Wandflower

Gaura spp.

By Helen Hamilton, *President of the John Clayton Chapter, VNPS*

These long-blooming plants (May-October) create an airy effect in the garden. White or pink flowers are borne on slender, wiry stems that move easily with breezes. The four petals are bent backwards, and the stamens and pistil bend downwards in front; the cross-shaped stigma is typical of this family of Evening-primroses. Only a few flowers are open on the stalks at one time, resulting in a delicate appearance. Lance-shaped leaves are sparse, and develop closer to the base.

Gaura does well in hot, dry climates; with a long taproot, the plant can withstand drought. A great perennial that grows in an airy, bushy clump about four feet tall with a three-foot spread, it does well in containers, informal borders, or wildflower gardens. Preferring full sun, it can tolerate partial shade, and will grow in poor soils, although moist, well-drained soil is better for good growth.

The generic name "Gaura" comes from the Greek word *gauros*, meaning "proud", referring to the charming flowers. *Gaura biennis* is native to southeastern Virginia and the piedmont and mountain areas as well. *Gaura lindheimeri*, usually found in nurseries, is native to Louisiana, Texas and Mexico. Many cultivars can be found with names like "Whirling Butterflies", "White Fountain", and "Blushing Butterflies", with soft pink flowers over compact green foliage. ❖

Wildflower Spot – August 2008
John Clayton Chapter of the Virginia Native Plant Society

Passionflower Vine

Passiflora incarnata

By Helen Hamilton, *President of the John Clayton Chapter, VNPS*

Two species of this tropical-looking flower are native to Virginia, growing in most counties in the coastal and piedmont regions. The large lavender flowers are arranged in intricate layers, fringed in the center. Leaves are toothed along the edges and 3-lobed. Emerging late in the spring, passionflower vine grows and blooms rampantly all summer, then often disappears in October and November under the voracious grazing of the caterpillars of the fritillary butterflies.

Tendrils permit climbing up a tree or on a fence, but it is often found sprawling along the ground where it blooms just as passionately. In a controlled garden or flower bed, passionflower vine should be planted in a large container, sunk into the ground.

Passionflower vine grows in fields, pine woods and fencerows in southeastern U.S. and Bermuda and west to Oklahoma and Texas. Any soil will do, rich is preferred. Full sun produces more flowers, drainage can be moist to dry. The plant has deep roots and will colonize to form groundcover.

Passiflora lutea, also native to Virginia, is not quite as showy, with smaller yellow flowers and a small black berry as fruit. Native passionflower vine is often sold in local nurseries, but be careful, the leaves of non-native passionflower vines have more than 3 lobes.

The passionflowers were discovered by a Roman Catholic friar in Mexico in the early 1600's. Symbolism to the Christian passion abounds. The combined sepals and petals could represent 10 apostles (omitting Peter who denied, and Judas who betrayed), the five anthers = the five wounds, the column of the ovary = the cross, the stamens = the hammers, the three stigmas = the three nails.

However, American Indians already used the plant in folk medicine and as an aphrodisiac, attaching a different meaning to the plant's name. Chemists have found drugs in passionflower used to combat insomnia and anxiety. A writer in southern Appalachia advises: "After you have lived with someone for many years the little things they do start to bother you. So you take some passionflower leaves and make you a tea. Pretty soon you start to relax and the little things don't bother you so much and you get along fine."

The fruit is greenish-yellow, edible and makes a very good jelly. In 1612 Captain Smith reported that in Virginia the Indians planted a wild fruit like a lemon, which begins to ripen in September. Passionflower is also known as "maypop", referring to the sound the fruit makes when stepped upon. It is the official state wildflower of Tennessee.

The flowers are visited by butterflies such as the variegated fritillary and zebra longwing, who lay eggs on the stems and leaves permitting the entire lifecycle of these beautiful butterflies. Hummingbirds and bees also visit the flowers, but beware, deer and rabbits may eat the fruit. ❖

Photo: Passionflower vine (*Passiflora incarnata*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Wildflower Spot – August 2009
John Clayton Chapter of the Virginia Native Plant Society

Carolina Wild Petunia

Ruellia caroliniensis

By Helen Hamilton, *President of the John Clayton Chapter, VNPS*

Resembling the annual garden petunias, wild petunia produces a single 5-lobed, trumpet-shaped flower, 1-2 inches long and wide, emerging where each leaf joins the stem. Although it superficially resembles a garden petunia, which is in the potato family, wild petunia is a member of the Acanthus family, to which the cultivated "shrimp plant" and "black-eyed-susan" also belong. The flowers of wild petunia vary in color from pale lavender to medium bluish-purple. On some plants the stems and the paired, egg-shaped leaves are hairy. The plant grows 1-2 feet tall, although a little scraggly.

Wild petunia can be seen along roadsides, moist or dry woods across most of Virginia. Although the species name refers to its occurrence in the Carolinas, the plant is found in the U.S. from New Jersey to Iowa and south to South Carolina, Alabama and Texas. Blooming June through September, the blossoms last only a day or two, but new flowers form in succession.

The plant self-seeds, and new shoots can be seen throughout the garden from a single planting. They are easily transplanted. Germination from seeds is low, but summer stem cuttings will root well. This plant was named for an early French herbalist Jean Ruella (1474-1537). ❖

Photo: Wild Petunia (Ruellia caroliniensis) taken by Helen Hamilton and Jan Newton
For more information about native plants visit www.vnps.org.

Wildflower Spot – August 2010
John Clayton Chapter of the Virginia Native Plant Society

Whorled Rosinweed

Silphium trifoliatum
Aster Family

By Helen Hamilton, *President of the John Clayton Chapter, VNPS*

An imposing meadow plant, producing sunflower-like flowers well into the fall. Lance-shaped dark green leaves, purple stems, and vibrant yellow flowers provide an excellent color contrast. Whorled Rosinweed grows 3-7 feet tall on smooth stems. The middle leaves are in whorls of 3 or 4 with short stalks; the leaves sometimes occur in pairs, or alternate on the stem. Sunflowers *(Helianthus spp.)* have mostly alternate leaves. Flowers are up to 2 inches wide with 15-20 rays.

Very tough and adaptable, preferring rich, well-drained soils, this plant is easy to grow in the home garden, in partial to full shade. Whorled Rosinweed spreads freely and fills in nicely around other shade perennials; it is drought tolerant once established.

A native in eastern U.S. and most counties of Virginia, Whorled Rosinweed is found in open woods, prairies, and disturbed open places. Blooms July-September.

The name of the genus *Silphium* comes from the Ancient Greek word for a North African plant whose identity has been lost; its gum or juice was prized by the ancients as a medicine and a condiment. ❖

Photo: Whorled Rosinweed *(Silphium trifoliatum)* taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Wildflower Spot – August 2011
John Clayton Chapter of the Virginia Native Plant Society

Marsh Eryngo/Button Snake-Root

Eryngium aquaticum

By Helen Hamilton, *President of the John Clayton Chapter, VNPS*

A dramatic, perennial native plant of marshes and bogs, this eryngo has round, bluish flower heads surrounded by spiny bluish leaflike bracts that are longer than the flower heads. Growing to 3 feet tall, the stems have parallel ribs with leaves arranged alternately on the stem. The lance-shaped leaves are larger toward the base of the plant, up to 20 inches long and 2 inches wide), with wavy margins. The upper leaves may be spiny-toothed.

Strictly a wetland species, marsh eryngo grows in brackish and tidal fresh marshes, nontidal swamps, wet pinelands, bogs, ponds, streams and ditches. It adapts well to average garden soils. In Virginia the plant is native to the coastal counties; it is also found from New Jersey south along the Coastal Plain to central Florida and west to Texas.

Various homeopathic sources list marsh eryngo for treatment of some urinary and respiratory disorders. ❖

Photo: Marsh eryngo *(Eryngium aquaticum)* taken by Helen Hamilton in the Williamsburg Botanical Garden

For more information about native plants visit www.vnps.org.

Boneset

Eupatorium perfoliatum

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

Boneset derives its name from long, lance-shaped leaves which are paired and fused on the stem, without petioles. This perennial grows over 5 feet tall on erect, solid stems covered with long spreading hairs. Small fuzzy white florets cluster at the top of branching stems, blooming August through October. Other species of Eupatoriums found on the Coastal Plain have spreading clusters of white flowers, but the leaves are rounded, sessile or on short petioles. The genus is confusing because of varietal forms and hybrids.

Widespread across Virginia, Boneset grows in marshes, swamps, bogs, wet pastures, and other moist or wet low grounds. The range extends from Nova Scotia and Quebec to northern Florida, west to North Dakota, Nebraska, Oklahoma and Texas.

Because the stem appears to be growing through the leaf, early herb doctors wrapped its leaves with bandages around splints, thinking the plant would be useful in setting bones ("doctrine of signatures"). The dried leaves have been used to make a tonic, "boneset tea," thought effective in treating colds, coughs and constipation. Many insects visit the plant.❖

Photo: Boneset (*Eupatorium perfoliatum*) taken by Phillip Merritt
For more information about native plants visit www.vnps.org.

Common Arrowhead

Sagittaria latifolia

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

Growing over 3 feet tall, this perennial has large fleshy leaves mostly shaped like arrowheads, highly variable in size. Both the leaves and flowering stalks are 2 feet long and contain a milky sap. The flowers are in whorls, with 3 white petals, the upper whorls with numerous yellow stamens. The leaves of Bulltongue Arrowhead (*S. lancifolia ssp. media*) reflect the name, as they are broadly lance-shaped, without the projecting pointed lobes at the base.

Common Arrowhead is abundant in marshes, ponds and streams across Virginia, ranging from Nova Scotia and Quebec to British Columbia, south to tropical America. Bulltongue Arrowhead occurs in Virginia only in the counties of the Coastal Plain, and is found near the coast from Delaware to Florida and Texas and south. Blooms July-October.

The genus name is from Latin *sagitta*, "an arrow", referring to the leaves. The species name *latifolia* means "broad-leaved." Another common name "Duck Potato" refers to the tubers produced on the ends of underground stems that are dug up and eaten by waterfowl. Native Americans roasted or boiled the tubers; several days were required to cook them properly -- the "potatoes", deer meat and maple sugar made a very tasty dish.❖

Photo: Common Arrowhead (*Sagittaria latifolia*) taken by Jan Newton
For more information about native plants visit www.vnps.org.

Arrow Arum

Peltandra virginica

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

In early summer, the most conspicuous part of this plant are the arrowhead-shaped fleshy leaf-blades, up to 10 inches long. They are on long stalks from a tuberous root. In late summer and early fall the leaves begin to fade, becoming dormant over the winter.

The flowers are similar to other members of the Arum Family - Jack-in-the-Pulpit (*Arisaema triphyllum)* Skunk Cabbage (*Symplocarpus foetidus*) and Golden Club (*Orontium aquaticum*). A tapering, leaf-like bract (spathe) with wavy edges is curled around a yellowish rod-like spike (spadix). This is the reproductive part – the female flowers are at the base of the spadix with the male flowers above, all tiny and inconspicuous.

In late summer the flowers become a club-shaped appendage at the end of the flower stalk lying in wet ground. Inside are numerous black-green berries which spill out and are primarily disbursed by water.

Growing in swamps and shallow waters, the plant survives with special tissue that allows oxygen from its leaves to reach down to the roots. Arrow Arum requires wet soils and is easily grown in standing water to 6 inches deep or in consistently moist boggy soils, in full sun to part shade. It occurs in the Coastal Plain and

Piedmont region of Virginia and ranges from southern Maine to Florida, west to Michigan, Missouri and Texas. Spoonflower (*Peltandra sagittifolia*) is similar, but with a white spathe, and does not grow in our area. The range of spoonflower is from eastern North Carolina south to Florida and Louisiana.

The genus name comes from the Greek *pelte,* "small shield," and *aner*, "stamen," referring to the shield-like contour of the stamens. While the roots are rich in starches, they contain crystals of calcium oxalate which cause intense burning. Capt. John Smith said "Raw is no better than poison," and "it will prickle and grate the throat extreamely" unless roasted, sliced, and dried in the sun. The name "Tuckahoe," was used by the Algonquin who ate the plant after prolonged cooking or drying which destroys the crystals. ❖

Photo: Arrow Arum *(Peltandra virginica)* taken by Phillip Merritt
For more information about native plants visit www.vnps.org.

Dune Sandspur

Cenchrus tribuloides

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

This native beach grass is often found when walking the dunes or the beach in the fall. As with most grasses, the flowers are inconspicuous and the plant is recognized by its fruits and seeds. The flowering spikes of Dune Sandspur carry several hairy, cup-shaped burs, covered with bristles. Each one has a backward-pointing barb that is very painful to the skin, and difficult to remove. As one of nature's hitchhikers, these spiny fruits easily attach to shoes, pants, and skin, where they will be carried to new locations.

Of the 3 species of the genus *Cenchrus* in the Coastal Plain, this is most likely the species discovered in sand dunes and along the beach, especially when walking barefoot. Other species of *Cenchrus* are recognized by differences in the character of the spines and leaf blades.

Dune Sandspur is an annual with lots of branches that trail along the sand. The leaves are leathery and rough to the touch, and fold inward so they appear to be round. By late fall the plant begins to root wherever the stem touches the ground. This native plant requires sandy soil and full sun, and is common in Virginia's Coastal Plain, growing in coastal sands, sandy fields and woods. The range is from southern New York to Florida and Texas.

Despite its formidable seeds, Sandspur does have redeeming qualities as a sand binder. The stems produce roots while lying flat, thereby securing the plant; the low profile and rooted stems are adaptive features that reduce wind abrasion and increase water uptake.

The species name *tribuloides* comes from the Latin *"tribulus"* referring to a weapon called a caltrop that had four spikes, one always pointing upward when supported on the ground by the other three. ❖

Photo: Dune Sandspur (*Cenchrus tribuloides*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Oxeye

Heliopsis helianthoides

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

Related to sunflowers, Oxeye bursts into bloom in July and continues well into autumn. Large, bright yellow ray flowers surround deeper yellow disk flowers. Unlike sunflowers with fertile disk flowers only, both the ray flowers and the disk flowers of Oxeye will set seed. It's interesting to watch the disk flowers develop in this member of the Aster Family. Each flower is very small, with petals joined in a single tube. The male anthers are the brown columns that first appear, pushed upward and out the top of the flower by the female pistil that acts as a piston. After the stamens wither, the stigma opens where pollinators deposit pollen as they search for nectar.

Growing 2-6 feet tall on stout stems, these are robust plants with large, dark green leaves that are ovate in shape and have teeth along the margins.Very undemanding, Oxeyes do best in full sun with good, well-drained loam, but will tolerate clayey soils. These plants occur in woodlands, meadows and roadsides and do very well in the home garden. They self-sow easily, and as perennials, will return each year. They are frequent in the mountains of Virginia, less frequent in the Piedmont, and grow naturally in only a few counties of the Coastal Plain.

Oxeye is pollinated by many insects: the ground-nesting bee *Holcopasites heliopis* is a specialist pollinator of Oxeye, visiting only this plant and a few others. Usually, the flowers are covered with other bees, hoverflies and especially soldier beetles, often mating while eating. Deer and voles do not bother this plant. ❖

Photo: Oxeye (*Heliopsis helianthoides*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Spanish Needles

Bidens bipinnata

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

The common name comes from the striking arrangement of long, slender, needle-like dry fruits in round seed heads. The flower heads are yellow, but small, ½ inch across, with only a few rays. Bright green leaves are fern-like, divided many times and sit opposite each other on the stem. These are weedy plants growing 1-4 feet high, with strongly veined, square stems.

The size of the plant depends on its growing conditions. While it likes a fertile, loamy soil, somewhat moist, this plant can adapt to a wide range of environmental conditions, as long as there is dappled sunlight – it wilts in full sun. An annual, blooming for only one season, Spanish Needles spreads by reseeding itself.

Native to southeastern United States, it grows in every county in the state of Virginia. Other members of the genus *Bidens* prefer wetter habitats, and the leaves and flowers are different, the fruits broad, not needle-like. This is not a plant usually sold in nurseries for the home garden, but it can be common along roadsides or as a weed in cultivated fields. Some nurseries offer seeds and seedlings of other members of this genus.

This aster has both ray and disk flowers that attract bees, flies, and the cabbage white butterfly. Blooming from August through October, the nectar and pollen feeds insects that are active late in the season.

Native Americans found uses for this plant. The Cherokee chewed the leaves for sore throat and used a leaf tea to expel worms.

The genus name *Bidens* means "two teeth," referring to the barbed points on the fruits that will stick into anything passing by, fur of animals and clothing of people. "Sticktights" is another common name. ❖

Photo: Spanish Needles (*Bidens pinnata*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Cardinal Flower

Lobelia cardinalis

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

One of the most spectacular and beloved of all our wildflower species, Cardinal Flower was named for its resemblance to the intense red worn by cardinals of the Catholic Church. Each flower is about one and a half inches long, with the lower lip of each flower divided into three spreading lobes while the upper lip is two-lobed. Between the two lobes a tube forms with grayish dots that are actually the reproductive parts of the flower. The male part emerges first, followed by the female, on the same stalk.

Cardinal Flower needs moist rich soil. While it will tolerate average garden soil and moderate moisture, it loves to have its roots bathed in the wet, and will grow taller with optimum conditions. However, only one bloom will develop per stalk, so they should be clustered together. In rich soil with lots of water, as many as 50 flowers will bloom on each stalk. Planted with a continual source of water, such as a little stream in the garden, and plenty of mulched organic material, cardinal flower will bloom from midsummer to frost.

The blossom is unusual among our native wildflowers, producing a true red color. The flowers are sources of nectar to butterflies and attract hummingbirds which are the principal pollinators. Although neat gardeners like to remove the spent stalks, it's better to leave at least one to set seed and self-sow. Then in the fall or early spring, the seedlings can be transplanted to new sites.

A relative, the Great Blue Lobelia (*Lobelia siphilitica),* is an even bigger favorite of the hummingbirds; it grows where conditions are a little drier. Red Cardinal Flower can be planted at a pond's edge, while Great Blue Lobelia thrives a little distance from the edge of a pond. Both species grow naturally throughout Virginia.

The brilliant red flower was one of the first plants sent back to France by the French colonists. American Indians made a tea of the roots to use for stomachaches, syphilis, typhoid, worms and as a love potion.

But be careful – the plant can be deadly! It contains at least fourteen alkaloids similar to those found in nicotine, and can cause vomiting, sweating, pain, and death. ❖

Photo: Cardinal Flower (*Lobelia cardinalis*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Rose-Mallow

Hibiscus moscheutos

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

The wide showy flowers of Rose-Mallow signal the start of summer, as they bloom profusely in moist areas until September. Each flower is open for only a day, but they follow sequentially over time. The bloom is a larger version of okra, cotton or hollyhocks which are also members of the mallow family. *The flowers are usually white or pink, but may be a pale yellow***.** All have a red or maroon center and a projecting column of stamens. Many cultivars are available at nurseries, with color variations.

"Hibiscus" is the Greek name for mallow, and "moscheutos" means "scented like the musk rose". Many of the hibiscus are called "marshmallow" because of their family relationship to *Althaea officinalis,* a plant introduced from Europe from which marshmallows were made (now produced from corn syrup and gelatin).

In folk medicine, a poultice of the leaves and roots was used on breast tumors and for gastrointestinal, lung, and bladder problems, as it produces a locally soothing effect.

Rose-mallow grows in all regions of Virginia, and is found in the coastal plain. The plant prefers full sun, and moist to average soil, but will tolerate clay soil. Propagation by seed is easiest, as division requires a cleaver or machete and a person with a strong back.

Many species of butterflies and hummingbirds seek nectar from hibiscus. Rose-mallow is deer resistant. ❖

Photo: Rose-mallow (*Hibiscus moscheutos)* taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Wildflower Spot – August 2020
John Clayton Chapter of the Virginia Native Plant Society

Mistflower and Monarch Butterflies

Conoclinium coelestinum
(formerly Eupatorium coelestinum)

By Helen Hamilton, *Past-president of the John Clayton Chapter, VNPS*

This is one of the native perennials highly regarded as nectar food for monarch butterflies. The typical life cycle of monarchs includes four flights each year, the third in July-August, and the last September-October that produces a different butterfly, capable of the long migration south. Monarchs lay their eggs on milkweed, the leaves furnishing food for the growing caterpillars.

The adult butterflies get their energy and maintenance food from the flowers of milkweed as well as many other late summer flowers, such as Cardinal Flower, Blue Vervain, Wild Bergamot, New York Ironweed, goldenrods, bonesets. Plants with massive heads of tiny flowers are favorites of butterflies since they can easily collect nectar from the closely packed blossoms, not using energy to fly to other nearby plants.

Mistflower is an ideal candidate, blooming from July through October to feed insects from late summer into fall. This native perennial is topped with masses of soft, fluffy violet-blue flowers. It's a member of the Aster family, but there are no rays on the flowers. Each flowerhead has as many as 50 little florets, each with 5 tiny lobes and a long style that gives the flowers a fuzzy appearance. Other asters like black-eyed susans, dandelions, and sunflowers have both ray and disk flowers.

This plant grows 3-4 feet tall, and spreads by creeping roots. It can take over an entire border, but the roots are shallow and easy to pull out. The plant grows best in full sun to light shade, in moist conditions – it does not handle drought well but requires little attention.

A cultivar 'Wayside' is somewhat shorter, but there is little information about butterfly visits to this plant. "Gregg's Mistflower" is native to Texas, Arizona and New Mexico and south and is a good pollinator plant in that region. Our native Mistflower can sprawl and become weedy in appearance by late fall, but it is a butterfly magnet, and is the only mistflower that should be planted here. Deer do not typically browse on the bitter-tasting leaves.

It is also known as Wild Ageratum because the flowers resemble those of the shorter (6-12") annual Dwarf Ageratum (*Ageratum houstonianum,)* sold in garden centers as bedding plants. Blue Boneset is another name; the eupatoriums were thought to cure broken bones since the stems of some species grow through the leaves.

Mistflower grows wild in woods edges, stream banks, ditches, meadows, and fields, in nearly every county in Virginia. The leaves grow opposite on the stems with soft toothed edges, 3" x 2". ❖

Photo: Blue Mistflower (*Conoclinium coelestinum*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.