

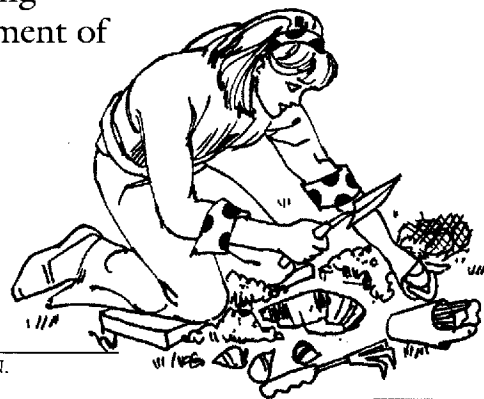
Master Gardener Projects— Making Connections

Mary Hockenberry Meyer

The diversity of projects on which MGs work varies widely, but includes horticulture hotlines; teaching in schools and community education programs; plant diagnostic clinics at local libraries, farmers' markets, and garden centers; horticultural therapy in hospitals and nursing homes; community gardens and landscaping projects; information booths and displays at county and state fairs; and writing newspaper columns and magazine articles.

By volunteering in specific projects, MGs make connections in their communities—connections that provide themselves and participants with a sense of place and purpose with the creative and nurturing nature of horticulture. MGs provide the educational link between professors with research findings at the university and the homeowner level, making environmental decisions about yard waste, water quality, and pesticide use. MGs bring time, people, and organizational skills where cooperative extension agents and specialists bring facts, data, and research expertise. Although typical impact statements are usually compiled in terms of people contacted, hours volunteered, or years of service, we have only begun to measure the value and qualitative effects of MGs. As we continue to realize the environmental impact and value of horticulture on our daily well-being, MGs will become increasingly more valuable as environmental stewards and teachers of horticulture.

In preparing this Master Gardener 25th Anniversary compilation of papers for *HortTechnology*, many states submitted descriptions of projects and programs in which MGs are involved. The following projects show the diversity, dedication, and long-term commitment of MGs.



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Master Gardeners and the Greening of a Children's Hospital

The Kluge Children's Rehabilitation Center (KCRC), a part of the Children's Medical Center (CMC) at the University of Virginia Health Sciences Center, is an oasis for children and their families recovering from serious illnesses or accidents. Children who come to KCRC have disabilities including, but not limited to, traumatic brain injury, spinal cord injury, cerebral palsy, severe burns, behavioral problems, developmental disabilities, and amputations.

Horticulture therapy has been part of the Recreational Therapy Department at KCRC since 1986, when the playground area containing one raised bed was planted with seasonal vegetables and flowers. Later, two raised beds were designed and built by the local Rotary Club. In 1988 Giant Foods Inc. donated a 10 × 24-ft Victory Garden greenhouse, which made horticulture therapy possible year-round and created possibilities for the program to become self-sustaining by having annual plant sales.

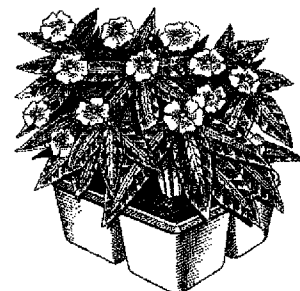
The program supervisor (a certified therapeutic recreation specialist) contacted the Piedmont Master Gardener Association for horticultural knowledge and expertise. Two Master Gardeners (MGs) began coming to KCRC weekly. The greenhouse was soon filled to capacity and the gardens were planted and cared for. Bluebird houses, squirrel and birdfeeders and birdbaths were installed. Bunnies and bunny hutches along with parakeets for the greenhouse were donated by MGs.

More volunteers came as the program expanded. Four annual plant sales were held throughout the year making the horticulture therapy program self-sustaining. Houseplants were distributed and maintained in offices, family lounges, school rooms, conference, and therapy rooms. The homelike atmosphere that the plants provided softened the institutional quality of the facility and was appreciated by all.

For 2 years, the horticulture therapy program has received America the Beautiful Grants from the Virginia Department of Forestry, enabling the purchase of trees and weekly horticulture activities for patients and families at KCRC.

Currently at least four MGs volunteer weekly, working in the greenhouse or gardens and or answering gardening questions from parents or staff. MGs have played a key role in developing the concept of a Children's Healing Garden, the next development for the program. The plan is to transform a hot, unshaded concrete area adjacent to the building into a green natural space with shade trees, arbors, fountain, play structures, benches, and handicapped-accessible pathways. It will be a place for play, meditation and prayer, nature education, and horticulture therapy and to honor the memories of children who have died. The Healing Garden will address the needs of bereaved parents by creating a special place for the annual memorial service. By helping parents honor the memory of their children, the garden will aid in the grieving and healing process while also serving children and their families in the present and future. All this is taking place within a natural environment where plants, animals, and play heal the body, mind, and spirit.

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Master Gardeners Handle Horticulture Hotline

The Henrico County (population 235,000 near Richmond, Va.) office of Virginia Cooperative Extension depends heavily on Master Gardener (MG) volunteers to meet the demands from citizens for environmentally responsible horticulture information via an organized telephone hotline. The hotline is staffed 5 days a week, year-round. During the busiest time of the year, April through October, the work is divided into two 4-hour shifts. Although the number of calls varies, it is not unusual for a volunteer to handle an average of 25 to 30 calls per shift.

Preparing for the hotline begins in the classroom portion of MG training. Once classroom training is complete, the interns are paired with a veteran MG who gives them on-the-job training during two work shifts on the hotline. Two environmental horticulture agents on staff are usually available to assist with questions. MG interns are required to spend at least 20 of the 50 total hours of their internship year staffing the hotline.

Customer satisfaction with the hotline has been determined by surveys to at least 150 residents selected randomly from the telephone logs kept during the year. The survey consists of four short questions and an opportunity to share additional comments. In 1996, of those callers surveyed, ≈95% indicated that they had received a prompt response and 100% indicated that the response was courteous. Seventy-five percent said that they had put the recommendation received into practice (others said that they had not yet had a chance to do so, or that their inquiries did not involve a recommendation; 12% indicated that they did not put the recommendation into practice.) Of those putting into practice a recommendation, 92% indicated that they were satisfied with the results. Additional comments indicated the callers' intentions to continue calling the hotline because they found it a useful service.

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Weather Watchers

Master Gardeners (MGs) in Kitsap County on Washington's Olympic Peninsula have developed a network of weather watchers who record daily temperatures and rainfall in 30 areas throughout the county. Information from these reports is entered into a computer database and a monthly Weather Watchers Report is included in the *MG Newsletter*. A compilation of these reports, along with a map of the weather stations is available at many plant diagnostic clinics to help gardeners pinpoint their own neighborhoods and find the average high and low temperatures and average rainfall amounts for their specific areas of the county. Since 1995, the project has been featured in local newspapers and a daily report is provided in the Bremerton Sun paper. This spring, the National Weather Service decided to include these local statistics in their Western Regional Climatic Conditions database.

Patt Kasa, Program coordinator, Cooperative Extension, 614 Division St. MS-16, Port Orchard, WA 98366.

Mast Way School Garden Project

In 1995 Master Gardeners (MGs) began a school landscaping project at Mast Way School in Lee, N.H. A recent expansion had left a barren 11,000-ft² courtyard. With Parent-Teacher Organization (PTO) input, a mission statement was expanded to include not only plants but areas for wildlife, outdoor instruction, student gardens, and relaxation. The garden committee was expanded to include a professional landscape designer and a nurseryman. Other school courtyards were visited, soil tests were taken, and landscape plans were defined including costs. About \$5000 was needed to cover the cost of patio bricks, grass seed, and plant materials. The PTO assisted with fundraising, and the trees were donated as memorials from parents and local community members. Volunteers from the community planted the garden with the direction of MGs. Two MGs have logged >100 hours each on this project. Starting plants indoors is part of a 12-week instructional unit for third and fourth graders in the school. Most classrooms maintain their own garden site, which produces flowers and vegetables.

Gael Grant, Master Gardener, Strafford County, 168 Wednesday Hill Road, Lee, NH 03824.

Maryland Inmates Become Master Gardeners

The Patuxent Institution, a maximum-security, treatment-oriented, coeducational correctional facility in Jessup, Md., joined forces in 1996 with Maryland Master Gardeners (MGs) to launch a MG program for inmates. Nine MGs from two county programs and four cooperative extension service professionals from the Home and Garden Information Center and Baltimore City Extension office provided 65 hours of classroom and hands-on training for the first crop of 12 inmates.

In 1995, Patuxent Institution received a grant to establish a horticultural therapy program, which would address the needs of substance-abusing, youthful offenders. The program's guiding philosophy is that young offenders can learn prosocial values and behaviors through horticultural training. Furthermore, by growing plants organically, without chemical fertilizers or pesticides, inmates can learn to achieve personal growth and productivity without drugs. In the past year and a half, this program has flourished with administrative support.

In Fall 1995 and Spring 1996, two carefully screened groups of offenders took an initial "Gardening to be Drug Free" course, to learn basic gardening skills and to relate their experiences in the gardens with their lives through group therapy. A subset of these selected inmates then moved into the more formal MG training, using the *Maryland Master Gardener Handbook* for a guide. Upon graduation (they must pass a 200-question exam) this year's graduates will be responsible for helping to maintain the prison grounds and for mentoring next year's trainees.

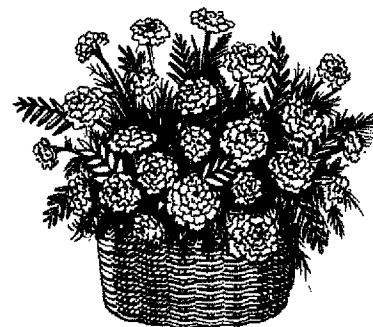
Unlike many of their more conventional counterparts, these MG trainees were able to apply the coursework directly in the field. The inmates have built compost bins and barrels, cold frames, and a 18 × 36-ft greenhouse. They also have planted fruit trees, grapes, and brambles and have dug and planted extensive flower and vegetable beds. The participants can also earn volunteer credit hours for their MG certificate by maintaining hundreds of tree seedlings for the Maryland Department of Natural Resources' Treemendous Maryland program. Future plans include donating produce to homeless shelters and food banks.

The program has a strong vocational component; offenders are exposed to many aspects of horticulture and learn skills necessary for employment in the green industry.

Perhaps of greater importance, though, has been the program's positive effect on inmate behavior. On a recent visit, an inmate remarked, "I can't wait to get out here in the garden. It's a chance to give life, to take care of things, to be productive and not destructive."

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Debbie Kafami, Director of research, Patuxent Institution, P.O. Box 700, Jessup, MD, 20794.



Building Community Partnerships through Educational Gardens

Three years of planning preceded the grand opening in June 1997 of the Discovery Garden, a 1.5-acre site at Washington State University's research and extension facility in Skagit County. An important advantage of the site is high visibility, since it is adjacent to a major road traveled by local residents and millions of tourists who visit the area for recreational purposes.

The goals of the Discovery Garden are to inspire and educate the public, develop a garden for community use and enjoyment, and enhance the quality of the environment of Skagit County. The garden is open to the public 7 days a week with signs that allow visitors self-guided tours. A wide variety of ecologically sound pest management methods are demonstrated in the garden. Workshops on various subjects are held throughout the year. The design includes several theme gardens: an Enabling Garden for persons with various physical abilities; a Naturescaping Garden; a Children's Garden; an Ethnobotanical and Herb Garden; an Ornamental Garden; a Vegetable and Fruit Test Garden; and an educational pavilion and composting and picnic areas.

Planning efforts involved defining a philosophy and purpose for the garden, assessing local needs, outlining short and long-term objectives and goals, and developing a general layout for the garden. Washington State University MG Julie Hubner, is the overall garden project leader, assisted by a Board of Directors. Each of the garden divisions has a designated MG coordinator and committees who were charged with designing their particular garden, estimating materials and plant costs and needs, projecting a work schedule for the year, establishing the garden, and maintaining it the first year.

A funding team of eight MGs developed informational packets, which were sent to area businesses and organizations with potential for donating resources. Each contact received an introductory letter, followed by a personal visit or phone contact by members of the team. Community support for the Discovery Garden has been overwhelming. More than 150 trees and shrubs and 300 perennial plants were contributed. Nearly 40 retail and wholesale nursery operations and 150 individuals, business, corporations, and service clubs donated cash, services, materials, or plants to the garden. The Mount Vernon City Police are helping to develop a display area to demonstrate landscaping to deter crimes. Job Corps volunteers assisted with the installation. An MG who is an architect donated the design plans for the entrance, the educational Pavilion, and the tool shed. An MG who is a retired insurance agent volunteered his expertise to address questions of insurance and financial liability. Two professional landscape designers contributed expertise and drawings. An MG who is also a retired entomologist developed an insect identification display. A professional graphics designer donated designs for promotional T-shirts, media materials, and *The Discovery Garden Thymes* newsletter. The first promotional display was created by high school art students.

The number of volunteer hours given to the project increased from 335 in 1994 to 400 in 1995. In 1996, 65 MG volunteers contributed 2280 hours to the Discovery Garden. Applications for positions in the MG program have quadrupled since the planning began for the garden.

In addition to the wealth of support provided by the community, the rose, dahlia, iris, and native plant societies are planning to establish gardens alongside the Discovery Garden. The local homeless shelter benefits from the fruit and vegetables harvested from the Garden. Teachers in community elementary schools are working with their classes to help plan the Children's Garden. Local nurseries and seed companies will evaluate adaptability and acceptability of new plant varieties as they are tested in the garden.

The Discovery Garden is a model for delivering education to the public, creating partnerships in the community, inspiring volunteers to achieve their potential, bringing the farming and gardening communities together, and serving the citizens of the region.

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Julie Hubner, Washington State University Master Gardener, Washington State University Cooperative Extension, 220 East College Way, Suite 180, Mount Vernon, WA 98273.

A Miraculous Learning Oasis in a Low Desert Garden

Master Gardeners (MGs) in a rough community in central Phoenix, Maricopa County, Ariz., facilitated the creation of an organic market garden managed by inner-city youth. The three key components of the project are 1) creating and managing a garden for gourmet vegetables, which will teach youth marketable horticultural skills, planning, team work, and responsibility; 2) marketing the vegetables, which will teach money management skills and planning; and 3) assisting youth in finding and keeping jobs in the horticulture industry.

In this area of Maricopa County, residents call the police three times more frequently than the rest of the metro area. Of all juveniles sent to court for violent crimes, 28% are from this community, which is primarily Hispanic and African-American. Gang related violence and school dropout rates are particularly high. In Maricopa County an estimated 70.8% of African-American males are referred to juvenile court by age 17 and 42.9% of Hispanic males are likely to have a record by this age.

The 3.5-acre lot was cleared of debris, fenced, and cultivated to raise organic produce for sale in upscale restaurants and grocery stores and a local farmers market. The garden is operated and managed by at-risk adolescents from the surrounding community who work 4 to 8 hours a week. The neighborhood associations recruit mentors from the community to work in the garden with the youth. The mentor's role is to establish a supportive relationship with the young people. Since the youth and the mentors live in the same community, they will be able to interact frequently and over time.

The youth are encouraged to be involved with all aspects of the operation from planning, planting, and maintenance to sales, marketing, and accounting. They receive training from MGs in planting cultivation and harvesting; irrigation, landscape design, and maintenance; marketing skills such as customer service, retail client relationships, and basic money management; job readiness skills including writing a resume and interview techniques; and leadership, communication, and presentation skills. Working with the Arizona Nursery Association, MGs are developing a Junior Certified Nursery Professional program for Miracle Garden youth.

To determine the affect of the garden, the following areas are being examined: juvenile crime and vandalism within the targeted neighborhood as measured by police records; truancy as measured by school records; misbehavior as measured by school, parent, and self-reports; substance abuse as measured by police and self-reports; and the neighborhood residents' perception of their personal safety and general health of the community.

Lucy K. Bradley, Extension agent, Urban Horticulture, University of Arizona Cooperative Extension, 4341 East Broadway Road Phoenix, AZ.

Master Gardeners and Horticultural Therapy

Master Gardeners (MGs) can be seen throughout the state of Minnesota assisting with therapeutic horticulture programs including delivering activities and projects, maintaining gardens and greenhouses, and managing overall programs. Working in therapeutic horticulture, MGs have the added incentive to bring the people to the plants and the plants to the people. Barb Gasterland, MG at Courage Center Adult Day Care, Golden Valley, Minn., facilitates the garden for people recovering from traumatic brain injury. Gasterland works with the day program staff to plan weekly activities, care and maintain plants, and develop new garden program initiatives (such as newly constructed raised bed planters). Her strong leadership skills and love for people and plants make this project a perfect fit.

Sue Murray, MG and retired special education teacher, works on the care and maintenance of the Sojourn Adult Day Care garden, Spring Park, Minn. Each week Murray and members of Sojourn see that the gardens are watered and maintained. She also assists in the facilitation of intergenerational gardening activities. Living nearby in her retirement, caring for the plants at Sojourn is a wonderful opportunity for Murray to share her skills. Lois Ankrum, MG from Winona, Minn., works at the local Day Achievement Center for adults with development disabilities. When her work day is finished, Ankrum volunteers her time to facilitate the Day Center's garden and greenhouse program. Here, clients are given the opportunity to work and learn about plants throughout the year. When asked if she ever gets tired of her volunteer work at the Center, Ankrum quickly answers "No" and says its her most rewarding experience when she can turn someone on to plants.

Jean Larson, Horticulture therapist and Master Gardener, Minnesota Landscape Arboretum, 3675 Arboretum Drive, Chanhassen, MN 55317.