

Can You Live Without Lawn?

In creating a landscape setting for the South Greenhouse, students in several landscape design courses considered how a homeowner might create a diverse and interesting landscape that requires less fuel and fertilizer than a typical lawn.

Former student **David Horsey** created the design that serves as the framework for the landscape. After planning new walkways and a low brick wall to define the space and protect the new plantings from vehicles, David designed a simple plan for the woody plants that ultimately defines the character of the garden. Key plants include:

- *Ostrya virginiana* – the **hophornbeam** is an unusual native understory tree which develops an interesting peeling bark when it matures. A large mature specimen can be seen in the Clark Garden in front of Townsend Hall.
- *Malus* ‘Donald Wyman’ – this non-native **crabapple** is beautiful in most seasons and does not have invasive qualities in our area. Fragrant white spring flowers in spring are followed by showy fruits that attract birds.
- *Ilex fosterii* – golden-fruited form – these upright evergreen **hollies** are distinctive for their yellow berries, and their narrow form makes them a good choice in smaller areas.
- Working within a modest planting budget, students and faculty planted shrubs, perennials, and annuals to create interest in all seasons. Some key strategies to the design included:

1) Design the challenging seasons first!

We considered the effect in autumn and winter initially. Beautiful spring gardens are easy to achieve in this area, but a garden that is attractive in autumn and winter denotes careful planning. Multi-season interest is insured with some key plantings:

- *Helleborus* – the “**Lenten Roses**” have low, distinctive evergreen foliage and striking nodding flowers appearing at the end of winter into early spring. Although not native, these tough plants perform well in shady locations, increasing in beauty each year.
- **Asters** – these tough native perennials flower in the autumn and are tolerant of sunny, dry conditions. Their heights and floral impact have wide variation, so we consulted the Mt. Cuba Center research which compares and rates the garden performance of several species of Aster.

- *Panicum* – our native “**switch grass**” is a tough plant with persistent winter appeal, as well as striking glints of red and burgundy autumn color.
- **Sedums** – these tough succulents have interesting foliage through the growing season, and have flowers that are attractive to insects in late summer and into the fall.

2) Combine smaller plants with larger plants for cost-effective plantings.

Smaller plants almost always cost less than larger plants, and often they are more adept at establishing, assuming that they are large enough to exist in the open without extra protection or care. For this project we have used some larger plants to help define the spaces, but we have used many smaller plants as well, especially “plugs,” to keep costs low. These plugs start out quite small, and were initially marked with conspicuous labels. The establishing perennials were interplanted with annual companions in their first growing season. Although it is a common joke among gardeners that “*friends don’t let friends plant annuals,*” these short-lived plants have some excellent uses that suggest that the best landscapes shouldn’t exclude them. In this garden, they helped to create a beneficial microclimate that aided in the establishment of the small perennial plugs. Only a few of the annuals selected overcompeted with the perennials for water and light and eventually had to be removed.

3) Favor native and regionally-adapted plants, and consider long-term water needs.

Although our plantings are not exclusively native, we have managed to include a high percentage of native plants. Even though native plants are generally well-suited to our local conditions, remember that microclimates can significantly impact the conditions that cause a plant to thrive or die.

- In shady sections of our site, we include the **Bowman’s Root** (*Porteranthus trifolius*), as well as the **hairy alumroot** (*Heuchera macrorhiza* ‘Autumn Bride’) and **turtlehead** (*Chelone lyonii* ‘Hot Lips’). Bear in mind that shade patterns change over time and through the seasons. As trees and shrubs grow, shade increases in the garden. In the interim, you can interplant shade-loving perennials with annuals to help protect their leaves as they establish.
- In the sunny, hot sections of our site, we include tough plants including the **narrow leaf blue star**, (*Amsonia hubrichtii*), **false indigos** (*Baptisia*), and the **robin’s plantain** (*Erigeron pulchellus* ‘Lynnhaven Carpet’). These natives are good at fending for themselves in dry times once established.

We hope you will consider these principles when designing your own garden. Please check back and watch as the garden evolves by the South Greenhouse – home office for the University of Delaware Botanic Gardens.