

# Edina Goes Green Part II: Using Home Lawns as Demonstration Sites to Teach Low-input Lawn Care

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**SUMMARY.** Master Gardeners (MGs) were paired with homeowners who volunteered their lawns for demonstration sites in Edina, Minn., as part of a yearlong community-wide campaign to teach low-input lawn care. Project objectives were to 1) promote locations where community members could see low-input lawn care, 2) provide individualized instruction to homeowners via MGs, and 3) explore the feasibility of home lawns as public demonstration sites. Surveys suggest that participants changed practices because of the individual instruction from MGs. Further recommendations are given for using private homes as demonstration sites.

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Demonstration sites have been a traditional extension teaching method in agronomic crops (Rznewnicki, 1991) and forestry (Harmon and Jones, 1997). Consumer home lawns are rarely thought of as public demonstration sites yet they have good visibility and the

potential to be very influential in consumer horticulture. An opportunity arose in Edina, Minn., for teaching low-input lawn care when a group of concerned citizens began working with the University of Minnesota Extension Service, Edina City Hall, and the League of Women Voters of Edina, to implement an education program called Edina Goes Green (EGG). The EGG project in entirety is reported elsewhere (Carpenter and Meyer, 1999a).

The idea of using home demonstration sites fit well with this project because many residents wanted to get involved and promote responsible and low-input lawn care. This paper reports the use of demonstration sites which had three main goals: 1) to educate the community at large by providing locations where residents could see the results of low-input lawn care, 2) to provide a one-on-one educational opportunity for the homeowner and Master Gardeners (MGs), and 3) to evaluate home lawns as public demonstration sites.

## Program implementation

The League of Women Voters of Edina recruited volunteers from within their organization to offer their lawns as demonstration site locations. Twenty-two households signed up for the program. An information sheet was mailed to each volunteer household explaining the project's goals and what would be expected of the participants. It was also reiterated that by participating in the project, the homeowners agreed to have their addresses publicized to the community at large. Three households decided they did not meet the requirements, thus nineteen households participated for the entire year.

The addresses of the demonstration site locations were published in Edina's community magazine, *AboutTown*, on the EGG World Wide Web site, and on fliers posted in public buildings.

Sixteen MG volunteers signed up for the program. MGs are volunteers trained by the University of Minnesota Extension Service to teach horticulture to the public. They work in a wide variety of projects (Meyer, 1997; Pottorff and Brown, 1994). The MGs were paired to work in eight teams, with each team assigned two or three demonstration site locations. Following the 1996 growing season, four MGs left the program and their sites were shifted to others. By the project's end, 12 MGs were still involved, 10 were working in pairs, and 2 were working alone.

Three meetings were held with the MGs during the program. The first, in May 1996, was an orientation session. At this time, the MGs met their partners and were given the addresses to their sites. The goals of the program, low-input lawn care techniques, as well as the role of the demonstration sites were discussed. MGs were supplied with site evaluation forms and then visited two sites as a group to practice their site analysis skills and to help ensure that the techniques and standards used would be uniform for all participants.

MGs were to visit each site monthly, evaluate and make recommendations for lawn care strategies appropriate for the level of lawn maintenance that the homeowner wished to practice. The lawn care recommendations were based on the information in the Hennepin County Extension Bulletin, *LILaC: Low-Input Lawn Care* (Mugaas, 1995).

At two subsequent meetings, in July and September 1996, the MGs and project organizers discussed the sites and made group recommendations for management of specific problems. These meetings helped the MGs conduct site analyses and assured that the recommendations being made were in accordance with the techniques outlined in the *LILaC*

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bulletin. Other information and updates on the program were shared through letters sent to MGs and site participants. In the spring of 1997, MGs made final site visits.

### Lawn care knowledge and practices

A random survey of 800 Edina residents was conducted in Spring 1996 and 1997, measuring lawn care knowledge and practices before and after the EGG educational program (Carpenter and Meyer, 1999b). The demonstration site homeowners also received the lawn care survey. These responses, a 42% return rate, were compared to those from the general population. This comparison was used to help determine if the demonstration site project achieved its goal of providing one-on-one lawn care education. Comparisons in the frequencies of certain responses do suggest that the project was effective as a one-on-one teaching tool (Table 1).

For example, in response to question 1, asking when is the best time to fertilize the lawn, 75% of the demonstration site group chose the preferred response, "Fall", compared to 52.3% from the community-wide response group. There was also some improvement in the demonstration site group's responses to question 4, which asked the amount of fertilizer needed. More demonstration site respondents (25%) chose

the preferred answer, "2 lb N/1000 ft<sup>2</sup> per year." In the overall community just 6.5% chose this response. Interestingly, this question brought in the greatest percentage of "Don't know" responses across all survey groups, but the frequency of "Don't knows" in the demonstration site subgroup was just 50%, down from 72.6% from the general population.

In other questions, though, the effects of one-on-one mentoring were not as apparent. Question 2 asked when is the single best time to control broadleaf weeds. Here, a greater percentage of demonstration site respondents (87.5%) than respondents from the community (78.9%) chose "Spring", which was not the preferred answer. On the other hand, the preferred response, "Fall", was still chosen more frequently by the demonstration site group (12.5%) than in the overall community (7.7%).

### Program evaluation

Responses from questionnaires and follow-up phone calls to MGs and homeowners were compiled to evaluate the educational impact of the project on participants; 75% of the MGs and 68% of the homeowners evaluated the program. The questionnaires consisted of open-ended questions asking the respondent's opinion about various aspects of the program

**Table 1. Comparison of responses of the general public and demonstration site participants to selected survey questions about lawn care knowledge and practices.**

Survey question	Frequency (%)	
	General public	Demonstration sites
The single best time to fertilize a lawn is		
Spring	40.2	25.0
Summer	0.9	0
Fall	52.3	75.0
Don't know	6.5	0
The single best time to control broadleaf weeds is		
Spring	78.9	87.5
Summer	6.3	0
Fall	7.7	12.5
Don't know	7.1	0
Lawn clippings are		
Detrimental to the law	3.0	0
Of no value to the lawn	2.5	0
Equal to 1 fertilizer treatment if left on the law	83.1	87.5
Don't know	11.4	12.5
The amount of fertilizer needed for a medium maintenance lawn is		
1 lb N/1000 ft <sup>2</sup> per yr	12.7	25.0
2 lb N/1000 ft <sup>2</sup> per yr	6.5	25.0
3 lb N/1000 ft <sup>2</sup> per yr	4.2	0
5 lb N/1000 ft <sup>2</sup> per yr	2.5	0
None	1.5	0
Don't know	72.6	50.0
My lawn clippings are usually		
Left on the lawn	75.9	100
Composted	5.1	0
Bagged and removed	18.7	0
Don't know	0.2	0
My lawn is usually fertilized in the (choose all that apply)		
Spring	82.1	75.0
Summer	34.5	0
Fall	67.4	75.0
Never	7.6	12.5
Don't know	1.0	0

and what, if anything, they gained through their participation; 78% of the homeowners indicated that they learned something about lawn care that they hadn't known before the program and that they had changed their lawn care practices in some way as a result of what they learned. All also described the MGs as helpful and said that the MGs had taken their concerns into consideration when making suggestions.

All of the MGs indicated that the participants were open to the advice they gave and 50% knew for certain that the homeowners had put their advice to use. The remaining 50% felt the homeowners acted independently of their advice.

When asked for recommendations to improve the program, both the participants and the MGs brought up two main concerns. Both groups suggested having meetings with all participants so that the homeowners could share their experiences and learn what was happening at other sites. They both also stressed that the goals of the program needed more clarification. The role of the MG was not always clear, some had very little contact with the homeowners while others were being asked to help with landscape problems that were outside of the scope of the project. Also noted was the disadvantage of using home lawns with a lack of control over the cultural practices of the owner.

In response to questions asking what the best and worst parts of the program were, 85% of the MG respondents said that meeting and working with the homeowners was the most rewarding part of the program. The opportunity to learn and put into practice the things they had learned in training was also mentioned by 50% of the MGs. 37.5% of the homeowners' responses mentioned having a MG to talk to as the best part of the program. The other 62.5% focused on how much they learned and their increased involvement in lawn care activities. The biggest problem the MGs had with the program involved scheduling, in coordinating with their partners and in meeting with the homeowners.

In May 1997, a random sample of Edina homeowners indicated a 1.1% familiarity with the demonstration site project (Carpenter and Meyer, 1999a). These results suggest that the demonstration site concept, as employed in this study, was not very effective as an educational tool for the community. The primary learners in this project were the homeowners themselves, not the community as a whole.

## Recommendations

Future projects involving homes as demonstration sites should consider these suggestions:

**INCREASE PUBLICITY** to improve community awareness of the program. Posting signs on the sites labeling them as low-input lawn care demonstration sites would draw the attention of passersby, and published announcements including a map showing the locations of the sites would also help to attract community members. Sponsor open houses to attract the public to the sites. Offer an opportunity to meet and talk to the homeowners and MGs.

**SCHEDULE MEETINGS WITH HOMEOWNERS AND MGs** to share experiences and offer additional lawn care information.

**LENGTHEN THE PROGRAM** beyond one year to allow for further one-on-one training and for the community to learn of the sites.

**USE QUESTIONNAIRES** to obtain periodic feedback while the program is in progress, and make necessary changes to emphasize topics that are not well understood.

**PROVIDE PARTICIPANTS WITH AN INFORMATION KIT**, including copies of relevant fact sheets, a soil test kit, site evaluation forms,

and general information about the project. Outline a step-by-step approach for tasks to be done by the homeowner (soil test, site map, etc.) with the MG acting as a mentor and educator.

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