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**Category B, Demonstration Garden**

## **Master Gardener Education & Research Display Gardens**

The story of the **Master Gardener Education & Research Display Gardens** started in early 1942, when 90 farming families in Rosemount and Empire, Minnesota were forced to sell their property to the government. The plot of 12,000 acres became the Gopher Ordinance Works; the purpose of this plant was to manufacture smokeless black powder for use in artillery shells. Although most of the farmers supported the war efforts, they were angered at the speed with which they were dispatched from their land. After the war was over, the title for most of the land was transferred to the University of Minnesota for use as a research center instead of being returned to the original farmers. The resulting anger among the local residents has cooled to resentment that still exists in those communities.

This story continues with the present day involvement of Master Gardeners in the development of a public garden on this controversial property. In 1999, as new Director of Operations of the property, Dave Walgenbach began looking at ways to develop a program to reach out to the local community and develop some of the land for public use. At the same time, Extension Educator Bob Mugaas was working on turf research at the site. Many discussions later, they decided to invite the Dakota County Master Gardener program to the table. Bob, Dave, Barbara Stendahl (MG Coordinator) and 4 Master Gardeners formed a study group. It was decided that this would be an excellent use of the land that could provide many benefits to the local community and, perhaps, turn around the negative feelings a number of local long-term residents still had for this site. It was an opportunity that could not be missed; each person made a 2-year commitment to work to bring the promise of a public garden to fruition.

The project was named the Master Gardener Education and Research Display Garden (MG ERDG). The mission statement, “Master Gardeners will bring the expertise and experience of the University of Minnesota horticultural research to home gardeners through demonstration and display”, and a 5-Year Plan were written. The key underlying purpose for this venture would be to provide an *education destination* for the local communities and for metro area Master Gardeners. The committee established the following criteria for the activities and projects to be included in the program:

- Is it research? Is it activity based on applying the scientific method and using statistical tools to obtain defensible results?
- Is it educational? Is there a transfer of research-based information to the public?

If the answer is yes to one or both of the questions, then it proceeds to the next decision point.

- Are there resources available (people, land, \$\$\$) to successfully support the activity?

If the answer to the last question is yes, then a project can move to a place on the 5-year plan. On that plan, individual gardens were designed to fit the scale of a home garden using plants and materials that were readily available, making them easy and practical to replicate.

### **Year One**

In the first year we needed to sink our roots. The first work day was May 5, 2001 with Dakota and Hennepin County Master Gardeners. A one acre soybean plot was transformed with the construction of vegetable and flower trial beds, laying a paved walkway, construction of an 'M' garden in the University of MN colors of maroon and gold, compost beds and the seeding of the turf trial areas to evaluate the use of corn gluten to control turf weeds. Later that season the Prairie Garden was planted, the gazebo was built and the gardens were toured by the Dakota County Extension Advisory Board.

### **Year Two**

During our second year, 2002, Master Gardeners designed and planted two more acres of gardens: the Entry, Gazebo, Heirloom, Master Gardener Vegetable Trial and Butterfly Gardens as well as a Sunflower display, All-America Selections, and a U of M Chrysanthemum Evaluation Garden. A partnership was formed with the U of M Horticultural Research Center to plant the U of M Tree and Shrub Introduction Garden. A paved driveway and parking lot were installed making it possible for us to host hundreds of visitors on the Trinity Hospital Garden Tours, a year ahead of our schedule. In August, our Grand Opening was held with garden tours, gardening mini-seminars, tractor rides and root beer floats to officially open the gardens to the public. That fall, vegetables from our first harvest were used by the Dakota County Extension Home Economist for food preparation demonstrations in the community.

### **Year Three**

In 2003 we were ready to focus more of our energy on education and research. Our third year brought much more activity to the Master Gardener Education and Research Display Garden. The Prairie Garden was burned in April and sprang immediately to life, a half acre shrub rose garden was designed and 60 roses were planted to start a 3-year research project in cooperation with U of M Horticulture Research Center. The first evaluations of the trees, shrubs and 200 chrysanthemums were made. Permanent signage was installed and hard-scaping the beds, walkways and arbors/trellises of the rose garden was planned. The MG ERDG hosted Extension educators Bob Mugaas and Janna Beckerman for the MG Plant Research and Evaluation Program (PREP), a state-wide training clinic. The MG ERDG also became home to our new Jr. Master Gardener program, the Dakota Kids JMG Camp. At our August Community Garden Party, junior and adult MG's led tours and activities. The MG ERDG was the site of an Eagle Scout composting project, and a Blue Bird Trail. Many community groups discovered the MG ERDG in our third year; the garden was reserved for 16 tours and events led by Master Gardeners for Girls Scout groups, ESL (Adult English as a Second Language) groups, senior citizens, garden clubs and church groups. By the end of the 2003 season, the MG ERDG had expanded to fill six acres and involved 75 of our 100 Master Gardeners.

### **Year Four**

In 2004, the MG ERDG had six acres under cultivation with dozens of back-yard sized garden areas. The demonstration gardens included Heirloom Plants; All-America Selections; a Butterfly Garden; Prairie Garden; Iris Garden; Daylily Garden; Heirloom Peony Garden; Bird Garden; U of M Tree and Shrub Introductions; Shrub Roses; Junior Master Gardener's gardens and a Gazebo Garden. A new pioneer-style outdoor kitchen with a living willow fence was installed adjacent to the Heirloom Garden and is used for demonstrations and heirloom vegetable tasting events. The Minnesota Hardy Shrub Rose Display was completed and the Gazebo Garden was the site of our first wedding.

In addition to the demonstration gardens, the MG ERDG was home to many research plots, such as the University of MN Chrysanthemum Trials; Turf Trials; Master Gardener Vegetable Trials and the Plant Research and Evaluation Program for plant diseases.

By the end of our fourth year, our hard-scaping efforts included a new irrigation system and underground electrical service.

### **The Nitty Gritty**

Over the past four years, Master Gardeners have volunteered approximately 9000 hours on the Master Gardener Education & Research Display Gardens project. Warren Banks, a Dakota County Master Gardener since 1981, is the MG chair of the project; each individual garden and program has a team leader and committee of MG volunteers responsible for its planning and execution. Warren Banks, Bruce Granos, Barbara Stendahl and Connie Villari have been involved in the project since the beginning; more than a hundred more Master Gardeners have volunteered since then.

Community businesses and private individuals have donated more than \$60,000 worth of materials, tools and labor to the project since 2001. UMore Park, where the MG ERDG is located, has provided invaluable support and assistance by re-surfacing the driveway and parking areas, installing water lines, providing storage space, a roto-tiller, chipper-shredder and a part-time employee to help water the trial gardens. A small fee is charged for Master Gardener led tours and other reserved events. The garden is open daily to the public for free. As we hoped, community and University resources have combined with volunteer efforts to make our plans for a public garden a reality.

It's difficult to measure exactly how many visitors we have had over the years, but we estimate that several hundred attended planned events last year and several hundred more visited the gardens informally, totaling 2000 visitors in 2004. During the season, Master Gardeners are available to answer questions and give casual tours on a daily basis as they go about their chores in the gardens.

### **Empire Commons**

The centerpiece of the Master Gardener Education Research and Display Gardens is the gazebo and the surrounding garden, aptly named "Empire Commons" in honor of the local families who so long ago gave up their property to help their country. Numerous educational opportunities are now available at the MG ERDG for residents of Dakota County as well as for Master Gardeners in the Minneapolis/St. Paul metro area. Every event we host brings in a few more people who don't know the history of the site, that the University has research gardens or who Master Gardeners are. Judging by the increasing number of requests alone, we believe this project is already a success.

### **Impact**

The impact of the MG ERDG has expanded beyond our immediate communities. Research done at this site will influence University of Minnesota introductions and recommendations, providing up-to-date, research-based information. In turn, Master Gardeners will take this information and pass it along to the public, again demonstrating their value as educators all over Minnesota. Individual visitors learn what plants and techniques are appropriate for home gardens and also learn how the University of Minnesota tests and develops plants and techniques. The Minnesota environment is a challenging one to garden in and one that is rarely addressed by national magazines, seed companies and greenhouses. For example, when we show homeowners what a healthy low-impact lawn will look like *without* the nationally advertised 4-step program, we are affecting the quality of their lives and empowering them to create a healthier environment for their families.

In 2004 we used feedback forms for the first time and over 500 visitors responded. One of the questions we asked was, "Did you observe anything here that you will take home and adopt in your own garden?" Typical comments were: "I'd like to try a salsa garden"; "your mulching techniques"; "...the living willow fence" and "I'd love to get an indigo plant and those purple peppers". We'll continue to solicit program feedback in 2005, both to measure the impact of our program and to learn what more our community would like to see at the Master Gardener Education & Research Display Gardens.

