What is the New Jersey Agricultural Experiment Station?

- The largest research unit at the university
- Funded by state legislature, County Boards of Chosen Freeholders, USDA – no tuition money is used

What are Cooperative Extension and Cooperative Research?

- The means by which we carry out our mission
- NJ AES funds these units to provide research, extension programs, and services throughout the state
A Brief History of Rutgers New Jersey Agricultural Experiment Station

- **1862 – Morrill Act passed**: provides grants of federal lands to create public institutions for teaching agriculture and mechanical arts.

- **1864 – The Rutgers Scientific School** is founded as New Jersey’s land-grant college, with George H. Cook as its head.

- **1887 – Hatch Act passed**: establishes federal agricultural experiment stations at land-grant institutions (New Jersey had established its New Jersey Agricultural Experiment Station in 1880).

- **1914 – Smith-Lever Act is passed**: establishes the Agricultural Extension Service at each land-grant institution.
Where We Are

- Based at Rutgers University, on the George H. Cook Campus in New Brunswick
- NJ AES programs are delivered via 9 on-campus centers/institutes and research farms, 9 off-campus research centers and farms, and offices in all 21 NJ counties
NJ AES Mission and Impact

“To enhance the vitality, health, sustainability and overall quality of life in New Jersey by developing and delivering practical, effective solutions to current and future challenges relating to agriculture; fisheries; food; natural resources; environments; public health; and economic, community, and youth development.”

- 300+ faculty and staff and 6,800 volunteers serve all 21 NJ counties
- County partnerships generate $7.5 M in cooperative support
- NJ AES Cooperative Research is supported by $21 M in state and federal funding and over $11 M in grants annually
Programs that Make a Difference

Food and Nutrition
- Food safety
- Packaging and engineering
- Proper nutrition and exercise

Youth Development
- 4-H
- T.E.E.M. Gateway
- Workforce preparation
- K-12 programs (i.e., Liberty Science Center partnership)

Public Health
- Vector Biology
- Awareness and reduction of toxic exposures
- Urban Entomology

Environmental and Natural Resources
- Alternative fuels
- Water quality and quantity
- Climate and weather
Programs that Make a Difference

**Economic and Community Development**
- Industry development, technology transfer, entrepreneurial training
- Community planning and economic development strategies
- Workforce development and training
- Green buildings and sustainable communities

**Production Agriculture, Horticulture and Allied Industries**
- Integrated pest management
- Plant and animal improvement and protection
- Sustainable farming
- New market opportunities

**Marine Fisheries and Aquaculture**
- Shellfish and finfish stock assessments
- Aquaculture production
- Policy development
- Ocean observing
An Urban Experiment Station

- NJ AES can help New Jersey’s nearly 9 million residents in areas such as
  - vector diseases
  - urban sprawl
  - youth at risk
  - food, health, and nutrition
  - environmental assessment

- We plan to stay true to our mission and expand it to meet the needs of all of NJ’s residents
Resource Stewardship

Rutgers Urban Gardening Program
• Motivates low-income families and individuals in Newark and surrounding areas to grow vegetables using backyards, containers, and community garden plots
• Gardens covering acres of former city wasteland are producing vegetables and other plants for food

Environmental Stewards of Essex County
• Trains community leaders for proper land management
• Is a partnership with Duke Farms and numerous community and nonprofit organizations
TEEM Gateway

- Rutgers NJ AES TEEM Gateway works with parole officers, case managers, Newark public schools, the City of Newark, and numerous community organizations to provide
  - Educational, vocational, and employment placement services
  - Life and job coaching
  - Individualized case management
  - Family services

- The Ye²s Center in Newark opened its doors on Jan. 31
  - Offers Rutgers students opportunities for hands-on and service learning
Youth Development

• Essex County 4-H After-School Garden Program
  - Uses gardening and food preparation as vehicles to develop leadership and social skills in youth

• The Union County 4-H Summer Science Program
  - A seven-week educational program designed to increase low-income youths’ interest in science

• Cultivating Youth and Communities for Positive Futures
  - Develops life skills in at-risk youth populations
  - Capitalizes on the strength of partnerships with other youth-serving organizations and uses lessons in horticulture, gardening, food and nutrition, and entrepreneurship to meet project goals
Integrated Pest Management in Schools

• IPM on school property is a long-term approach to maintaining healthy landscapes and facilities that minimizes risks to people and the environment.

• IPM uses site assessment, monitoring, and pest prevention in combination with a variety of pest management tactics.

• Instead of routine chemical applications, IPM employs physical, horticultural, mechanical, and biological controls with selective use of pesticides when needed.

www.pestmanagement.rutgers.edu/IPM/SchoolIPM
Community Health

- Get Moving-Get Healthy
- Master Gardeners
- Urban Gardening
- Small Steps to Health and Wealth
- Food Stamp Nutrition Education Program (FSNEP) and Expanded Food and Nutrition Program (EFNEP)
- Children’s Health Summits
- School Wellness Training
Signature Initiative: Climate & Environmental Change

Our Goals:
- Understand the mechanisms that drive global and regional climate change
- Predict the future impacts of climate change on a densely populated, coastal state
- Educate students and society about the causes and consequences of climate change

Climate and Environmental Change Programs
- NJ State Climatologist
- Center for Environmental Prediction
- Coastal Ocean Observation Lab
- Initiative on climate change, social policy, and politics
Signature Initiative: Economic Development

- Identify emerging economic issues and nurture solutions
- Work with local communities, businesses, nonprofit organizations, local to federal government, and academic institutions
- Base efforts on five principals: empowerment, education, economic sustainability, and entrepreneurial job creation

Economic Development Programs

- Food Innovation Center, EcoComplex, Food Policy Institute
- New Jersey Urban Experiment Station
- Center for Economic and Community Development
- Economic impact assessments
- Technology transfer
- Entrepreneurship education
- Workforce development (OCPE)
Signature Initiative: Our Oceans

- New Jersey has six major fishing ports, 1,500 vessels, 15 seafood processing plants, and 81 wholesalers
- Economic impact = $4.5 billion/year

Fisheries and Aquaculture Programs
- Barnegat Bay Shellfish Restoration Program
- Multispecies Aquaculture Demonstration Facility
- Institute of Marine and Coastal Sciences
- Haskin Shellfish Research Laboratory
- Rutgers Cape Shore Laboratory
- Center for Deep-Sea Ecology and Biotechnology
- Center for Marine Biotechnology
We Invite You to Learn More

At NJAES, we are committed to...

- Promoting sustainable growth in urban and rural communities
- Developing effective public-private partnerships
- Providing a well-educated, highly skilled work force
- Engaging in cutting-edge, innovative research
- Fostering technology/innovation transfer to industry
- Launching start-up enterprises through incubators and business development support

NJ AES is a Rutgers-wide resource. By working together, we can better serve our state’s residents.
Visit Us in Person

Cooperative Extension of Essex County
Rutgers New Jersey Agricultural Experiment Station
162 Washington Street
Newark, NJ 07102-3098

Cooperative Extension of Essex County and Rutgers Urban Gardening
Rutgers New Jersey Agricultural Experiment Station
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Cooperative Extension of Essex County - FSNEP
UMDNJ Dept of Primary Care
65 Bergen St., Room 157
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