The Year Brought Special Highlights Statewide

We Celebrated Our 35th Anniversary
In 2012, the University of Minnesota Extension Master Gardener program celebrated 35 years!! The main 35th celebration event took place during the Upper Midwest Regional Extension Master Gardener Conference hosted by Minnesota Extension Master Gardeners. Governor Mark Dayton proclaimed July 19, 2012 as Extension Master Gardener Day in Minnesota. First Lady of the University, Karen Kaler made a special presentation in association with the dedication of a northern pin oak tree (Quercus ellipsoidalis “Majestic Skies”) to honor 35 years of Extension Master Gardener service in Minnesota. At the celebration, we honored five active Master Gardeners who were part of the first class of interns trained in 1977 and have been volunteering ever since.

We Hosted the 2012 Upper Midwest Regional Extension Master Gardener Conference
The University of Minnesota Extension Master Gardener program hosted the Upper Midwest Regional Extension Master Gardener Conference, July 19-21, 2012 at the Minnesota Landscape Arboretum. Over 450 registrants from nine states and the Canadian province of Ontario participated. Under the theme, “Inspiration from the Ground Up,” the event featured 69 classes and tours that provided education on a broad range of horticulture topics. We used this event to feature University of Minnesota research and plant introductions.

We Began a Biochar Research Study
Is biochar a good soil amendment for growing vegetables and flowers? That is the question Extension Master Gardeners in Minnesota and Iowa will test as part of a multi-state biochar applied research study. This study is part of a larger five-year, multi-state/university research project funded by USDA/NIFA. Biochar is a charcoal material, a byproduct of a process called pyrolysis. Pyrolysis converts biomass into bio oil which can be refined to produce transportation fuels.

Three research demonstration gardens were developed and managed by Extension Master Gardeners in Minnesota in 2012. The gardens are amended with different levels of biochar. Over three years, Master Gardeners will collect data to determine any positive or negative effects of biochar on typical garden plants.
Looking Back...Looking Forward

It has been said that we need to know where we come from in order to know who we are going forward. In 2012 we did a lot of looking back when reflecting on the 35 year anniversary of the Extension Master Gardener program. Over those 35 years the program and institutional structures have changed, the ways we communicate and access information have changed, and the ways we want to volunteer have changed. What hasn’t changed is our passion for horticulture and our desire to share research-based knowledge to help Minnesotans. In 2012 we also began looking forward to envision a vibrant and sustainable Extension Master Gardener program for the next 35 years. As we approach another year’s end and prepare to collect accomplishments for 2013, we recognize that yet again we will change the way we move forward. Some of that change is expressed below by Julie Weisenhorn, Extension Master Gardener director. As we move forward, be assured that our passion for horticulture and our desire to share research-based knowledge to help Minnesotans remains our solid foundation.

2012 Stats at a glance

- **2,448** Extension Master Gardener volunteers
- **129,222** volunteer hours contributed
- **52.8** hours average contribution per volunteer
- Equivalent to **62.1** FTE staff positions
- **$2,527,582** Total Dollar value of volunteer time:

  (The value of volunteer time is calculated using Independent Sector’s 2011 nationally recognized formula (minus 12% fringe) to determine dollar value of volunteer time. For more information visit: http://www.independentsector.org/volunteer_time)

Number of Minnesotans reached by Extension Master Gardeners in 2012:

- **162,800** adults
- **53,500** youth

From the Director

Speaking as someone who has lived in the tropics, one of the best things about Minnesota are the distinctive four seasons. Each season contributes a unique richness to life in Minnesota, whether it be life in the city, life on the country farm, or life in the woods. I am always ready to move onto the next season!

Extension programs – and people - move onto new “seasons” too. For the past two years, we in Extension have been visualizing how the Master Gardener program might best serve Minnesotans now and in the future while respecting the traditions of the past. On January 1, 2014, the University of Minnesota Extension Master Gardener program will partner with the Minnesota Landscape Arboretum with Tim Kenny as the new state Master Gardener director. I will move to a full-time position in Extension as an educator in consumer horticulture and will focus on education for Master Gardeners and on developing new curriculum for home gardeners. I have always enjoyed this kind of work helping Extension volunteers deliver University-based research to communities. This is an exciting, new collaboration between Extension and the Arboretum. Forming a stronger partnership with the Landscape Arboretum will provide exciting synergy and growth potential, especially in the areas of volunteer management and home horticulture education. This partnership between Extension and the Arboretum will be the source of great potential for consumer horticulture education and will mean a bright future for the University of Minnesota Extension Master Gardener program.

I have truly enjoyed the more than six years as state director, and I look forward to doing more in Extension horticulture education with Master Gardeners for our gardening public!

All my best,

[Signature]

Julie Weisenhorn
The Year Brought Special Highlights in Counties

Just What Do You Do?

The mission of the Extension Master Gardener program is “to support Extension by providing volunteers trained in horticulture to educate the public with research based information on the best practices in consumer horticulture and environmental stewardship.”

This annual report shares highlights from 46 county Extension Master Gardener programs that submitted 2012 reports. It captures the many methods and venues Extension Master Gardeners use to deliver education and share gardening knowledge. It helps to answer a question often asked of our Extension Master Gardeners, “Just what do you do?”

1. We answer questions and help people solve garden problems.

When the Extension Master Gardener program was created in the 1970’s, the role of Master Gardeners was to assist county Extension educators in answering gardening questions. Today, finding solutions to gardening questions and situations is still a primary function of Extension Master Gardener volunteers, although the methods of doing so have changed significantly. Online fact sheet, web links, email, digital photos, and social media pages were primary tools used to answer thousands of gardening questions in 2012. Master Gardeners have not abandoned the phone or face-to-face contacts though. ‘Ask a Master Gardener’ county phone lines still operate in most counties and Master Gardeners staff the phone line for the Minnesota Landscape Arboretum. In two counties, Master Gardeners answer questions on local radio shows.

2. We help the public understand and use home landscaping and gardening practices that minimize negative impacts on the environment.

Raingardens

16 counties engage in projects that provided instruction, demonstration, or information about the value, construction and maintenance of raingardens to reduce run-off into public waterways.

- You’ll find demonstration raingardens developed and maintained by Extension Master Gardeners in Minnesota River Valley (Blue Earth), Cook, Douglas, Lake of the Woods, and Washington Counties.
- Working with Metro Blooms, Hennepin County Master Gardeners assisted 60 homeowners with raingarden plant selection and design consulting.
- Raingardens were featured in garden tours in Steele, Rock and Olmsted Counties.

Shoreline Restoration

5 counties prove classes about or assistance with shoreline restoration projects.

- Master Gardeners in Becker, Benton, Goodhue, Stearns and Itasca Counties partner with Soil and Water Conservation Districts and Extension educators to assist lake associations and others with shoreline projects that reduce runoff into lakes and rivers.

Composting

15 counties continued or initiated educational programs to increase and encourage the practice of composting yard waste and other compostable waste items.

- Ramsey County Master Gardeners answered 2,336 questions from residents who use one of the seven county yard waste compost sites.
- Many counties used composting as the focus of education classes and fair booth displays in 2012. In Nicollet County, Master Gardeners gave away a supply of compost tea at their fair booth. Mower County Master Gardeners hosted a composting booth at a local college ‘Clean Energy Day.’ Douglas County Master Gardeners did the same at an Earth Day celebration. In Renville County they demonstrated composting at a local hardware store.
• Master Gardeners in **Olmsted and Ramsey Counties** provided education on composting for local programs that distribute compost bins and rain barrels.

**Invasive Species**
11 counties are active in the distribution of educational materials, creation of information booths, or participate in partnerships that increase public knowledge about the impact and management of invasive plant and insect species.

• Master Gardeners in **Cook, Crow Wing and Stearns Counties** have been trained as first responders in the detection of Emerald Ash Borer and the newer invasive insect, the spotted wing drosophila.
• Educational displays and educational booths continue to be a good way to educate the public about invasive species like Emerald Ash Borer and buckthorn. **Washington, Douglas and Aitkin County** Master Gardeners provide education in this way.
• **Goodhue County** Master Gardeners conducted a class for 35 people to educate them about oriental bittersweet, a newer invasive making its way into southeastern Minnesota.

**3. We excite youth about gardening and plant sciences.**

Whether the outcome is discovering where food comes from, learning how to grow and eat healthy food, sharpening academic and inquiry skills, or connecting with the natural world, more and more Extension Master Gardeners are working with youth. Many of our youth educational programs are conducted in partnership with others.

**With other Extension Partners**
21 counties partner with Extension 4-H youth development and nutrition education programs to excite and teach youth about growing plants and eating healthy produce.

• Many of the reporting counties have Master Gardeners who conduct gardening classes for youth and leaders at 4-H project workshops.
• Serving as fair judges, **Carlton County** Master Gardeners saw a need to better educate 4-H youth on gardening and exhibiting. Their horticulture class attracted 15 youth for a very positive learning experience.
• **East Otter Tail** Master Gardeners work in partnership with 4-H to conduct a Junior Master Gardener and Children’s Garden program. They also draw on Extension nutrition education staff to teach youth how to use vegetables they produce.

**With Schools**
25 counties deliver gardening and horticulture education with youth through schools, sometimes in the classroom and sometimes in one of the growing number of school gardens.

• **Hubbard County** Master Gardeners engaged 122 first graders in restoring a school prairie. **Pennington County** Master Gardeners continued their ongoing seed collection and prairie educational program with students at an elementary school in Thief River Falls.
• **Mille Lacs County** Master Gardeners teach nearly 500 early elementary students about plant growth by helping them raise flowers for a school garden. Their multiple session program includes a very popular pocket garden germination project.
• In **Pennington County**, Master Gardeners teach the plant portion of Operation Pizza, an Ag in the Classroom program teaching about food production.
• **Douglas County** Master Gardeners continue their work on a multi-agency program with School District 206 that not only teaches youth about gardening and how food grows, it’s changing the school’s food service. Produce from 25 raised bed gardens provide produce for the summer program’s breakfast and lunch program. About 100 youth attend Master Gardener-led garden classes each week during summer months.
• **Hennepin County** Master Gardeners conduct a Junior Master Gardener (JMG) program at Champlin/Brooklyn Park Academy for Math and Environmental Sciences. The 2-year program includes all 4th and 5th graders. The JMG program is built into the school’s curriculum. Master Gardeners teach monthly classes. In 2012, 154 students graduated with JMG certificates. Master Gardeners also tutor students, which teachers say has resulted in fewer students falling behind academically.
With Other Youth Programs

11 counties reach youth in partnerships other community and youth serving organizations, like Boys and Girls Clubs, public libraries, and the YMCA.

- **Ramsey County** Master Gardeners reach youth through neighborhood organizations in St. Paul. A new class for youth at the Aurora-St. Anthony Peace Garden was the result of an outreach strategy that has developed over several years. The program helps urban youth learn about nature and make a connection to food from plants.

- **Master Gardeners in Nicollet County** partner with St. Peter Community Education’s Volunteers in the Park (VIP) program. In VIP, youth aged 10 and older apply to be volunteers. Master Gardeners provide the weekly instructional sessions that prepare youth to plant and maintain gardens at the city’s community center.

- **Itasca County** Master Gardeners teamed up with the YMCA to conduct a youth garden. Thirty youth participated in the program that began with starting seeds for transplant and ended with vegetable harvest.

- **Master Gardeners in Olmsted County** continued an ongoing Junior Master Gardener program in partnership with the Boys and Girls Club.

- **Steele County** Master Gardeners completed their second year of coordinating a community garden with 42 plots, 20 ft. x 20 ft. each. They provide information to new gardeners and maintain a demonstration garden which produced over 500 pounds of produce that was donated to a local food shelf.

- **Pine County** Master Gardeners incorporated the Minnesota Landscape Arboretum’s “Grow Yourself Healthy” program into the education offerings at the Pine City Community Garden, a garden they developed and have managed for four years. They used that same theme for a county fair booth. One garden plot was used to demonstrate the benefit of landscape fabric. The garden’s produce went to a local food shelf.

- **Isanti County** Master Gardeners established the Cambridge Community Garden in 2009 in partnership with the city and the county’s environmental coalition. They have experienced steady increase in use, increasing space 25 percent between 2011 and 2012. Master Gardeners have turned over management of the garden to a newly formed “Board of Gardeners.”

- **In Washington County, Master Gardeners** support 3 community gardens. They provide education and support for a corporate partner, Retail Construction Service, who established a garden to engage youth and employees in producing food for a food shelf. In 2012 they donated 3000 pounds of produce.

- **Hennepin County** Master Gardeners worked with a similar corporate program, the C.H Robinson employee “giving” community garden. They taught employees gardening classes and provided consulting through the growing season. Departments within the company competed to grow the most produce. Collectively they donated 3036 pounds of produce to a food shelf.

4. **We help to increase access to healthy food by teaching others to garden.**

Community Gardens

12 counties have organized or assisted in the development of community gardens. In all cases, Master Gardeners provide either classes or time in the garden to answer questions and mentor new gardeners. Often Master Gardeners use a garden plot to grow a teaching garden and contribute the produce to a food shelf.
5. **We continue to reach out, build relationships and share in learning with individuals and communities traditionally underserved by Extension.**

- In 2012, using a new cohort model of learning that focuses on building community as well as content, the **Fond du Lac Tribal Community** collaborated with the 13 Moons Fond du Lac Tribal Extension program to establish the first community-based Extension Master Gardener group. The five initial Master Gardener interns focused their volunteer work solely on meeting needs of the tribal community.

- **Dodge County** Master Gardeners annually organize community gardens in three communities. Because many new gardeners have limited English language skills, they publish their garden newsletter and garden signage in both English and Spanish.

- **Hennepin County’s** Vegetable Growing Basics program is an urban garden education program that graduated 66 participants in 2012. Responding to participant needs, classes at two sites were taught in Spanish.

- A composting workshop was conduct in Hmong language in an immigrant housing complex in **Ramsey County**. This met a county goal to reach Hmong families with education that would encourage residents to compost and use other environmental best practices.

- **Winona County** Master Gardeners and local Hmong gardeners/farmers shared information on vegetable gardening in Minnesota. Master Gardeners created a demonstration garden to show good growing practices that minimize erosion in the hilly southeastern Minnesota terrain and to promote sound pest management practices. They introduced Hmong gardeners to plant varieties best adapted to the local plant zone. They helped Hmong farmers introduce to others in the Winona community new types of vegetables typical to Hmong culture.

- **Renville County** Master Gardeners presented a session on raised bed vegetable gardening to residents of the Lower Sioux community. Associated with a State Health Improvement Program grant, the number of raised beds in the community increased from 8 to 22.

6. **We use hands-on activities and gardens to provide environments for healing, enrichment and vocational skill building.**

- Organized through **Anoka County** Master Gardener program in 2012, a team of Master Gardeners works year-round with adults with cognitive and developmental disabilities at Merrick, Inc. Master Gardeners receive specific training to work with this adult population. They then provide regular hands-on learning sessions for the participants in the Merrick, Inc. life-enrichment horticulture program.

- **Goodhue County** Master Gardeners helped Mayo Red Wing Health Center develop a healing garden. They conducted informational tours in the garden in 2012. Similarly, Master Gardeners in **Wright County** created a healing garden for the Cancer Care Center at the hospital in Buffalo. In **Rock County**, Master Gardeners continue their ongoing work with the Sanford Hospital Healing Garden, a garden they were instrumental in starting. This year they engaged teens in a day of garden maintenance.

- Leonard Gloeb, an Extension Master Gardener in **Ramsey County**, started a horticulture project with patients at St. Paul Children’s Hospital nearly two decades ago. In 2012 he reached 22,000 volunteer hours. Now a team of Master Gardeners join him in weekly visits with patients. Children pot a plant, water it with a syringe, and keep it with them to take home. Patients become familiar with medical supplies in non-threatening ways. They get to nurture

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*Photo: A patient at St. Paul Children’s Hospital gets guidance from a Master Gardener to use a syringe to water her newly potted plant.*
and care for a living plant while they are sick and need care and nurturing themselves.

- **Olmsted County** EMGs work on accessible gardening projects at a rehabilitation center where patients are recovering from a stroke or chemotherapy. Classes are geared toward activities the patients can do at home when they leave the facility.
- Extension Master Gardeners in **Mower, Pine and Rock Counties** provide assistance to nursing homes and residents. They have introduced raised bed gardens and assist residents in planting, mostly with plants that yield fresh garden produce.
- **Isanti County** Master Gardeners continue to provide gardening help and assistance to military families through the County’s Yellow Ribbon program.

7. **We help new homeowners increase property values and improve neighborhood aesthetics when we partner with Habitat for Humanity.**

Working with new homeowners, Extension Master Gardeners provide instruction on plant selection, installation and maintenance. In doing so, both plants and new relationships grow.

- Extension Master Gardeners in **Anoka, Crow Wing, Hennepin, Nicollet, Ramsey, and Washington Counties** all report working with Habitat for Humanity. Collectively they assisted 38 new homeowners.
- **Ramsey County** began a follow up program with previous clients to provide information about ongoing maintenance.

8. **We promote gardening through libraries, books and scholarships.**

One way to stimulate an interest in gardening and nature is through books and incentives to study horticulture. Libraries have also become good partners in delivering educational classes.

- A growing number of counties find that public libraries make good partners in delivering classes and other educational programs. For example, **Aitkin County** EMGs conducted a five session garden series at both Aitkin and McGregor libraries and served 121 people.

- **Winona County** Master Gardeners have a library grant program that provides funds to schools to purchase gardening themed books. In 2012 it is estimated that 617 youth benefitted from this outreach.
- **Becker County** Master Gardeners provide books on gardening to a local woman’s shelter. They then advise and assist clients in planting vegetables and flowers.

9. **We engage in applied research in collaboration with Extension educators and partners like the Minnesota Department of Agriculture.**

Extension Master Gardeners assist faculty in adding new knowledge to the field of horticulture and in formulating decisions that impact communities.

- Master Gardeners in **Kanabec County** continued their efforts to care for and record data for one site of a hardy shrub rose trial conducted by an Extension educator.
- **Over 100 Extension Master Gardeners** across the state participated in the 2012 seed trial program, conducted this year under direction of a volunteer committee. Across the state Extension Master Gardeners grow selected garden seed varieties, evaluate specified growth variables and submit their data for a statewide report. The Minnesota Horticultural Society publishes the report annually.
- In an effort to plan for anticipated destruction of ash trees resulting from Emerald Ash Borer, **Crow Wing, Kanabec and Minnesota River Valley** Master Gardeners assisted university staff and municipal officials in conducting tree inventories in the cities of Brainerd, Mora and Mankato.
- Master Gardeners from several metro counties began a multi-year project to evaluate biochar as a soil amendment for vegetable and flower gardens. Biochar is a byproduct in the production process that turns biomass into transportation fuel. Three applied research gardens were established in Minnesota, along with several in Iowa. This applied research project is part of a multi-state CenUSA Boichar project funded by a USDA NIFA grant.
10. We use gardens to teach as well as to be inspired.

Seeing specific plants or best gardening practices applied in a teaching garden or a real home landscape is a practical and effective way to teach a gardening concept. Teaching gardens in public places are a venue a growing number of counties use to teach classes or convey garden education through educational signage and literature. Garden tours that include instruction or ‘Ask a Master Gardener’ booths at each site are becoming a popular way for Extension Master Gardeners to deliver education.

- Master Gardeners in Isanti, Winona, Kanabec, Steele and other counties incorporate a demonstration vegetable garden in local community garden projects. The garden plot becomes a teaching lab. Garden produce from the plot is donated to a local food shelf.
- St Louis County Master Gardeners designed a series of demonstration vegetable gardens to illustrate the amount of nutritious food that could be produced in a small space. Plot designs and recipes that incorporated the produce were available to the public.
- Carver-Scott, Dakota and Anoka Counties maintain teaching gardens on public grounds where they host regular evening garden classes during the summer. Interpretive signage provides a permanent educational component for the gardens. The ongoing development of the Discovery Children’s Garden in Red Wing is a similar project created by Goodhue County Master Gardeners.
- Demonstration gardens, often used to teach about a specific plant species or use, are maintained by Lake of the Woods, Minnesota River Valley, Nicollet, and Washington Master Gardeners.
- Olmsted County Master Gardeners have worked in partnership with the Mayowood Estate in Rochester for nearly 20 years. They have been integral in restoration of the grounds at this historic site. They have taught others who assisted them in doing the restoration. They also use the site for teaching and tours.
- Garden tours organized and hosted by Lake, Murray, Hennepin, and Olmsted Counties provide a popular way to engage the public in learning about plants and best practices. The tours become a fun outing as well.
11. We deliver a lot of gardening and horticulture education in a single event using the Horticulture Day model.

During late winter and early spring in communities across Minnesota you’re bound to find a horticulture day event, with a name like ‘Let’s Get Growing’, ‘Growing Green’, or ‘Burst into Spring’ organized and hosted by local Extension Master Gardeners. A keynote speaker, multiple workshops conducted by Extension staff and Master Gardener volunteers, a vendor fair and often a silent auction to generate revenue for the local program is the format.

In 2012, these popular events were conducted in 25 counties. Collectively, over 3,300 people participated, and that does not include the hundreds of Extension Master Gardeners working behind the scenes and up front to make the events run smoothly. In 2012, Extension Master Gardener programs in these counties reported hosting a horticulture day:

- Anoka
- Carver-Scott
- Chippewa-Yellow Medicine
- Chisago
- Clay
- Cook
- Crow Wing
- Douglas
- Houston
- Isanti
- Itasca
- Le Sueur
- Lyon
- Minnesota River Valley (Blue Earth)
- Olmsted
- Otter Tail – East
- Otter Tail – West
- Pennington
- Pine
- Sherburne
- St. Louis
- Stearns
- Washington
- Winona
- Wright

12. We use news media and social media to provide research-based information to help individuals solve problems and to educate the greater public.

Newspapers
Pick up a local newspaper most anywhere in the state and you’ll likely find a horticulture column or article written by an Extension Master Gardener. In 2012, 28 counties report that Master Gardeners wrote news articles. In total they produced more than 420 different newspaper articles.

Radio
In some counties it’s weekly, in others once a month. In some counties it’s live talk, in others it’s recorded. In 2012, 12 counties report that Extension Master Gardeners produced radio show. In total, 92 different radio shows or taped educational messages were produced.

Television
In 2012, 7 counties report that Extension Master Gardeners produced television shows. These are often done through local cable television stations. Becker County Master Gardeners produced 44 shows. Minnesota River Valley Master Gardeners produced 30.

Social Media
Facebook has become popular way to reach today’s public. In 2012, 10 county Extension Master Gardener programs report hosting Facebook pages, and others are making plans to do so. Two counties can also be followed on Twitter. Several counties use YouTube videos to promote events.