Ocean County Rutgers Cooperative Extension

2024 Annual Report



Rutgers Cooperative Extension helps the diverse population of New Jersey adapt to a rapidly changing society and improve their lives and communities through an educational process that uses science based knowledge. Through science-based educational programs and applied research, Rutgers Cooperative Extension truly enhances the quality of life for New Jersey's residents and brings the wealth of knowledge of the state university to local communities.

Our Ocean County Extension office continued to meet the needs of residents and businesses in 2024 by offering educational programs on a wide-range of topics via classroom-, field-, and webinar-based educational programs. These science-based programs met the needs of clientele by helping to ensure healthy lifestyles; providing productive futures for youth, adults, and communities; enhancing and protecting environmental resources; ensuring economic growth and agricultural sustainability; and improving food safety and nutrition.

Visit our Ocean County Extension office or another local Extension office throughout New Jersey to access a wide range of science-based information and assistance regarding 4-H, agriculture, family and community health sciences, marine science, and natural resources and the environment. The following report outlines educational programming and other activities in these areas which occurred at our Ocean County office in 2024.





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.





RCE Outreach Programs

Rutgers Cooperative Extension of Ocean County offers a variety of informational and "hands-on" educational programs to Ocean County residents. In 2024, we offered 35 educational programs to our residents with 3,066 attendees. The following educational programs were delivered by our staff:

2024 PROGRAMS

4-H Youth Development

- Learning @ Laurita's
- Fall Clover Bud Day
- STEM LEGO Challenge
- Discover the World of Small Animals
- Reel Into Fishing
- Learn2Lead Camp
- All About Pollinators
- Joint Base McGuire Earth Day
- Introduction to Small Animal Care
- Terrarium Program

Environmental Resource Management

- Understanding Soil Compaction
- Interactive Exploration of Mosquito Research Techniques, Project Ideas, and Collaborative Discussion
- Microfibers: Plastic Pollution That's Out of Fashion
- Native Trees: Stafford Arbor Day
- Watershed Management
- Build a Rain Barrel Workshop
- Mosquitoes Aren't a Barrel of Fun: Ways to Reduce Mosquito Larvae in Rain Barrels
- Rain Garden Benefits & Engineering considerations
- Options for Rain Barrel Pumps
- Picking a Sustainable Landscaper: Yard Care Resources for Homeowners

<u>Fisheries</u>, <u>Aquaculture</u>, <u>and Coastal Resource</u> Management

- Marine Extension Program Seminar Series (MEPSS)
- Barnegat Bay Shellfish Restoration Program (BBSRP)

Horticultural Programs

- Winter Sowing Workshop
- Tick Confidence with NJ Ticks 4 Science
- Easy-Care Native Plants
- Hybridizing Siberian Iris
- Home Vegetable Gardening
- Growing Fruit Trees in the Home Garden
- Native Plants for Pollinators
- Annual Flower Gardening
- Mosquitoes Aren't a Barrel of Fun
- Butterfly Tent Event
- Growing Daffodils
- Growing Garlic in the Home Garden
- A Pinelands Road Trip

2025 UPCOMING PROGRAMS

- Winter Seed Sowing
- Caring for Our Kin
- Introductory Fisheries Science for Stakeholders (IFISSH)
- Growing Gourmet Mushrooms
- Using Cover Crops in the Garden
- Self-Watering Planter Workshop
- Creating a Jersey-Friendly Yard
- Diseases of Trees
- Edible Landscapes
- Clover LEGO Challenge
- Reel Into Fishing
- Learn2Lead Teen Camp
- Rain Barrel Upkeep/Maintenance
- Hiring a Sustainable Landscaper
- Build a Rain Barrel Workshop



Rain Barrel Pump



Reel Into Fishing



Growing Garlic Workshop

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Agriculture and Natural Resources

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Throughout 2024, 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.

Programming continued to be offered online and as in-person presentations during 2024, for both residents of Ocean County and others throughout New Jersey. We conducted 15 classes, workshops, and webinars to 824 farmers, educators, horticulturists, environmental professionals, and the public. These presentations were on a variety of topics that included maintaining healthy soils, sustainable landscaping, and protecting water resources. In addition, Ocean County ANR partnered with other County Agents and organizations to coordinate and implement an additional 12 webinars to 1,041 participants.

Earth Day, Every Day – More people are looking for ways to protect our natural resources and leave the environment in better shape for the future. 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, controlling invasive insects, and protecting wildlife habitat. The 2024 series of webinars focused on the elements of natural resource management and climate change impacts to the environment. There were 1,041 attendees at these 12 webinars, with an additional 1,481 views to the recordings on YouTube. More information on the 'Earth Day, Every Day' program is available at https://envirostewards.rutgers.edu/earth-day-every-day/.

The 'Earth Day, Every Day' Team was presented with the 2024 Association of Natural Resources Extension Professionals (ANREP) Bronze Award for Outstanding Educational Materials Award: Webinars. This national award was presented to the team at the ANREP conference in Hershey, PA in May. The ANREP Awards Program recognizes significant achievement and expands the use of high quality, innovative materials and programs by honoring the outstanding members and partners who developed them.

Water Conservation Displays – We worked with municipalities to host displays educating residents on ways to save water throughout 2024. Water conservation displays were exhibited at the Stafford Township Library, Manchester Municipal Building, and the Lakewood Township Public Works. These displays have distributed 1,421 flyers with tips to conserve water to residents throughout Ocean County. The display helps fulfill the public education requirements for both a town's Sustainable Jersey certification application and their Municipal Stormwater Permit.

In 2023, we developed a Spanish-language version of the display and flyer as well as a supporting website of water saving resources (https://ocean.njaes.rutgers.edu/anr/save-water-ahorra-agua-espanol). These materials have been exhibited at Manchester's Municipal Building and the Lakewood Public Works Building, with the web page getting 256 views since debuting in July 2023.

Wetsuit Recycling – Each year, it is estimated that 250 tons of wetsuits are discarded. Like plastic, the neoprene that comprises a wetsuit remains in the environment for a very long time. One way to help reduce this waste is to recycle the wetsuit material into another product. In September and October, we set up a barrel in the office to collect wetsuits from residents. A total of 63 wetsuits were collected from the public, totaling 196 pounds of neoprene collected. These wetsuits will be upcycled at a local company that creates new products from the neoprene. Future opportunities will be made available to collect additional wetsuits at various times of the year.









Susan Emhardt-Servidio, Senior Horticulturist & Rutgers Master Gardener Coordinator
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The 2024 growing season in Ocean County was hot and dry. Many horticultural inquiries were about plant and insect identification, best watering practices, and landscape plant management. Our dedicated staff and Rutgers Master Gardener (RMG) volunteers answered over 3,900 calls and emails while helping 1,240 clients who visited the Agricultural Center.

Over 770 ticks were identified at the Ag center, with the Lonestar tick being the most common. This year, clients were encouraged to submit their ticks to the 'NJ Ticks 4 Science!' program to help researchers gather information on how many ticks are vectoring tick-borne diseases across New Jersey. For more information, please visit https://ticks.rutgers.edu.

Our 'In the Know to Grow' program series continued this year. This 11-part program, which educated over 2,300 people, was instrumental in spreading horticultural knowledge. The most viewed program, "Tick Confidence w/NJ Ticks 4 Science!", with over 580 views, empowered our audience with crucial tick safety information. Ensuring this knowledge is accessible to all, past recorded virtual programs are available on our RCE of Ocean County website and the Rutgers NJAES YouTube channel.

Our RCE outreach efforts around the county continued with participation in various events: Night Out Against Crime in Lakewood, the Ocean County Fair, and our fourth annual Butterfly Tent Event. The Butterfly Tent Event was held on August 17-18, 2024. Over 1,244 people experienced multiple exhibitors, activities, information tables, and a Butterfly walkthrough tent. This year, visitors of all ages were encouraged to participate in a Community Art Project, which required painting a part of the butterflies on a canvas and signing their names. The Community Art Project is currently on display in the lobby at the Agricultural Center. We extend our heartfelt thanks to all RMG volunteers and staff who worked tirelessly to make this event great!



Butterfly Tent



Community Art Project

In 2024, the focus of the Ocean County RMG program was expanding the out-of-office helpline services. The 209 volunteers, including 38 interns, donated over 17,500 hours to the RMG program and Ocean County. Of those hours, 7,389 were in Outreach services through 56 speaker bureau events, 80 'Ask a Rutgers Master Gardener' events, 47 community outreach events, 56 educational outreach events, gleaning events, and in-office diagnostic services. Over 7,800 people interacted with the RMG volunteers in out-of-office events. These events were a resounding success, fostering a strong connection between the volunteers, county residents, and venues. The RMGs grew almost 2,600 pounds of produce and, along with the NJ Agricultural Society, gleaned over 3,000 pounds of produce donated to 8 food pantries throughout Ocean County.

New in 2024 was the Homegrown Garden, built in collaboration with the Boy Scouts of America as an Eagle Scout Project initiated by Michael Becker. The Homegrown Garden is an additional demonstration space where our Rutgers Master Gardener interns and the public engage in hands-on experience with best vegetable gardening practices. In October, RCE held the first in-person public program, "From Bulb to Harvest: Growing Your Own Garlic." This two-part program began with a presentation on garlic to 15 Ocean County residents, followed by the participants planting various garlic bulbs. During part two of the program, which will continue in the early summer of 2025, participants will harvest the garlic planted. In its inaugural year, the Homegrown Garden produced 150 pounds of produce donated to various Ocean County food banks.



Homegrown Garden



The RMGs volunteers are an integral part of the Rutgers Cooperative Extension, helping us to educate our County residents one garden at a time.

RMG Volunteers

Fisheries, Aquaculture, and Marine Resources

Dr. Douglas Zemeckis, County Agent II (Associate Professor)

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We had another productive year for our Marine Extension Program in 2024 as we continued delivering our education programs and conducting research projects. These efforts worked to meet stakeholder needs on issues related to fisheries, aquaculture, and marine resource management by distributing science-based information and generating new knowledge through applied research.

Our Coastal Stewardship course was offered as a part of the Barnegat Bay Shellfish Restoration Program in collaboration with ReClam the Bay. We educated 125 students on how to be more responsible stewards of our marine resources using shellfish biology, restoration, and aquaculture as the primary teaching tools. Our 'Earth Day Every Day' program continued in collaboration with Extension Agents throughout the state. Spring seminars focused on issues related to "The Elements of Natural Resources Management" and fall seminars focused on "The Winds of Change: Environmental Impacts from an Altered Climate".

Our annual collaboration with Ocean County 4-H and the International Game Fish Association (IGFA) included the "Reel Into Fishing" program as a three-day youth program on marine biology, sustainable fisheries, and recreational fishing techniques. This program was also offered in Burlington County in 2024.

Our research in 2024 focused on ecological and fisheries monitoring of future offshore wind farms in collaboration with the fishing industry and other stakeholders. Given the anticipated scale of offshore wind development, it is critical to understand, reduce, and mitigate impacts to marine resources. We have been involved with ongoing efforts to outline recommendations for environmental monitoring in wind farms and to execute fisheries monitoring plans that evaluate impacts to fisheries resources and fishing activities.

Other ongoing research is investigating the impacts of sand mining for beach nourishment on coastal habitats and fisheries resources. Projects completed in 2024 provided insights into consumer perceptions of aquaculture products to assist in seafood marketing, exploration of the feasibility of marine finfish and macroalgae aquaculture for New Jersey, and testing of a modified commercial sea scallop dredge to improve the sustainability of this fishery.

We at Rutgers Cooperative Extension continue to be here for and to serve our clientele 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, then please call or email Dr. Douglas Zemeckis (County Agent II, Associate Professor): zemeckis@njaes.rutgers.edu, 732-349-1152.





Visit our Marine Resources website for more info about our programs and resources: https://ocean.njaes.rutgers.edu/marine/



Family and Community Health Sciences

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Family and Community Health Sciences is charged with delivering nutrition, personal wellness, and healthy lifestyle educational programs to NJ residents of all ages. FCHS in Ocean County is focused on addressing the changing needs of older adults in Ocean County through age-friendly initiatives to support healthy aging in place, chronic disease prevention and control, and comprehensive well-being among older adults through community-based outreach, education, and research. Ocean County has the second highest percentage of adults 65 and older in New Jersey, at 22.8% of the population, and over 200,000 adults 65 years of age and older, according to the most recent census estimates.



A public health practitioner and Registered Dietitian Nutritionist with more than 15 years of experience working with culturally diverse communities to achieve equitable health outcomes, Dr. Kathleen Cullinen joined the Rutgers Cooperative Extension (RCE) of Ocean County as the new Family and Community Health Sciences Educator on July 15, 2024. Since hired, she has spent the majority of her time building multi-sector partnerships and designing community-based outreach, education, and research projects to be implemented and evaluated in 2025.

On behalf of the Ocean County Office of Senior Services, FCHS prepared a grant proposal to respond to a Request for Proposals (RFP) issued by the Division of Aging Services at the New Jersey Department of Human Services. The proposed age-friendly communities grant project, 'Age-Friendly Ocean County', aims to assess, plan, and develop local age-friendly initiatives that support the health and well-being of older adults, and to advance efforts that result in tangible and sustainable transformation of policies, systems, and environmental conditions. This 18-month project will promote public, private and cross-sector partnerships between county leaders, and engage older adults, adults with disabilities, and caregivers to participate in an accessible, culturally responsive, and linguistically appropriate community needs assessment to identify strategies and best practices to improve communities for older adults and enable residents to remain in their homes as they age. Funding is anticipated in December 2024 with a start date of January 1, 2025. This project was accepted for presentation at the RCE 2025 Annual Conference, *Cultivating Connection: Building a Culture of Communication*, on January 14, 2025, at the Busch Student Center, Rutgers University, in Piscataway, New Jersey.

FCHS received training from Penn State Extension on a 12-week, modular support program, 'Caring for Our Kin'. This program is codeveloped by Penn State Extension and West Virginia University Extension for grandparents, other relatives, and close family members who are taking care of children and teenagers. RCE of Ocean County will serve as a pilot site to launch and evaluate this program beginning in January 2025. The 12 modules of the curriculum, each covering an important aspect of caregiving, work together to help caregivers build a solid foundation of knowledge and skills to handle various situations and provide the best care for the children they're looking after. This program will be offered monthly and will include a light supper. This program was awarded \$12,000 in funding by the Grunin Foundation.

We submitted a peer-reviewed article, <u>Tips to Help Older Adults Beat the Holiday Blues</u>, published in the December or fourth newsletter issue of <u>Visions</u> for 2024. This content was expanded upon in a Rutgers New Jersey Agricultural Experiment Station (NJAES) Fact Sheet and submitted for peer review. FCHS also developed a Visions newsletter specific to Ocean County, <u>Ocean County Visions</u>, to promote FCHS' 2025 community-based outreach, education, and research. The statewide and Ocean County-specific <u>Visions</u> newsletters were mailed to 23 community partners (130 issues of each total) and also distributed via an email list of Ocean County residents interested in FCHS programming. Finally, FCHS updated their <u>website</u> to include 2025 programming and resources for Healthy Aging.

In collaboration with Rutgers faculty, staff, and student interns, FCHS contributed to a Cooperative Extension core competency project, funded by the Extension Foundation, to develop competencies and to identify training examples for Cooperative Extension professionals to meet the five core competency domains in Cooperative Extension's National Framework for Health Equity and Well-Being:

- 1) Data, Assessment, and Planning
- 2) Communicating About Equity
- 3) Leadership and Systems Thinking
- 4) Community Partnership
- 5) Cultural Competence







4-H Youth Development Program

Amelia Valente Minervini, 4-H Senior Program Coordinator ocean4h@co.ocean.nj.us, 732-349-1227

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 clubs, camps, and outreach programming to meet the needs of today's youth. The 2023-2024 program year experienced a 5% increase in enrollment due to dedicated 4-H volunteers and 4-H staff offering consistent communication, fresh organizational tactics, and new programs.

4-H Program Highlights:

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. Youth met consistently with trained adult volunteers exploring topics in animal science, beekeeping, STEM, shooting sports, ecology, dog obedience, sewing, and more. To meet the needs of today's youth, clubs offer in-person meetings, virtual meetings, or a hybrid of both. County staff also offer programs that are welcome to any youth, whether they are current members or not, as a recruitment strategy.

• Youth In Action Award: 4-H member Katie Culbert received the 2024 National 4-H Youth in Action award, a tremendous honor which only recognizes four young leaders across the entire country with diverse backgrounds and perspectives who have positively impacted their communities. The winners receive a \$5,000 higher education scholarship and spend 2024-25 inspiring other youth by telling their 4-H story and celebrating their leadership. Katie is a part of the Busy Bee's Beekeeping 4-H Club and currently is a freshman at Harvard University.



Ocean County 4-H member showing off a grape caterpillar, a part of the healthy eating activity of 4-H Cloverbud Day 2024

- Cloverbud Days: Ocean County 4-H offers Cloverbud-specific programs, called Cloverbud Day, for any youth in Ocean County in grades K-3. The goal of these programs is to provide specific hands-on educational experiences to the youngest of 4-H members while recruiting new members to join. Members have engaged in topics that involve the power of wind, animal science, pollinators, gardens, carnivorous plants, nutrition, and cooking.
- Learning at Laurita: With the goal to provide the public with an educational program featuring 4-H, Ocean County 4-H staff and the Ocean County 4-H Association Officers arranged an event called Learning at Laurita, held on March 2, 2024, at Laurita Equestrian Center in New Egypt NJ. 4-H clubs in Ocean County set up booths where they offered something for the public to learn about. 4-H club members taught over 60 participants in topics that included poultry care, rabbit nail clipping, bee hive honey extraction, raising a baby goat, and angora rabbit fur maintenance. An equine dentist also offered the chance for participants to watch a horse teeth cleaning. This is just one of many hand-on youth lead educational programming provided in Ocean County 4-H.
- Ocean County Fair: The Ocean County Fair was held July 10-14, 2024 at Robert Miller Airpark. Ocean County 4-H members were excited to have the opportunity to showcase the projects that they had been working on all year. Projects included paintings, sculptures, handmade clothes, recipes, STEM projects, rabbits, small animals, livestock, poultry, equine, and more. Educational opportunities for 4-H youth and public youth to participate were also offered, such as an archery fun shoot. Fun events were also included, like bobbing for carrots and a chicken dance. The fair proved to be quite successful bringing in 21,000 guests.
- 4-H Community Outreach: 4-H staff maintained strong relationships with twenty-six partners in the 2024 program year, which includes county parks, county libraries, schools, town municipalities, and other non-profit organizations. 30 staff-led outreach programs were presented to members of the public. Topics included Environmental Science, STEM, Animal Behavior, Pollinators, Terrariums, and more. One example is the Butterfly Raise and Release Project, which was in coordination with the Seaside Environmental Commission. From June through August, fifteen youth raised 178 painted lady butterflies, which were released at the Seaside Butterfly Garden. These opportunities further connect RCE/4-H with the community as they learn something new from the topics taught.
- 4-H Staff Presentations: This past year Sr. Program Coordinator, Amelia Valente Minervini, had the honor of presenting at the Positive Youth Development Academy and again at the National Extension of 4-H Youth Development Professionals Conference, where she spoke to over one hundred professionals about essential knowledge and skills to plan, implement, and evaluate high-quality 4-H programs that help youth thrive.

Ocean County 4-H by the numbers:

 18 Active clubs 	 51 Adult volunteer leaders 	 26 Community partnerships
 206 Youth members 	 936 Volunteer hours contributed 	 70 Hours of staff outreach programming



Ocean County Rutgers Cooperative Extension







Mordecai Island

Rutgers Masters Gardeners

Rain Garden

Extension Service/Agriculture Center

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.

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Rutgers Master Gardeners Help Line: 732-349-1245 Monday - Friday, 9:00am-3:00pm

2024

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4-H Student Ambassadors

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