A REPORT FROM THE

EXECUTIVE DEAN OF AGRICULTURE AND NATURAL RESOURCES

Report to the New Jersey State Board of Agriculture March 2019



John Grande explains types of farm equipment to tour group at Snyder Farm.

John Grande retired as director of Snyder Research and Extension Farm in Pittstown, NJ, on March 1. Grande began his Rutgers career when he served as assistant research professor in vegetable weed control from 1973 - 76. After a stint in private industry, he returned to Rutgers in 1988 as farm supervisor at Snyder Farm. That year, the farm was bequeathed to Rutgers upon the death of Melda Snyder, and named the Clifford E. and Melda C. Snyder Research and Extension Farm, which served as a Center for Sustainable Agriculture. Grande later became its director, responsible for bringing many program innovations to the farm, including outreach to public school students, teaching garden

programs, large-lot lawn clinics for homeowners, as well as first generation farmer program. The annual tomato tasting event has grown from a few hundred people to over a thousand during Grande's tenure as director. Grande also led an educational outreach program developed for New Jersey residents on black flies and the potential for a biological control solution. His expertise in turfgrass management assisted schools and municipalities to better address the expansion of sports played on natural grass. Grande was also instrumental in creating an educational program on the use of backpack sprayers on small farms.



Dina Fonseca (center) and Andrea Egizi (right) and SEBS students sweep for ticks in field.

While the presence of several hard tick species in New Jersey has been documented, there is limited information on the occurrence of other such species in the state. Species often encountered by New Jersey residents, like the American dog tick, the lone star tick, and the blacklegged tick (previously known as the 'deer tick'), are well-known. However, less commonly encountered species of hard ticks, or species unlikely to bite humans, may play a pivotal role in the local transmission of pathogens, thereby driving epizootics—an epidemic outbreak of disease in an animal population that can extend to humans. Members of the Rutgers Center for Vector Biology and colleagues presented an

annotated list of documented hard ticks from New Jersey, with details of other species that may be present but undocumented, or that may become established in the future. The team determined that the verifiable hard tick fauna of New Jersey currently comprises 11 species. Nine are indigenous to North America and two are invasive, including the recently identified Asian longhorned tick. The study was published in the February 2019 *Journal of Medical Entomology*. The goal was to assist in the development of standardized hard tick surveillance across New Jersey, thus facilitating more accurate assessments of tick-borne disease risk as well as the development of strategies to minimize such risk statewide. The authors of the research include members of the Department of Entomology: **James Occi**, doctoral student; **Andrea Egizi**, visiting professor; **Dina Fonseca**, professor; and Richard Robbins, Department of Entomology, Smithsonian Institution.



Rutgers Haskin Shellfish Research Laboratory (HSRL) was awarded a \$592,390 NOAA Sea Grant to enhance bivalve aquaculture, which is important to the socioeconomic wellbeing of coastal areas that are depressed by the decline of wild fisheries. Principal investigator for the three-year project, "Enhancing bivalve aquaculture through species improvement and diversification," is **Ximing Guo**, professor and shellfish geneticist, with co-PIs **Daphne Munroe**, associate professor, HSRL; **Lisa Calvo**, shellfish aquaculture program coordinator; **David Bushek**, director, HSRL; **Mike De Luca**, director of the Rutgers Aquaculture Innovation Center; and Peter Rowe, director of research and extension, NJ Sea Grant. Bivalve aquaculture is one of the most important aquaculture industries in the U.S. and globally. In New Jersey, it is dominated by oyster farming in Delaware Bay and hard clam farming in coastal bays. However, both species are threatened by diseases. While disease-resistant stocks have been developed for eastern oyster aquaculture, most of the selected stocks so far are developed for low-salinity estuaries. Additionally, Guo and Calvo received a grant from NOAA National Marine Fisheries Service (NMFS) to develop superior triploid oysters for high-salinity coastal bays of New Jersey and the Northeastern region. This two-year grant, valued at \$281,080, was awarded under the Saltonstall-Kennedy program of the NMFS and will conclude in 2020.

Events:

2019 Pre-Season Farm Labor Meeting

Sponsored by NJ Farm Bureau and Rutgers NJAES Cooperative Extension *Atlantic County Extension Office - March 26, 7-9pm* 6260 Old Harding Highway Mays Landing, NJ 08360 *Cumberland County Extension Office - March 28, 7-9pm* 291 Morton Ave. Ext. Center, Millville, NJ Contact: Ben Casella, New Jersey Farm Bureau, 609-393-7163

Industrial Hemp Educational Session

April 3, 2019, 8:15 am – 12 noon

Cooperative Extension of Burlington County

2 Academy Drive, Westampton, NJ,

For farmers, landowners, county governmental officials and others interested in a NJ hemp industry.

Contact: Anna Molinsky, annamol@njaes.rutgers.edu

The Coastal Stewardship course aims to educate stakeholders about the ecology of Barnegat Bay and to promote responsible stewardship of coastal marine resources while using shellfish biology, restoration, and aquaculture as the primary teaching tools. The course meets during the spring and fall. The spring meetings include Tuesday evening (7--9pm) classes from May 7 through June 22, and two field trips on June 8 and June 22. The fall includes five evening (7-9pm) classes from September 17_through November 4. All classes will meet at the Rutgers Cooperative Extension of Ocean County, 1623 Whitesville Road, Toms River, NJ. This will be a HyFlex course where people can participate in the class sessions live, either in-class or remotely via webinar. Contact: Kelly Jurgensen kjurgensen@co.ocean.nj.us, 732-349-1152.

