



Extension Master Gardener

2019 Search for Excellence

Search for Excellence recognizes outstanding Extension Master GardenerSM volunteer educational, group projects that result in significant learning. Applause and appreciation go to the following Extension Master Gardener volunteers (EMGVs) for their efforts to address local issues, find solutions for gardening problems, and share sustainable, research-based gardening information in their communities.

Learn more about the 2019 winning projects on the following pages:

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CATEGORY: COMMUNITY SERVICE

Cabarrus County – County Fair Booth, “Digging in the Dirt”

TARGET AUDIENCE

General population of Cabarrus County residents attending the 2018 Cabarrus County Fair

GOALS

- Promote our Extension Master Gardener program
- Educate the public about various kinds of soils, amendments, fertilizers and provide soil sample kits
- Educate youth about butterflies
- Answer general gardening questions

IMPLEMENTATION

- A committee forms to plan our County Fair booth and decides on a streamlined theme and message.
- Plans are reviewed, donations are requested and volunteers are recruited (with online signup). Volunteers shifts are 4-hour increments over the 9 days the Fair is open - a sizeable request.
- Volunteers select/gather materials and set up the booth. Materials include handouts, soil sampling kits, plants for aesthetics, various banners and signs, and scavenger hunt items and prizes. Two volunteers brought butterflies in different stages of development.
- Volunteers staff the booth all the hours the Fair is open.
- After closing day, volunteers dismantle booth and return materials to storage.



RESULTS

- Increased public awareness of EMGVs as a valuable program and resource
- Improved public understanding of native soil and soil amendments
- Engaged and educated families via free, safe, fun activities: the scavenger hunt and butterfly exhibit
- Visitors gained knowledge on growing vegetables, flowers and environmentally friendly crops

CABARRUS COUNTY TEAM: Bob Wilber, Renee Hedrick, Gerri Harris, Larry and Tillie Heintz, Karen Andre, Jackie Ashton, Lynn MacDougall-Fleming, Mary Ann and Corky Johnson, Melody Wilkes, Patty Day, Nelson May, Joe Hutchins, Darnelle Hodge, Melanie Misenheimer, Jon Stewart, Sid Rauch, Mitchell Hagler

LEARN MORE

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CATEGORY: DEMONSTRATION GARDEN

Caldwell County - Unity Park and Community Gardens Demonstration Beds

Unity Park and Community Gardens (UPCG) is the transformation of a former Singer Furniture Factory site. The walking park and series of raised bed gardens are the result of a 2010 Fit Community Grant. UPCG Volunteer Manager and Extension Master Gardener volunteer, David Horn envisioned this space as a way to promote healthy eating and increase access to healthy and affordable food through gardening education. David, along with many Master Gardener volunteers, Extension and several community partners worked as a team to bring the vision to life.

TARGET AUDIENCE

Residents of Caldwell County interested in learning more about gardening

Unity Park Community and Community Gardens gardeners and visitors

The Caldwell Early Headstart participants

The 4H Garden Club

GOALS

- Utilize Unity Park and Community Gardens for education by hosting public gardening classes taught by Extension personnel and Master Gardener volunteers
- Demonstrate growing a variety of crops including maintenance, harvesting, preparation and preservation
- Share harvest with the public and local food banks

IMPLEMENTATION

- Team discussed how to utilize UPCG for gardening education and established 2 focus areas:
 1. a square foot garden to demonstrate growing produce in small spaces and
 2. a pollinator garden to increase awareness of pollinators.
- Selected appropriate crops for each garden. Ordered plants/seeds to coincide with planting times.
- Identified champions for each bed and area.
- Created tentative program schedule for the year.
- Partnered with the City of Lenoir to film progress at the square foot garden and feature video on the local cable channel.
- Established weekly maintenance schedule. Coordinated maintenance and workdays via email. Scheduled periodic workdays, as needed.
- Finalized education program schedule and promoted through various media outlets, including N.C. Cooperative Extension, Caldwell County center website, City of Lenoir website, email and social marketing, appearances on county TV and regional radio programs, and printed fliers.
- Class preparation included finalizing the topics, selecting the handouts and recipes to share with participants, and preparing samples if applicable.
- Utilized a logbook to record harvest amounts.



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CATEGORY: DEMONSTRATION GARDEN

Caldwell County - Unity Park and Community Gardens Demonstration Beds (cont.)

RESULTS

7 classes impacted...
6 classes impacted...
2 classes impacted...
2 sessions featured ...

8 families in...
74 people in...
42 participants in...
the square foot garden for...

Early Headstart
the public
4H Garden Club
the public



100%
of participants reported

- growth in knowledge and appreciation for hands-on gardening
- empowerment to grow new foods, save money, and eat more produce
- commitment to adopt an Extension-recommended gardening practice

1100+

pounds of produce harvested in the gardens including the private beds benefitting local food pantries and the Lenoir Soup Kitchen.

- Expanded public reach through videos produced by the City of Lenoir featuring four seasons of the square foot garden bed (4 videos) and the pollinator garden (1 video)
- Successfully demonstrated nearly year-round harvest and provisions of fresh, local food.
- Provided classroom and hands-on experiences on a variety of topics including berry production, pesticide safety, pest management, soils and fertilizers, growing in the fall, and growing and preserving various crops including peppers and ginger!
- Ensured continuity of learning experience by sharing recipes for the crops grown. In some instances, classes provided plants, growing materials, and even offered food samples.
- Unique U-pick operation included cut flowers and edibles such as zinnias, seminole squash, tomatoes, okra, summer squash as well as a variety of greens herbs.



YOUTUBE PLAYLIST
go.ncsu.edu/lenoir-upcg

CALDWELL COUNTY TEAM David Horn, Ellen Roberts, Lynda Campbell, Josie Varela

LEARN MORE

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CATEGORY: DEMONSTRATION GARDEN

Wilson County Wilson Botanical Gardens: STEM Garden

Wilson County, home to several science and technology-related companies, is challenged by a lack of qualified employees due to the county's below-average test scores, high-school graduation rates, and college graduates. The unskilled workforce has contributed to the high unemployment and poverty rate in the county. The STEM Garden project provides local youth with concrete, hands-on, supervised exposure to science, technology, engineering and mathematic principles in an outdoor setting. The STEM Garden aims to increase students' interest in these topics and provide area educators a unique setting for students to develop their skills.

TARGET AUDIENCE

Middle and high school youth

GOALS

- Provide a unique opportunity for hands-on STEM learning in an outdoor environment
- Improve proficiencies and encourage students to further their interest and education in Science, Engineering, Technology, and/or Math.

IMPLEMENTATION

- Developed STEM Garden concept, received project bids from five landscape design firms.
- Hired designer, obtained permits, implemented a three-phase construction plan.
- Sought grant funding and fundraisers. Installed Phase 1, overall garden design, hardscape.
- Phase 2 followed with installation of plants, STEM features, and curriculum development.

Science: a bog garden educates students on native flora such as carnivorous plants, water conservation, filtration, recycling, collection and use of stormwater, chemical reactions, and insect/plant interactions.

Technology: a solar-powered charging station and a web-based weather station emphasize alternative power sources, power generation and use, weather prediction and tracking.

Engineering: a working windmill generates power to pump water through hydroponic plant growing farms. Students explore wind power, hydroponic farming, basic engineering principles.

Math: a Fibonacci spiral and the surrounding plantings demonstrate a mathematical concept which appears repeatedly in nature. A backgammon feature enables playful mathematical lessons of counting, predication, chance, percentages, etc.

- Phase 3, a large outdoor classroom completed one year later.



continued...

CATEGORY: DEMONSTRATION GARDEN

Wilson County

Wilson Botanical Gardens: STEM Garden (cont.)

RESULTS

- Outreach to all Wilson County public schools, two private schools, and local homeschool groups.
- Educational signage included QR codes, website and other interpretive features allowed for engagement with or without a facilitator.
- Programs connected with needs of educators in the community and their measurable objectives including testimonials, pre- and post-test on curriculum learned, and test scores. Incorporated a defined lesson plan, activity, evaluation, and follow-up. Qualified educators designed and supervised.

80% of students improved understanding of wetland environments, wetland wildlife, wetland & carnivorous plants, water pollution, and how insect hotels help beneficial bugs.

75% of students increased understanding of alternative energies, renewable resources, wind and solar energy usages, and what an anemometer is used to measure.

72% of students gained knowledge of how to grow plants without soil, nutrients supplied in hydroponic systems, and what grows in hydroponic systems.



YOUTUBE VIDEO TOUR

go.ncsu.edu/wilson-stem-garden

WILSON COUNTY TEAM

Karen Blume, Tap Tapie, Judy Buzard, Sandy Goetz, Linda May

FUNDING NOTE

The capital improvements of the STEM Garden equal \$136,331,18. This money was raised through 4 years of Wilson Winter Lights and multiple grants, the largest from Glaxo Smith Kline's Ribbon of Hope and NC Rural Economic Development Commerce grants (\$25K each). Smaller project-specific grants received from Wilson Visitor's Bureau and the Wilson Rotary Club.



LEARN MORE

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CATEGORY: INNOVATIVE PROJECT

Chatham County Newcomers' Project

TARGET AUDIENCE

Primarily new residents, as well as any local gardeners needing easy access to quality, research-based information.

Homeowners and gardeners new to the area who need orientation to soils, plants, and climate issues in NC's Piedmont region.

GOALS

- Improve access to relevant garden information for newcomers and Chatham residents.
- Inform newcomers about available resources and build awareness of services offered by N.C. Cooperative Extension.
- Gather quality resources into one easy-to-access and navigable website.
- Create a companion handout for the website for distribution.

IMPLEMENTATION

Overall

- Determined project lead responsible for coordinating work: compiling information, calling meetings, setting agendas, etc. Held regular meetings to review, share and edit materials. Agendas insured issues/challenges were identified for consideration prior to meetings.
- Created a list of relevant community informational needs to target.
- Identified team members for specific tasks - research, assemble and verify relevant materials.
- Determined best way to deliver resources to our target audience. Decided on a user-friendly, web-based format to display information, along with a handout to raise awareness of the new site with a QR code.
- Insured involvement of county agent to oversee and validate team's approach including resources, content, and formatting.

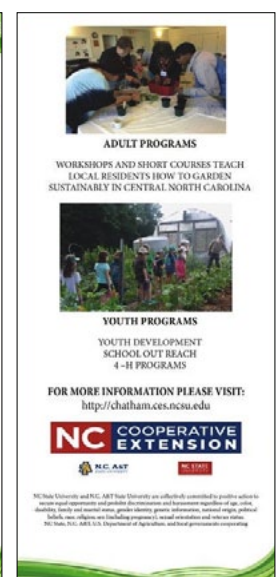
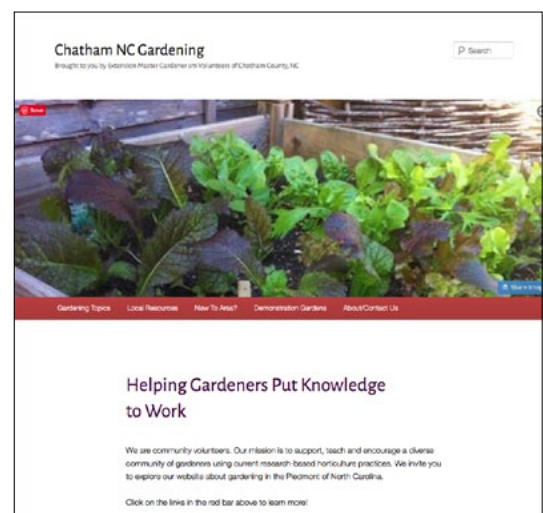
Handout

- Developed content – one member gathered team ideas for content and drew up first draft for team input. Intentionally selected timeless content, insuring multi-year value. Identified relevant interest-generating pictures for the handout.
- Identified local printer to assist with final brochure design, printing, and developing cost.
- Developed a distribution plan in the community.

Website:

- Verified compatibility of technology with proposed structure of information.
- Merged newly-researched and existing resources and materials, insuring all content was up-to-date
- Identified person(s) responsible for populating and maintaining the website as an ongoing activity.

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CATEGORY: INNOVATIVE PROJECT

Chatham County Newcomers' Project (cont.)

RESULTS

- New digital resource: go.ncsu.edu/welcometochatham
- 4X increase in hits since site launch in late January (59, 139, 233, 263 for January, February, March, April, respectively).
- Simple, durable one-page brochure with QR code to distribute at public events. Currently in trial distribution to identify best placement for target audience.
- Likely a valuable resource for plant clinic questions from home gardeners. Data on Chatham County Plant Clinic contacts indicate strong growth since 2016 inception (up 30% in 2017 and 74% in 2018).



CHATHAM COUNTY TEAM:

Cathy Morehead, Karen Greager,
Paul Szulewski, Chip Chescheir,
Bruce Birbeck, Laurie Cousart, Donna
Worcester, Pat Stucke, Susan Pflum

Not shown: Anne McKee, Patty Reitz

LEARN MORE

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CATEGORY: SPECIAL NEEDS

Cabarrus County Stonewall Jackson Horticultural Project

The Stonewall Jackson Youth Development Center is a residential juvenile correction facility for boys 12-21 years of age, located in Concord, NC. The Center has a garden consisting of a greenhouse with an aquaponics system, outdoor raised beds and in-ground planting for small fruits. There is also a small pond, a ½ acre wildflower bed, and a windmill which helps provide oxygen to the fish tank of the aquaponics system. The produce is used in the school kitchen for dinners. Many students had no experience with gardening before participating.

TARGET AUDIENCE

Students attending the Horticultural Center at Stonewall Jackson Youth Development Center. Prequalifications include working on/completion of high school diploma or GED, and screening.

GOALS

- Teach the students how to plant, care for, harvest and use the vegetables and fruits they grow
- Care for the tools and learn healthier nutritional habits.

IMPLEMENTATION

- Evaluated and determined education needs: comprehensive care and harvesting of crops, preparation of site-grown harvest and exploration of new foods, and proper care and hygiene of tools.
- Determined supply needs for additional raised beds: building material, seeds, plants, and soil.
- Coordinated teaching opportunities with Master Gardener volunteers and community partners, such as 100 Gardens, Extension agents, City of Concord, and Concord Wildlife Alliance.
- Recruited donations for plant material and supplies from local businesses and partners.

RESULTS

- Increased production of site-grown vegetables for onsite kitchen through expansion of raised bed area. Donated surplus vegetable production to local non-profits organizations.
- Cultivated students' appreciation for how things grow and how to care for them. Beds were kept weed-free and watered. Students took ownership and pride through improvements such as cleaning the pond area, planting flowers, and starting a raised bed rose garden.
- Delivered education opportunities for students to learn about the care and maintenance of tilapia and the aquaponics system, understand and examine insects, and discover native plants and their benefits.
- Empowered students to give back to their community through growing native plant seeds which were made available to county residents.



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CATEGORY: SPECIAL NEEDS

Cabarrus County Stonewall Jackson Horticultural Project (cont.)

RESULTS (CONT.)

- Improved student awareness and appreciation of their family norms and values through reflection and sharing past experiences (i.e. helping grandparents in the garden when they were younger).
- Improved students' understanding of food production, potential job-related opportunities.
- Hosted two stir-fry events featuring some of the harvested produce for students to taste. Many learned they actually like beets!
- Enhanced students' state of mind through outdoor enrichment - students reported being calmer, healthier. When asked what students like best about the class they said, "getting outside".
- Highly rewarded volunteers who mentored the students.



CABARRUS COUNTY TEAM:

Karen Andre, Dorothy Antony, Denise Christiana, Renee Hedrick, Dawn Mulligan, Marianne Scully

LEARN MORE

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CATEGORY: WORKSHOP

Watauga County - Advanced Landscape Design for Master Gardener Volunteers

TARGET AUDIENCE

Extension Master Gardener volunteers

GOALS

- Train Extension Master Gardener volunteers in basic landscape design principles and skills
- Provide N.C. Cooperative Extension, Watauga County Center with volunteer support for clients seeking landscape design help
- Provide more specialized landscape design training

IMPLEMENTATION

- Recruited landscape architect, and Master Gardener volunteer, Jan Frazee to help design and teach the class. Examined other landscaping classes to aid development of class framework, including hands-on experience creating a base plan for a real client.
- Polled EMGVs find the most workable dates and times for the class, and to get an idea of the number interested.
- Recruited client prospects through social media promotion - a "free consultation by Extension Master Gardener students". Several prospects emerged. Selected a property that presented challenges aligned with class principles. It was conveniently located and offered a "blank slate."
- Jan Frazee took property measurements, created a scaled drawing, and made 20" x 24" copies for each student as class materials.
- Carried out workshop in a 4-part class series:
 - Class 1** included a walkthrough of client landscape. Notation models and base plan concepts provided. Students noted property traits and initial ideas.



Class 2 focused on aesthetic and functional values of perennial plants/shrubs, creating privacy, and landscaping on hillsides.

Class 3 centered on design principals and refinement of students' base plans.

Class 4 provided time for students to present base plans to client. Instructors provided critical commentary on strengths and possible issues. Client received multiple base plans proposing a variety of landscape ideas.



continued...

CATEGORY: WORKSHOP

Watauga County - Advanced Landscape Design for Master Gardener Volunteers (cont.)

RESULTS

Master Gardener volunteers learned how:

- to implement major design principles, such as scale, unity, balance, and perspective
- to make a scaled plan and draw a base map
- solutions to specific landscaping issues such as drainage, grading, screening, traffic flow, parking, trees, and using landscape to frame a house
- to make a landscape function for client's needs, desires, and personal aesthetic

Established a group of volunteers able to serve clients with landscaping questions and a core group of Master Gardener volunteers ready for more specialized education and presentations on landscaping issues in the High Country.

Created a model for Extension centers wishing to offer a course on landscape design.



WATAUGA COUNTY TEAM: Landscape Architect, and Certified Extension Master Gardener volunteer, Jan Frazee and Twenty-one Master Gardener volunteer class participants

LEARN MORE

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CATEGORY: WORKSHOP

Buncombe County - Dr. Wesley Grant Sr. Recreation Center Day Camp, Garden Week

TARGET AUDIENCE

Children ages 8 to 12

GOALS

Teach basics of gardening, including soil composition, importance of insects and birds and benefits of gardening.

IMPLEMENTATION

- 4 months before - chair called a meeting of interested EMGVs and 7 brainstormed ideas for the day camp, then sorted ideas into subjects and assigned a subject to each day of camp.
- 3 months before - clarified goals, toured facility, reviewed supplies, daily plans, and expectations.
- 2 months before - finalized schedule, prototyped projects (determine if age-appropriate), assigned project responsibilities, created list of supplies needed, determined best project locations.
- Recruited EMGVs for day camp via postings on intranet calendar and youth committee schedule.
- 1 week before – fine-tuned details.
- Camp arrived – met in auditorium for 15 minutes to introduce daily theme. Divided into 3 groups and rotated work on 3 theme-related projects.

RESULTS

- Children, staff and caregivers learned the importance of soil, insects/pollinators, birds, worms, flowers, fruits and vegetables. 15 projects and literature were taken home to share.
- Impressive appreciation from target audience. Each child wrote a note thanking EMGVs for camp. One camper wrote that she hopes to be a Master Gardener volunteer when she grows up!
- Increased learning and subject fluency through experience of EMGVs teaching the kids.
- Enthusiastic audience engagement - kids enjoyed sharing their garden knowledge.
- Stronger relationships with children and their families from many different community areas.

BUNCOMBE COUNTY TEAM: Carol Brown, Suzanne Wodek, Nancy Good, Shirley Phillips, Jill Prior, Nina Fox-Holladay, Kay Green, Judy Hamrick, Mollie Milner, Mary Ann Snedeker, Anne Stafford, Susan Spencer



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