

THE MASTER GARDENER VOLUNTEER PROGRAM: THEN, NOW & BEYOND

JOAN P. BRADSHAW
*Department of Environmental Horticulture
University of Florida, IFAS
Gainesville, FL 32611*

Abstract. As the Florida Master Gardener Program advances into its nineteenth year, it is appropriate to reflect on progress made to date. This volunteer supported program was conceived by a forward thinking extension agent in the state of Washington and has been adopted in 47 states within the U. S. Within Florida, 47 counties currently sponsor Master Gardener Programs with an average of 57 volunteers per county. More than 82% of the counties train once per year with 55.4% of the counties carrying out multi-county training. In the early years of the Master Gardener Program, the initial goal of the program was to train Master Gardeners to answer repetitive seasonal telephone requests for information. A comparison of educational outreach efforts indicates a dramatic increase in recent years in proactive projects, such as writing and compilation of newsletters, setting up exhibits and demonstration projects and conducting surveys. Additional outreach efforts have been made possible via Master Gardener Program collaboration with nonprofit organizations, entertainment corporations and sponsors of natural attractions. These efforts have far extended the potential for dissemination of the environmental horticulture message of the University of Florida and the Cooperative Extension Service.

Historical Perspective of the Master Gardener Program

In 1972, the Master Gardener Volunteer program began in the United States in the state of Washington. As the result of being inundated with residential requests for horticulture information, Dr. David Gibby, extension agent in King and Pierce Counties, began seeking methods to address volumes of requests for home gardening information. His efforts to use the media to answer questions more efficiently only resulted in increased number of telephone calls requesting individualized educational information. Speculating he could locate gardeners who would be able to and willing to answer public inquires, Gibby formulated the idea of trading specialized training in horticulture for a commitment to spend a specified number of hours doing volunteer outreach work. He sought to obtain assistance from extension agents, specialists and administrators at the state university level in planning and executing training programs for volunteers. More than 300 residents applied during the first request for candidates and 120 volunteers were selected for the training program. During the first year of the Master Gardener Program an additional 7,000 citizens of King and Pierce Counties received service.

A decade later, the Master Gardener Volunteer Program had grown in Washington to include 900 Master Gardeners contributing 40,000 hours of volunteer time per year, and was adopted by 33 additional states. Other states who developed Master Gardener Programs include: Alabama, Arizona, California, Colorado, Connecticut, Georgia, Florida, Hawaii, Indiana, Idaho, Illinois, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New York, North Carolina, Ohio, Oklahoma, Oregon, Rhode

Island, Utah, Virginia, Washington, West Virginia, Wisconsin, and the District of Columbia (R. E. Gomez, FEZ horticulture program leader, personal communication). Twenty years later, the Master Gardener Program has spread throughout forty-five states, the District of Columbia and four Canadian Provinces (Ruppert et al., 1989).

In an attempt to determine the current status of the Master Gardener Program throughout the United States, a survey questionnaire was developed and sent to 50 states and Canadian Provinces. Two follow-up mailings of the Master Gardener survey questionnaire were disseminated prompting responses from thirty-nine states and one Province consequently resulting in a 78% response rate.

As indicated in Table 1, more than 52% of States within the United States had Master Gardener volunteer programs in 25 counties. Data also indicated that Master Gardener Coordinators had managed state wide programs for on average 5.5 years and 40% of the coordinators had less than 20% of their faculty assignment dedicated to the Master Gardener Program.

A national review of the Master Gardener Volunteer Program indicated 47% of the states had established guidelines for screening applicants entering the program with 76% of the states offering one basic training at the county level per year. Sixty percent of the states indicated their basic training program consisted of 40 hr of horticulture subject matter information. Fifty-five percent of the states indicating that Master Gardener volunteers were required to contribute 40 hr of service to the Cooperative Extension Service during the first year.

Funding of the volunteer program was also addressed during that national review. Most states indicated they were supported by Master Gardener Associations whose role consisted of fund raising to support Master Gardener projects, newsletter production, obtaining equipment and field trips. Data indicate within the United States the Master Gardener Program receives funding from the following sources:

- 51.4% of the states obtained county funding
- 54.1% of the states obtained state funding
- 21.6% of the states obtained federal funding
- 10.8% of the states maintained private partnership
- 18.9% of the states supported their programs through Master Gardener fees

The Genesis of the Florida Master Gardener Program

Florida is characterized by a subtropical climate resulting in an abundance of lush vegetation and white sandy beaches which attracts 40 million tourists year-round. Not only does the attractive natural environment keep visitors returning to the Sunshine State, but in many cases, visitors decide to call Florida home at an estimated rate of 900 new residents each day. In addition to a steady increase in tourist, the U.S. Census Bureau indicates that Florida's permanent resident population grew from 13 million in 1993 and is estimated to reach 15 million by the year 2000. This ever increasing population trend has resulted in a critical need for education and awareness of concepts of natural resource management to maintain

Table 1. A profile of Master Gardener Programs in the United States.

State	No. Cty in State	MG & %MG	%U/R	Pop.	% Assign.	No. Yr	Dept.	No. Yr Coord.
AK	0	0	67/33	551,947	10	20	Ext.	20
AL	67	35	60/40	4 mil	80	16	Hort.	3.5
		52.2%						
AR	75	32	53/47	2.3 mil	50	9	Hort.	5
		42.7%						
AZ	15	10	87/13	3.6mil	0	17	Agr.,Hort.	2
		66.6%						
BC/Canada	N/A	1 progr in BC	75/25	3.8 mil	80	15	N/A	7
CA	6	NR	93/7	29.5 mil	0	NR	Work groups	
CO	61	24	80/40	3.3 mil	0	22	Ext.	5
		39.3%						
CT	8	NR	79/21	3.25 mil	50	19	Ext.	2
DE	3	3	73/27	600,000	5	11	Plant & Soil	11
		100%						
FL	67	47	85/15	13 mil	100	18	Hort.	10
		70.1%						
GA	152	65	63/37	6.5 mil	20	18	Hort.	.5
		42.7%						
IA	99	96	61/39	2.7 mil	75	19	Hort.	1
		98.9%						
KS	105	15	69/31	2.5 mil	50	17	Hort.	17
		14.2%						
LA	64	2	68/32	4.2 mil	.05	3	Ext. Hort.	3
		3.1%						
MD	23	5	81/19	4.8 mil	20	19	Home/ Garden Center	3.5
		21.7%						
MI	82	62	70/30	9.3 mil	100	20	Hort.	6
		75.6%						
MN	87	86	70/30	4.3 mil	40	20	Hort.	3
		98.9%						
MO	115	24	69/31	5.1 mil	30	14	Hort.	3
		20.8%						
MS	82	8	53/47	2.6 mil	0	4	Plant & Soil	.5
		9.7%						
NC	100	61	50/50	6.6 mil	100	20	Hort.	2
		61%						
ND	50	10	53/47	650,000	0	15	Hort.	10
		20.0%						
NE	93	52	66/24	1.6 mil	25	20+	Hort.	7
		55.9%						
NH	10	8	51/49	1.1 mil	.2	4	Plant Sci.	2
		80%						
NJ	21	9	89/11	7.7 mil	100	13	Agr./Ext.	2
		42.8%						
NM	33	9	73/27	1.5 mil	20	16	Ext.	1.5
		27.3%						
NV	17	24	88/12	1.20 mil	0.	No resp	NA	NA
		70.8%						
OH	88	44	74/26	10.8 mil	75	20	Hort. & Crop Sci.	6
		50.0%						
OK	77	6	68/32	3.2 mil	33	18	Hort.	.5
		7.8%						
OR	36	26	30/70	2.8 mil	40	21	Hort.	.5
		7.8%						
PA	67	58	69/31	11 mil	90	15	Hort.	1
		86.5%						
RI	5	0	86/14	1 mil	100	20	Ext.	9
		0%						
SC	46	23	55/45	3.5 mil	50	6	Hort.	6
		50.0%						
SD	66	16	50/50	700,000	15	12	Hort.	6
		24.2%						
TN	96	17	60/40	4.5 mil	undeter.	10	Plant & Soil	4
		17.7%						

*No. of counties within the state.

*No. of counties with Master Gardener Programs, percentage with Master Gardener Programs.

*Percentage urban/rural population in the state.

*Approximate state population.

*Percentage of assignments dedicated to the Master Gardener Program.

*No. of yr the Master Gardener Program has been in existence in the state.

*Department within the university system that the Master Gardener Program is a component of.

*No. of yr respondent has served as a Master Gardener Coordinator.

Table 1. (Continued) A profile of Master Gardener Programs in the United States.

State	No. Cty in State	MG & %MG	%U/R	Pop.	% Assign.	No. Yr	Dept.	No. Yr Coord.
TX	254	46 12.1%	50/50	10 mil	75	10	Ext. Hort.	10
UT	29	7 24.1%	80/20	1.9 mil	20	17	Ext.	5.5
VA	107	68 63.5%	75/25	6 mil	100	20	Hort.	1
WA	39	30 76.9%	40/60	5 mil	60-70	24	Hort.	8
WI	70	NR	66/33	4 mil	NR	18	Hort.	18
WY	23	7 30.4%	50/50	450,000	0	16	Ext.	9
Total = 40	Total no.	Total no.	Totals	Total no.	No. of yr	Avg no. of yr as a coordinator		
	0-40 = 15	0-25 = 21	400,-1mil = 6	0-20 = 16	0-5 = 3	5.5 yr		
	41-80 = 11	26-50 = 8	1+ -3mil = 10	21-40 = 5	6-10 = 4			
	81-120 = 11	51-75 = 6	3+5mil = 13	41-60 = 4	11-15 = 7			
	121-160 = 0	76-100 = 2	5+7mil = 4	61-80 = 6	16-20 = 21			
	161-200 = 1	nr = 3	>7+mil = 7	81-100 = 7	21+ = 3			
	201 = 1			NR = 2	NR = 2			
	na = 1							
Percent	County %	% w/MG	% of total	% of assign	No. of yr			
	0-40 = 37.5	0-25 = 52.5	400,-1mil = 15.0	0-20 = 40.0	0-5 = 7.5			
	41-80 = 27.5	26-50 = 20.0	1+ -3mil = 25.0	21-40 = 12.5	6-10 = 10.0			
	81-120 = 27.5	51-75 = 15.0	3+5mil = 32.5	41-60 = 10.0	11-15 = 17.5			
	121-160 = 2.5	76-100 = 5.0	5+7mil = 10.0	61-80 = 15.0	16-20 = 52.5			
	161-200 = 0	nr = 7.5	>7+mil = 17.5	81-100 = 17.5	21+ = 7.5			
	201+ = 2.5			nr = 5.0	nr = 5.0			
	na = 2.5							

*No. of counties within the state.

*No. of counties with Master Gardener Programs, percentage with Master Gardener Programs.

*Percentage urban/rural population in the state.

*Approximate state population.

*Percentage of assignments dedicated to the Master Gardener Program.

*No. of yr the Master Gardener Program has been in existence in the state.

*Department within the university system that the Master Gardener Program is a component of.

*No. of yr respondent has served as a Master Gardener Coordinator.

the health of Florida's natural ecosystems and habitats. (World Book, 1996).

This being the case, the Florida Cooperative Extension Service has attempted to augment environmental horticulture programs throughout the state through the assistance of the Master Gardener Volunteer Program. These growing educational needs have been the impetus for how the Florida Master Gardener Program currently operates and how it will be managed in the future. As the state with the fourth largest population in the country, the Florida Cooperative Extension Service will continue to realize an every increasing need for Master Gardener Volunteer assistance throughout the state.

During the late 1960's and early 1970's, inflation grew at a rapid rate making it necessary for citizens to cut costs on household items and food. Although the cost of food was relatively inexpensive, residents perceived they could cut costs by growing vegetables in their back yard. Having little gardening experience, these "inflation gardeners" became frustrated by a simple lack of gardening skills and knowledge, and sought information and assistance from the Florida Extension Service. Their frustration and concern carried over to the Cooperative Extension Service, where there were few agents with consumer horticultural training, and small staffs were over run by the number of new gardeners throughout the state. With the commercial horticulture industry as their primary clientele, both

county agents and state horticultural specialists, began to recognize the need for services for the home gardener.

Using the Washington Master Gardener Program as their model, University of Florida Horticultural Specialists and Administration initiated a volunteer program in 1979. Three urban counties, Dade (Miami), Manatee (Bradenton), and Brevard (Cocoa) were selected for the initial pilot project. Twenty to thirty Master Gardeners were recruited per county and training began in September of 1979. Since that time, 47 counties have initiated Master Gardener Programs throughout the State of Florida (Ruppert et al., 1988).

The Master Gardener Program in Florida today is evenly distributed around the state with approximately 22% of the programs located in each of the following districts: District 2, (north east Florida), District 4, (central west Florida) and District 5, (south Florida). As indicated in Table 2, 19% of the Master Gardener Programs are located in District 3 (central east Florida) with the remaining 15% of the volunteers located in north west Florida. The Master Gardener Program has been sponsored on average 9.7 yr within Florida with an average of 57 Master Gardeners volunteers per county. More than 82% of the counties trained once per year with 18% of the counties training twice per year. Training in Florida primarily occurred in the winter month (Jan./ Feb.) and during the beginning of fall (Aug./Sep.).

Table 2. A profile of Master Gardener Program in Florida.

County	District	No. Yr	Frequency	Month	Advisory Comm.	Serve on MG Comm.	TF	GT	What Counties	No. of MG
Baker	2	8	1	AUG	NO	NO	NO	YES	NE FL	13
Bay	1	8	1	JAN	NO	YES	YES	YES	Dis 1	39
Bradford	2	3	1	AUG/SEP	YES	NR	NO	YES	Baker, Clay, Duval, Nassau, Suwannee, Bradford.	4
Brevard	3	18	1	JAN	NO	YES	YES	YES	Osceola, Orange, Seminole, Volusia, Lake.	160
Broward	5	7	1	SEP	NO	NO	YES	YES	Dis 5	40
Calhoun	1	2	1	JAN	NO	NO	NR	NR	NR	6
Charlotte	5	10	1	JAN	YES	YES	YES	YES	Dis 5	50
Clay	2	12	1	AUG	NO	YES	YES	YES	Clay, Putnam, Nassau, St. Johns, Duval, Baker, Bradford, Suwannee, Flagler.	73
Collier	5	NR	1	FEB	NO	YES	YES	YES	Dis 5	60
Dade	5	NR	2 - 3	SEP-FEB	NO	NR	YES	YES	Charlotte, Lee, Palm Beach, Broward.	230
Duval	2	13	1	AUG	NO	NO	NR	YES	Nassau, St. Johns, Clay, Putnam, Bradford, Baker.	105
Escambia	1	12	1	WINTER	NO	NO	NO	NO	NR	60
Flagler	2	1	2	JUNE	NO	NO	NO	YES	NE FL, CEN FL	18
Hendry	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hernando	3	10	1	OCT	YES	NR	YES	NO	NR	56
Highlands	4	12	1	OCT	NO	YES	YES	YES	Highlands, Hardee, Polk, Manatee, Sarasota, Hillsborough, Pinellas, Pasco.	42
Hillsborough	4	16	1	OCT	YES	NR	YES	YES	Tampa Bay	76
Indian River	4	14	1-2	JAN/FEB	YES	NR	YES	YES	NR	NR
Jefferson	2	3	1	JAN	NO	NO	NO	NO	NR	8
Lake	3	12	1	MAY	NO	YES	YES	YES	Orange, Seminole, Lake,	86
Lee	5	NR	1	FEB	YES	YES	YES	YES	Charlotte, Collier.	50
Leon	1	15	1	JAN	NO	NO	NO	NO	NR	110
Manatee	4	18	1	APR	NO	YES	YES	YES	Manatee, Sarasota, Hillsborough, Pinellas, Polk, Highlands, Desoto.	55
Marion	3	13	1	OCT	NO	YES	YES	NO	NR	98
Martin	5	13	2	FEB	NO	YES	NR	YES	S FL	42
Monroe	5	5	1	NR	NO	YES	YES	YES	Dis 5	30
Nassau	2	5	1	AUG	NO	NO	NO	YES	Clay, Duval, Baker, Bradford.	12

District.

*No. of yr a county has sponsored a Master Gardener Program.

*Frequency of Master Gardener training.

*The month of year training begins.

*Have you served on the state Master Gardener Advisory Committee?

*Are you willing to serve on the Master Gardener Advisory Committee?

*Are you willing to serve on a Task Force to identify future directions of the Master Gardener Program? Do you participate in Green Team meeting or area horticulture agent meeting on a regular basis?

*With what county do you participate?

*Total number of active Master Gardener in your county on 30 Aug. 1996.

Table 2. (Continued) A profile of Master Gardener Program in Florida.

County	District	No. Yr	Frequency	Month	Advisory Comm.	Serve on MG Comm.	TF	GT	What Counties	No. of MG
Okaloosa	1	3	1	JAN	NO	NR	NR	NR	Bay, Leon, Santa Rosa, Escambia.	30
Okeechobee	4	11	1	JAN	NO	NR	NR	NO	NR	13
Orange	3	15	1	AUG/SEP	YES	NR	YES	YES	Seminole, Lake, Volusia, Osceola, Brevard.	54
Osceola	3	15	1	SEP/OCT	NO	NO	YES	YES	Lake, Orange, Osceola, Seminole, Brevard, Citrus, Volusia.	42
Palm Beach	5	13-14	2	MAR	NO	YES	YES	YES	DIS 5	100
Palm Beach	5	14	2	FEB	NO	NO	NO	YES	DIS 5	100
Pasco	4	2	1	MAR	NO	NO	NO	YES	Pasco	25
Pinellas	4	15	1	FEB	YES	YES	YES	YES	Tampa Bay	135
Polk	4	6	1	OCT	NO	YES	YES	YES	Hillsborough, Highlands, Pasco, Manatee, Sarasota.	11
Putnam	3	15	1	AUG	YES	YES	YES	YES	District 2	
Santa Rosa	1	9	1	JAN	YES	YES	YES	YES	Okaloosa, Escambia, Bay.	40
Sarasota	4	6	1	APR	YES	NR	YES	YES	NR	72
Seminole	3	12	2	VARIES	NO	NO	NO	YES	Lake.	33
St. Johns	2	10	1	AUG/JUNE	NO	YES	YES	YES	Putnam, Flagler, Clay, Duval, Bradford, Duval, Baker.	75
St. Lucie	4	13	2	FEB/SEP	NO	YES	YES	NO	NR	45
Suwannee	2	2	1	AUG	NO	NO	NO	NO	NR	2
Volusia	3	NR	1	AUG	NO	YES	YES	YES	Dis 3	45
Wakulla	1	5	1	JAN	NO	YES	YES	NO	NR	14
Total = 46	1 = 7 2 = 10 3 = 9 4 = 10 5 = 10	9.7 yr	1/yr = 37 2/yr = 8 NR = 1	Jan/Feb 19 Aug/Sep 12 Oct 6 June 2 Apr 2 Mar 1	Yes = 12 No = 33 NR = 1	Yes = 21 No = 14 NR = 11	Task force Yes = 29 No = 11 Nr = 6 Green Team Yes = 34 No = 9 NR = 3			Avg No. 57
Percent	1 = 15.2 2 = 21.8 3 = 19.5 4 = 21.8 5 = 21.8	1/yr = 82.2 2/yr = 17.8			Yes = 26.7 No = 73.3	Yes = 60 No = 40	Task force Yes = 72.5 No = 27.5 Green Team Yes = 79.1 No = 20.9			
Alachua	2	13	1	JAN	YES	NR	YES	YES	NR	90

District.

*No. of yr a county has sponsored a Master Gardener Program.

*Frequency of Master Gardener training.

*The month of year training begins.

*Have you served on the state Master Gardener Advisory Committee?

*Are you willing to serve on the Master Gardener Advisory Committee?

*Are you willing to serve on a Task Force to identify future directions of the Master Gardener Program? Do you participate in Green Team meeting or area horticulture agent meeting on a regular basis?

*With what county do you participate?

*Total number of active Master Gardener in your county on 30 Aug. 1996.

Prior to entering Master Gardener basic training, 89.4% of the counties screen applicants wanting to participate in the program. Once selected for the training program, applicants participate in 10 to 16-wk training programs. Additional

hours of training are provided by counties implementing Florida Yards and Neighborhoods Program and Master Composter Programs. To maximize efficiency in the training process, 55.4% of the counties implement multi-county or

regional training and 76% of the counties reported using subject matter specialists to assist in basic or advance training.

Currently, the funding of the Master Gardener Program in Florida is a joint effort between the state and county. The state budget supports the funding of the salary, travel, supplies and equipment for the State Master Coordinator who is a University of Florida faculty member within the Department of Environmental Horticulture. A portion of the salary of horticulture extension agents with Master Gardener responsibilities is also funded by the state. County funding supports the Master Garden Program via a portion of the horticulture agent's salary, providing working environment, horticultural books, supplies, and equipment. Data also indicates, 78.6% of the counties charge fees for Master Gardener basic training programs. Thirty-two percent of the counties refund fees to volunteer upon completion of their volunteer commitment.

Master Gardener Assisting the Cooperative Extension Service

In the early years of the Master Gardener Program in Florida, the initial goal of the program was to train Master Gardeners to answer seasonal repetitive questions via the telephone or in person. Over the years, this role has evolved considerably as exemplified in a comparison made between 1989 Master Gardeners' educational outreach efforts and 1996's methods. As indicated in Table 3, the greatest areas of growth centers around Master Gardener volunteer involvement in more proactive community-oriented ventures such as: setting up educational exhibits, conducting surveys, participating in community gardens, writing or compiling information for newsletters, etc. Educational efforts such as: collecting plant and insect specimens, judging contests and fairs and staffing plant clinics while still important, have decreased in the number of counties reporting their Master Gardener's involvement. Other outreach efforts not reported in 1989 such as horticulture therapy, landscape design consultations, Florida Yards & Neighborhoods Advisors, serving as research technicians, and development of county Web Sites are becoming areas of increased interest and involvement by Master Gardeners.

New Opportunities for Program Visibility

While Master Gardeners continue to aid the Extension Service in many traditional roles, opportunities have arisen which provide a new arena for dissemination of information. Networking with private and public enterprises to showcase the University of Florida's environmental horticulture program has provided to be a beneficial avenue to disseminate information to the public. A variety of private and public organizations provided Master Gardener Volunteers with a forum for horticulture educational outreach.

Non-Profit Organizations Collaborations

One successful avenue for community outreach was a Master Gardener collaboration with Habitat for Humanity. Founded in 1976, Habitat for Humanity sought to eliminate poverty housing to make decent shelters a matter of conscience and action. Though volunteer labor, management expertise and tax deductible donations of money and supplies, Habitat builds and rehabilitates homes with the help of the home owner. Master Gardeners were able to work with new

home owners in the selecting, planting and maintaining landscapes serving as demonstration project for techniques of environmental providing information of environmental landscape management. Orange County Master Gardeners worked with local Habitat for Humanity crews in planning and planting the landscapes of an entire block of homes. Master Gardeners designed, obtained plants and demonstrated planting techniques to fully landscape 15 new homes.

Master Gardeners also developed a partnership with Okaloosa Coalition on the Homeless Transition in creating the designs and planting landscapes around homeless shelters in the Okaloosa area. Consideration was given to providing shade color and fragrance in an attempt to provide a functional and more aesthetically pleasing environment while creating a low maintenance landscape which residents could efficiently maintain.

Florida Entertainment and Natural Attractions

Walt Disney World Corporation has been widely recognized throughout the world as a forerunner in the entertainment business. Beginning in the spring of 1994, Disney's EPCOT hosted what has become the Annual International Flower and Garden Festival with an attendance of more than 1.5 million guests. The University of Florida, Master Gardener Volunteers and Environmental Horticulture Agents hosted exhibits at EPCOT'S International Flower and Garden Festival Exhibits. Master Gardener volunteers from 15 counties, and extension agents staffed a Florida Yards and Neighborhood Exhibit for the duration of the 45-day festival event. More than 180 agents and Master Gardener Volunteers staffed the University of Florida exhibit. Those counties represented during the festival were: Lake, Seminole, Osceola, Brevard, Manatee, Hillsborough, Hernando, Lee, Orange, St. Lucie, Sarasota, Volusia, Highlands, Flagler, and Pinellas. During the 1997, festival the University of Florida showcased "Florida Friendly" concepts of the Florida Yards and Neighborhood program. More than 1700 Florida residents as well as out-of-state visitors had an opportunity to learn more about principle of environmental horticulture through the Florida Yards and Neighborhoods program themes.

Another important natural attraction in Central Florida is Lowry Park Zoo. This facility is toured each year by 630,000 visitors who have come to experience natural Florida 600 flora and fauna species. Hillsborough Master Gardener Volunteers worked in conjunction with Lowry Park Zoo creating a backyard habitat demonstration to educate visitors to the zoo on native plants to attract wildlife. The backyard habitat demonstration illustrates how to turn an area with poor drainage into a habitat for birds, butterflies and other wildlife.

Myakka River State Park is 28,875 acre dry prairie in Sarasota County which is toured annually by 250,000 visitors. In an attempt to enhance the educational quality of the entrance median of the state park, Sarasota County Master Gardeners were instrumental in creating an attractive dry prairie garden of wire grass, lopsided Indian grass and many other native grasses found in this area. As visitors entered the state park, this exhibit provided an educational opportunity to learn more about plant materials native to the Sarasota Bay area. These additional outreach efforts provided by Master Gardener demonstration projects do much to extend the environmental horticulture message of the University of Florida and the Cooperative Extension Service.

Table 3. A comparison of Florida Master Gardeners educational outreach efforts.^a

Activity	Counties Reporting (%)		Change (%)
	1989 (n = 33)	1996 (n = 46)	
Write or compile information for newsletters	37	62	+25
Set up exhibits	63	79	+16
Write or assist in writing news articles	34	47	+13
Conduct surveys	26	38	+12
Participate in community gardens	49	57	+8
Assist and/or give demonstrations	63	70	+7
Conduct home visits	49	53	+4
Conduct soil tests	49	53	+4
Perform landscape and/or maintenance projects	69	72	+3
Assist in writing publications such as fact sheets, etc.	31	30	-1
Answer phone questions	86	83	-3
Answer questions in office	86	83	-3
Appear on television programs	31	26	-5
Youth work	71	66	-5
Perform clerical activities	69	62	-7
Answer questions or speak on radio shows	23	15	-8
Collect plant and insect specimens	51	43	-13
Act as judges in contests and fairs	66	53	-13
Staff plant clinics	80	66	-14

^aRuppert et al., 1997.

The Florida Master Gardener Program: Growing by Leaps and Bounds

The early 1990's proved to be landmark years with Master Gardener contribution more than 100,000 hr each year for a grand total of 716,718 hr in 1996. More than 3,750 volunteers have been trained since 1991 and 200 more volunteers have served the program for 10 or more years. There are currently more than 2,000 active Florida Master Gardeners who reported more than 167,000 hr in the 1996 reporting year. (Ruppert et al., 1997).

While there is an initial cost in terms of time to educate these volunteers, the return on Extension's investment is immense. Net in-kind donation to the extension service is approximately \$1,173,000 for the 1995-96 or \$4,449,000 since 1991 through development and maintenance of this program. Telephone consultations with customers alone approximate 626,000 over this five-year period. Since 1 Sept. 1991, MG's have donated 716,718 hr or \$8,385,601. Net in-kind donation is valued at \$4,449,876 more than five years. (Ruppert et al., 1997).

During 1996, the Master Gardener Program in Florida received the Davis Productivity Award for Florida Tax Watch for developing and promoting volunteer program in horticulture that has increased environmental action and awareness. Forty-seven Master Gardener programs in the state were recognized for outstanding innovation and productive use of resources on behalf of Florida taxpayers. Statewide, more than

3,750 volunteers worked with local county extension programs during 1996 contributing services worth \$1,173,000 to the citizens of Florida. Since 1991, the Master Gardener programs delivered volunteer services to Florida citizens valued at more than five million dollars.

The success of the Master Gardener Program cannot be over stated. The ultimate end to all educational outreach efforts is to extend the vision of the University of Florida Institute of Food and Agricultural Sciences, all the while protecting and sustaining natural resources and environmental systems, enhancing the development of human resources, and improving the quality of human life through the development of knowledge in agricultural, human and natural resources and making that knowledge accessible. To this end, the Master Gardener Program continues to prove to be the "sparkling gem" of the Florida Cooperative Extension Service.

Literature Cited

- Brunkhorts, B. J., L. A. Fontana, R. A. Vinz, S. L. Waugh and R. Wedgeworth. 1996. World Book Encyclopedia. World Book Pub. Chicago, IL.
- Relf, D. 1992. The role of horticulture in human well-being and social development. A national symposium 19-21 Apr. 1990, Arlington, VA. Timber Press. Portland, OR. p. 205.
- Ruppert, K. C., J. P. Bradshaw and A. Z. Stewart. 1997. Florida Master Gardener Programs: History, utilization and trend. HortTechnology 7(4):348-353.
- Ruppert, K. C., J. M. Stephens and R. Black. 1988. First nine years of the Florida Master Gardener program (1979-1987). Fla. Coop. Ext. Serv. Staff Rpt. Ser. ORH-88-3. Univ. of Fla. Gainesville, FL.