

## Final Project Report from HPS 2022 Grant Recipient – SUSSEX COUNTY MASTER GARDENERS

Sussex County Master Gardeners in Georgetown, DE received \$770 to purchase perennial plants for their Dry Shade Garden to demonstrate a well-landscaped grove of trees.



### Dry Shade Garden

The Sussex County Master Gardeners' Dry Shade Garden, a 2022 Hardy Plant Society grant recipient, benefitted through all stages of the grant cycle process. In some ways, the benefits were expected, and others were unexpected. These benefits and challenges are discussed below.

## **The Grant Application Process**

One of the themes of this write-up is that the grant served as a catalyst for better management of this garden for this year and future years. Putting together the grant application helped focus the garden plans.

In general, we now look at this garden as a test bed for growing plants in a dry shade environment without the benefit of irrigation. However, the creation of the dogwood grove or something similar to this grove could be replicated in the home landscape. There is a real possibility that the creation of a grove of trees in itself offers a demonstration of what an individual homeowner or perhaps an HOA or a municipality or a school might accomplish at the landscape scale. Visiting the dry shade garden offers the visitor an opportunity to see the value of a grove of trees as well as the perennial plants that grow in the shadows cast by the trees. That the plants on the ground interact with the trees almost goes without saying. The grove creates landscaping, environmental, and horticultural value.

The history of this grove as an experiment was explained more fully during a public virtual workshop (held in April). As part of the workshop, the planting process was described including the size of containers initially used for the dogwoods (5-gallon containers) and how an individual might proceed on their own with limited resources to develop this type of landscape feature. Many people who do a walkthrough of this garden often remark about the microclimate (cooler and more protected than most of the other gardens within the Georgetown Garden complex), as well as the peace and serenity that this grove conveys to the visitor. For some, it is experienced as a place for quiet contemplation. The purposefully pruned arched pathway (one of the photos submitted in the application) also conveys a sense of peace and tranquility.

The application also moved the planting plan for the herbaceous materials from ones already tested as individual specimens in the garden to one that relies on drifts of plants throughout the grove. Requiring a project site map within the application served as a focal point to identify plants and locations that could be used to create drifts of plants and be visually appealing. Each of these selected plants was previously grown on an individual or small group basis within the 6-year initial test period. The site plan as submitted in the application was followed closely both in terms of species bought for planting purposes as well as following the schematic drawing design for the plantings.

## **Implementation Phase**

The \$770 grant provided sufficient funds to implement the planting plan with the species and locations as submitted in the application. To reach this goal, it was necessary to buy mostly bare root plants. With bare root plants, there is a tradeoff in terms of the number of plants that can be purchased for a fixed amount of money versus the size of the individual plants. With herbaceous perennials, there is also the factor that much of the energy during the first year, often described as the establishment year, goes towards root development and aboveground growth is limited. Due to their small size bare root plants may also be more subjected to environmental stress. All of the plants were in the ground by mid-May with

some planted during April. Sometimes these little plants can also be more easily attacked by rodents or insects. These impacts will be described in the first-year results section of the report.

## **Year One Plant Results**

### Polygonatum biflorum Solomon's Seal.

These plants were chosen because they had done very well since the beginning of the garden. The idea, as depicted in the site plan, was to plant them along the path, hoping that they would spread out accentuating the path. The bareroot plants purchased from a nursery were very small rhizomes, almost like root cuttings. They did not appear to be doing much, so some of the existing Solomon's Seal plants within the garden were divided with an individual aboveground stem attached to rhizomes with roots. These are growing quite well and, if needed, additional divisions could be made next year. Solomon's seal embodies a certain degree of toxicity which helps to protect them in this environment. Several master gardeners have commented that they like this use of Solomon's Seal as a ground cover plant along the pathway.

### Polystichum aristochroides - Christmas Fern.

These were planted from bareroot stock in the center of the garden. They are still small, but have shown some aboveground growth and appear to be quite healthy. One advantage that ferns have is that they do not appear to have insect issues or other predators. Christmas Ferns are native, can withstand drought once established, and grow steadily, but are not likely to get out of control. They are evergreen and should stay that way throughout the fall. They have made a major visual impact on the garden so far and their future looks good.

### Dicentra spectabilis alba and Dicentra spectabilis pink - Old Fashioned Bleeding Hearts.

These plants were purchased as bareroot. They were planted in April. They did not flower this year but seem healthy. As expected, they died back (became dormant) by midsummer. One advantage for them is that they complete their life cycle and flower before the really hot weather reaches its peak. It is highly expected that these plants will return to flower next year. When they are in bloom, they should be one of the highlights of the spring garden. It should be noted that these plants are in a part of the garden that receives irrigation.

### Iris cristata - Dwarf Crested Iris.

The iris was also bought as bareroot specimens. They are among the most shade tolerant of the iris options. They grew well during most of the year. However, in late summer a few of them were attacked by an Iris Sawfly (*Rhadinoceraea micans*). These insects are native to Europe and can cause a lot of damage to the iris. Some control measures will likely need to put forth soon as an IPM strategy.

### Epimedium 'Orange Queen' - Barrenwort or Fairy Wing.

These plants have grown well in the dry shade garden in previous years. They were purchased as bare root this year and grew well for several months. However, some of them were heavily chewed on during August. It is believed that there might be a combination of factors including drought stress and insect damage. Next year larger specimen plants will be purchased (non-Hardy Plant Society funds) to move forward with the plan. It is also possible

that some of the plants from this year's bare root stock will be more vigorous growers next year. After all, they grow mostly from underground rhizomes. A couple of the larger plants that exist within the garden could also be divided and planted as rhizomes to pursue this approach.

#### Sedum ternatum - Three-leaf Sedum.

These were planted from quart containers. They seemed to establish well, but like some other plants seemed to be heavily eaten in the garden. This was particularly distressing because other plants grew well in other parts of the Demonstration Garden outside of the Dry Shade Garden environment. Although they may recover, these plants will not be planted again soon in the garden. One of the lessons learned from this year's efforts.

#### Other new plants in the Dry Shade Garden

The Hardy Plant Society's grant was used to purchase plants as they were outlined in the application. This provided an opportunity to use part of the 2022 budget allocated from Master Gardener funds to pursue other opportunities. In this regard 10 Ink Berry (*Ilex glabra*) small shrubs were purchased to create a screen that will help obscure two propane tanks that are adjacent to the garden. Several trees, again small-sized specimens, were also purchased and planted around the periphery. These included two White Fringe Trees (*Chionanthus virginicus*), one Bald Cypress (*Taxodium distichum*), and one River Birch (*Betula nigra*). All are natives and all should enhance the garden for many years to come.

### **Dry Shade Garden Audiences**

#### **Publicity within the Sussex Master Gardener Volunteer Community.**

This garden and acknowledgment of support by the Hardy Plant Society Mid-Atlantic Group were acknowledged over and over again. This garden was acknowledged at monthly meetings when the grant was received and at subsequent meetings. A dozen master gardeners listened to the zoom workshop that highlighted the garden. Even more participated in a walkthrough of the garden with the Coordinator of the Sussex County Master Gardeners. Individual Master Gardeners assisted the Chair by helping to plant, weed, and irrigate these new plantings. In part because of this exposure, several master gardeners have indicated their intent to become more involved in the management and maintenance of this garden for next year. The future seems much brighter for the Dry Shade Garden thanks to the support from the Hardy Plant Society Mid-Atlantic Group. An acknowledgment sign for the Hardy Plant Society at the entrance to the Dry Shade Garden will remain in place for the foreseeable future.

#### **Public Workshop via Zoom - Shade Is Cool and Demonstration Garden Walk Through.**

A master gardener-sponsored workshop was held on the evening of April 19th with 42 participants. A dozen people attended a walk through the garden on May 10th. At each event, the Hardy Plant Society Mid-Atlantic Group was acknowledged for its support. The dry shade garden was observed by 51 other people in 3 workshops hosted in the Demonstration Garden on 6/21/22, 7/19/22 and 8/2/22.

#### **National Research Center Administrators Society Summer Tour**

On September 13, 2022, 44 Agricultural Research Center Directors from 15 different states, received a tour of the Demonstration Garden by the Horticulture Agent. The dry shade

garden was on this tour with recognition of support given to the Hardy Plant Society/ MidAtlantic Group. <https://www.thercas.org/>

### **Special Tour of the Sussex County Demonstration Garden for New Sussex County Master Gardener Volunteers**

This tour was to prepare for the A Day in the Garden event and learn more about the Demonstration Garden observations for the 2022 growing season. Eighteen new master gardeners participated in a 2 hour tour on September 8 and 9, 2022. John Ferrell gave his observations and insights learned from the Hardy Plant Society Grant with recognition of the Hardy Plant Society/MidAtlantic Group.

### **Publicity within the Garden Community Via the A Day In the Garden Open House.**

Tours of the Dry Shade Garden were highlighted as a timed event in promotional materials for the event that was held on September 17th. Over 30 people attended the tours: one of the highlights of the Day in the Garden. The chair of the Dry Shade Garden acknowledged the support by the Hardy Plant Society Mid-Atlantic Group at the start of each tour. The event was attended by 325 people. The dry shade timed tours were available for those specifically interested in learning about dry shade gardening. Many others walked through this section of the garden on their own while visiting. This event was advertised via 1000 postcards going out to our mailing list. As well as a flyer (shown in the google folder) that went to 779 email recipients from our email list with the Hardy Plant Society logo included. The Hardy Plant Society/ MidAtlantic Group was announced on Facebook Live at East Coast Garden Center in Millsboro, DE on September 6 with 1,300 viewers. We also mentioned it on the WGMD Talk Radio - The Jake Smith Show with 18,000 listeners on September 15,2022. Newspaper Ads were purchased for the event in the Cape Gazette with 15,000 average users and Morning Star Publications with 5,000 users. An article about the event with The Hardy Plant Society MidAtlantic Group mentioned in the article was published on September 15 with 5,000 users.

### **Photographs and Videos**

Throughout this year photographs (.jpg files) were taken and a video was recorded during the dry shade garden workshops and tours. These have been put in a Google folder and are included as part of this report for potential use by the Hardy Plant Society Mid-Atlantic Group.

<https://drive.google.com/drive/folders/1tRxRUyRFohmp1OBHKbY47mgkG9CINXD?usp=sharing>

### **Hardy Plant Society/Mid-Atlantic Group Expenditure of Funds**

Please see paid invoices for the expenditure of funds for the \$770 grant award for the Dry Shade Garden by the Hardy Plant Society/Mid-Atlantic Group. Total expenditures for plants procured related to the Grant were \$907 (all of the Hardy Plant Society funds were used to support this effort). All of the \$907 was spent on the plant species identified in the grant application and all of the plants were planted by the site map submitted in the grant application.

**The Master Gardeners of Sussex County acknowledges and thanks the Hardy Plant Society Mid-Atlantic Group for its generous support of the Dry Shade Garden.**