Highlights of The Daniel Stowe Botanical Garden®

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INTRODUCTION

The staff of Daniel Stowe Botanical Garden in Belmont, North Carolina, was thrilled to host I.P.P.S. when they met in Charlotte in October 2006. Attendees had a quick stroll through the gardens before enjoying a catered dinner in the Robert Lee Stowe Visitor Pavilion.

This presentation is in two parts: first an overview of the Daniel Stowe Botanical Garden from a horticulturalist's perspective, and second, a look at a number of notable plants and groups of plants. Included in this second half are several suggestions of possible nursery crops that to this gardener's mind could be worthwhile additions to the nursery trade.

Daniel Stowe Botanical Garden is primarily a horticultural display garden. The oldest gardens opened on 8 Oct. 1999. Our focus is creating the most aesthetically pleasing gardens of year-round interest. Within this framework we work with the whole range of plants: permanent trees and shrubs, winter-hardy herbaceous perennials (including grasses and ferns), tender perennials that are treated as annuals, true annuals, bulbs, and tropical plants that are on display in containers during the frost-free growing season. The collection of plants totals over 4000 taxa. Though the focus is on display, the plants are also essentially on trial. A computer record of plants is kept, as is a weekly bloom journal. Construction of its first public Conservatory is to start in fall 2006 and will feature orchids and other tropicals.

The layout of the garden was designed by the landscape architectural firm Marshall-Tyler-Rausch (MTR) of Pittsburgh, Pennsylvania. The design of the plantings within this framework was collaboration between Edith R. Eddleman and Douglas Ruhren. Exiting out the back of the Visitor Pavilion, one enters the Four Seasons Garden. Here the focus is first and foremost on plants of winter interest, and it is the strongest season in this garden. A garden need not be dull in the winter months, especially in the milder parts of the Southeast where there are quite a few plants that bloom during this second of two growing seasons, the growing season when frost is likely; the other growing season being the frost-free one. Beyond the winter-blooming plants are colorful berries, evergreens of varied hues, colorful and curious twigs, ornamental grasses, and architectural plants. The Four Seasons is bordered on two sides by the pergola covered Color Walks. Here the plantings are totally changed twice per year and feature a very varied range of annuals suited to that particular season.

Continuing into the next garden one enters the Cottage Garden which is a garden of plants that were typical of gardens in the Piedmont of the Southeast during the late nineteenth and early twentieth centuries. Many of these plants are still garden-worthy in the early twenty-first century. It is planted in a cottage-garden style, meaning largely that we struggle to forget that we are garden designers and instead garden the way most of us garden at home: "there's a hole, let's plant it there." The effect is of delightfully exuberant randomness.

Next comes the Canal Garden, whose name derives from the nearly 300-ft-long canal that starts with one fountain of many separate jets and ends with a 20-ft-tall geyser fountain. Here the effect that is striven for is a tropical one. The backbone of this garden is built on winter-hardy permanent plants that suggest the tropics, such as winter-hardy bananas, palms, elephant ears, cannas, ginger lilies, and giant ornamental grasses. Annuals and tender perennials really pump up the color display through the summer months. A highlight of this garden at the time of this visit were the multiple ruby clouds of the purple multy grass, *Muhlenbergia capillaris*, in the center beds bordering the canal.

The four perennial gardens follow this one. If all of the separate beds of the perennial gardens were put end to end they would run 2/3 mile long. And many of these are quite wide, running 20 to 30 or more feet wide.

Three of the four perennial gardens are distinguished by their color schemes: the Allee Garden of yellow and violet, the Rib Garden of red, orange, and yellow, while the Serpentine Garden is the cool end of the spectrum, blues, violets, and purples. The Scroll Garden lacks a color scheme and instead plays more with shapes and textures as well as focusing on plants that attract pollinators and plants that have interesting winter forms. These gardens are so large that woody perennials (shrubs and trees) are a significant part of the plantings.

Heading back up to the Visitor Pavilion one can enjoy the Fall Azalea Garden, which features almost 600 plants of EncoreTM azaleas and all 24 of the currently available cultivars. Nearly all have been outstanding performers, blooming for 2 to 3 months in late summer into fall as well as in spring. Furthering the look of spring-infall are repeat-blooming bearded irises and autumn-flowering cherries both of which bloom in October. The last garden of note is the Nellie Rhyne Stowe White Garden, which opened in the summer of 2003 and is off the west side of the Visitor Pavilion.

INDIVIDUAL PLANTS OF NOTE, FIRST SOME NATIVES

Magnolia macrophylla, the bigleaf magnolia, is a native deciduous magnolia with the largest simple (that is: undivided) leaves of any North American native. It is of easy culture despite its being a fairly rare native and is most worthy of wider cultivation because it is a plant of year-round beauty. The huge, white, delightfully fragrant flowers are much like those of M. grandiflora. The almost banana-leaflike leaves are dramatic, and every breeze reveals their nearly white undersides. The winter aspect of this plant is of a landscape-sized silver candelabrum, with the large terminal buds the flames. *Ilex decidua*, the possumhaw holly, is of garden merit equal to that of the winterberry holly, I. verticillata, and is sufficiently distinct as to not be redundant. For one, it is more of small tree size, to about 20 ft tall. Its strikingly beautiful silver stems also set it apart from the black stems of the winterberry, which also goes by the name of black alder. Its leaves are also much smaller. As with winterberry, it is highly recommended that one seek out improved selections of *I. decidua* for the best fruit displays. Simpson Nursery in Vincennes, Indiana, has probably made the most and best selections of this species. All have been superb performers. Possumhaw is equally tolerant of the heavy wet soils that winterberry thrives on, yet also seems to be more drought tolerant.

Yes, the native buckeyes, *Aesculus*, are slow but we will try to educate the public about their highly ornamental early spring display, their drought tolerance, their importance to the hummingbirds, which first return at the time of their bloom

(a mutually beneficial arrangement, no doubt) if the nursery industry will make them available. Their drought tolerance makes them easier plants to establish and maintain than flowering dogwood, *Cornus florida*, and they are far more permanent than redbud, *Cercis canadensis*.

Zenobia pulverulenta is the melodious name for the dusty zenobia or honeycups, a Southeast native related to blueberries and azaleas. Gorgeous in bloom in spring, and especially attractive through the summer months in the glaucous-leafed cultivar 'Woodlander's Blue', it becomes a knock-your-socks-off display of the most brilliant scarlet and crimson in December. Perhaps not of the easiest culture as it seems to insist on evenly moist, but well drained soil. Plant it high in aged pine bark, and it is highly likely to thrive.

Those who live where the following species is native might laugh at the idea of promoting *Sabal minor*, the dwarf palmetto. But it adds such a dramatic architectural shape to the landscape that borders on being a thicket of green exclamation points! It is quite hardy. Here it sailed through 4 °F without any foliage damage.

Butterfly gardens are highly popular with the public, and from this has come an interest in other pollinators. In bloom the mountain mint, *Pycnanthemum incanum*, becomes a veritable insect zoo, and it is in bloom for months. It is very ornamental in bloom, and so are its charcoal-grey seed heads. The East Coast forms of this species spread a mile a minute and so are hard to use in home gardens, but the Midwest forms don't run. So you see I hadn't lost my mind in recommending this plant. Propagate the Midwest forms. The white-bracted sedge, *Rhynchospora latifolia*, blooms all summer and is highly recommended for sunny damp gardens. With the popularity of rain gardens it might find much use.

Most flowering plants spend most of the year out of bloom, so if they have other ornamental features they are of much greater value in garden displays. *Helianthus salicifolius*, the willow-leafed sunflower, is a striking foliage plant for months before it blooms, looking like a pale green feather duster. The one in the perennial border at the J.C. Raulston Arboretum at North Carolina State University might be worthy of naming as a distinct cultivar since it has especially narrow leaves. I might suggest it be named for Edith Eddleman, the designer of this border.

Eryngium yuccafolium, the rattlesnake master, is a strikingly architectural plant in silvery pale-green. A great garden ornamental, surely the cut flower trade would also wildly accept it as they do a number of European Eryngium. If you can grow daffodils you can grow Virginia bluebells, Mertensia virginica. It probably blooms for 2 months and then dies away quicker than daffodil foliage so it is a more valuable ornamental than the average daffodil. And it is easy to propagate, by root division, seed, and I have to think by tissue culture because so many of its relatives in the Borage family are tissue cultured. Sure, some wonderful native nurseries are producing it, but what I am saying is that this needs to be mainstreamed. And then maybe wild-collected offerings of this U.S.A. native won't "need" to be sold back to us by foreign vendors.

Isopyrum biternatum, the false rue anemone, might be burdened by its scientific name and not much better common name, yet it is of easy garden culture and here blooms from December into May. Enough said?

A FEW MORE PLANTS OF NOTE, THIS TIME NON-NATIVES

Stachyurus praecox needs a great common name. Is there one out there? I am sorry, but its Japanese common name is not going to help. In late winter or earliest spring

its bare branches are draped with 3- to 6-inch long chains of lime-green flowers. It thrives in Piedmont Carolina growing conditions, grows rapidly, and softwood cuttings are easily rooted. The variegated cultivar 'Magpie' adds additional ornamental interest.

Clematis cirrhosa starts blooming in October and continues into January despite the cold. It does defoliate in summer, an adaptation to its Mediterranean origin, so spring-rooted cuttings are more difficult to get through their first summer dormancy than fall- and winter-rooted ones. Its foliage is very handsome all winter, spring, and fall. It is vigorous, to 6 m (20 ft) tall.

Iris unguicularis, the Algerian iris, is another great winter bloomer. In its best forms it starts in November and blooms during any mild spell all winter into March. Division is best in late summer, because it initiates new root growth then. It is easy from seed, and if one wants to produce one's own seed it would best to protect the flowers from freezing temperatures so that they are not destroyed before pollination is effected.

A FEW RANDOM IDEAS TO EXPLORE

Those breeding compact *Loropetalum* are to be applauded, yet before we totally discard the full-sized cultivars, lets consider growing the very best of these as trees. *Loropetalum chinense* f. *rubrum* 'Zhuzhou Fuchsia' is such a gorgeous thing, why not give it the room it needs to become a large multi-stemmed crepe-myrtle-size tree? Gardens need more good small flowering trees.

There is great value in testing tropicals for hardiness. Every now and then one proves to be reliable and thus moves from being a houseplant to a hardy perennial. *Philodendron selloum*, for one, is reliably winter hardy wherever cannas and elephant ears are likely to overwinter.

It is funny how some bulbs, whether they are winter hardy or frost tender, exist either solely in the bulb trade or solely as container-grown stock. Certainly some such as dahlias and crocosmias are grown and marketed in both forms. Let's move more and more bulbs strictly from the dormant bulb trade to the container-grown trade. The majority of bulbs could be handled as container grown, and for example, spring-flowering bulbs could fit into the impulse shopping habit of garden center customers who forgot to plant them in the fall. Some bulbs such as winter aconites are almost impossible to establish from dormant bulbs yet are easy in containers from garden divisions.

Someone needs to use *Lilium formosanum*, the Formosa lily, in a breeding program. This species blooms in 1 year's time from seed (some other lily species don't even germinate in 1 year). It blooms late, August for us. It grows everywhere, wet, dry, and even in the cracks between bricks in the walks. In other words, take this ease of culture and extreme vigor and produce a wide range of garden hybrids.

Jenks Farmer got us growing winter vegetables to add variety to fall-planted pansies. Want still more diversity? There are quite a few hardy annuals that normally germinate in the fall, grow through the winter months, and flower in spring. Many, such as annual poppies and larkspur, do not transplant well if dug up in the garden but totally tolerate being sown directly in cell-paks and planted from the cell-paks at the time that pansies are planted. Other proven performers are baby blue eyes (Nemophila), forget-me-nots, English daisy, love in a mist (Nigella), poached eggs (Limnanthes douglasii), and wall flowers. Sow all of these in September.

And last but not least, in looking forward don't forget to look to the past, for there are some superb heirloom plants that can hold their own or better amongst their modern counterparts whether we are talking about crinum lilies or heirloom iris such as 'Perfection', which was introduced in the 1800s, or the occasional older rose cultivar such as 'Monsieur Tillier' that not only is as healthy and floriferous as some of the best new landscape roses but also a great deal more beautiful. Ah, never a dull moment at Daniel Stowe Botanical Garden. Please come back to visit!