Yellow Trout Lily (or Dog-Tooth Violet)

Erythronium americanum

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

In early spring, look for a bright yellow flower, drooping towards the ground ("its eyes look downwards"). Each stem is only 4-6 inches tall with a solitary flower on top. A member of the lily family, the trout lily has flower parts in threes, i. e., 3 yellow "sepals" and 3 yellow "petals" and 6 stamens in two circles of three. The fleshy



season. It is important to choose an appropriate site, with sun in the spring — to warm the earth and provide enough light for the lilies to make and store food — and shade or partial shade in the summer. Trout lilies are lovely intermingled with other spring ephemerals such as bloodroot or spring beauties. They do not

green leaves with purple mottling are equally distinctive in the forest litter.

Because trout lilies are difficult to grow from seed, many bulb suppliers and nurseries sell the bulbs, which can be planted in the fall. If left undisturbed, plants will slowly spread by underground shoots. Despite its ability to spread, the trout lily is not considered an aggressive spreader but rather a delight to have in one's garden. Trout lily grows best in moist, acidic woodland soils, but can adapt to growing in many types of gardens.

Remember to buy from nurseries that guarantee nursery-propagated seeds or plants as our native plants and habitats are at risk from being depleted.

The flowers have a short life, but the leaves remain as ground cover throughout the growing

transplant well.

The common name refers to the appearance of the flowers during trout fishing season, and to the brown and purple spotted leaves. "Dogtooth violet" refers to the appearance of the bulbs, although this plant is not related to violets. Trout lily is found throughout the state of Virginia, and ranges south to Florida and Alabama.

While not recommended today because of some toxicity, Iroquois women ate the leaves to prevent conception and the plant has antibacterial properties.

A close relative, *Erythronium umbilicatum* looks very much like *E. americanum*, but its fruit has a depression at the tip. The fruit of *E. americanum* is rounded or flat at the summit. *Erythronium umbilicatum* also occurs extensively in Virginia.

Photo: Yellow Trout Lily (*Erythronium americanum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

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

Shadbush; Eastern Serviceberry

Amelanchier canadensis

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

The lacy white-flowered inflorescences of Shadbush signal the arrival of spring. Early colonists noticed the tree blooming when the shad were running, hence one of its common names. It was also known as "Serviceberry" because in the mountains its bloom-time served as an indicator that the ground was thawed enough to bury the deceased and, thus, ministers were able to hold funeral services.

This species of Shadbush usually occurs as a multi-stemmed large shrub reaching 20-25 feet in height, but sometimes it is a small, singlestemmed tree. It does not form colonies by means of rhizomes or stolons, as do some other shrubby shadbush species. Although primarily a native of wet bogs and swamps, it grows well in full sun or light shade on moist, well-drained, acid soil. It will rarely require any pruning or fertilizing, except if thinning of the multiple stems is desired. Long-term health is usually not affected by pests.

Small white flowers are produced in dense, firmly erect inflorescences from attractive reddish-purple terminal buds. When flowering begins, the leaves are still folded, only about half-grown and covered with a fine, soft gray



fuzz; later the leaves are smooth and dark green. The flowers produce many small, red, sweet and juicy fruits resembling tiny apples, often well-hidden by the leaves. The sepals that remain on the apex of the fruit are erect or spreading, in contrast to the strongly reflexed sepals of Downy Serviceberry (A. arborea). These fruits would be popular with people were they not so quickly consumed by birds and other wildlife.

In autumn, shadbush is alive with a variety of colorful hues, from yellow and gold to orange and deep red. This plant is striking when placed in a mixed shrubbery border where its brilliant white blooms and fall color stand out nicely against a background of evergreen shrubs. With its open crown, Shadbush is wellsuited for planting as a specimen near the deck or patio. \clubsuit

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

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

SAW GREENBRIER

Smilax bona-nox

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

While seven species of greenbriers can be found in coastal Virginia, 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 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.

The young shoots are excellent cooked like asparagus and served with butter. Also, the young shoots, leaves and tendrils can be prepared like spinach or added fresh to salads as long as they remain tender and juicy, often well into summer. The tuberous roots will provide a gelatin substitute, crushed, cleaned and dried.

This greenbrier will grow in all soils, acid or alkaline, in semi-shade or full sun, but does require moist soil. Found in coastal and piedmont Virginia, the range extends from southern Maryland to Missouri and south to Florida and Mexico. Information about other native plants can be found at www.claytonvnps.org. �

Photo: Saw Greenbrier (*Smilax bona-nox*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

Poison Ivy

Toxicodendron radicans

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

"Leaflets 3, let it be!" Relatively few plants carry 3-parted compound leaves, and this is an easy way to recognize a very irritating plant. Not related to invasive English ivy, poison ivy can grow as an erect shrub or climber. Leaves are 3-parted and variable – they may be stiff and leathery, hairy or not, shiny or dull, toothed or not. The red fall foliage is especially conspicuous.

Twigs are brown with short aerial rootlets; old stems, covered with fibrous roots, look hairy. Small yellowish flowers blooming in May-July produce small clusters of white, ball-shaped fruits August-November.

Poison ivy is found in every county in Virginia, and widely distributed throughout the eastern and central United States. A close relative with lobed leaflets of 3, poison oak *(Toxicodendron pubescens),* does not extend into the northern states nor Canada, and grows in only a few eastern counties of Virginia. Human sensitivity to the irritating oil urushiol is variable, and 15-25% of the population is not at all allergic to poison-ivy and will never develop a reaction. Some people require prolonged exposure to the plant to develop a rash, but about half of all people will break out with a single contact, some requiring hospitalization. Without the leaves, poison ivy vines are difficult to identify in the winter, and for persons with high sensitivity, touching a stem on a tree trunk will cause an allergic reaction.

Despite poisonous effects of the plant on humans, the fruits are relished by over 60 species of birds. Many seeds are passed undamaged through their digestive systems, allowing wide distribution of this noxious vine. �



Photo: Poison ivy (*Toxicodendron radicans*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

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

LOBLOLLY PINE

Pinus taeda

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

This tall evergreen tree grows rapidly, reaching up to 115 feet. The bark is reddish brown to blackish gray, furrowed to form broad, elongate, flat-topped plates. The needles are long (up to 10 inches) and yellowish green, in bundles of three needles per cluster. Young female cones are yellow and near the growing point of the twig; mature cones are slender and oblong when closed. Cones persist for about a year after shedding seeds.

Loblolly pine is native in 15 southeastern states, often forming pure stands in swamp margins and well-drained slopes of rolling, hilly uplands. The tree grows in eastern and central counties of Virginia, and is particularly abundant on the Coastal Plain. All pines are wind-pollinated; both the pollen and the seeds of loblolly pine blow everywhere. Requiring sunny locations, abandoned fields are excellent nurseries for this species which often invades old agricultural lands.

The pollen released by the male cones in early spring covers surfaces with a yellowish powder. Researchers have found the pollen can travel as far as 1,800 miles from its source and remains viable despite exposure to moisture, cold and



UV radiation from sunlight. Although suspected of causing allergic reactions, very few people are affected.

One of the meanings of the word loblolly is "mud puddle", where these pines often grow. Among the fastest-growing southern pines, it is extensively cultivated in forest plantations for pulpwood and lumber. The wood is light brown and coarse-grained, widely used for home and general construction, especially for house framing. The Cherokee also used the wood for lumber, and for canoes and carvings.

Trees of the pine family are larval hosts for over 200 species of butterflies and moths. �

Photo: Loblolly Pine (*Pinus taeda*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

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

VIRGINIA PINE

Pinus virginiana

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

Although once considered a "forest weed" and called "Scrub Pine," Virginia Pine quickly reforests abandoned and cutover lands and has become a principal source of pulpwood and lumber in the southeast. Commonly a small or medium-sized tree, a specimen 114 feet tall has been recorded. Long branches are often drooping, forming a ragged, flattened crown. The lower branches are long persistent even when dead.

Reddish-brown bark is thin and scaly, with shallow fissures. The needles are in 2's. to 3 inches long, stiff, twisted, dark green, persisting 3-4 years. The cones are somewhat prickly, maturing the second year and remaining on the tree for several years after the seeds are released. Greenish male cones are in clusters at the tips of branches, while the female cones sit upright on the branches. This tree is wind-pollinated, blooming April through May.

Virginia Pine grows best on clay and loamy acidic soils, well-drained, especially on abandoned farm fields. This tree occurs in every county in Virginia and ranges from southern New York to northern Florida and east Texas.

The Cherokee found medicinal uses for various plant parts and used the needles or gum to scent soap.

The seeds are an important food source for many small mammals and birds, including the Northern Bobwhite. Because older trees contain much softened wood, Virginia Pine offers good nesting sites for woodpeckers. *



Photo: American Holly (*llex opaca*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

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

Longleaf Pine

Pinus palustris

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

Longleaf Pine is well-named with evergreen needles 10-18 inches long, 3 in a bundle. Densely crowded at the ends of branches in a distinctive arrangement, they form large round clusters, often drooping. Twigs are very stout, over1/2 in diameter and orange-brown in color. In winter, the ends of branches have large buds, up to 5 inches long; covered with silvery-white, fringed scales, known as "candles" when elongating. Cones are larger, over 8 inches long, with short prickles. When young, the bark is gray-brown, thin and scaly; with age the bark shows flat, scaly, reddish brown plates. The tree grows tall and straight, to 90 feet, with sparse branches.

The habitat for this species is largely gone, due to overharvesting, and commercial forestry practices. Now occurring in Virginia only in Brunswick, Southhampton, Suffolk, Isle of Wight and Virginia Beach, Longleaf Pine ranges south to Florida and Texas. It grows in moist or dry sandy soil, largely on the Coastal Plain. Extremely fire tolerant, when young the bud is protected by the compact arrangement of needles, hence the tree is adapted to frequently



burned environments. Historically, frequent fires ignited by lightning and Native Americans sustained this species.

Longleaf Pine is valuable as lumber, tar, pitch and turpentine. Several species of birds prefer this habitat, including the critically endangered Red-cockaded Woodpecker, and perhaps the Ivory-billed Woodpecker. ❖

Photo: Longleaf Pine *(Pinus palustris)* taken by Phillip Merritt For more information about native plants visit www.vnps.org.

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

Field Horsetail

Equisetum arvense

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

This plant is not a rush, nor a fern. *Equisetum* is the single surviving genus of a class of primitive vascular plants, which included huge tree-like species, dating back to 350 million years ago. They are grouped with "fern allies" because, like ferns, they do not have flowers, nor seeds, and reproduce by spores. Only four species of *Equisetum* are found in Virginia, two in the mountain region, and one other in our area, Scouring Rush (*E. hyemale*).

Field Horsetail produces separate soft, light brown unbranched stems early in the spring, with cones at the tips. After the spores are shed, the stems wither and green sterile stems start to grow, with their characteristic regular whorled branches, ascending to a foot tall. While these stems die back in winter, this is a perennial, and will return in the spring from the wide-creeping rhizomes. With an extensive root system, the plant can become weedy and difficult to control in the home garden.

Native to nearly every county in Virginia, this plant is found frequently in floodplain forests, tidal swamps, calcareous marshes, and moist to wet disturbed sites such as ditches and roadsides. Field Horsetail occurs all over North America and into Mexico.

As an herbal remedy, this plant dates back to ancient Roman and Greek medicine, and has been used to stop bleeding, heal wounds, and to treat tuberculosis and kidney problems. Containing silicon, it has been suggested as a treatment for osteoporosis. Horsetails have been found to accumulate traces of gold and have been assayed as a clue to its presence.

The genus name comes from Latin *equus*, "horse," and *seta*, "bristle," referring to the coarse black roots of one species. The species name *arvense*, means "of cultivated fields." �



Photo: Field Horsetail (*Equisetum arvense*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

Bloodroot

Sanguinaria canadensis

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

Bloodroot is one of the earliest, and most interesting flowers in the spring. Sometime in March, a brown tip emerges from the soil with a leaf inside wrapped around the stalk. Delicate white flowers appear. above the still-folded leaf. Sometimes two flowering stems will sprout from only one underground stem (rhizome). After the flower is done, the petals drop and the leaf with 5-7 wavy lobes slowly opens. Once expanded, the bright green heavily veined leaf shades the developing fruit. The appearance

and actions of the leaf are as interesting as the satiny white flower petals.

Bloodroot is named for the red juice that can be extracted from the rhizome. The root juice or powdered root can destroy tissues and has been used to treat skin conditions such as ringworm, warts, fungal growth, etc. Researchers are investigating the root's value in cancer treatment. An extract has long been used in toothpaste and mouthwash to fight plaque and gingivitis, a use now sanctioned by USFDA. Native Americans used the juice as warpaint and to dye fabrics.

Bloodroot is found in moist but well-drained woodland soil in all but a few counties in the state of Virginia, the range extending throughout the mid to eastern states. Populations of bloodroot are somewhat limited to soils containing high amounts of calcium from fossil shells. Growing 6-8 inches tall in part shade, this plant is one of the spring ephemerals, appearing for only a short time in early spring. Bloodroot will self-sow to form larger colonies each year. The plant goes dormant in mid-summer, and is a good companion to ferns which emerge later in the spring. �



Photo: Bloodroot (*Sanguinaria canadensis*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

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

RED MAPLE

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

One of the first signs of spring is the red haze over the bare limbs of our local maple trees. This would be the male and female flowers of Red Maple. Typical of many species, the male flowers appear first as a yellowish pink, closely followed by the darker pink blossoms of the female trees. When fertilized, the familiar maple "keys" form and drop from the twigs like miniature helicopters.

Red Maple is a medium-sized tree with smooth gray young trunk bark and broken darker older bark. The highly variable leaves have 3 to 5 lobes and are whitened underneath. It is well named, as its flowers, petioles, twigs and seeds are all red to varying degrees. However, this tree is most well known for its brilliant deep scarlet foliage in autumn. Many cultivars are available with varying shades of red and leaf shapes.

One of the most common and widespread deciduous trees of eastern North America, Red Maple ranges from Minnesota, east to Newfoundland, south to Florida, and southwest to Texas. Usually occurring in low, wet sites, this tree is adaptable to a very wide range of site conditions. It can be found growing in



Female flower



Male flower

swamps, on poor dry soils, and most anywhere in between.

Red Maple will tolerate some air pollution and is easy to transplant. With striking fall foliage and pleasing form, it is often used as a shade tree for landscapes. Maple syrup and lumber production occur on a small scale from red maple.

This is the State Tree of Rhode Island. 🛠

Photo: Deerberry *(Vaccinium stamineum)* taken by Phillip Merritt For more information about native plants visit www.vnps.org.

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

American Beech

Fagus grandifolia

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

American beech is one of the easiest trees to recognize in the winter, with slender, sharppointed cigar-shaped buds at the tips of somewhat zigzag branches. Also distinctive are the dark green leaves which are edged with even, sharp teeth and pointed at the tips. From the midrib, veins extend to the edge of the leaf in straight, parallel rows.

Turning yellow and tan in the fall, many faded leaves persist on the lower branches until spring. In April, yellow-green flowers appear with the leaves in small, drooping clusters on male trees; the female flowers are separate and

arise directly from the young stems. The fruit is an angular, spiky husk with an edible "beechnut."

American beech is a very large tree, growing to 60-75 feet with a trunk diameter of 2-3 feet. Specimens in virgin forests were more than 100 feet tall with trunk diameters up to 4 feet. Few other large trees have smooth gray bark, often carved with initials and dates. With the combination of smooth bark, pointed buds, and prickly fruits, American beech can easily be identified in all seasons. This tree prefers moist rich soils of uplands and well-drained lowlands but will grow in a variety of situations. American beech ranges from southern Ontario, south to Florida, west to Wisconsin, Illinois, Missouri, Oklahoma and Texas, and is common in all counties of Virginia.

The colonists recognized this tree, who already knew the famous, closely related European Beech. The words "beech" and "book" come from the same root, because ancient Saxons and Germans wrote on pieces of beech board. The wood has been used for cheap furniture and fuel, and the tree is planted widely for ornament.

Although the kernels of beechnuts are small, they are sweet, edible, and nutritious, and are consumed in quantities by wildlife, especially squirrels, raccoons, ruffed grouse and wild turkey.



Photo: American beech (*Fagus grandifolia*) taken by Phillip Merritt For more information about native plants visit www.vnps.org.

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

SMOOTH ALDER

Alnus serrulata

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

This multi-stemmed small tree or large shrub with shiny gray-brown bark reaches 15 feet tall. Both male and female flowering structures persist through the winter. In winter, smooth alder can be recognized instantly by two reproductive structures. The small cone-like female catkins are from the female flower of the previous year while the yet-unopened catkins are of the coming year. The future "cones" that will be pollinated by the catkins are themselves still tiny in winter.

In the spring the male flowers are yellow-brown drooping catkins. Alders are wind-pollinated, and release pollen before the leaves emerge.

Dark green leaves have wedge-shaped bases and leaf edges are usually finely toothed. The glossy summer foliage becomes yellow and tinged with red in the fall. The reddish buds grow from the twig on short stalks, another identifying feature in the winter, since the buds are not stalked in most trees and shrubs.

Alders are most important as pioneer species that stabilize and fertilize barren areas such as strip mines, clearcuts, and riverbanks. These small trees fix nitrogen from the air in a symbiotic relationship with bacteria in the root system, which nourishes the tree. As alder leaves fall, the nitrogen-rich litter quickly fertilizes barren ground. Many conifers have



been shown to grow better in areas where alders have preceded them, so alders are often planted as the first step in reforestation.

The only alder native in southeastern United States, smooth alder grows in disturbed and wet areas, commonly found at the edge of water. This shrub or small tree is common in eastern and central U.S. and in most counties across Virginia.

Inner bark can be ground into a crude flour in an emergency. Deer will eat the twigs, but it is not a favorite food. ❖

Photo: Smooth alder (*Alnus serrulata*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.

Wildflower Spot – March 2019 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, but the berries persist for many months.

This 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 droughttolerant 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.

Coralberry is a member of the honeysuckle family and produces small pink-white flowers bloom June to July which attract bees, wasps, and flies. These insects suck nectar from the flowers, although some of the bees also collect pollen.

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.



Another common name of *Symphoricarpos orbiculatus* is Buckbrush, because the shrub is a favorite food plant of white-tailed deer and is often heavily browsed. Where deer are not a significant problem in garden areas this native shrub is a good alternative to Japanese barberry and cotoneasters.

Found all over Virginia, Coralberry ranges from Connecticut south to Louisiana and west to Michigan and Colorado. ❖

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

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

RED MAPLE

Acer rubrum

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

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Red Maple will tolerate some air pollution and is easy to transplant. With striking fall foliage and pleasing form, it is often used as a shade tree for landscapes. Maple syrup and lumber production occur on a small scale from red maple.

This is the State Tree of Rhode Island. 🛠



Photo: Red Maple male/female (*Acer rubrum*) taken by Helen Hamilton For more information about native plants visit www.vnps.org.