

## Bloom Guide September



Green-headed coneflower *Rudbeckia laciniata*. Close inspection of members of the aster family reveal a collection of many flowers arranged in one inflorescence. Like other 'daisy-like' flowers, coneflowers contain ray flowers that most think of as the petals, and center disk flowers. The disk flowers are usually the fertile ones that contain pollen and nectar, while the ray flowers are most often sterile and act as an advertisement. After pollination, the center disk flowers often elongate and become brownish as the seeds ripen. Find greenheaded coneflower in the meadow.



**Virgin's Bower**, *Clematis virginiana*. This climbing vine sets a lace-like web of pure white flowers, (each with four petal-like sepals) in late summer into fall. The leaves are compound, with 3-4 **toothed** leaflets along with axillary tendrils that help it climb. Best grown in full sun to part shade, this native can be aggressive in a home landscape, but is a wonderful addition to a naturalized setting. After pollination, the plumed seeds offer unusual winter interest. **Please note:** the nonnative *Clematis terniflora* has smooth edges to the leaves and is often confused with our native species.



**Field Thistle** *Circium discolor* This biennial is a rosette of spiny leaves the first year, that give rise to a floral spike reaching six feet the following year. It is a multipurpose wildflower offering nectar rich, disk flowers for pollinators, copious seeds for birds to eat as well as silky thistle down for birds like goldfinches to line with nests. It is also a caterpillar plant for painted lady butterfly and several moth species. Not considered a traditional home garden plant, field thistle is nonetheless an important addition to our meadow.



**Great Blue Lobelia** *Lobelia siphilitica*. The bluish-purple flowers of this gorgeous late summer bloomer grow on a spike rising from a whorl of basal leaves. Each flower consists of two lobes that point up and three that point down. A favorite of bumblebees, it is great fun to watch them visit the flowers and stuff their fat bodies into the mouth of the flower. The genus Lobelia is in reference to a 16<sup>th</sup> century botanist Matthias L'Obel. Great blue lobelia can be found in the visitor center garden, along President's Drive and around the new pond.



Photo by Mary Anne Borge

**Hyssop-leaved Boneset** *Eupatorium hyssopifolium*. This flat-topped wildflower consists of many small disk flowers appearing as one unified inflorescence with narrow gray-green foliage. In mass, it makes a striking display for butterflies, bees and humans alike. Occasionally called justice weed, in the 1800's it was used medicinally in South Carolina by John Justice to treat rattlesnake bites. There is no medical evidence of its efficacy though. Look for it throughout the meadow.



**Obedient Plant** *Physostegia virginiana*. This tall perennial can get aggressive if it likes where it is growing, but the beautiful pink/purple spike of flowers are a real showstopper in mass. Notice the flowers bloom from the bottom of the spike up, offering a great nectar and pollen source for insects for many weeks. The common name refers to the flowers that when nudged to the side, stay put. Try your hand at flower 'rearranging' next time you visit the meadow.



Photo by Mary Anne Borge

**Boneset** *Eupatorium perfoliatum*. Small fluffy white disk flowers bloom in a terminal mound above leaves that are pierced by the stem. The bases of the opposite leaves surround the hairy stem which give it its species name, *perfoliatum* which means through the leaf. Widely used as a folk medicine for treatment of flu, fever and colds, the genus name is in honor of Mithridates VI Eupator, 132-63 BC King of Pontus who reportedly discovered the medicinal properties of many *Eupatorium* species. Find Boneset in the visitor center garden, meadow and founders pond.



Photo by Mary Anne Borge

Aromatic Aster *Symphyotricum oblongifolium*. One of the last of the asters to bloom, aromatic aster can often be enjoyed through October. The oblong leaves on stiff branched stems grow in an open habit. Electric, blue-purple ray flowers surround bright yellow disk flowers that turn dark orange after pollination. Attractive to many late summer butterflies as well as bees, flies, beetles and others, this aster is an important native for our pollinators. Find aromatic aster in the Visitor Center Garden, the new pond and meadow.



Closed Gentian *Gentiana andrewsii*. This slow growing, but long-lived perennial grows in moist shady areas of the Preserve. The bright blue tubular flowers remain closed, inviting only bumblebees to visit since they are the only insect strong enough to pry open the corolla. The leaves and stems of gentian are bitter and therefore not attractive to herbivores, but deer may nip the young tips before the plant flowers. This may cause the central stem to branch. Find Closed Gentian at Founders Pond and in the meadow.



Photo by Mary Anne Borge



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New England Aster Symphyotricum novae-angliae. Bright purple ray flowers surround yellow-orange disk flowers of this Pennsylvania native. It thrives in full sun in all but the driest of soils. Even before the flowers bloom, New England aster is easy to identify by its leaves that clasp the hairy stems. For a garden setting, pinching back the stem in late June-early July will encourage a bushy habit with more flowers. Butterflies, bees and other pollinators love this plant and would appreciate you adding it to your perennial garden! Find New England Aster in the Visitor Center Garden, the meadow and new pond, and of course our nursery!

Sneezeweed Helenium autumnale is an erect perennial that grows 2-5 feet in average well drained soil. The winged stem supports yellow fan-shaped, sterile ray flowers that end in three rounded points. The fertile disk flowers are green when closed, turning yellow as they open to hungry pollinators such as bees, wasps, butterflies and flies. The common name 'Sneezeweed' refers to the historic use of the pulverized disk flowers and leaves taken up the nose as snuff. This would cause sneezing intended to rid the body of evil spirits. Look closely at sneezeweed flowers. You'll notice they open in a concentric circle from the outside, inward. No concern about it making you sneeze through. Sneezeweed pollen is only for insects!

Wingstem Verbesina alternifolia is a tall full sun to partial shade perennial. Its name sake refers to the extra membranous tissue along many of the stems that hold a cluster of bright yellow flowers. The ray flowers droop down offering clear access to the fertile disk flowers in the center. Wingstem is visited by many long-tongued bees, butterflies and moths. It is also a host plant of the silvery checkerspot butterfly and several moth species. Find Wingstem in the Visitor Center Garden and along President's Drive.

White Wood Aster *Eurybia divaricata*. This woodland aster blooms in the shade offering bright white ray flowers surrounding yellow disk flowers. The disk flowers turn dark orange to rusty red after pollination as a signal to visiting bees to move on to fresher flowers. Notice the broad leaves of this woodland plant. Large leaves increase the chance of capturing what little light reaches the forest floor. You can find White Wood Aster throughout the wooded trails.

Thin-leaved Sunflower Helianthus decapetalus. Don't be fooled by the species name decapetalus which means 'ten-petaled'. These bright yellow flower heads can have between 8-12 ray flowers surrounding numerous disk flowers that sit on stiff upright stems 3-5 feet high. This perennial member of the aster family is a great addition to a home garden for attracting bees, flies, wasps, butterflies and moths which feed on the nectar and pollen. It is also a caterpillar plant for several species of butterflies and moths. As a bonus, birds will come feed on the spent seed heads after the flowers are pollinated. Find it along President's Drive exit road.



Photo by Thomas Miller

Elephant Foot's *Elephantopus carolinianus*. This unusual perennial grows along woodland edges. The common name refers to the large, wrinkled basal leaves. Surrounding the purple flower heads are three green bracts which set off the purple, lavender or white flower heads. Look closely at the flower cluster. What appears to be petals are actually a 5-lobed corona of disk flowers arranged in a circle. Elephant's Foot is a Pennsylvania species of special concern, possibly because we are the northern edge of its range. A nice patch of Elephant's Food can be found at the beginning of the Cabin Path Trail right next to the nursery entrance and along the entrance gate as you came in.



Photo by Mary Anne Borge

Thin-leaved Coneflower (Brown-eyed Susan) *Rudbeckia triloba* This self-seeding late summer bloomer offers a colorful display of yellow ray flowers (petals) that are off-set by brown disk flowers (center disk). The genus name honors Olof Rudbeck (1630-1702) a Swedish botanist and founder of the Uppsala Botanic Garden in Sweden where Carl Linnaeus was professor of botany. Thin-leaved coneflower can be found throughout the meadow, near the new pond, as well as in the Visitor Center garden.

A note about goldenrods. We have selected three to represent a large and often difficult genus to differentiate. Goldenrods (*Solidago*) are typically comprised of a cluster of yellow flowers that bloom in the fall. Often thought to be the culprit for seasonal hay fever, goldenrods' pollen is large, heavy and sticky and therefore <u>not</u> airborne. Ragweed (*Ambrosia sp.*) blooms at the same time as some goldenrods and is actually the main reason for fall allergies.

In the past, goldenrods have been overlooked in the home landscape because of this confusion, but they are a critical food source for many pollinators including bees, flies, moths, butterflies, beetles and wasps. They actually sustain more than 100 species of butterflies and moths!

There are goldenrods for nearly every habitat, and Bowman's Hill has more than 10 different species; from the woodland **Wreath Goldenrod**, *Solidago caesia*, to the fragrant Sweet Goldenrod, *Solidago odora*, and the showstopping **Showy Goldenrod**, *Solidago speciosa*. Find goldenrod throughout the Preserve in the meadow, new pond, Visitor Center Garden and woodland trails. Perhaps bring one home from the Nursery after your visit!



Wreath Goldenrod, Solidago caesia Photo by Mary Anne Borge

Showy Goldenrod, Solidago speciosa Photo by Mary Anne Borge





