

Short Plant, Long Story

Shortia galacifolia

by Jaime E. Morin



Flowers of Oconee bells rise above the foliage on rosy-red stalks.

I adore Clemson University and the South. Most people at the Arboretum already know about my obsession. It was a long trip—over 1,000 miles and a ferry ride—from my beloved alma mater in South Carolina to the Polly Hill Arboretum on Martha's Vineyard. What a surprise when on my first day at PHA I spotted a plant that brought me back to Carolina in a heartbeat!

In Polly's Play Pen grows a colony of a sweet, little plant with beautiful white flowers and glossy leaves called Oconee bells (*Shortia galacifolia*). We learned about shortia, a southern Appalachian native, in my horticulture classes because of its significance to the county where Clemson nestles in the mountains. After my discovery at PHA, I took a keener interest in

this petite, evergreen groundcover. I'm not the first! For centuries this elusive beauty has enticed botanists, plant collectors, and propagators.

A low-growing, spreading, sub-shrubby perennial, Oconee bells naturally prefers moist stream banks and slopes in the deep shade abundant in the Carolina mountains. It has dark green, glossy, basal leaves with wavy teeth. Staying about 6 inches tall, shortia runs by stolons and can spread up to 30 feet in well-established patches. The white (occasionally pink-tinged) bell-shaped flowers are about an inch long, appearing singly on 4- to 5-inch stems.

One interesting facet of the shortia story is its history. The plant was first collected—but not identified—in 1788 by French botanist Andre Michaux in the

"high mountains of Carolina." He added it to his herbarium collection. Over 50 years later in 1839, Harvard botanist Asa Gray noticed the pressed specimen in a cabinet of unidentified plants while studying Michaux's collection in France. He became transfixed! For decades Gray searched the Carolina mountains for the mysterious plant, to no avail. Finally in 1877 the plant was rediscovered in North Carolina by the 17-year-old son of a local herbalist. Gray and a few fellow botanists traveled to the site, found the plant, and celebrated its rediscovery.

Though shortia had been rediscovered in the wild, fellow Harvard plantsman Charles Sprague Sargent was skeptical that it was Michaux's original site. The search continued. In 1886 Sargent organized another plant hunting expedition, this time following Michaux's exact field notes. Their search led them to the headwaters of the Keowee River in South Carolina where they discovered another colony. Unfortunately, the site has since been flooded to form the Duke Power Company's Lake Jocassee destroying roughly 60 percent of the original wild habitat and population.

Another factor that makes Oconee bells unique is its rarity both in nature and in cultivation. Endemic to a small part of the southern Appalachian Mountains, it is native in only six counties across North Carolina, South Carolina, and Georgia. It is listed as endangered in both North Carolina and Georgia. Polly received the plant in the Play Pen as a gift in 1980 from a colleague in Macon County, North Carolina. Because of its rarity, shortia isn't commonly cultivated, but I think that this plucky little plant deserves renewed attention.

S. galacifolia is easily propagated by clump division, but propagators have had difficulty with seed propagation. Seed freshness is thought to be an important factor in successful germination. I experimented with seed freshly collected from the Play Pen planting. I tried three different soil media, sowing two pots of each, to see if media might be a factor in germination success. All six pots had equally successful



Shortia's charming flowers set off against evergreen foliage

germination! Once germinated, seedlings in one pot of the three different media were regularly fertilized with a dilute, organic liquid fertilizer; the other three pots received none. The unfertilized seedlings growing in pure milled sphagnum moss were by far the most vigorous. Regardless of the experiment's outcome, I was pleased to produce genetically diverse plants that may someday be planted on the grounds.

There is another hidden treasure in the Play Pen, an even rarer shortia: *Shortia soldanelloides* var. *magna*. Polly received a potted plant of this Asian species in 1983 from Hal Bruce at Winterthur Gardens in Delaware. This highly variable variety can be found growing in low altitude woodlands as well as high altitude open areas throughout central and northwestern Japan. The white to light pink flowers are clustered in short racemes.

If this information has piqued your interest, you may want to chart an expedition to discover Oconee bells. Plan your own (inevitably easier!) trek to the western end of Polly's Play Pen and find them tucked among other horticultural treasures in block 28 and 29. Our plants are particularly happy there, shaded by a large rhododendron and luxuriating in plenty of moisture from the dripline irrigation. How lucky we are to have a rich piece of botanical history right at our fingertips!