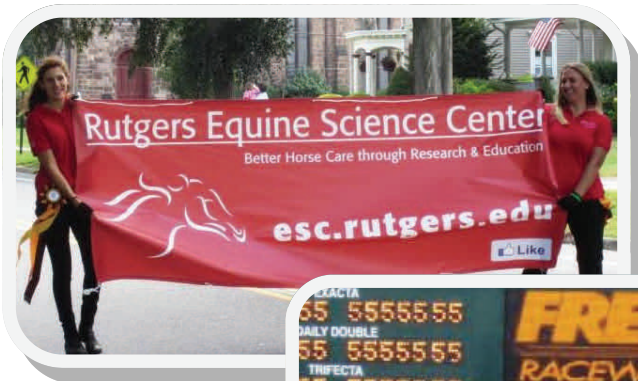
ment including a petting zoo, educational exhibits, live harness racing, vendor tables, food trucks and much more. A concert featuring Burlap to Cashmere and The Nerds will begin at 3:00pm. The Open Space Pace has entertainment and activities that cater to all ages, so bring the whole family for a day of free, fun-filled excitement!



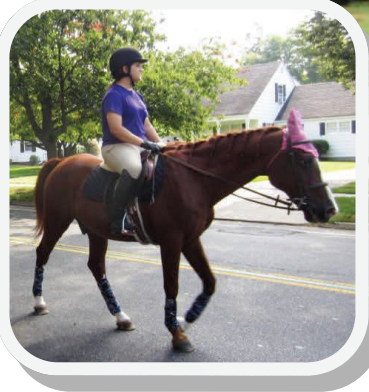
The Open Space Pace is a perfect event for many different special occasions and gatherings, including corporate parties, family reunions and many other types of social or professional gatherings.

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 our sponsors and 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**

We hope to see you at this great event for the whole family!



Saturday, September 19, 2015



CALENDAR

August 2015

20 - Vegetable Twilight Mtg., Research Tour & Tomato

Tasting - Rutgers Ag Research & Extension Center, 121 Northville Rd., Bridgeton, NJ 5:30 to 8:30 pm. Free event; pesticide credits have been requested.

26 - Snyder Farm Open House & Great Tomato Tasting -

3 to 7 pm. To RSVP or for more information visit

<http://discovery.rutgers.edu/events/2015/Great-Tomato-Tasting.html> or call 908-730-9419 X3501.

September 2015

RCE of Monmouth County New Crops Tour - Rutgers Cream Ridge Research & Education Center. Date to be determined. Bill Sciarappa 732-431-7260 x7278.

16 - Veg Group Mtg. 2:00 or 3:00 ? - Burlington RCE or EcoComplex ?

16 - NJVGA Mtg. - Mt. Holly 6:00 pm.

19 - Open Space Pace—see p. 6

21 - ARMA Ag Agents Mtg. - Mercer RCE 10 - 4 pm.

January 2016

19-21 Empire State Producers Expo, Syracuse, NY. For more info visit: www.hort.cornell.edu/expo

February 2016

2-4 - Mid-Atlantic Fruit & Vegetable Convention, Hershey, PA. For more info visit: www.mafvc.org

9-11—NJ Ag Convention & Trade Show, Harrah's Convention Ctr., Atlantic City, NJ. For more info www.njveggies.org

26 - Central Jersey Vegetable Mtg. - Ag Bldg., Freehold, More info 732-431-7260.



The Snyder Research and Extension Farm and the Melda C. Snyder Teaching Garden present the Snyder Farm Open House and

Great Tomato Tasting



August 26, 2015

3:00 – 7:00 pm

(rain or shine)

Snyder Research & Extension Farm
140 Locust Grove Road
Pittstown, NJ 08867

Tasting of over 60 tomato varieties, along with basil, honey and more!

Open house features include the teaching garden, a turf

labyrinth, sunflower pyramid and a wagon tour highlighting

Rutgers/NJAES agricultural and horticultural research.

Rutgers NJAES staff and Rutgers Master Gardener volunteers will be available to answer your gardening questions.

Visit our website for additional information and to RSVP online:

<http://discovery.rutgers.edu/events/2015/Great-Tomato-Tasting.html>

Or RSVP by phone at 908-730-9419 X-3501

Admission \$7.00 per person, free for children under 10
(cash or check only, service dogs only please)

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Chosen Freeholders. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

MONMOUTH COUNTY BOA

9-15, 10-20, 11-17, 12-15

BASIC PESTICIDE TRAINING

CORE 9 am - 1 pm - 9/29, 10/20, 11/17, 12/8

3A - 9 AM—3 PM—10/6

3B - 9 AM—3 PM - 10/27

To register call 800-524-9942

Held at Rutgers Cooperative Extension Ag Bldg.

4000 Kozloski Rd. Freehold, NJ 732-431-7260



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

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

RUTGERS COOPERATIVE EXTENSION MONMOUTH COUNTY
New Jersey Agricultural Experiment Station

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Bill Sciarappa, County Agricultural Agent
Extension Department Head

New Jersey Agricultural
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