“The Cornell Cooperative Extension system enables people to improve their lives and communities through partnerships that put experience and research knowledge to work”
Volunteer leadership is a vital force of Cornell Cooperative Extension Washington County. The loyalty and hard work of volunteers greatly expands available programming. Members of the Board of Directors are elected by the enrollees and are responsible for determining our local mission, setting program direction, ensuring adequate resources, and enhancing Cornell Cooperative Extension’s public standing.

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Eastern NY Horticulture Program (R) **

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CORNELL COOPERATIVE EXTENSION IS:

A partnership between the federal, state and county governments, Cornell University, and the citizens of New York State.

Practical. Programs are designed to solve real life problems, helping to transform and improve communities.

Locally-rooted. Citizens are key to identifying and creating programs which serve the needs of communities, businesses and individuals.

Integrated. A network of professionals includes campus-based faculty and staff, regionally deployed specialists, county-based educators and professional employees.

Extensive. High value educational programs are offered in every county and the 5 boroughs of New York City.

Comprehensive. CCE programming covers five primary mission areas: Agriculture, Community, Environment, Nutrition, Youth and Families.

Research-based. Educational programs are developed through interpretation and practical application of research conducted at Cornell University.
“4-H is a community of young people across America who are learning leadership, citizenship, and life skills”

Cornell Cooperative Extension’s 4-H Youth Development program develops citizenship, leadership, and life skills in youth through hands on learning. The essential elements of 4-H are the opportunities to experience independence, belonging, generosity, and mastery.

The 4-H youth development program is unique among youth-serving organizations because it combines the strength of a community based youth organization with the knowledge gleaned from university research to provide positive youth development opportunities.

4-H Youth Development Programs in Washington County are delivered using the traditional 4-H Club Model, special interest programs such as 4-h Shooting Sports, Tractor Safety, Camp Sew For You, and a variety of afterschool enrichment programs.

Over 400 youth are enrolled in almost 50 4-H Clubs supported by over 150 adult volunteers. An additional 500 youth were reached through special interest programs.
Agriculture & Food Systems: 4-H agriculture programs teach youth how to be engaged food citizens with a greater understanding of the plants and animals that contribute to feeding their communities and the world.

Science, Technology, Engineering & Math (STEM): 4-H science programs provide 4-H youth the opportunity to learn about Science, Technology, Engineering & Math through fun, hands-on activities and projects.

Citizenship & Civic Engagement: 4-H citizenship programs empower young people to be well-informed citizens who are actively engaged in their communities and the world.

Healthy Living: 4-H healthy living programs help 4-H youth learn how to lead lives that balance physical, mental, and emotional health.
Ag and Food Systems Education
Engaging youth & communities in their ag and food systems

INCREASED KNOWLEDGE AND INSIGHTS
Into the County’s ag and food systems

A MORE SKILLED AND BETTER PREPARED WORKFORCE
for jobs on area farms and in local ag enterprises

EDUCATED CONSUMERS
Able to make well-informed food choices

SCHOOL-BASED AGRICULTURE EDUCATION
Goal: Educate students on agriculture and strengthen their connection to the agriculture present in their community.

- All students would experience hands-on activities designed to cultivate their knowledge and interest in agriculture to be future informed consumers.
- Agriculture is integrated into local school curriculum and meets Common Core standards.
- Youth learn how the food they eat and the fibers they wear get from farm to table/closet.

EXPERIENTIAL LEARNING
Goal: Through hands-on opportunities youth and adults learn about working farms and food businesses

- Offer or partner with existing programs to coordinate internships in agriculture, food systems and nutrition education for students.
- Working with Master Gardeners and other initiatives, youth learn how to grow and prepare their own food.
- Youth learn for themselves, and teach others, about the relationship between food, health, their community, and the environment.

JOBS AND THE ECONOMY - WORKFORCE DEVELOPMENT PROGRAMS
Goal: Help youth and adult learners develop the skills and knowledge they need to build sustainable local food systems.

- Youth and adults work together to grow vegetables for donation to local food pantries and for sale throughout the county in partnership with food community leaders. Workshops and discussions about nutrition, sustainable agriculture, food systems, leadership, diversity and service are also an integral part of the program.
- By exposing students to a diverse array of nutritious and flavorful foods, and by bringing awareness to growing their own food and farming’s environmental benefits, students will be encouraged to make healthy choices for their bodies and for their communities.

12
Seasonal lessons were created to be delivered to grades K-2

3,641
Youth received Ag & Food System Education Programming in school

3
Schools planted some form of a School Garden
Residents participated in the Lecture Series

A lecture series was created to help bring Ag and Food Systems education to the general public. CCE partnered with Ag Stewardship Assoc., and SUNY Adirondack to create and deliver the lecture series.
Eastern NY Commercial Horticulture Program


2017 Statistics

- **2,264** FARM VISITS
- **2,735** CLIENT E-MAILS
- **2,567** PHONE CONSULTS
- **114** NEWSLETTERS/ E-ALERTS RECEIVED BY **28,193** TOTAL PRODUCERS
- **169** FIELD MEETINGS/ TRAININGS & WORKSHOPS
- **11,229** PRODUCERS IN ATTENDENCE
Eastern NY Commercial Horticulture Program

2017 RESEARCH WITH IMPACT

- Orchard Management Systems for Improved Yield and Fruit Quality
- Statewide Survey of Apple Tree Decline
- Multiple Strategies to Control Bitter Pit in Honeycrisp
- Monitoring and Management Tactics for Control of Ambrosia Beetles in NY Apple Orchards
- Surveying of Viruses in Apple Orchards Throughout NYS
- Nitrogen Dynamics and Yield Response to Minimal Supplemental Heating in High Tunnel Winter Production
- Field Treatments for Mitigating Onion Rot
- Educating Producers about Crop Insurance Cooperative Agreement
- Improving Labor Management on Fruit and Vegetable Farms in New York State
- Development of Effective Spray Programs for Post-Infection Fire Blight Management in Apples and Cost-Benefit Analysis of its Key Components
- Labor Readiness: Pathways for Farm Workers to Start Up and Advanced Beginners to Scale Up New Farm Businesses
- Optimizing Protected Culture Environments for Berry Crops
- Managing Root Weevil Populations for Improved Profitability and Sustainability on Eastern NY Berry Farms
- Using Low Tunnels for Extending Local Strawberry Production
- Climate Change Communication, Climate Smart Farming
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<thead>
<tr>
<th>Year</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>2017</td>
<td>Monitoring and Controlling Spotted Wing Drosophila in Berry Crops</td>
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<tr>
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<td>Unifying Resistance Management Education</td>
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<td></td>
<td>Spotted Wing Drosophila Integrated Pest Mgmt</td>
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<td>Using NDVI Images to Guide Selective Harvest in Wine Grape Vineyards</td>
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<td>Best Management Practices for Long Term Profitability High Tunnel Soil Fertility and Health</td>
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<td>Improving Garlic Production</td>
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<td>Assessing Barriers to Wholesaling for Small-scale Vegetable Growers: Case Study</td>
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<td>Invasive Pest Trapping</td>
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<td>Improving Profitability of Garlic Production Through Understanding and Management of Fusarium Diseases</td>
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<td>Innovations to Maximize Energy Efficiency</td>
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<td>Increasing Yield by Controlling Leaf Mold in Tomato High Tunnel Production</td>
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<td>Identification and Grower Education of Key Pests in Apple Orchards in Northern New York</td>
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<td>Precision Crop Load and Irrigation to Optimize Fruit Size and Quality of NNY Apples</td>
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<td>Apple Harvest Maturity</td>
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<td>Orchard Management Research</td>
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<td>Evaluation of Novel Cold-Hardy Grape Varieties for Production in Northern NY</td>
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<td>Wireworm Management in Sweet Potatoes Using Entomopathogenic Nematodes</td>
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<td>Increasing the Use of Cover Crops with On-Farm Demonstrations</td>
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<td></td>
<td>Scouting and Monitoring for Allium Leafminer in Eastern NY</td>
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The Capital Area Agricultural and Horticultural Program (CAAHP) provides agricultural and horticultural education through workshops, newsletters and consultations, utilizing traditional and electronic means to:

- Improve business profitability and performance
- Assist producers in attaining goals for a better quality of life in their business and work environment
- Guide and support environmental stewardship
- Support growers in developing markets for their agricultural products
- Provide leadership for fostering relationships between the agriculture industry and the general public

The CAAHP educator team works with a wide variety of agriculture and horticulture producers across a six-county region, reaching a diverse clientele, from those who aspire to start farming as a profession to established, multi-generational farm businesses.

**Commercial Livestock**

The 9th Annual Winter Green Up Conference was held on January 28, 2017 at the Century House in Latham, NY. This one-day conference was attended by 121 participants, many of whom have attended Winter Green Up since its inception nine years ago. Speakers included Doug Carmichael, Director at Lake City Research Station in Michigan, Blain Hitzfield of Seven Sons Farm, Dr. Rachel Gilker of the On Pasture newsletter and Phyllis VanAmburgh of Dharma Lea Farm. The speaker presentations covered topics such as: nutrition, soil health, marketing, team-building and holistic resource management. Multiple vendors were also in attendance. The traditional Winter Green-Up lunch featured grass-fed meat and poultry, sourced from local farms.

1,002 Producers subscribed to the CAAHP quarterly newsletter

121 Farmers attended the 2017 Winter Green-Up Conference

1,820 Producers received the CAAHP E-newsletter weekly
Commercial Horticulture

One group of growers the commercial horticulture specialist focused on in 2017 was the cut flower producers. The educational needs of these producers include sustainable nutrient and pest management, crop rotation, and high tunnel construction. A variety of educational activities were specifically developed to meet their educational needs including the first New York State Cut Flower Conference and on-farm field workshops. In 2017, more than 105 Capital Region cut flower growers (prospective and commercial) have been reached through at least one educational outreach effort.

Agronomy

Since New York State instituted the Farm Brewery Law, interest in brewing and associated crops has been strong. The Malting Barley Education Program works closely with commercial growers to provide the best production techniques available. Crops are scouted through the season to help farmers make timely management decisions, then the harvest from each field is sampled and analyzed for malting quality. Local grower meetings and field days at Cornell variety test plots bring farmers together to learn about this new crop.

Farm Business Management

Much of the farm business management is focused around analyzing farm businesses and assisting the farm client in making decisions to improve their profitability. In light of dairy price challenges, CCE hosted ‘Strategizing the Future: The Future of Milk Markets and How to Develop an Economic Plan’ which was combined with the Dairy Farm Business Summary. Maintaining milk markets and finding ways to grow components and forage are the most vital options for long term dairy farm viability.
During 2017, staff worked with various beginning farmers to assess the financial health of their businesses. One particular family was able to prepare financial statements and obtain an additional loan to expand their farm business. CCE’s beginning farmer educator also worked with farmers and growers in educating them to be mindful of marketing opportunities. Several presentations were offered on “Marketing Intelligence” to raise awareness of how to conduct market research. Additionally, staff helped to plan and conduct the Capital District Direct Marketing Conference which covered a variety of timely marketing concepts.

Financial literacy programming provides workshop-based and 1:1 education on a variety of personal financial management topics including, budgeting, credit and debt management, understanding credit reports and scores, among others.

The focus of this education is to empower area residents with the knowledge and expertise to better achieve personal financial security and stability, while working towards future goals. Many families, for a variety of reasons, struggle to make ends meet each month. Programming addresses how to better understand personal financial choices and options as a way to move towards financial self-sufficiency. Many program participants cite their success in understanding how to create a working monthly budget, or check their credit report online.

_CCE Washington’s one-to-one financial coaching program had an important role in helping an older couple keep their home. The couple was referred to the one-to-one financial coaching through the Mortgage Assistance Program (MAP). The couple had a reverse mortgage on the house and were in jeopardy of losing their home. The couple participated in the one-to-one coaching program for education on how to create a spending plan that would work for them. Together, they learned to track their spending, what their money was being spent on, determined what needs were a priority over desires, and were able to create a spending plan that showed MAP that they could afford the house._

Cornell Cooperative Extension, Washington County’s parenting and dependent care programs are designed to integrate research with community education on parenting and care-giving practices, care-giving program quality principles and standards, and care-related policies. Nearly 100 individuals participated in parent education programs.