

1. Program Name and Key Personnel

Program title: OSU Extension Master Gardener™

Name of working group: Home and Community Horticulture

Lead faculty member(s), phone number(s), academic department(s), campus or county:

Gail Langelotto, (541-602-5175), Horticulture, Statewide Coordinator
Patty Driscoll, Horticulture, Statewide Program Assistant

Sam Angima, Agent, Staff Chair, Ag/MG, Lincoln County
Neil Bell, Agent, Horticulture, Marion and Polk Counties
Tal Blankenship, Horticulture Instructor, Josephine County
Chip Bubl, Agent, Staff Chair, Agriculture/Horticulture, Columbia County
Steve Castagnoli, Agent, Tree Fruits/Horticulture, Hood River County
Brian Charlton, Agent, Ag/Crops/MG, Klamath County
Mary Corp, Agent, Agriculture/MG, Umatilla County
Janice Cowan, Agent, 4 H/MG/ Horticulture, Baker County
Elizabeth Daniel, MG Program Assistant, Hood River County
Jamie Davis, Horticulture Instructor/MG - Lake County
Amy Jo Detweiler, Agent, Horticulture, Deschutes, Crook, Jefferson Counties
Steve Edwards, MG Program Assistant, Deschutes, Crook, Jefferson Counties
Barbara Fick, Agent, Horticulture, Benton and Linn Counties
Beret Halverson, Metro MG Program Assistant, Multnomah, Clackamas, and Washington Counties
Clint Hett, MG Program Coordinator, Union County
Sunny Hunt, Agent - OFNP/MG, Clatsop County
Joy Jones, Agent, Ag/4-H/MG, Tillamook County
Lynn Long, Agent, Ag/Hort/MG, Wasco County
Tracy Martz, Agent – Master Gardener/4-H, Coos County
Linda McMahan, Agent, Chair/Ag/Hort, Yamhill County
Weston Miller, Agent, Hort/MG, Multnomah, Clackamas and Washington Counties
Shelley Palmer, MG Program Assistant, Curry County
Ross Pehhallegon, Agent, Ag/Hort, Lane County
Steve Renquist, Agent, Ag/Hort, Douglas County
Bob Reynolds, Hort. Instructor/MG, Jackson County
Linda Renslow, MG Program Assistant, Lane County
Kristy Weidman, MG Program Coordinator, Klamath County
Jordis Yost, Metro, Multnomah, Clackamas, and Washington Counties

2. Description of the program

OSU Extension Service Master Gardener™ volunteers expand Oregon State University's ability to reach and assist the citizens of Oregon. After receiving extensive training from OSU Extension Service faculty, Master Gardeners are certified to provide non-biased, science based information to citizens who are seeking a diagnosis, advice or information on a plant, garden or home horticultural issue. The title "Master Gardener" (which was trademarked by Oregon State University in 2001 to preserve the title's integrity) is

recognized by Oregonians to identify a knowledgeable advisor who represents Extension and Oregon State University . For many Oregonians, the Master Gardener program provides a window to the services and activities of Extension and Oregon State University.

When the Master Gardener program began in the mid-1970's, its focus was primarily directed at diagnosing plant problems and offering solutions. While still a major focus, Extension faculty and volunteers working in the Master Gardener program also develop and deliver a variety of educational programs that address critical issues in the community. These programs include: least toxic and integrated pest management, water quality protection, yard waste management and composting, sustainable landscaping, organic gardening, waterwise and fire resistant gardens and adaptive gardening. Master Gardeners are encouraged to find educational opportunities, or to help plan and develop outreach activities and programs, that will help extend Oregon State University's education mission more effectively to all Oregonians.

Currently, the Master Gardener program has a presence in 28 of Oregon's 36 counties (see 'Geographic Extent of the Program', for more information), and 3,504 Master Gardener volunteers (Table 1). After completing the 9-12 week training period, the volunteers are much more aware of Oregon State University, its Extension Service, the College of Agricultural Sciences, and how they all tie together to provide extended education to the citizens of Oregon. Very little advertising is necessary to attract new applicants each year. In fact, many counties maintain waiting lists for their annual Master Gardener training course.

In 2008 the program was in the able hands of 30 Extension faculty and program assistants. OSU Extension faculty and staff in each county or group of counties directed their efforts toward recruiting, training, and managing the activities of their trained volunteer staff. While the Master Gardener program requires adept managerial skills and high input by county Extension faculty and staff, the investment can result in substantial dividends. For example, the service provided and the public contacts made by Master Gardener volunteers amplify the ability of Extension faculty and staff to provide service in their community (Table 2). This embodies the historical foundation of the Master Gardener program: to provide a staff of trained volunteers who can extend knowledge and assistance to more people and through more channels than would be possible by Extension faculty and staff, alone. The interaction between Master Gardener Extension faculty and staff and Master Gardener volunteers thus puts meaning in the term "extended education".

The value of the Oregon Master Gardener program can be examined in several ways to gain a perspective of the importance it plays in OSU Extension's community horticulture educational efforts. First, the program is one of Extension's most popular volunteer management programs, as measured by the number of new volunteers who seek entry each year (838 in 2008), as well as by the number of volunteers who elect to remain in the program for succeeding years (2644 veterans in 2008). Second, a measure of the need for the program can be seen in the number of people who come to the Master Gardeners for information and advice (i.e. public contacts). Finally, a FTE (full-time equivalent) monetary value can be determined, based on the hours that the volunteers donate to the program.

In 2008 there were **3,504 active Master Gardeners** who made at least **162,369 public contacts** and donated at least **173,269.5 hours** to the program. The hours donated to Extension by Master Gardener volunteers resulted in approximately **85 FTEs** for Extension (calculated as hours donated divided by 40 hours*52 weeks=2040 hours worked by 1 FTE). This translates into a dollar value of approximately **\$3,380,487.95** (calculated as hours donated multiplied by \$19.51, the dollar estimate per volunteer hour for 2007¹).

¹ http://www.independentsector.org/programs/research/volunteer_time.html

The range of hours donated by Master Gardener volunteers varied by county or regional program (Table 1). However, the number of hours donated by Master Gardener volunteers within a county could be explained by the total number of volunteers within that county ($r^2=0.77$, $F_{1,22}=74.7$, $P<0.0001$, Figure 1). Somewhat surprisingly, there was not a direct linear relationship between the total number of public contacts and the number of Master Gardener volunteers within a county ($r^2=0.11$, $F_{1,22}=2.7$, $P=0.12$, Figure 1). These relationships are robust to the removal of the Portland Metropolitan Master Gardener program, which is an outlier with regard to the total number of Master Gardeners participating in the program. Specifically, there are 916 Master Gardeners involved in the Portland Metropolitan Master Gardener program. The next largest program, Jackson County, reports less than half that number at 398.

Counties with relatively few Master Gardeners, such as Wasco and Umatilla counties (47 and 31 Master Gardeners, respectively), generated an impressive number of public contacts in 2008 (9,058 and 14,585 public contacts, respectively). This suggests that relatively small programs can have large impacts in their community, by holding events that reach a large number of people in a single or a few days. These events include the Wasco County Master Gardener Association “Sun-Splashed and Wind-Washed” garden tour and the “Spring Spectacular” and “Spring into Spring” garden shows in Umatilla county. An alternative hypothesis for the lack of a relationship is that counties vary in their reporting of public contacts (i.e. some counties report public attendances at conferences and events, where other counties only report contacts at Plant Clinics).

Volunteer Hours and Public Contacts

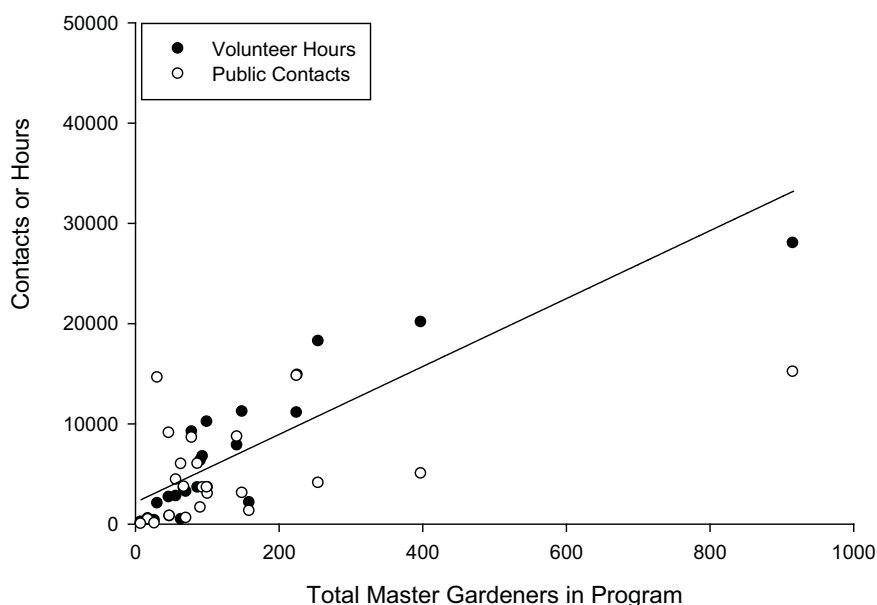


Figure 1. Number of volunteer hours and public contacts generated by Master Gardener programs in 2008, graphed as a function of the number of Master Gardener volunteers within each program.

On average, 72% of the 838 Master Gardener trainees who enrolled in on-site Master Gardener trainings completed their volunteer service obligation. However, the range of trainees completing service (23% to 100%; Table 1) across programs was quite large. The factors contributing these broad values are not immediately clear. It is possible that programs that rigorously interview prospective trainees before accepting them into the Master Gardener program are more likely to select Master Gardener trainees who are committed to completing the service requirement of the program. In addition, programs that have a mentorship program in place, where veteran Master Gardeners partner with new trainees, may be more

likely to retain and graduate trainees. These hypotheses are not mutually exclusive and are intended to generate conversation among Extension faculty and staff regarding how best to increase the retention of Master Gardener trainees.

On average, 63% of the 2644 veteran Master Gardeners chose to recertify in 2008, although the percent of veterans who recertified varied substantially across county or regional programs (19% to 100%; Table 1). Once again, the reasons for these differences are not immediately clear. However, it is important to note that recertification is not necessary to remain an active Master Gardener. Instead, recertification is required only for those Master Gardeners that serve in Plant Clinics or in another venue where they will be delivering a diagnosis or recommendation to those seeking advice for a home horticultural problem. Nonetheless, although recertification is not required, attendance at classes or other events that qualify for recertification credit helps to foster an informed and current corps of volunteers. Because Master Gardeners report that the greatest benefits of the program are educational², attendance at recertification events can be viewed as beneficial to both the Master Gardener program and to Master Gardener volunteers.

² Miller and Langellotto, in preparation. Benefits and impacts of the OSU Master Gardener Program.

Table 1. Training and retention of OSU Master Gardener volunteers in 2008.

County	Master Gardeners			Trainees Completing Service (%)	Veterans Recertified (%)
	Trainees	Veterans	Total		
Baker	15	3	18	33	100
Benton	23	119	142	91	19
Central Oregon*	33	59	94	48	90
Clatsop	10	149	159	70	26
Columbia	22	79	101	91	19
Coos	25	62	87	60	74
Curry	13	44	57	23	36
Douglas	48	207	255	85	41
Hood River	20	48	68	60	83
Jackson	74	324	398	99	40
Josephine	42	183	225	83	23
Klamath	23	48	71	64	74
Lake	0	8	8	NA	75
Lane	63	163	226	79	65
Lincoln	29	62	91	66	39
Linn	14	34	48	86	100
Marion	29	71	100	100	56
Portland Metro**	193	723	916	59	76
Polk	26	123	149	77	42
Tillamook	16	48	64	88	96
Umatilla	14	17	31	79	71
Union	22	5	27	23	100
Wasco	7	40	47	100	100
Yamhill	34	45	79	74	76
Statewide***	†43	NA	43	‡81	NA
TOTAL or MEAN ± SE	838	2664	3504	72 ± 5	63 ± 6

NA=Not Applicable

*Central Oregon includes Deschutes, Jefferson and Crook counties

**Portland Metro includes Multnomah, Clackamas and Washington Counties

***Individuals trained through the Statewide Master Gardener Program enrolled in the online Master Gardener course.

† In 2008, students enrolled in the online Master Gardener course pursued a Certificate of Home Horticulture, and not a Master Gardener badge.

‡The percent of trainees completing service, for the statewide program, represents the percent of students that passed the final exam and successfully earned a Certificate of Home Horticulture.

Table 2. OSU Master Gardener: Volunteer Service and Public Contacts

County	Hours of Volunteer Service	Number of Public Contacts^z	Mean Hours of Volunteer Service Per Master Gardener	Mean Number of Public Contacts Per Master Gardener
Baker	524	430	29	24
Benton	7823	8677	55	61
Central Oregon*	6,713	3,608	71	38
Clatsop	2,119	1,279	13	8
Columbia	3,628	3,000	36	30
Coos	3,613	5,976	37	69
Curry	2,749	4,389	48	77
Douglas	18,205	4,071	71	16
Hood River	3,527	3,682	52	54
Jackson	20,108	5,009	51	13
Josephine	11,082	14,752	49	66
Klamath	3,200	570	45	8
Lake	180	0	23	0
Lane	14,836.5	43,300	66	192
Lincoln	6,280	1,603	69	18
Linn	754	784	16	16
Marion	10,158	3,618	102	36
Portland Metro***	27,991	15,154	31	17
Polk	11,180	3,060	75	21
Tillamook	4,400	6,813	69	106
Umatilla	2,037	14,585	66	470
Union	340	50	16	2
Wasco	2,647	9,058	56	193
Yamhill	9,175	8,594	116	109
Statewide	NA	331	NA	NA
TOTAL or MEAN ± SE	173,269.5	162,369	53 ± 5	69 ± 21

*Central Oregon includes Deschutes, Jefferson and Crook counties

**Portland Metro includes Multnomah, Clackamas and Washington Counties

***Public contacts through the statewide Master Gardener program represent the number of people who attended the 2008 Gardeners Mini-College.

NA=Not Applicable

3. Geographic Extent of the Program and Master Gardener Associations

Currently, Master Gardener programs are active in 28 of Oregon's 36 counties (Baker, Benton, Clackamas, Clatsop, Columbia, Coos, Crook, Curry, Deschutes, Douglas, Hood River, Jackson, Jefferson, Josephine, Klamath, Lake, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Umatilla, Union, Wasco, Washington and Yamhill). In 2008, the program did not have an active presence in Gilliam, Grant, Harney, Malheur, Morrow, Sherman, Wallowa or Wheeler counties.

A total of 24 Master Gardener associations, which are separate non-profit entities from the OSU Extension Master Gardener program, were active in 2008. The Oregon Master Gardener association and its local chapters work to enhance and supplement the Oregon State University home horticulture program, by assuming responsibility for performing special tasks and engaging in continuous activities related to the program, promoting the wide dissemination of information available as a result of University study and experimentation and working with other gardening organizations to enhance gardening in Oregon, when appropriate.

Master Gardener associations contribute logistical support to their local Master Gardener program. Special events, such as the Central Oregon Master Gardener association's Spring Seminar and the Curry County Master Gardener association's Garden and Art tour are organized by association members, with guidance from program faculty and staff. However, the bulk of the planning and preparation is completed by the association and its members.

Association members pay dues to the Oregon Master Gardener Association, (OMGA), which is a statewide 501(c)(3) non-profit, as well as to their local association. Dues paid to OMGA and to Master Gardener associations are used to finance the activities of the associations, and may in part be used to contribute financial support to their local Master Gardener program and to their community (see section 10, Extramural Funding). However, OSU Master Gardener volunteers are not required to pay dues to the OMGA or their local chapter in order to be active in the OSU Master Gardener program. Furthermore, some counties, such as Baker and Union counties, have active Master Gardener programs that are not supported by Master Gardener Associations.

Beyond state borders, the OSU Master Gardener program has a national and an international presence. For example, counties that border California and Washington count individuals from these states as active Master Gardeners in their program. In addition, the fall 2008 offering of the online Master Gardener course included students from California, Idaho, Virginia and New Jersey, as well as the Republic of Georgia (of the former Soviet Union) and South Korea. In terms of activity on an international level, Extension faculty and OSU Master Gardener volunteers currently serve on the International Master Gardener Conference Search for Excellence committee. This conference, which convenes every other year, includes representatives from every state in the union, as well as 4 Canadian provinces (British Columbia, Ontario, Saskatchewan, Quebec). The next convention is scheduled for 2009 in Las Vegas, NV, where several OMGA members and OSU Extension faculty and staff plan to attend and will represent the Oregon Master Gardener program.

4. Flagship Programs and Actions

In December 2008, the Home Horticulture Working group met in Corvallis, OR, and decided that the two flagship programs of the OSU Master Gardener Program would be **Sustainable Gardening** and **Local and Backyard Food Production**. These areas have always been a focal point of Master Gardener trainings and service, and having formally decided upon these programs will help to guide

communications about the Program, basic and advanced training opportunities and planned Extension publications.

The following are brief descriptions of these flagship programs, and a few examples of actual services the Master Gardener program is providing to the public.

Sustainable Gardening . A ‘sustainable garden’ is defined as one where the gardener is able to meet their needs and expectations, without compromising the ability of future generations to meet their own needs. Lectures, workshops, seminars and Extension publications teach Master Gardeners and others how to adopt and maintain more sustainable gardening practices. Some of the efforts that align with this goal, many of which were initiated in 2008, are listed below.

OSU Certified Sustainable Landscape: In 2008, Steve Renquist initiated the OSU Certified Sustainable Landscape program in Douglas County. This program, which is modeled after the Florida Friendly Yards program, allows homeowners to self-audit their sustainable landscape practices. Homeowners who believe that they have achieved or surpassed a score of 70 out of 100 possible points can contact Douglas County Extension office to arrange for an in-person audit by Extension faculty or specially trained volunteers. Those homeowners that are certified as achieving a 70 or above are given a yard sign that announces their status as an OSU Certified Sustainable Landscape. The program has been very successful in Douglas County, and has spurred the creation of the Sustainable Landscape Specialist program in Lane County.

Online Courses: The online Master Gardener course, which was launched in 2008, emphasizes a sustainable approach to the installation and management of gardens and home landscapes. Proper plant choice and placement, integrated pest management (with a focus on cultural and biological controls), composting and judicious use of fertilizers are all featured as part of this course. In addition, Linda McMahan (Yamhill County) and Amy Jo Detweiler (Central Oregon) are collaborating on the Ecological Gardening online course. This course further emphasizes waterwise gardening, native plants, rain gardens and other sustainable gardening topics and techniques.

Waterwise Plants: OSU Extension faculty (Neil Bell, Amy Jo Detweiler, Steve Renquist, Chip Bubl, Linda McMahan) collaborated with municipal and non-profit groups to produce the popular ‘Water Efficient Plants for the Willamette Valley’ (2007). This publication is supported by postcards (which advertise efforts to conserve water in the garden with proper plant choice) and plant tags that are distributed at select local nurseries. In Central Oregon, Amy Jo Detweiler took a lead role in the production of ‘An Introduction to Xeriscaping in the High Desert’ (2005).

Gardensmart Oregon: Working with Oregon Public Broadcasting, the City of Portland, Oregon Sea Grant, The Nature Conservancy and the Oregon Association of Nurseries, Linda McMahan (Yamhill County) was a principal author of the Gardensmart Oregon booklet (2008). This booklet teaches homeowners about invasive plants (many of which have ornamental or attractive features) that may be in their yards and gardens, and offers suggestions for native and non-native ornamental plants that share similar forms, colors or other features with the undesirable invasive. The Gardensmart Oregon booklet was published in concert with the release of the Oregon Public Broadcasting special, ‘Silent Invasion’, so that folks who wanted to learn more about what they could do to stem the tide of invasive species in Oregon would have a resource that provided tangible actions.

Mini-College: The theme of the 2008 Mini-College was ‘Going Green on Our Silver’. This theme recognized the 25 year history of this educational event, as well as the sustainable gardening practices that Master Gardeners practice and promote. Classes on organic gardening, alternatives to pesticides, rain gardens, invasive species and native plants were complemented by a sustainability tour of OSU

and the Oak Creek Center for Urban Horticulture. In all, 33 classes, workshops and tours echoed the theme that Master Gardeners and others can have a positive impact on the environment by adopting or teaching sustainable gardening practices. An attendance record of 331 people was set at the 2008 Mini-College, which suggests that Master Gardeners and others in the general public are eager to learn about sustainable gardening and other environmentally-friendly home horticultural techniques.

Survey data suggests that the conference had an impact on attendees' attitudes towards gardening. For example, attendees were asked if they planned to make changes to their gardening practices, or their performances as a Master Gardener, as a direct result of the 2008 Mini-College. The overwhelming majority (57% of respondents, n=100) answered 'yes', and 26% stated that they would 'probably' change their gardening practices. Only 5% of respondents said that they would not change their gardening practices as a result of what they learned at the 2008 Mini-College.

Willamette Valley Green Industry Seminar: The Oregon Department of Forestry, the OSU Extension Service, the Pacific Northwest Chapter of the International Society of Arboriculture and the Oregon Association of Nurseries partnered again in 2008 to hold a series of educational seminars. These seminars were available to professionals in Oregon's "Green Industry," such as landscape contractors, arborists, urban foresters, and nursery owners. The seminars were held in the fall of 2008 at the Oregon Garden in Silverton, and drew 234 registered participants. Topics presented included water features, sustainable landscaping principles, rain gardens, the urban forest, situational pruning, irrigation controllers and water conservation, and insect and wildlife pests. A unique feature of this series is that, for the third year in a row, seminar proceeds are earmarked to help support the state Master Gardener™ Program Endowment.

Local and Backyard Food Production. Local and backyard food production contributes to a sustainable food system, greater food security and a nutrient rich diet. Lectures, workshops, seminars and Extension publications teach Master Gardeners and others about the various aspects of vegetable gardening and fruit production in a private or community garden. Some of the efforts that align with this goal are listed below.

Organic Gardening Certificate Program: This Program, which was initiated in 2008 in the Portland Metropolitan region, teaches students the knowledge and skills necessary for successful organic gardening, urban agriculture, and ecological landscaping. This program is similar in scope and scale to the OSU Extension Service Master Gardener™ Program, but with an organic gardening focus. The 57 hour training course utilizes a hands-on and active-learning format to teach participants about all aspects of growing and caring for plants without synthesized chemical fertilizers and pesticides. The course represents a partnership between OSU Extension, Oregon Tilth, and other program partners, and includes topics such as: soils and compost, plant biology, plant propagation, garden planning/design, vegetable gardens, ecological landscapes, ornamental plants, rain gardens, entomology, Integrated Pest Management (IPM), and fruit and nut production.

Garden Enhanced Nutrition Education: The Garden Enhanced Nutrition Education workgroup consists of Master Gardener Program faculty and OSU Extension Nutrition Educators. This workgroup aims to foster healthy eating habits, and to utilize gardening as a vehicle to support healthy eating and physical activity. Products of this collaboration include the 'Growing Healthy Kids' curriculum (for 1st through 3rd graders) and the GENE community garden grants. The GENE community garden grants provided \$20,800 to 6 community gardens across the state. Funds were provided by the the Oregon Department of Human Services, via the Governor's Initiative Against Hunger.

Demonstration, community and school gardens at fairgrounds, city parks, extension offices, and experiment stations, are used to show effective growing methods, new plant varieties, and approved pest control strategies to local citizens. Additionally, demo gardens in many counties are often designed to provide the local food-bank with produce during the harvest season. These include the Yaquina Bay Lighthouse Garden (Lincoln County), McMinnville Community Garden at the Salvation Army (Yamhill County), Grassroots Garden (Lane County) and the Master Gardener Demonstration Garden in Tillamook County.

5. Notable Events in 2008

The Master Gardener program saw many new initiatives, developments and challenges in 2008. A few of these are listed below:

Online Course: In cooperation with OSU ECampus, the online Master Gardener course launched in the Fall of 2008. For this first offering of this version of the online course, only students pursuing a Certificate of Home Horticulture (rather than a Master Gardener badge) were admitted. Students taking part in the course were from Oregon, California, New Jersey, Virginia, Idaho, South Korea and The Republic of Georgia.

A total of 43 students enrolled in the course, and several other prospective students were placed on a waiting list. The cap for this offering had been set at 50 students, but withdrawals and/or non-payment resulted in the final roster settling out at 43 students. That the final enrollment was lower than the cap that was set for the course, even though others were on a waiting list, spurred ECampus and Extension to refine the registration policies and procedures for subsequent offerings.

In this first offering of the online course, 41% of registered students said that their number one reason for enrolling in the course was to learn more about growing fruits and vegetables. The opportunity to learn more about sustainable gardening techniques the main reason that 21% of student enrolled in the course, while 19% of students enrolled to learn skills that would help them in their career. Most students were employed full time while taking the course (70%), while a minority were employed part time (14%) or were retired (14%).

By most accounts, the first offering of the course was hugely successful. Students were charged \$400 to enroll in the course, which generated a total of \$17,200. Of this, \$6,450 went to ECampus, \$1,075 went to Agriculture programs, and the remaining \$9675 will be used to support the Statewide Master Gardener program. Each of the 12 modules was highly rated in student surveys, and activity in student chat rooms and on the discussion board (333 total posts) suggest that the course allowed for interaction among students and between students and the instructor.

OSU Certified Sustainable Landscaping Program: In 2008, Steve Renquist initiated the OSU Certified Sustainable Landscape program in Douglas County. (Please refer to Section 2. Flagship Programs, for more information).

Tax Service Districts: Due in large part to the efforts of Master Gardener and other Extension volunteers, voters successfully passed measures which established tax service districts in Clackamas, Douglas and Linn Counties. This development helps to ensure a sustainable funding source for Extension, including the Master Gardener Program, in these counties.

Loss of County Funding in Lane County: The Lane County Master Gardener program suffered a serious blow when a large part of the funding for Lane County Extension was lost. Rent forgiveness, granted by Lane County commissioners, allowed the program to continue in their current location for the year. However, sustainable support is still needed in order for the program to function at full potential.

6. Program Activities

The components and target audiences of the Master Gardener program are very diverse. Because of this, a number of methods are used by county program managers to extend community horticulture education to their clientele. These methods include the following:

Plant Clinic: Plant clinic takes the form of a phone line, email address, or walk in booth at local Extension offices. Through plant clinic, Master Gardener volunteers provide research-based and unbiased answers to questions from local clients. Plant clinics are essential to the efficient functioning of county Extension offices. Via their service, Master Gardener volunteers relieve the local professional staff of the continual plethora of questions. Plant clinics may also be found at local farmers' markets, Master Gardener events (e.g. educational conference, plant sale, etc.) or at other venues. A total of 23 of the 24 Master Gardener programs (excluding the Statewide Master Gardener program) held some sort of Plant Clinic in 2008. Of these, 21 programs (representing 24 counties) held Plant Clinics at an Extension office. A total of 20 Master Gardener programs staffed a plant clinic at a local Farmer's Market or at a Master Gardener event. A total of 19 Master Gardener programs staffed a plant clinic at another venue, such as the state fair, county fairs, garden stores, public libraries and other sites frequented regularly by gardeners.

Demonstration, community and school gardens: Gardens at fairgrounds, city parks, extension offices, and experiment stations, are used to show effective growing methods, new and locally adapted plant varieties, and sustainable garden design. Many demonstration gardens include theme areas, which demonstrate adaptive gardening, vegetable gardening, herb gardens, or childrens' gardens. Additionally, demonstration and community gardens in many counties (e.g. Lane, Yamhill, Lincoln and Coos counties) provide local food-banks with fresh produce during the harvest season.

Conferences, Seminars Talks are used in various ways by Master Gardener programs and volunteers to extend research-based information to those who need advice. Conferences include the Home Garden Seminar (Josephine County), Winter Dreams and Summer Gardens (Jackson County), Insights into Gardening (Benton County), Fall Fling (Polk County), Spring Home and Garden Classes (Tillamook County), Spring Garden Seminar (Clatsop) and Spring Seminar (Central Oregon). These events are day long or multi-day conferences that are organized by Master Gardener Associations, in cooperation with local Master Gardener Program staff. Many Master Gardener Associations hold hour long educational seminars, which are open to the public. These 'brown bag' seminars are often held at lunch, or in the early evening, in order to attract a broad audience. Linn County, Benton County, Lane County, Coos, Curry, Douglas, Jackson and Josephine are a few of the Master Gardener programs that host these seminars. Speaker bureaus have been established in many counties, as means to link Master Gardener volunteers who are willing and able to teach one or more garden-related topics with civic and other organizations who would like to host a presentation. Jackson, Benton, Lane, Douglas, Marion and Columbia counties, as well as the Portland Metro program facilitated speakers bureaus in 2008.

Youth Programs involve students in "hands-on" programs to educate them on gardens and gardening; ultimately empowering them to grow and maintain plants. Several counties have formed partnerships

with local public schools to develop demonstration gardens to expose children to the joys of gardening. Some counties are assisting with school greenhouses where students can grow seedlings to use in the school landscape or to plant at home; giving the student an opportunity to take home what he learns and/or grows at school. Other counties have developed partnerships with local community youth programs to extend horticulture education to both the youth and other community members. Counties with active youth gardening projects include Jackson County (Youth Garden Project), Yamhill (Carleton Elementary School), Curry County (Kalmiopsis Elementary School), Lake County (Junior Master Gardeners), Wasco County (4th grade gardening classes, 2 week training), Coos County (Cooking and Gardening Day camp), Tillamook County (week long 4-H Gardening camp and projects at elementary, junior high and high schools) and Marion County (school educational program).

Garden Tours and Plant Sales: Master Gardener Associations in Tillamook, Hood River, Linn, Wasco and Curry counties use garden tours as a fundraiser. However, these tours are also educational in nature, and highlight sustainable gardening techniques, unique and inspiring garden design and adapted plant varieties. Many Master Gardener associations also hold plant sales, where they integrate the mission of the OSU Master Gardener Program (education and outreach) with their fundraising efforts. At a plant sale fundraiser for an association, the educational programming should take center stage, as is the case with 10-minute University at the Clackamas county plant sale or day long seminars at the Lane County bulb sale.

Beautification Projects: Many Master Gardener Programs and Associations work with their local civic organizations on beautification projects. These include Tillamook County (CART'M Recycle Beautification), Marion County (Oregon Garden in Silverton waterwise parking lot plantings) and Yamhill County (City of Newburg Beautification project). Once again, education is paramount in these projects. The Tillamook County CART'M Recycle beautification project demonstrates the reuse and repurposing of discarded items as garden containers. The Marion County project in the Oregon Garden demonstrates how a palette drought resistant and drought tolerant plants can be used to beautify a challenging garden space.

Table 3. Program Activities.

County	Plant Clinic			Conference, Seminar, Talks				Gardens			
	Extension Office	Farmer's Market	Master Gardener Event	Other Venue	Educational Conference	Educational Seminar Series	Speakers Bureau	Community Garden	School Garden	Demonstration Garden	Other Garden
Baker				***	***						
Benton	***	***	***	***	***	***	***	***	***	***	***
Central Oregon*	***	***	***	***	***			***	***	***	
Clatsop	***	***	***	***	***			***	***	***	
Columbia	***	***	***	***		***	***				
Coos	***	***	***	***	***	***		***	***	***	***
Curry	***		***	***	***	***		***	***	***	
Douglas	***	***	***	***	***	***	***				
Hood River	***	***	***	***				***	***	***	
Jackson	***	***	***	***	***	***	***				
Josephine	***	***		***	***	***		***	***	***	
Klamath	***		***	***				***	***	***	
Lake		***									
Lane	***	***	***	***	***	***	***	***	***	***	***
Lincoln	***	***	***	***				***	***	***	
Linn	***	***	***	***	***	***		***	***	***	
Marion	***	***	***	***			***				
Metro**	***	***	***	***	***	***	***	***	***	***	***
Polk	***	***	***	***	***	***					
Tillamook	***	***	***	***	***			***	***	***	
Umatilla	***	***	***	***				***	***	***	
Union								***			
Wasco	***	***	***	***							***
Yamhill	***	***	***	***				***	***	***	***
Statewide***					***						
TOTAL	21	20	20	19	12	9	7	15	11	18	7

*Central Oregon includes Deschutes, Jefferson and Crook counties

**Portland Metro includes Multnomah, Clackamas and Washington Counties

***Gardeners Mini-College is the educational conference coordinated by the Statewide Master Gardener program and the Oregon Master Gardener association.

7. Media Outreach

Newspaper, TV, Radio: In 2008, outreach via newspaper, television and radio outlets is estimated to have generated an additional **4,522,600 public contacts**. This number is based upon the 330 newspaper articles reported by Master Gardener programs across the state (where I roughly estimated a readership of 5000 per article), 64 TV interviews (with an estimated viewership of 10,000 per TV spot), and 11,163 radio spots or radio shows (with an estimated listenership of 200 per radio spot).

Master Gardener Newsletters: In addition, newsletters from most Master Gardener programs were distributed to volunteers on a monthly basis. The Oregon Master Gardener Association produces a newsletter that is distributed to all OMGA members 3 times per year. Based upon the number of Master Gardeners associated with county programs, as well as the frequency of circulation at county and state levels, newsletters resulted in an additional **30,312 contacts** (almost exclusively with current Master Gardener volunteers).

Master Gardener Website: In an effort to increase the visibility and outreach capacity of the program, the statewide Master Gardener program website (<http://extension.oregonstate.edu/mg>) was substantially revised in late 2007. The site went public in 2008. This site provides information about the program as a whole and has links to individual counties with Master Gardener programs throughout Oregon. An up to date calendar of Master Gardener and other gardening events is maintained on the website. Links to the OMGA, Master Gardener Endowment, and general horticultural references may also be found on the site. Each month, the website averages over **236,000 hits** (a visit to the site or associated subpages) and 22,000 sessions (prolonged visit to the site and/or associated subpages, consisting of multiple clicks on separate pages). This is a substantial increase from the 58,000 monthly hits that were reported in 2006.

8. Recognition of OSU Master Gardener Volunteers and of the OSU Master Gardener Program

OSU Master Gardener volunteers and programs received several awards in 2008. At the Annual Gardener's Mini-College, the Oregon Master Gardener Association presented Search for Excellence awards to Lincoln County, Yamhill County, Josephine County and Lane County. OMGA also presented the Behind the Scenes Award to a Master Gardener volunteer from Curry County, and the Master Gardener of the Year Award to a volunteer from Washington County. The Karl Carlson Award, which is jointly sponsored by OSU Extension and the OMGA, was given to Lincoln County.

An OSU Extension Diamond Pioneer Award was given to a Master Gardener volunteer from Klamath County, and the OSU Extension Association Cooperator Award was given to Master Gardener volunteers from Washington, Yamhill and Polk Counties. Polk County also received an OSU Extension Association Business Award.

Local municipalities also recognized the importance of Master Gardener volunteers and the Master Gardener program to their community. The Lincoln County Master Gardener program was recognized by the Lincoln County Food Share, Cascade Mission and Seal Rock Garden Club. Yamhill County Master Gardeners were recognized by the City of Newberg.

The online Master Gardener course was recognized with a "Vice Provost and Associate Provosts' Award for Outstanding Achievement - Online Teaching Innovation – Non-Credit Course" at the Annual Outreach and Engagement Conference.

9. Partners and Cooperators

In 2008, the OSU Master Gardener Program partnered with a variety of partners to expand the scope and reach of the Master Gardener Program. A few of these cooperators are listed below, besides the projects on which they partnered:

- Organic Gardening Certificate Program: Oregon Tilth, Portland State University, Metro, East Multnomah Soil and Water Conservation District
- Gardensmart Oregon, a guide to non-invasive plants: Oregon Public Broadcasting; The Nature Conservancy; Environmental Services, City of Portland; Oregon Association of Nurseries; Sea Grant Oregon; Clackamas Community College; Oregon Watershed Enhancement Board; Wal*Mart;
- Willamette Valley Green Industry Seminar: Oregon Department of Forestry, Pacific Northwest Chapter of the International Society of Arboriculture, Oregon Association of Nurseries; Oregon Garden; SPROUT (Sustainable Plant Research and OUTreach)
- Online Master Gardener Course: OSU ECampus
- Garden Enhanced Nutrition Education: OSU College of Health and Human Sciences; OSU Extension Nutrition Education Program, Oregon Department of Human Services
- Demonstration, Community and Other Gardens: Portland State University (Metro), Hood River Cultural Trust (Hood River), Google (Wasco), Salvation Army (Yamhill), Food for Lane County (Lane), Lincoln County Food Share (Lincoln), Saint Vincent de Paul Kitchen (Josephine)

In addition, local businesses across the state often contribute in-kind or monetary donations that are used to complete program and chapter projects to benefit residents of the specific county. Examples of local business support can be seen via the sponsorship of Master Gardener conferences in Benton county and Central Oregon, or the donation of excess plants or seeds for Master Gardener plant sales. The value of these in-kind and monetary donations to Master Gardener chapters has not been assessed on a statewide level.

10. Extramural Funding

In 2008, the Master Gardener Program received at least **\$312,016.83 in extramural funding**. The largest portion of this dollar amount came from \$131,000 in competitive grants received by home horticulture faculty and staff. Partnerships with the College of Health and Human Sciences and Portland State University resulted in another \$42,906 in support of faculty FTE. An additional \$20,800 was received from the Oregon Department of Human Services (as part of the Governor's initiative against hunger) to support community gardening projects. The ODHS funds were administered by the Statewide Master Gardener program. However, the funds themselves were a result of the GENE workgroup collaboration.

A substantial portion of the \$312,016.83 in extramural funds was donated by OMGA and its chapters. In 2008, OMGA and its associated chapters donated a combined \$117,310.83 toward the OSU Master Gardener program. These funds are used to support a variety of program needs, such as: mileage reimbursement for speakers who travel for annual Master Gardener trainings, purchase of books for a

diagnostic library in a county Extension office, purchasing an allotment of identifications from the OSU plant pathology or insect labs, or the purchase of computer equipment for the plant clinic.

Master Gardener associations provided an additional \$27,425 in support of community projects. These donations funded many community activities and projects, including scholarships for Master Gardeners to attend trainings and for high school students entering college. Funds were also given to local food banks and other community organizations. Coupled with the \$20,800 received by ODHS for community gardening projects, the Master Gardener program and Master Gardener associations provided **\$48,225 in support of community projects**.

At least \$3,000 of the funds donated by OMGA and its chapters was used to support the Master Gardener Program Endowment Fund, which is managed by the OSU Foundation. Additional contributions came from individual donors and from the proceeds of the Willamette Valley Green Industry Seminar. Endowment funds were affected by the market conditions of 2008 (Figure 3). In February of 2008, the total cash value of the endowment was \$115,208.40, before falling to a **year-end balance of \$86,595.00**. The expendable cash balance, however, continued to rise throughout the year, to a **year-end balance of \$15,881.94**. Although funds have yet to be withdrawn from the endowment account, the endowment will eventually be used for support staff and needs of the statewide MG program.

Master Gardener Program Endowment

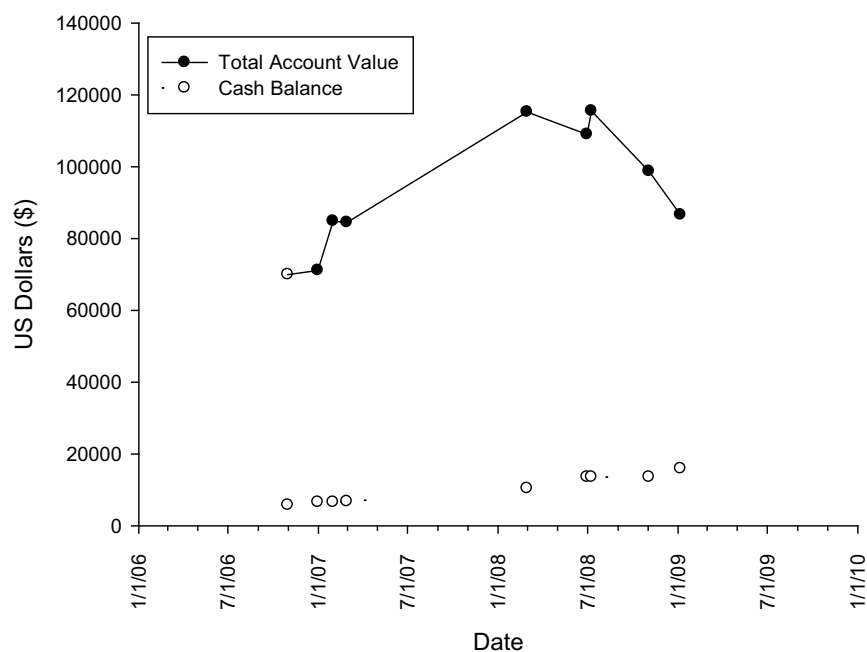


Figure 3. Temporal fluctuations of the Master Gardener Endowment fund. The total account value represents the sum total of (investment results + donations) – (investment losses + fees). The cash balance represents those funds that are available for use by the statewide Master Gardener program.

Table 4. Funding and fiscal support provided by the Master Gardener Associations in Oregon.

County	Master Gardener Associations	
	Funds Given in Support of Master Gardener Program	Funds Given in Support of Community Projects
Baker	NA	NA
Benton	\$7,000	\$3,000
Central Oregon*	\$386	\$0
Clatsop	\$0	\$0
Columbia	\$3,200	\$0
Coos	\$6,000	\$3,000
Curry	\$0	\$550
Douglas	\$11,150	\$500
Central Gorge**	\$0	\$0
Jackson	\$60,000	\$7,100
Josephine	\$0	\$1,200
Klamath	\$0	\$0
Oregon Outback***	\$0	\$0
Lane	\$9,106	\$1000
Lincoln	\$320	\$0
Linn	\$1,000	\$300
Marion	\$2,300	\$0
Metro****	\$6,000	\$400
Polk	\$614	\$4,225
Tillamook	\$2,952.83	\$2,650
Umatilla	\$0	\$0
Union	NA	NA
Wasco	\$0	\$0
Yamhill	\$2,300	\$3,000
OMGA*****	\$4,982	\$3,500
TOTALS	\$117,310.83	\$27,425

NA: Baker and Union Counties do not have Master Gardener associations and thus are not in a position to receive fiscal support from an association.

*Central Oregon includes Deschutes, Jefferson and Crook counties

**The Central Gorge Master Gardener Association works with the Hood River Master Gardener Program.

***The Oregon Outback Master Gardener Association works with the Lake County Master Gardener Program.

****Portland Metro includes the Multnomah, Clackamas and Washington County Master Gardener Associations.

*****OMGA is the Oregon Master Gardener Association. This association works with the Statewide Master Gardener Program.

11. Summary

The OSU Master Gardener program had a banner year in 2008. Active programs and associations across the state worked to educate Oregonian's about the art and science of all aspects of sustainable gardening. Educational conferences and seminars allowed Master Gardener volunteers to expose large segments of the general public to an array of gardening topics, while plant clinics in Extension offices and farmer's markets provided the opportunity for one on one interaction, which focused on a specific question or problem of concern to the client. By any measure- be it fiscal (\$3,380,487.95 value of volunteer service and \$312,016.83 in extramural funding), public contacts (162,369 people worked with a Master Gardener in plant clinic or attended a Master Gardener educational program), media exposure (4,522,600 additional public contacts via TV, newspaper and radio alone), the number of individuals who elect to become a Master Gardener (838 new trainees, of which 72% completed their service practicum) or the number of individuals who elect to remain active in the program (2664 veteran Master Gardeners, of which 63% recertified in 2008) – the Master Gardener Program represents a huge benefit to Extension, Oregon State University and the people of Oregon.

All that is accomplished in the Master Gardener program would be impossible without the dedication and talents of the 3,504 Master Gardener volunteers who donated a combined total of 173,269.5 hours to the program. Also essential to the success of the program are the 24 Master Gardener Associations that contributed a combined total of \$117,310.83 in support of local and statewide programs. As historical sources of funding for Extension have decreased over the years, the volunteer hours and fiscal support of Master Gardeners and associations have allowed the program to flourish at a time when a variety of challenges could have diminished the program. Nonetheless, funding issues continue to challenge the Master Gardener program. Securing a sustainable funding stream for several counties and for the statewide Master Gardener program is essential to maximizing the capacity of the Master Gardener program to train volunteers, develop timely and relevant programs, and work with the citizens of Oregon to promote sustainable gardening practices and backyard food solutions.

In 2009, efforts will be made to collect data on the specific programs to which volunteer hours are allocated (e.g. plant clinic in Extension office, plant clinic at farmer's market, educational conference, and other activities listed in table 3). In addition, data will also be collected on the specific programs (once again, the activities listed in Table 3 of this report) which generate public contacts in 2009. Collecting data at this finer scale will help program faculty, staff and volunteers to better understand how the Master Gardener program is serving communities across Oregon and to ensure that volunteer hours are best dedicated to the program mission of outreach and education.