

Ocean County Cooperative Extension

2021 Annual Report



WE **R** HERE
WHEN YOU NEED **US**

Due to the COVID-19 pandemic, Rutgers Cooperative Extension shifted its programming to remote online offerings but maintained quality efforts to meet the needs of our clientele directly. Many educational programs were able to be conducted as webinars as we reached out to thousands of people in Ocean County and beyond. Rutgers Cooperative Extension teaches the diverse population of New Jersey to adapt to a rapidly changing society and did so by adapting during 2021 to still provide quality programs while keeping our farmers, homeowners, youth, and communities safe.

Cooperative Extension's goals are to ensure healthy lifestyles, provide productive futures for youth, adults, and communities; enhance and protect environmental resources; ensure economic growth and agricultural sustainability; and improves food safety and nutrition.

Visit your local Rutgers Cooperative Extension county offices for all kinds of information and assistance regarding 4-H, agriculture, family and community health sciences, marine science, and natural resources and the environment.

This report highlights program impact for the calendar year 2021:

- 59,325 Educational Fact Sheets Distributed
- 11,368 Clients Received Educational information
- 228 Educational Meetings and Webinar Programs
- 147 Newsletters
- 2,445 Soil and Plant Diagnostic
- 756 Tick Identification
- 431 Facebook and Instagram Posts



Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and Boards of County Commissioners.
Educational programs are offered without regard to race, sex, disability, color, national origin, or age. Rutgers Cooperative Extension is an Equal Opportunity Employer.

RUTGERS
New Jersey Agricultural
Experiment Station

Cooperative Extension of Ocean County
1623 Whitesville Road
Toms River, NJ 08755
ocean.njaes.rutgers.edu

Agriculture and Natural Resources

Dr. Steven Yergeau,
County Agent II (Associate Professor)

As the effects from the pandemic were still being felt in 2021, the Agriculture & Natural Resources (ANR) team continued to offer many programs to promote and sustain Ocean County's environment and farming communities. The goal of our programs, our research, and our technical assistance is to maintain a healthy environment for county residents with a large focus being on protecting the water quality of Barnegat Bay.

All our programming continued to be offered online during 2021, for both residents of Ocean County and others throughout New Jersey. We conducted 13 classes, workshops, and webinars to 846 farmers, educators, horticulturists, environmental professionals, and the public. These presentations were on a variety of topics that included:

- Maintaining healthy soils
- Sustainable landscaping
- Protecting water resources

In addition, Ocean County ANR partnered with other County Agents and organizations to coordinate and implement an additional 26 webinars to 2,802 participants.

GREEN LIVING

More and more people are looking for ways to protect our natural resources and leave the environment in better shape for the future. To provide tools so that residents can live sustainably, we partnered with other Environmental County Agents throughout the state to develop and conduct the 'Earth Day Every Day' webinar series. 'Earth Day Every Day' classes focus on actions everyone can take to improve our surroundings, from environmentally-friendly lawn care, reducing plastic waste, conserving water and energy, controlling invasive insects, and protecting wildlife habitat. The 2021 series spanned 16 weeks (8 weeks in the spring and 8 weeks in the fall), where 1,327 participants learned small actions that, together, would reduce negative impacts on the environment. All the 'Earth Day Every Day' webinars were recorded and are available online at <https://envirostewards.rutgers.edu/Earth-Day.html>.



Homeowners in the region were given assistance with how to make their landscaping practices environmentally-friendly with a series of Jersey-Friendly Yards webinars on topics such as beneficial insects, attracting bees and other pollinators, native plants, and sustainable garden design. The 2021 series was created by a team including ourselves, the Barnegat Bay Partnership, and the Ocean County Soil Conservation District and ran monthly from January through October. These 10 sessions attracted 1,475 attendees from throughout New Jersey. All the Jersey-Friendly webinars from 2021 were recorded and can be found at <https://www.jerseyyards.org/events/2021-webinars/>.

WORKING TO KEEP MOSQUITOES OUT OF RAIN BARRELS

Practices that involve the collection of rain water, such as rain barrels, are seen as activities that save water but also as the opportunity to increase mosquito breeding sites around one's home. To deter mosquito breeding in rain barrels, several recommendations are available: window screen, BTI larvicides ("dunks"), and a surface barrier of oil or soap. However, the relative success of these practices is currently unknown. Because of the environmental-mindedness of individuals who wish to utilize rain barrels, having options to control mosquitoes in rain barrels that are proven will help more residents adopt the use of rain barrels and, therefore, conserve more water for the future. During the summer of 2021, Rutgers Cooperative Extension of Ocean County partnered with the Ocean County Mosquito Extermination Commission to evaluate the effectiveness of various types of mosquito control methods appropriate for rain barrels. Initial results look promising and the project will be conducted again during the spring, summer, and fall of 2022.

RUTGERS

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Horticulture

Susan Emhardt-Servidio, Horticulturist & Rutgers Master Gardener Coordinator
Patti Dixon, Horticultural Consultant

Horticultural inquiries and tick identifications increased a bit as Ocean County residents ventured out more in 2021. We answered over 3,600 calls and emails regarding many varied insect identifications, Spotted Lanternfly sightings, vegetable gardening questions and tree problems. Staff and Rutgers Master Gardener volunteers identified 756 ticks.

Our Rutgers Cooperative Extension 'In the Know to Grow' program series presented 17 virtual programs. We had an unprecedented number of total attendees (1,676) and views of the recorded programs (2,641) from all over Ocean County and beyond. Although individual program numbers fluctuated greatly from each other, programs averaged 250 people per program. We are humbled by the numbers and comments from our audience which included:

'[T]hank you for letting me participate in the virtual classes. I really enjoyed them and look forward to future classes and training sessions.' ~Natasha S.

'What a treasure for a Master Gardener or for anyone who is an avid gardener or is just learning. I am eagerly looking forward to tonight's webinar. I am an avid gardener but there is planting and pruning information I need to learn. I can't thank you enough for making this webinar and document available---and right at the perfect time for pruning some plants, bushes, etc.' ~Jinny H.



One of our horticulturists, Patti Dixon, designed a Bog Garden to showcase some of NJ's native bog plants. With help from her husband, staff, and a Rutgers Master Gardener volunteer, the garden was installed behind the Agricultural Building. All of the plants were graciously donated by Jason and Kelly Austin of The Little Plant Company in Pine Beach. The garden has been featured in a number of Facebook and Instagram posts and was used for a hands-on program hosted by Ocean County 4-H. The kids dissected pitcher plants and learned about carnivorous plants.

Our horticultural posts on Facebook and Instagram reached new heights as over 170,600 people read or watched our 211 total posts/videos. The most popular post/video was posted on July 28, 2021 and reached over 39,000 people. This post gave viewer information regarding Spotted Lanternflies in New Jersey.

The Rutgers Master Gardener (RMG) Program was suspended from conducting in-person programs from April of 2020 through August of 2021. While many volunteers were chomping to get back into the RMG Gardens at Ocean County Park (OCP), there were some volunteers who were not shy about going virtual for speaking events as well give a few in-person programs to local organizations. A great big thank you to RMG volunteers, Suzanne Keane ('06), Gene Cranmer ('19), S. Ann Earon ('14), Sue Masoorli ('17), Noreen Baris ('08) and Debbie McCabe ('17) for their time helping educate our county residents on various garden topics. As the OCP gardens were opened once again to volunteers in July, many volunteers worked through the heat of the summer to whip the neglected gardens back into shape. The RMG Community Garden crew at OCP was able to grow and harvest over 1,000 pounds of produce which was donated to twelve local pantries. RMG volunteers worked with Farmers Against Hunger to glean more than 4,600 lbs. of produce from NJ farms that were also donated to the 12 local pantries.



*Educational Bog Garden - Agriculture Building
Designed by Patti Dixon*

Overall, the RMGs volunteered a total of 4,845 hours in service to Ocean County. Despite COVID concerns, the RMGs strive to provide information and fresh produce to Ocean County residents in need.

Marine

Dr. Douglas Zemeckis, County Agent III (Assistant Professor)
Fisheries, Aquaculture, and Coastal Resource Management

It was another productive year for our Marine Extension Program in 2021. Despite continued headwinds in response to the COVID-19 pandemic, we continued to deliver all of our annual education programs, while also implementing some new programs, in order to meet stakeholder needs on issues related to fisheries, aquaculture, and marine resource management. Also, some field-based research continued along with interview- and survey-based research on a variety of marine related issues.

Our Introductory Fisheries Science for Stakeholders (IFISSH) course occurred again via webinar in 2021. A total of 110 people participated in the course to learn more about New Jersey's marine fisheries via lectures from seventeen different experts on topics which focused on the science, management, and responsible stewardship of our marine fisheries resources. Our 2021 Coastal Stewardship course educated students on how to be more responsible stewards of our coastal marine resources while using shellfish biology, restoration, and aquaculture as the primary teaching tools during 20 hours of webinar instruction plus two experiential learning field trips. A total of 113 people registered and participated in the course to learn more about how to be a more responsible steward of the marine resources in Barnegat Bay and elsewhere in New Jersey. Similarly, the seminars as a part of our Marine Extension Program Seminar Series (MEPSS) continued via webinar to provide monthly educational opportunities on topics such as shark tagging, horseshoe crabs, striped bass, hurricanes, sea level rise, and U.S. seafood.

Other education programs offered in 2021 included the second annual "What's The Catch? New Jersey Seafood and Healthy Living" program and a new "Hooked on Ocean Acidification" webinar series. The "What's The Catch?" program included collaboration with the Family and Community Health Sciences Department to educate people about New Jersey's sustainable seafood production and the health and nutrition benefits associated with consuming seafood. The Hooked on Ocean Acidification webinar series involved a new collaboration with the Mid-Atlantic Coastal Acidification Network, New Jersey Sea Grant, and Virginia Sea Grant to educate recreational anglers about ocean acidification, climate change, and the impacts of these ecosystem changes on the species that they harvest, including both finfish and shellfish.

Multiple fisheries and aquaculture research projects continued in 2021. For example, research continued into testing a modified sea scallop dredge including a multi-day research trip to Georges Bank. Collaborations continued with New Jersey's commercial fishing industry to better understand and improve the resiliency of ports to climate change related impacts, including storms, flooding, and species distribution shifts. Additionally, ongoing research has been evaluating consumer attitudes towards and purchasing behaviors of seafood products in the retail setting with a focus on aquaculture products and changes during the ongoing COVID-19 pandemic.

Offshore wind energy development off the New Jersey coast continues with windfarm construction expected from 2023 onwards. A new six-year research program started in 2021 with the objective of evaluating the impacts of construction of offshore windfarms to New Jersey's fisheries resources, which includes several different gear types (trawl, traps, rod-and-reel, dredge) and fish tagging as a collaboration among fishing industry members and multiple fisheries scientists from Rutgers University.

Therefore, we at Rutgers Cooperative Extension continue to be here for and to serve our clientele in order to address the needs and issues of the businesses, communities, and individuals in Ocean County and throughout the Garden State. If you have any questions related to our marine resources or industries, including our marine Extension programs, please call or email Dr. Douglas Zemeckis (County Agent III, Assistant Professor): zemeckis@njaes.rutgers.edu, 732-349-1152.



Sea scallop research photos showing sunset on Georges Bank (above) Jeffrey Silady (Marine Program Monitor) and Dr. Zemeckis sitting on a pile of sea scallops (below)



Family and Community Health Sciences

Joanne Kinsey, FCHS Agent

RCE is always willing and prepared to adapt to various situations and 2021 was no exception. We are pleased to say that Family and Community Health Sciences (FCHS) has stepped up and addressed community needs with focused educational programs as issues and trends arose.

FCHS in Ocean County has continued to respond to the Pandemic restrictions in several interesting ways. The monthly *Wellness Wednesday* series has grown considerably with online one-hour webinars and reaches several thousand NJ residents as well as consumers from most states across the country. Ocean County participated by presenting three webinars in the series: *Laughter is the Best Medicine*, *Everyday Mindfulness*, plus *Yoga and Meditation*. Also, participation as part of the *FCHS Ask an Expert* evening programs titled, *Meals in Minutes*, *Food Preservation: Tomatoes and Food Preservation: Pickles* attracted consumers from various NJ counties. Participants were able to ask pertinent questions of the FCHS faculty.



FCHS in Ocean County develop and maintains, and disseminates the Live Well & Work Well program since 2012. Recently the program was adopted by NJ Transit for dissemination through their Office of Employee Engagement. Additionally, a collaboration was created with Tuckerton Seaport as a means of further expanding our outreach. The first program, *Using Mindfulness to Reduce Stress*, was presented on the Tuckerton Seaport tour boat in December.

In an effort to empower many employees working from home, and for those working at worksites, a weekly newsletter, *Healthy on the Job: Self Care*, took flight in early April. This resource-rich newsletter developed by FCHS in Ocean County was disseminated to employees to help them best deal with stress, maintain a healthy lifestyle, manage time efficiently, and be physically active. The weekly newsletter distribution list for employees is over 6,000 and continued throughout 2021.

Consumers were dealing with the same social and health issues, so the *Healthy at Home* weekly newsletter continues to be disseminated to consumers in Monmouth, Warren, Atlantic and Ocean Counties. This purpose of this newsletter is to provide healthy lifestyle strategies to adults of all ages. Also, the *Live Well & Stay Healthy* text messages are disseminated twice weekly to consumers in several counties.



The *Live Well & Stay Healthy* program was initiated in late 2020 in response to needs in various senior communities in the county. The following webinar programs were conducted; *Cultivate Calm in Your Life*, *Cooking Your Way to a Healthy Heart*, *Everyday Mindfulness*, *Stress Less with Laughter*, *Infusing Ecotherapy into your Day*, *Food and Mood*, *NJ Berries*, *Summer Safety*, *Hydration*, *Harvest Vegetables*, *The Health Benefits of Tea*, and *Chocolate: Is it the New Health Food?* This series is open to residents of Ocean County and statewide as well. By the end of 2021, 409 people registered for the series of webinars.

Also the *Eastern Regional's Innovation in Programming Award* was given for the *Get Moving Get Healthy NJ Workforce Program* in Monmouth County in collaboration with Rachel Tansey, FCHS Monmouth County.

Cross county and statewide collaborations became very effective in 2021 and FCHS looks forward to continuing this work in the future.



4-H Youth Development Program

Amelia Valente, 4-H Program Associate

Laura Ferrie, 4-H Program Assistant

Ocean County 4-H uses a learn-by-doing approach to enable youth to develop the knowledge, attitudes, and skills they need to become competent, caring, and contributing citizens of the world.

Ocean County 4-H staff coordinates community clubs, organizes camps, and arranges afterschool programming to meet the needs of today's youth. Due to the COVID-19 pandemic, Rutgers University put into place an in-person suspension through May 2021. Today, Ocean County 4-H clubs have the option to hold their club meetings in-person, virtually, or a hybrid of both.

4-H Community Clubs and Programs:

Over 171 youth met consistently with trained adult volunteers exploring topics in animal science, beekeeping, Science, Technology, Engineering, and Math (STEM), shooting sports, ecology, and culinary arts, to name a few. National studies consistently find that youth who participate in 4-H programs display greater confidence, a sense of responsibility, and better focus than those who do not. To meet the needs of today's youth, new short term exploratory program (S.T.E.P) clubs have been introduced to the 4-H program.

- **Mars Mondays in March S.T.E.P Club:** Each Monday in March 2021, twenty-one 4-H members, ten of which were Ocean County 4-H members, met virtually with five 4-H teen ambassadors and 4-H staff to complete together the 4-H STEM Challenge Mars Base Camp activity box, developed by Google and Virginia Cooperative Extension. This collection of activities taught youth STEM skills like mechanical engineering, physics, computer science, and agriculture. On the final week, 4-H staff invited professionals in the field of STEM to present about their careers. This included a Payload Systems Engineer at Johns Hopkins Applied Physics Lab, an Educator/Show Producer of the Hayden Planetarium in New York, a NASA postdoctoral fellow at Rutgers University, the Science Agent of 4-H Youth Development at Rutgers University, and a STAR member (Students in Transition Advising and Registration) at Rutgers University.
- **Newest Beekeeping Club:** The ground breaking for the newest Ocean County 4-H Club, the Busy Bee's Beekeeping Club was held on June 12, 2021. In partnership with Ocean County Board of Commissioners, Ocean County Parks and Recreation, and Rutgers Cooperative Extension of Ocean County, two honey bee hives have been placed at Jakes Branch County Park. The bees are used as an educational display and ambassadors to pollinator species. Club members are responsible for the care and upkeep of the hives.
- **4-H Summer Sensation:** Though the 2021 Ocean County Fair was canceled, 4-H members showcased their projects during a staff created 4-H Summer Sensation event. This took place outside of the RCE Building on Saturday, August 14, 2021. Members participated in an art show, an egg drop contest, various team building activities, animal shows, and a picnic. Over 70 people attended who reported the positive effects of togetherness that this event brought.
- **Discover Camp:** 4-H staff led a two day camp for 9 Ocean County youth November 4 and 5 at the RCE Building while schools were closed for Teachers Convention. Participants completed a carnivorous plant dissection with O.C. Master Gardener Coordinator and Horticulture Consultant. Campers also created and raced pasta STEM cars, they cooked their own lunches, and learned about watersheds with Clean Ocean Action staff using an Enviroscape.



*Ocean County 4-H's Newest Club:
The Busy Bee's Beekeeping Club*

4-H State Level Events and Programs:

- **Multi-state teen game night:** Selected teen members from the NJ 4-H State Level Teen Council, two of which were Ocean County 4-H members, held a monthly summer game night for any 4-H member in the country to attend. These teens were responsible for the organization, advertisement, and operations of these programs. A total of 25-30 4-H'ers participated from 8 different states and Puerto Rico.
- **NJ State Public Presentations:** A major component to a member's 4-H experience is developing the skill of public speaking. 4-H alumni report that learning how to give a public presentation is one of the best skills to learn as it helps prepare for your future. A job well done to the four Ocean County 4-H members who qualified and competed at the NJ 4-H state level presentations.

RCE Outreach Programs

Rutgers Cooperative Extension of Ocean County offers a variety of informational and “hands-on” programs to the residents of Ocean County. Due to the COVID-19 pandemic we were unable to conduct in-person programming however, we continued to educate the public through online programs. In 2021, we offered 22 educational programs to our residents with 1,887 attendees.

In 2021, we focused on our social media platform in the areas of Horticulture, Agriculture, Marine, FCHS and 4-H. RCE posted 257 Facebook posts reaching 207,716 and 174 Instagram posts reaching 11,729.

2021 PROGRAMS

- Aquaponics
- Backyard Reptiles
- Pruning
- Get More Dirt on Your Soil Series
 - An Organic Gold Mine in Your Garden
 - Breaking Ground on Composting
 - Unearth the Life Beneath Your Feet
- Growing Figs in the Home Garden
- Tick Talk
- A Guide to Growing Beautiful Roses
- Rain Barrels
- Vegetable Gardening
- All About Bulbs
- Fall Lawn Rescue
- Caring for House Plants in the Fall and Winter
- Vermicomposting
- Daylily Basics
- Garden Railroads
- Daylily Hybridizing
- Marine Extension Program Seminar Series (MEPSS)
- Barnegat Bay Shellfish Restoration Program (BBSRP)
- Introductory Fisheries Science for Stakeholders (IFISSH)
- Reel Into Fishing
- Discover Camp



Reel Into Fishing Program

2022 UPCOMING PROGRAMS

- Living Shorelines at Cattus Island
- Mosquitoes
- Spotted Lanternfly
- Spotted Lanternfly Trap Workshop
- Planning and Planting an Herb Garden
- Edible Flowers: Color, Flavor, and Fun
- A Year in the Life of a Peony Gardener
- Terrarium Workshop
- Submerged Aquatic Vegetation and Habitat Restoration in Barnegat Bay NJ



STAFF

Steven Yergeau,
County Extension
Department Head

Mary Ann Dreikorn,
Business Manager

SUPPORT STAFF

Teresa Becker, Agriculture &
Natural Resources
Deborah Fuentes, Agriculture
Denise Gerhauser, 4-H
Kelly Jurgensen, Marine/FCHS

AGRICULTURE

732-349-1246

Susan Emhardt-Servidio,
Horticulturist
Patricia Dixon,
Horticultural Consultant

FISHERIES, AQUACULTURE, AND COASTAL RESOURCE MANAGEMENT

732-349-1152

Douglas Zemeckis,
County Agent III

FAMILY AND COMMUNITY HEALTH SCIENCES

732-349-1247

Joanne Kinsey, FCHS Agent

ENVIRONMENTAL RESOURCE MANAGEMENT

732-505-3671

Steven Yergeau,
County Agent II

4-H YOUTH DEVELOPMENT

732-349-1227

Amelia Valente,
4-H Program Associate
Laura Ferrie,
4-H Program Assistant

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*Sea Scallop Research Project
August 2021*



*Ocean Fun Days, October 2021
Peggy Mott and Silke Stutz
RCE Master Gardeners*



*4-H Camp, November 2021
Bog Plant Lesson
Patti Dixon, Horticultural Consultant*

Rutgers Cooperative Extension county offices, are found in all 21 New Jersey counties, and are the result of a partnership between Rutgers Cooperative Extension, Boards of County Commissioners, and the U.S. Department of Agriculture, working together to meet the needs of all New Jersey residents.

Programs are provided without regard to race, religion, color, national origin, ancestry, age, sex, sexual orientation, gender identity and expression, disability, atypical hereditary cellular or blood trait, marital status, civil union status, domestic partnership status, military service, veteran status and any other category protected by law. Rutgers Cooperative Extension encourages individuals with disabilities to participate in its programs and activities. If you need special accommodations, have questions about physical access, or require alternate means for program information, please contact your local Extension Office. Contact the State Extension Director's Office if you have any concerns related to discrimination, 848-932-3703.



4-H Fall Beach Sweeps - October 24, 2021

Agriculture Center
1623 Whitesville Road
Toms River, NJ 08755
Fax: 732-505-8941
Website: ocean.njaes.rutgers.edu

Rutgers Master Gardeners Help Line:
732-349-1245
Monday - Friday,
9:00am-12:00pm

Ocean County Board of Commissioners
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Rutgers, The State University
of New Jersey
The NJ Agricultural Experiment Station

Laura Lawson,
Interim Executive Director,
NJ Agricultural
Experiment Station

Wendle Cohick,
Sr. Associate Director,
NJAES
Director of Research

Brian Schilling,
Sr. Associate Director, NJAES
Director,
Cooperative Extension

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Experiment Station

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