The purpose of the WSU Extension Master Gardener Program is to provide public education in gardening and environmental stewardship based on research at WSU and other university systems. Volunteers are trained to be community educators about issues of importance in their local communities that enhance natural resources, sustain communities, and improve the health and wellness of Washington residents.

The WSU Extension Master Gardener Program has a rich history, beginning in the Seattle area in 1973, and spreading from most counties in Washington to the entire United States and abroad.

<table>
<thead>
<tr>
<th>Total certified Master Gardener volunteers:</th>
<th>Total MG volunteer hours reported:</th>
<th>Average hours per MG volunteer:</th>
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<tbody>
<tr>
<td>4,895</td>
<td>409,040</td>
<td>83.6</td>
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 WSU Extension Master Gardeners Teach Food Gardening

MG Volunteers taught 220,863 first time gardeners.

Research links people’s learning to grow vegetables with improved eating habits and health. The more experience people have with food, the more likely they are to eat it, meaning they eat more fruits and vegetables than non-gardeners eat. Diets high in fresh fruits and vegetables are known to prevent obesity, diabetes and other chronic illnesses. Seniors who garden eat more fruits and vegetables, are more physically active, and report a higher quality of life than non-gardeners.

FOR INSTANCE:

In Cowlitz County, MG volunteers offered the Home VEG (Vegetable Educational Garden) program where they built raised beds at homes in the community for people to plant a vegetable garden. The MG supplied a 4 x 8-foot raised bed, soil, seeds, and plants starts. People receiving a raised bed were assigned a mentor to answer their gardening questions. Residents wishing to be selected for the program were required to maintain the garden for 3 years, attend a class provided by the MG volunteers on vegetable gardening, and do all the work to maintain the garden. The goal is to help people grow their own food and to promote self reliance. Participants said, “This was a great experience for my family. We ate better and enjoyed trying new veggies.”

“It was great to pick lettuce and beans from my own garden to eat for lunch or dinner that very day.”

“I enjoyed the fact if I needed answers or advice it was available to me.”
**MG Volunteers taught in 151 community gardens.**

Studies of Community Garden participants show more benefits to gardeners than just better access to fresh food and nutrition. Community gardens foster increased community involvement and pride among residents, increased neighborhood safety and activity, increased activity and sense of well-being, and less isolation among residents. Additionally, community gardens bridge ethnic, economic, and age differences in neighborhoods. Over 48 tons of produce were donated from these gardens to food banks or other community support agencies in Washington.

**FOR INSTANCE:**

In **Pierce County**, MG volunteers started a gardening project with inmates at the Washington Corrections Center for Women in Purdy in 2010, and now in 2012 much of the grounds are covered in gardens. The women grow strawberries, zucchini, potatoes, tomatoes, lettuce, carrots, beets, winter greens, and other vegetable crops. In 2012 the women grew over 11,000 pounds of produce that went into the cafeteria defraying food costs and increasing the amount of vegetables the women consumed. The women who work in the gardens were ecstatic to harvest enough strawberries in one day for every inmate to have strawberry shortcake.

In **Mason County**, the Catalyst Park Food Bank Garden and Orchard produced over 2,000 pounds of fresh produce that was donated to Saints’ Pantry food bank clients. Community gardeners attended monthly education workshops taught by MG volunteers to learn timely growing techniques for their beds. A senior from Shelton High School used the garden as his senior project and learned how to grow, maintain, and harvest the food. The garden was always neat, tidy, and showed how to use sustainable gardening practices to grow nutritious, wholesome food. A Children’s Garden will be designed and installed beginning in 2013 with funds donated by the Optimist Club.

In **Benton County**, 2012 MG Bill Dixon provided leadership to the Benton-Franklin MG Program’s Plant-A-Row for the Hungry and Community Garden efforts. Because of his work the MG Demonstration Garden and MG volunteers donated 2962 pounds of produce to local food banks, feeding hungry residents in our communities and creating an awareness of the need for other local gardeners to donate their extra produce. In 2013, Bill will be leading an effort to help the City of Kennewick establish its first community garden in a local park in an area where many residents live below the poverty level. MG volunteers will continue to serve as mentors to other community food gardens and plan to hold mini-clinics and classes in the gardens.

**MG Volunteers taught 20,363 youth.**

School gardens create more positive attitudes among students regarding fruits and vegetables, leading to higher consumption of fruits and vegetables by students and their families who garden. Studies of students involved in school gardens show higher nutrition and environmental awareness, higher science test scores, increased self-esteem and interpersonal relationships, and better work and team skills than their non-gardening peers.

**FOR INSTANCE:**

In **Thurston County’s** Summer Children’s Garden Program, MG volunteers teach children ages 4–12 horticulture and environmental science education through fun and creative activities. Young gardeners are introduced to the art and science of gardening while developing community service values. From seed to harvest, the activities help young gardeners develop an appreciation of the environment and cultivate their minds to help serve others. This year, 146 children participated and over 627 pounds of produce were grown and donated to the Thurston County Food Bank.

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MG Volunteers taught audiences with special needs.

In Spokane County, “Gardening for Life” MG volunteers specialize in teaching people with compromised abilities to continue to garden after an accident, stroke, or other limiting condition. For the past several years MG volunteers have been assisting patients at St. Luke’s Rehabilitation Center to garden in raised beds. Patients receive task-oriented physical therapy and use specially adapted garden tools. Produce from the gardens is used on site or sold to visitors and staff, with proceeds going to fund the garden for the next year. Staff report increased motivation and success for many physical therapy patients.

From long term work at St. Luke’s, plus outreach to local assisted living centers, the Gardening for Life group has grown a reputation for building successful partnerships. In 2012 the local Shriners Hospital for Children worked with MG volunteers and donations of materials and labor from other community partners to build several portable gardening containers sized for children. The gardens were built to specifications provided by the Gardening for Life MG volunteers so that they could be accessible by wheelchair patients as well as more mobile children. The children grew vegetables and lots of flowers to beautify the hospital grounds. This project has opened the door to other partnerships with the Shriners Hospital, including the possible addition of drought-tolerant plantings to reduce water usage on the grounds.

 WSU Extension Master Gardeners Teach Sustainable Gardening Practices

MG Volunteers taught 24,604 residents how to conserve water and protect water quality.

Washington rivers, lakes and groundwater sources (aquifers) provide water for agricultural, residential, and recreational use and provide wildlife habitat. Safe, reliable sources of water must be maintained to meet the needs of our growing populations. Water-conserving garden practices such as mulching, efficient irrigation, planting drought tolerant plants, and xeriscaping are the most cost effective and environmentally sound ways to reduce the demand for our limited water supplies. Stormwater runoff has been linked to pollution of drinking water supplies and declining health of wildlife and fish species and has been identified as the #1 cause of pollution in the Puget Sound region. Urban gardening best management practices to protect water quality include reducing the use of pesticides and fertilizers, composting, mulching and using groundcovers to reduce erosion, grass cycling, and planting rain gardens.

FOR INSTANCE:

In Clallam County, the MG Program started a Rain Garden Mentor class using a small grant from the 12,000 Rain Gardens project. The effort has blossomed into fruitful relationships with the City of Port Angeles, the County Planning Department and the County Road Department, indicating that MG volunteers work on projects with a broad impact on the community in both rural and urban areas.

The City of Port Angeles has started a program that encourages homeowners to install rain gardens and other stormwater filtration/reduction systems. MG volunteers provide expertise on rain gardens and related systems, while the city provides incentives and engineering advice. County homeowners are required to install systems to mitigate surface water runoff that occurs because of development. Builders and homeowners have been very dissatisfied with the few options the county gives them for compliance. Because of the advice and educational opportunities that the MG Rain Garden Mentors offer, the county is willing to increase the number of options that homebuilders/owners have for complying with stormwater runoff mitigation.
MG Volunteers taught 21,610 residents to use Integrated Pest Management methods.

Integrated Pest Management (IPM) is a proven system of managing pests (insects, diseases and weeds) in ways that keep pest damage to a tolerable level for plant health and minimize threats to non-target species and environmental health. Master Gardeners teach cultural, mechanical, biological, and chemical methods of pest management, stressing plant health measures to prevent plant problems to begin with and using least toxic methods of pest control when necessary.

FOR INSTANCE:
In **Chelan County**, MG volunteers hosted an awareness weekend on pollinators and waterwise landscaping for people to learn about the importance of pollinators for our food production and to our environment. A variety of pollinators were featured during the event, but mason bees became the focus. Attendees learned about proper use of pesticides to help protect insect pollinators and learned about pollinator-attracting plants that thrive in the climate of the Wenatchee area with little or no pesticide use. People learned that an ideal garden has a balance of the right insects to control potential garden problems with the least amount of pesticide use. In addition, people toured a xeric garden to learn about native and xeric plants that thrive best in our environment, conserving water and reducing the need for fertilizers and pesticides. Attendees learned about mulching, efficient irrigation, and how to remove turf grass while still maintaining a colorful, pleasing landscape.

MG Volunteers taught proper tree planting and maintenance practices to 8,833 residents.

Research points to many benefits of a healthy urban and community forest, such as moderation of extreme air and soil temperatures, conservation of energy, improved air quality, reduction of stormwater runoff, lower noise levels, and increased wildlife habitat. For instance, a 25-foot tree can reduce heating and cooling of a typical residence by 8 to 10%. Trees modify the “heat island effect” in urban areas by evaporation through their foliage which cools their immediate surroundings. Roots and fallen leaves help hold soil together and protect it from erosion. These benefits result in benefits to residents and communities through energy savings and increased survival and health of other landscape plants. In addition, trees and plants enhance property values and community assets, which results in an increased tax base for municipalities.

FOR INSTANCE:
In **Spokane County**, MG volunteers worked with the city’s urban forestry department to develop a Tree Steward Guide for Spokane homeowners and property managers. Working in partnership with representatives from city and county governments, as well as local utilities and tree conservation groups, MG volunteers researched proper planting and care of trees and produced a guide that is easy to understand, without sacrificing scientific accuracy. The grant funded guide will be available in mid-2013, with online and hard copy versions.