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Additional index words. extension, education, prisoners, therapy

Summary. The first prison-based Master Gardener (MG) program in South Carolina was piloted at a minimum security prison for men and women in Columbia in 1991. Since then, 130 inmates have become certified MGs at 7 South Carolina Department of Corrections institutions. Certification is awarded after the inmates complete 40 hours of training provided by grounds maintenance staff, county extension agents, and MGs. Besides offering green-industry job skills, successfully completing the program offered inmates a sense of academic accomplishment and sparked their interest in horticulture.

In 1981, the South Carolina Master Gardener (MG) program was introduced in Charleston County and was modeled after the program developed in Washington State [Master Gardener International (MGI), 1991b]. This volunteer training program is administered by the Clemson University Cooperative Extension Service and is offered to residents in 26 of the 46 counties in South Carolina (Singleton, 1997).

Similar to other programs nationwide (MGI, 1991a; Swain, 1993), the South Carolina program is divided into two parts: instruction and service. In the first part, participants receive at least 40 hours of intensive horticultural training. After successfully completing the classroom portion, which requires regular attendance and passing a final exam, participants receive the MG title. The MG graduates then volunteer for at least 40 hours of service within a year of receiving the training to a local Clemson extension office or in the community at large. The volunteer activities are coordinated through the county extension office.

MGs share their knowledge and skills in several ways, such as answering consumer horticulture calls at the extension office, conducting plant problem clinics, assisting communities with beautification projects, and providing information to the media.

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A pilot study of a prison-based MG program

In 1991 the chief of grounds maintenance for the South Carolina Department of Corrections (SCDC) with the approval of the deputy director and warden piloted a MG program at State Park Correctional Center, a minimum security prison in Columbia, S.C., which housed men and women. The inmates used the South Carolina Master Gardener Handbook, slide sets, and other Clemson extension materials as educational aids and learning guides. Instructors included SCDC grounds maintenance staff, county extension agents, and experienced MGs.

The SCDC staff exceeded state MG program guidelines by offering >50 hours of instruction (Table 1). At least 30 hours of instruction were from a core curriculum of topics dictated by the state program. The remaining hours of instruction included practical, more vocationally oriented subjects such as brick-laying and small engine repair.

The program also emphasized plant identification. Instead of 3 hours of plant materials as recommended by the state MG program, inmates learned to identify at least 10 herbaceous and woody plants per week and become familiar with their cultural requirements. Also, selected plants were propagated at the end of each session. In subsequent classes, the inmates were quizzed on plant materials introduced in previous sessions and on the subject matter covered in the last class. As a result, inmates learned a total of ≥120 ornamental plants by the end of the program.

Before receiving the final exam, participants attended a 3-hour review session of topics covered throughout the course. The comprehensive final exam was prepared by SCDC staff (Table 2). Participants who passed the final with a score of $\geq 70\%$ received their MG certificates at a formal graduation ceremony.

Development of statewide prison-based MG programs

Based on evaluations from the inmates and staff from the 1991 pilot program, the MG program was subsequently extended to six other prisons in South Carolina, ranging from minimum to medium-maximum security (Table 3).

Currently, any SCDC institution can conduct a MG program provided that a building and grounds supervisor II is on staff. Prison-based MG programs are typically offered twice a year, winter and mid-summer, and are coordinated by grounds maintenance staff at the institution. To participate in the program, inmates must have a high-school diploma or a GED and have a record free of

disciplinary infractions. Before acceptance into the program, inmates are interviewed by a grounds maintenance staff member to determine their interest and ability to complete the program. Inmates without a high-school degree or equivalent can audit the program. Grounds maintenance correctional officers enroll in the program as an adjunct to their job. Other prison staff are required to take annual leave during class time and pay a registration fee to become MGs.

Since 1991, a total of 130 inmates and 20 SCDC staff, which included correctional officers assigned to ground maintenance, graduated from the MG program (Table 3). In addition, 19 inmates have audited the program.

As the MG program requires service after receiving instruction, inmates who become MGs have volunteered in a number of projects, including writing articles for the state MG newsletter, producing plant labels for the South Carolina Botanical Garden at Clemson University, and growing bedding plants for state-run facilities in the local communities. At the prison, inmates have used their knowledge and skills to cultivate vegetables for institutional use, propagate and cultivate indoor and landscape plants in the nursery and greenhouses for SCDC use, and maintain the grounds. Monthly records of volunteer hours and service donated by the participants are maintained by SCDC staff.

Table 1. Typical list of topics offered to SCDC inmates enrolled in the Master Gardener program.

Week	Topic ^z		
1	Introduction and orientation		
	Soils and plant nutrition		
2	Basic plant physiology		
	Basic entomology		
3	Basic plant pathology		
	Pesticide use and safety		
4	Vegetable gardening		
	Annuals and perennials		
5	Fruit gardening		
	Culture of woody ornamentals		
5	Small engine repair		
	Lawn management I		
7	Lawn management II		
	Indoor plants I		
3	Indoor plants II		
	Irrigation design and maintenance		
7	Field trip (nursery, botanical garden) ^y		
	Landscape design		
10	Diagnosing plant problems		
	Review and final exam		
11	Graduation		

^aEach topic is presented within a 3- to 3.5-hour time period. Other topics offered to inmates include bricklaying, florist techniques, nursery and greenhouse production basics, and organic vegetable gardening. ^yOnly inmates in minimum security institutions are eligible.

Table 2. Sample questions from a Master Gardener final exam prepared by South Carolina Department of Corrections staff.

Question

- 1. List the four parts of a soil.
- 2. List five benefits of organic matter.
- 3. Name the four major groups of plant parasitic organisms.
- 4. _____ is a fungus that causes damping-off of young seedling plants.
- 5. Define a perennial.
- 6. What three factors should be considered when selecting a turfgrass?
- 7. What is a thatch layer?
- 8. Name three important factors to consider when analyzing a site to be landscaped.
- List three qualities of plant material to consider when selecting a plant for a certain spot.
- 10. Name three ways to propagate indoor plants.

Considerations for future prison-based programs and conclusions

After taking the initial 40 hours of training, staff and inmates expressed an interest in receiving additional MG training. Any educational programs or materials developed for MGs would also be suitable for inmates.

Also, the therapeutic effects of the MG program for inmates requires further study. Inmates who received their South Carolina MG certificates at graduation ceremonies commented about a sense of accomplishment, intellectual stimulation, improved communication with fellow inmates, and an opportunity for learning. In addition to evaluating control, self-esteem, and life satisfaction of inmates in federal prisons (Migura et al.,

1996), further work in horticultural therapy should concentrate on the effects of the MG program on the employment of released inmates and recidivism.

In conclusion, introducing inmates to the MG program was not viewed as a means of rehabilitating inmates (Flagler, 1992; Migura et al., 1996), rather a way of teaching marketable green-industry job skills to inmates (Boston, 1986). This program provides trained skilled workers who can assist the SCDC grounds maintenance program and find employment in a sector of the green industry upon their release.

Literature cited

Boston, G.R. 1986. Seeds of hope: Prison garden program at Rikers Island. Corrections Today 48:8.

Singleton, G.F. 1997. 1997. Master Gardeners offer education and assistance to communities. Extension Answers 11:1–8.

Flagler, J.S. 1992. Master Gardeners and horticultural therapy. HortTechnology 2:249–250.

Master Gardeners International. 1991a. Directory of Master Gardener programs in the United States and Canada. MGI, Falls Church, Va.

Master Gardeners International. 1991b. The growth of master gardening. MaGIC Lantern 4:1.

Migura, M.M., J.M. Zajicek, and L.A. Whittlesey. 1996. Effects of the Master Gardener program on the self-development of female inmates of a federal prison camp. HortScience 31:608–609. (Abstr.)

Swain, R.B. 1993. A gardener's education. Horticulture. Feb.:11–18.

Table 3. South Carolina Department of Corrections prisons that offered the Master Gardener program to inmates and staff arranged by year.

Year	Prison	Inmate custody level ^z	City	Inmate graduates	Staff graduates	Inmate audits
1991	State Park	Min	Columbia	10	1	3
1992	Stevenson/					
	Goodman	Min	Columbia	9	3	3
1992	McCormick	Med/Max	McCormick	15	2	0
1993	Broad River	Med/Max	Columbia	26	2	1
1993	Kirkland	Med/Max	Columbia	13	1	9
1994	State Park	Min	Columbia	11	0	2
1994	McCormick	Med/Max	McCormick	14	2	0
1996	Stevenson/ Headquarters	·				
	Complex	Min	Columbia	15	3	1
1997	Lee	Med/Max	Bishopville	17	6	0
Total		·	•	130	20	19

²Min = minimum security; Med/Max = medium/maximum security prison.