Wildflower Spot – February 2007 John Clayton Chapter of the Virginia Native Plant Society

Skunk Cabbage

Symplocarpus foetidus

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

One of the few plants blooming in February, skunk cabbage is well-named because all parts, when crushed, smell of skunk. Children love to be repulsed by this plant! Growing in swamps and moist low ground, the flowers appear first, in a knob-shaped cluster inside a purple-brown and green mottled hood 2-5 inches long. The flowers generate enough heat to melt the surrounding snow. Biologists have found the flowers produce warmth over a period of 12-14 days, remaining an average of 36 degrees F about the outside air temperature, day or night. Like a warm-blooded animal, they can regulate their warmth. The heat and foul smell attract the first pollinating insects of the year (usually flies).

The large oval leaves resemble cabbage. They unfold after the plant blooms, and can grow 3-4 feet long. By mid-May a wetland can be covered with skunk cabbage leaf rosettes. By June the leaves begin to decay; since the plant forms no woody fibers, a large part of the leaf and stem is water, and the leaves simply dissolve. By mid-June the fruit heads are roundish balls, wine-red, about two inches in diameter. In August the fruit head falls apart, leaving seeds on the ground to be eaten, to decompose, or to germinate.



By the end of summer no trace of the plant is left, but a fully-grown skunk cabbage has a massive root system, with several years' reproductive parts partially formed within. Skunk cabbage is widely distributed in the state of Virginia, its range extending to Georgia and West Virginia. A truly remarkable, unusual plant! �

Photo: Skunk Cabbage(*Symplocarpus foetidus*) William S. Justice @ USDA-NRCS PLANTS Database For more information about native plants visit www.vnps.org.

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

Possum-haw

Ilex decidua

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

The bright colored berries of possum-haw create a striking effect in the winter landscape. Shrubby or growing to small-tree size, this holly drops its blunt-toothed leaves in the fall revealing many small orange or red berries (drupes) along leafless slender gray twigs. The dark green, glossy leaves are widest above the middle and wedge-shaped at the base. They turn a soft yellow in the fall before dropping. The leaves are generally thinner than those of yaupon holly, which has smaller, evergreen leaves.

The inconspicuous flowers, which appear in the spring, are greenish-white and in small clusters. Keep in mind that as in the case of American Holly, with Possum-haw both a tree bearing male flowers and a tree bearing female flowers are required for berry formation.

This very adaptable shrub prefers well-drained,



acidic soil with average moisture. Try growing it in low spots or along ponds or streams in moist soil, and give it plenty of space to stretch its branches. Its native habitat is swamps and wet woods, chiefly on the coastal plain from D.C. to Florida and Texas and in the Mississippi Embayment region.

Possum-haw is effective as a single specimen, in groups or as a hedge ("haw" comes from the same root as "hedge"). Opossums, raccoons and other mammals eat the fruit, as well as songbirds and game birds. Bluebirds especially like the fruit. �

Photo: Possum-haw (*llex decidua*) from Native Plant Society of Texas website. For more information about native plants visit www.vnps.org.

CRANEFLY ORCHID

Tipularia discolor

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

A familiar site in rich woods in the winter is the single leaf of the summer-blooming cranefly orchid. This species usually occurs in colonies – several leaves, each representing a single plant, are usually seen together. Green on the upper surface, the underside is shining purple. The top surface may be smooth or corrugated, but the underside is always beet red.

When the orchid blooms in mid-July, no leaves are visible. The flower of Cranefly orchid is very delicate and inconspicuous. Pale green and pale purple to beige, no more than ½ inch across, it is easily overlooked, unlike the winter leaf which signals the presence of this orchid. The flowers are only noticed when a shaft of slanting fall sunlight highlights what reminds some people of a swarm of small insects - hence "cranefly." The genus name of the cranefly is Tipula. Another common name is Elfin's Spur.

Another common name, "Crippled Cranefly" refers to the flowers which incline slightly to the right or left. This is necessary for pollination by night-flying moths, when the pollen-bearing sacs become attached to the moth's eye.



Cranefly orchid is not usually available in nurseries since, like all native orchids, it is dependent on fungi in the ground and all parts of the plant are basically inconspicuous. However, on a walk through local woods in the winter, the green leaves are a welcome sight in the midst of brown leaf litter.

Growing naturally in nearly all counties of Virginia, Cranefly orchid is found in rich damp woods from Massachusetts to southern Michigan, Florida and east Texas. �

Photo: Cranefly Orchid (*Tipularia discolor*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

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

SEEDBOX Ludwigia alternifolia

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

A look at the fruits makes it clear why this plant is called seedbox –numerous little brown boxes no larger than ¼ inch in diameter are filled with seeds. Growing 2-3 feet tall, the many-branched, smooth stems are covered with the almostsquare fruits, visible in the winter without the leaves. In summer small, yellow flowers appear next to each leaf along the stem. Seedbox is related to evening primrose, but the flowers are smaller.

This native perennial grows mostly in swamps and wet soil. With many seeds in each seedpod, the plant can be aggressive in the home garden. Ranging from Massachusetts and south Ontario to Iowa and southern Nebraska, south to Florida and Texas, seedbox is found in nearly every county in Virginia. Flowering is in July and August.

The species name comes from the fact that the leaves are arranged alternately on the stem. Honored by the genus name, Christian Gottlieb Ludwig was a professor of botany at Leipzig 1709-1773. ❖



Photo: Seedbox (Ludwigia alternifolia) taken by Helen Hamilton in Williamsburg Botanical Garden, where it was growing in moist microhabitats before the Ellipse Garden was established, January 2010.

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

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

Wild Yam

Dioscorea villosa

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

This low, creeping perennial vine is usually found wild in the eastern half of North America. Wild yam can be recognized in winter by the greenish-gold, 3-winged capsules with very wide, winged seeds. The alternate leaves are heart-shaped at the base, long-pointed, and with prominent veins. Leaf edges are smooth, and the lower ones occur in whorls of three. In spring small, greenish-yellow flowers hang in drooping spikes – the flowers are much smaller than the fruits which come later. The male and female flowers are in separate clusters.

Wild yam can be found in moist open woods, thickets, and roadsides. The plant will grow in poor soils and full sun. Found in nearly every county in Virginia, it ranges from Connecticut and New York to Minnesota, and south to Florida and Texas. Flowers appear in April through July.

American Indians used root tea to relieve labor pains. A tea made from fresh dried root was formerly used by physicians to various conditions. Most of the steroid hormones used in modern medicine, especially those



in contraceptives, were developed from elaborately processed chemical components derive from members of the yam family. Although recently marketed as a source of estrogen or progesterone, wild yam root does not contain human sex hormones. The fresh plant may induce vomiting and other undesirable side effects. (Foster and Duke, Medicinal Plant and Herbs.) ◆

Photo: Wild Yam (*Dioscorea villosa*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

Wildflower Spot – February 2012 John Clayton Chapter of the Virginia Native Plant Society

Swamp Bay

Persea palustris

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

This medium-sized tree is evergreen, with strongly aromatic, narrow, dark green leaves, wedge-shaped at the base. Somewhat leathery, the leaves are shiny on top and pale beneath with rusty-brown fuzz. The twigs are angled, and densely rusty-hairy. In May and June small flowers are borne in clusters on hairy stalks, producing small, dark blue to black roundish berries on red stems. Bark is dark reddish and deeply grooved. Swamp Bay is a tree of swamps and wet woods in the southern coastal states. In Virginia, it occurs in only 12 counties of the Coastal Plain. A large champion tree grows in a residential neighborhood in Newport News with a circumference of 155 inches, and 55 feet in height. The flowers bloom May to June.

With an aroma similar to that of the European true laurel or bay tree, *Laurus nobilis,* the spicy leaves can be used to flavor soups and meats.

The tree is a larval host for the Palamedes swallowtail butterfly, and several species of birds eat the fruit. A close relative is *P. americana* of Central America, the avocado.

This species is very similar to the southern species Red Bay *Persea borbonia*, which is much less hairy, especially on the twigs, and is native north only to central North Carolina. �

Photo: Swamp Bay (*Persea palustris*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.



Wildflower Spot – February 2013 John Clayton Chapter of the Virginia Native Plant Society

BRITISH SOLDIER LICHEN

Cladonia cristatella

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

A bright spot in the woods and meadows in winter is this little lichen with the red caps, named for the red uniforms of the British soldiers during the Revolutionary War. The surrounding material is gray-green, a color characteristic of lichens, reflecting their dual lifestyle. A green alga Trebouxia erici supplies nourishment by its photosynthesis while the fungus, Cladonia cristatella furnishes necessary water and nutrients.

Lichens are not plants, but an association, often called "mutualism" of two, and sometimes three different organisms. Often gray-green in color, their growth form can be shrubby, as is this species, leafy, or crusty, among others. Certain lichens live on leaves, as parasites. Sexual reproduction is by spores, formed in ascospores, the red caps of this species, and bowl-shaped structures in other lichens. They reproduce asexually when a fragment is broken from the main body, and by producing microscopic, dustlike particles distributed by the wind.

These are extremely important organisms ecologically. They can transfer nitrogen from the air to the soil in a form usable by plants, they break down old wood, returning nutrients to



the soil, and can grow on bare rock, eventually dissolving the rock and creating minute bits of soil. Very sensitive to air pollution, a lack of lichens in an area indicates an unhealthy atmosphere.

British Soldier is usually found on mossy logs, tree bases, and stumps. Native to North America, this species is widespread in Virginia, common in moist exposed roadside soil and rotting wood, especially in sunny openings. *

Photo: British Soldier Lichen *(Cladonia cristatella)* taken by Helen Hamilton For more information about native plants visit www.vnps.org.

Wildflower Spot – February 2014 John Clayton Chapter of the Virginia Native Plant Society

Pond Pine

Pinus serotina

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

The leaves of Pond Pine occur 3 or 4 in a bundle, and are almost as long as those of Loblolly, where the leaves are 3, rarely 2 in a bundle. The bark is very different - Pond Pine has small, scaly plates, usually with numerous tufted needles along the trunk, while the bark of Loblolly is thick and rectangular. Pond Pine grows 40-70 feet tall, with gnarled and twisted branches and trunk; Loblolly forms a tall, straight trunk. Young cones appear March -April, but the mature seed cones may remain closed for up to 10 years. They will open following a fire.

This pine is endemic to the southeastern Coastal Plain, growing in swamps and wet soils in a few southeastern counties of Virginia. It grows in wetlands along with Shortleaf Pine (*P. echinata*). The documented range is from Alabama and Florida, to southern Delaware and southeast Maryland. This species is closely related to Pitch Pine (*Pinus rigida*), native to the mountains of Virginia.



The species name *serotina* comes from the Latin *serus*, meaning "late." Pond Pine is known as a "serotinous" species, since the cones open in response to a hot fire. Fires in the Great Dismal Swamp National Wildlife Refuge have encouraged the growth of Pond Pine forests. �

Photo: Pond Pine (*Pinus serotina*) courtesy Will Cook for Carolina Nature For more information about native plants visit www.vnps.org.

CRANEFLY ORCHID

Tipularia discolor

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

A familiar site in rich woods in the winter is the single leaf of the summer-blooming Cranefly Orchid. This species usually occurs in colonies – several leaves, each representing a single plant, are usually seen together. The top of the leaf is gray-green, often mottled, and the underside is bright purple, a combination of colors which may increase the light captured under winter conditions. After the flowers disappear, an ovate leaf grows up and is visible in the local woods all winter.

When the orchid blooms in mid-July, no leaves are visible. The flower of Cranefly Orchid is inconspicuous. Pale green and pale purple to beige, no more than ½ inch across, it is easily overlooked, unlike the winter leaf which signals the presence of this orchid. The flowers are inconspicuous but very delicate. They are

only noticed when a shaft of slanting fall sunlight highlights what reminds some people of a swarm of small insects - hence "cranefly." The genus name of the cranefly is *Tipula.*

Another common name, "Crippled Cranefly" refers to the flowers which incline



slightly to the right or left. This is necessary for pollination by night-flying moths, when the pollen-bearing sacs become attached to the moth's eye.

Growing naturally in nearly all counties of Virginia, Cranefly orchid is found in rich damp woods from Massachusetts to southern Michigan, Florida and east Texas.The species name *discolor*, "of different colors," refers to the leaf surfaces. This genus has a complex geological past; its 3 species are located in the Himalayas, Japan, and here in the eastern U.S.

Cranefly orchid is not usually available in nurseries since, like all native orchids, it is dependent on fungi in the ground. And, all

parts of the plant are inconspicuous. However, on a walk through local woods in the winter, the leaves are a welcome sight in the midst of brown leaf litter. �



Photo: Cranefly Orchid (*Tipularia discolor*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

Wildflower Spot – February 2016 John Clayton Chapter of the Virginia Native Plant Society

CORALBERRY *Symphoricarpos orbiculatus*

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

The fruit of Coralberry is its most outstanding ornamental attribute. From fall throughout the winter, long, cascading branches carry clusters of brilliant reddish purple berries, eaten primarily by robins and bobwhite quail. Coralberry loses its leaves in the winter; the bare branches with berries can be used for cut arrangements.

The shrub is dense and low-growing and can be used as an informal hedge or for erosion control on slopes. Coralberry forms extensive colonies and spreads by rooting at the nodes where it touches the ground. This plant is drought-tolerant and will adapt to full sun or part shade, moist to dry conditions, and a loamy or rocky soil; it is a good choice for xeriscape and woodland gardens.

Songbirds, ground birds, small mammals, and browsers use this plant for food, cover, and nesting sites, because of its dense branching habit and abundant leaves. A member of the honeysuckle family, another common name of *Symphoricarpos orbiculatus* is Buckbrush, because the shrub is a favorite food plant of whitetailed deer, and is often heavily browsed.



From June to July, small pink-white flowers bloom which attract bees, wasps, and flies primarily. These insects suck nectar from the flowers, although some of the bees also collect pollen.

Found all over Virginia, Coralberry ranges from Connecticut south to Louisiana and west to Michigan and Colorado. This native shrub is a good alternative to invasive Japanese barberry and non-native cotoneaster. <a>

Photo: Coralbery (*Symphoricarpos orbiculatus*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

Wildflower Spot – February 2017 John Clayton Chapter of the Virginia Native Plant Society

INKBERRY *Ilex glabra*

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

When conditions are too wet for most nonnative evergreens, our native Inkberry will thrive. This useful shrub is long-lived, slowgrowing, and fine-textured – all characteristics that make it desirable for formal hedges in traditional gardens. But it is also invaluable as screening and as winter bird food in more natural landscapes. When it gets lots of sun, it will become dense without shearing or pruning. Inkberry can tolerate part shade, but in the wild whenever the forest canopy gets multilayered and dense, inkberry dwindles away and dies. effective screen. Inkberry prefers acid, sandy soil, near a wet source. Companion plants are blueberry, winterberry, wax myrtle; nearby pine trees can furnish the necessary acid soil conditions.

Inkberry grows in bogs and wet woods of the coastal plain from Nova Scotia to Florida and west to Louisiana. In Virginia it is found primarily in the southeastern counties. This mound-shaped shrub is an attractive alternative to non-native invasive plants such as privets and heavenly bamboo. ◆

This evergreen holly produces black fruits in the summer which persist over the winter, furnishing food for many birds, including bluebird, brown thrasher, hermit thrush, bobwhite, and wild turkey. The leaves are without prickles, usually blunt-tipped with a few wavy-edged teeth above the middle.

An attractive landscape plant, Inkberry grows only to ten feet, and can colonize to furnish an



Photo: Inkberry (*llex glabra*) taken by Jan Newton For more information about native plants visit www.vnps.org.

Wildflower Spot – February 2018 John Clayton Chapter of the Virginia Native Plant Society

Greenbriers

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

Greenbrier, Catbrier, Sawbrier, Bullbrier, Carrion-flower – members of this genus have many common names, none of them conveying that of a friendly plant. Rather, the leaves of many species have strong prickles, and the stems have thorns to hook onto branches of other plants. New homeowners of old farms and less-than-new houses often find part of the property covered with dense impenetrable thickets of the vine, viewed by some as "razor wire."

While clumps of these plants are daunting to gardeners, all this greenery is important food and shelter for wildlife. Black Bear eat the berries and shoots, deer graze on new growths, and birds enjoy the berries, passing the seeds along to another site. Native Americans found many uses, culinary and medicinal, for species found here in the Coastal Plain.

Common Greenbrier (*Smilax rotundifolia*) was described by Linnaeus, from plants collected by colonial botanists and sent to Europe. Also known as Sawtooth Greenbriar, Horsebrier, and Round Leaf Greenbrier, this is not a plant loved by gardeners. This vine grows all over natural wooded areas, draping stems from shrub to shrub – it's easy to get caught in a group of bending and sprawling shoots, the thorns



Common Greenbrier (*Smilax rotundifolia*) catching on smooth clothing and impossible to remove from woolen sweaters.

Easy to recognize, Common Greenbrier has rounded leaves that are bright green on both sides, and strong parallel veins. While these leaves often persist over the winter, most species are deciduous. Tiny yellowishgreen flowers (male and female on different vines) bloom for two weeks in April or May, followed by clusters of blue-black berries from September through November. Among the many birds that feed on the berries are Catbird, Brown Thrasher, Eastern Bluebird and Whitethroated Sparrow.

Catbrier (*Smilax bona-nox*) is distinctive for the leathery, triangular leaves with a broad lobe on each side, presenting an "eared" appearance. This is a woody vine that climbs and winds with tendrils up trees, over shrubbery and along the ground, creating thick brambles. The smooth, green stems grow to 20 feet long, and *Continued on next page*

Photos: Catbrier *(Smilax bona-nox)* taken by Helen Hamilton Common Greenbrier *(Smilax rotundifolia)* taken by Seig Kopinitz For more information about native plants visit www.vnps.org.



Catbrier (Smilax bona-nox)

are covered with stout, sharp prickles that make passage very difficult. Leaves are green beneath, often mottled with white. The leaf edges are often bristly and when smooth, a raised, wire-like vein runs along the margin.

In late spring, small, inconspicuous flowers appear in clusters in the axils of the leaves, male and female on different plants. Following the flowering period, clusters of blue fruits are very attractive to wild turkeys, squirrels and many species of songbirds during the winter. Whitetailed deer will browse the foliage, not bothered by the thorns on the lower parts of the plant. The seeds are dispersed by animals and can be carried long distances by birds.

Native Americans and colonists cooked the shoots of greenbriers and added young leaves and tendrils to salads, well into summer. The roots form a large tuber similar to a sweet potato that served many needs. Dried, pounded to a powder, and mixed with water, the final paste was used to thicken soups, to make jelly, and to treat minor aches and pains. Francis Peyer Porcher, an American botanist, wrote that the American Indians as well as soldiers during the Civil War fermented the Greenbriar tuber into a "home brew" adding sassafras for flavor to enlighten their spirits. The leaves of the Greenbriar can be used as a dressing for cuts and burns. \diamondsuit

Wildflower Spot – February 2019 John Clayton Chapter of the Virginia Native Plant Society

American Hazelnut

Corylus americana

By Helen Hamilton, Past-president of the John Clayton

This multi-stemmed shrub can be recognized in the winter by the 2-3-inches long, yellowishbrown catkins, hanging from the tips of every branch. These are the male flowers, the female flowers appear in small, reddish, inconspicuous catkins. In late summer the female flowers give way to small, egg-shaped nuts encased within interesting leafy, ragged-edged bracts.

Dark green leaves are oval-shaped, edged with double teeth. In the fall their color ranges from combinations of orange, rose, purplish red, and yellow to a dull yellowish green. Twigs are covered with bristly, reddish hairs topped with sticky glands; they contain toxic materials that may act as a line of defense. The hairs were used by Native Americans and early physicians to treat nephritis.

Hazelnut grows in moist to dry well-drained soils, in full sun or light shade, and can tolerate clay and drought. This tree is cold-hardy, blooming in February through March. It is widespread in Virginia, usually found in dry or moist woods and thickets.

Growing 6-12 feet tall, the plant can form thickets, creating a dense privacy screen, and



furnishing nesting sites for birds. Also known as American filbert, the hazelnuts are edible and eaten by deer, squirrels, foxes, northern bobwhite, turkey, and woodpeckers. They have a higher nutritional value than acorns or beechnuts but are quite small and this plant is not grown for commercial purposes. A European species C. avellane is the source of hazelnuts in the U.S. \diamondsuit

Photo: American Hazelnut (*Corylus Americana*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

SKUNK CABBAGE Symplocarpus foetidus

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

Skunk Cabbage is the first flowering plant of spring, sometimes appearing in January. But the bloom is not at all typical. Poking up through the snow is a purple-brown and green mottled hood, which is a modified leaf, 2–5 inches long. Inside is a nearly round flower head with many small, tightly packed individual flowers. They "bloom" when stamens emerge above the four tiny sepals. After the pollen has been released, the stamens wither, and a style grows out of the middle of each flower to be pollinated by insects with pollen from other flower heads.

The flowers of Skunk Cabbage have no colorful petals to attract pollinating insects. Instead, they emit an odor similar to decomposing flesh which attracts the first insects of the year, usually carrion and dung flies, but also beetles, bees and mosquitoes.

Biologists have found the flowers produce warmth over a period of 12-14 days, remaining an average of 36 degrees F about the outside air temperature, day or night. Like a warm-blooded animal, they can regulate their warmth. The heat and foul smell attract the first pollinating insects of the year, usually flies.

After the plant blooms, large oval leaves resembling cabbage unfold and can grow 3-4 feet long. By mid-May a wetland can be covered with skunk cabbage leaf rosettes. By June the leaves begin to decay; since the plant forms no woody fibers, a large part of the leaf and stem is water, and the leaves simply dissolve. By mid-June the fruit heads are roundish balls, wine-red, about two inches in diameter. In August the fruit head falls apart, leaving seeds on the ground to be eaten, to decompose, or to germinate. By the end of summer, no trace of the plant is left but a fully-grown skunk cabbage has a massive root system, with several years' reproductive parts partially formed within.

Skunk cabbage is widely distributed in the state of Virginia, its range extending to Georgia and West Virginia.

The range extends from Quebec and Nova Scotia to North Carolina and west to Minnesota and Iowa. A nearly identical plant of northeast Asia is a close living relative. Three other members of the huge, mostly tropical Arum family are familiar in the Coastal Plain -- Jack-in-the-Pulpit (*Ariseama triphyllum*), Arrow Arum or Tuckahoe (*Peltandra virginica*), and Golden Club (*Orontium aquaticum*).

Calcium oxalate crystals in the leaves are irritating if eaten and may be toxic. With these crystals and the disagreeable scent, most animals will avoid eating them, except when the leaves are young in the spring. The roots are considered toxic, but Native Americans used them for cramps, convulsions, toothaches and as a poultice for wounds. Early physicians used the leaves for coughs, asthma, and externally in lotions for itching and rheumatism. \diamondsuit



Photo: Skunk Cabbage (*Symplocarpus foetidus*) taken by Lisa Nickel and Helen Hamilton For more information about native plants visit www.vnps.org.