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

Partridge-Berry

Mitchella repens

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

One of the most adaptable and easy-to-grow groundcovers for the home gardener in the Southeast, partridge-berry displays edible, but insipid berries ten months of the year. An 18th century writer reported "The leaves are much celebrated by the common people as a diuretic and sweetener of the blood, but are of very little efficacy. The berries are rather of an agreeable taste." Native American women took frequent doses during the few weeks before giving birth.

Partridge-berry is a creeping, delicate vine, does not climb and is often covered by fallen leaves. The stems take root at the nodes and form a mat. It transplants easily, grows quickly, but rarely becomes a pest.

In late spring, the two paired white flowers at the tip of each shoot open their four-petaled buds. At flowering time, the two flowers are already partially fused. Both flowers must be pollinated to produce the red "double-berry", which stays on the vine until after blooms appear in the spring. Look closely and you will be able to see on the top of the "double-berry" the scars marking the attachment of both flowers. Also known as "twinberry", the plant is evergreen, and grows well in rich, dappled shade. It most often occurs on small knolls in the woodlands.

Linnaeus named this plant Mitchella for his friend John Mitchell, a resident of Urbanna, Virginia, who was a physician, naturalist, plant lover, and cartographer. Dr. Mitchell developed a method of treating yellow fever victims and saved thousands of lives. "Repens" refers to the plant's trailing or creeping growth pattern. ❖

Photo: Partridge-Berry (*Mitchella repens*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

Witch Hazel

Hamamelis virginiana

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

A crooked, multi-trunked, low-branching shrub or small tree, 15-20 feet tall, witchhazel is grown mostly for its winter flowers. Common witchhazel blooms after the leaves fall, usually in deep winter. Depending upon the location, blooming occurs November through February. The strap-like yellow blossoms are often the only color in a snowy landscape. Vernal witchhazel, Hamamelis vernalis, produces coral flowers in February.

Witchhazel leaves are aromatic, and in the fall show yellow, orange or purple colors. This plant likes rich, acid soil and moist to dry drainage. Seeds are eaten by ruffed grouse and squirrels. Witchhazel is pollinated by winter moths that fly when temperatures are above freezing. Leaf litter protects the moths during cold nights.

A widely used medicinal herb, the North American Indians used witchhazel bark to heal wounds, treat tumors and for eye problems. The bark is astringent and hemostatic; a homeopathic remedy is made from fresh bark and used to treat nosebleeds, hemorrhoids and varicose veins. The bottled witchhazel is a steam distillate, used as an external application to bruises, sore muscles, and inflammations. ❖

Photo: Witch Hazel (*Hamamelis virginiana*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

Eastern Red Cedar

Juniperus virginiana

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

There is much to like about our native red cedar which provides a home for many songbirds. The tree is evergreen, requires full sun, and is tolerant of most soils, especially those dry and infertile. The heartwood is highly aromatic, light, strong, durable, and widely used for cedar chests, cabinets, fuel, and fence posts. The dry outer bark, when stripped and rubbed between the hands, provides excellent tinder. A volatile oil derived from juniper leaves is used in perfumes and a flavoring may be derived from the berries.

Eastern red cedar can grow to 60 feet tall, retaining an attractive columnar-pyramidal form. The leaves are of two types -- sharp, spreading and needle-like on young plants up to 3 years old and as scattered shoots on adult trees. The adult leaves are small, scalelike, overlapping and carry a heavy coating, permitting survival during cold winters and hot dry summers.

Important winter food for birds and small mammals are the bluish waxy seed cones, berry-like with fleshy scales. Inside the cones are a few wingless seeds, which pass through digestive tracts undamaged and are often dropped along fences. The fruits are eaten by over 50 species of birds, including cedar waxwings, bluebirds, bobwhite, grouse and pheasant. The great purple and olive hairstreak butterflies lay their eggs on red cedar which furnishes food for the larva.

European settlers planted cedars on either side of their front doors as a good luck charm – possibly because they are so long-lived. American Indians chewed the fruit for canker sores, and used fruit tea for colds and coughs. Leaf smoke or steam was inhaled for colds, bronchitis and rheumatism, and for purification rituals.

Ranging from southwest Maine to southern Minnesota, and southwest to Georgia and Texas, red cedar grows naturally in almost every county in Virginia. Juniper seedlings appear frequently in meadows and gardens, again from bird distribution. Cedar trees without the "berries" in the fall and winter are probably the male of the species, which carry golden-brown remnants of their pollenbearing cones. ❖

Photos: Eastern Red Cedar (*Juniperus virginiana*) by Jan Newton and Helen Hamilton
For more information about native plants visit www.vnps.org.

Tulip Tree

Liriodendron tulipifera

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

Tulip tree is easily recognized in the summer by its unusual square-shaped leaves with four shallow lobes. Striking in the spring are the beautiful yellow-green, tulip-like flowers, each petal-base with an orange blotch. The outline of the leaf is also somewhat tulip-like. Coneshaped groups of fruits (samaras) are produced in the fall.

In winter the stout, lustrous twigs have a spicy aromatic odor and are tipped with peculiar duck-bill-shaped buds, with a line (stipule) underneath running all the way around the twig. The scars left by the fallen leaves are roundish and somewhat elevated with several dots (bundle scars) in the center arranged in a circle -- these remain from the tubes carrying water and food to and from the leaf. This tree is very straight and tall with dark gray bark, often whitened in grooves.

No other common broad-leaved tree in our area grows a straight and slightly tapering trunk, clear of branches for a great distance from the ground. Tulip tree is one of the largest

and finest of eastern American hardwoods, commonly reaching 80-100 feet with a 2-5 foot trunk diameter. While preferring moist, well-drained soils and rich woods, it makes a very desirable street, shade, or ornamental tree. Tulip tree ranges throughout eastern U.S. to the Mississippi River, and in every county in Virginia. It was introduced into Europe from Virginia by the earliest colonists and grown also on the Pacific Coast.

Tulip-tree wood is used for furniture, musical instruments, boats, interiors. While sold commercially as “yellow poplar,” it is a member of the magnolia family. Indians and pioneers made trunks into dugout canoes. Bees make quantities of honey from the flowers, and the seeds are eaten by squirrels and songbirds. ❖

Photo: Tulip tree (*Liriodendron tulipifera*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Putty-Root Orchid

Aplectrum hyemale

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

Putty-root Orchid is easily found in the leaf litter or snow cover in winter as a single large oval leaf. Appearing in late summer, each corrugated leaf is uniquely pin-striped, with parallel silvery-white veins alternating with green stripes. No leaf is visible in late May or early June, when a flower stalk emerges, carrying several small purplish-green blossoms.

This orchid grows in rich deciduous woods and moist soil in most counties of Virginia, and the eastern half of United States and Canada. It is found in calcareous ravines in the Coastal Plain. Putty-root Orchid will spread underground through the growth of its tubers, forming large colonies.

Aplectrum comes from the Latin, meaning that the flowers are "without spurs." The species name *hyemale* means "winter" and refers to the fact that this orchid has a solitary leaf that persists all winter. The plant is also called Adam and Eve.

The common name refers to a mucilaginous substance which can be removed from the tubers when they are crushed. The sticky substance was used to mend broken crockery by early settlers, and by Native Americans for medicinal purposes. ❖

Photo: Putty-root Orchid *(Aplectrum hyemale)* taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Wintergreen

Chimaphila maculata

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

Although a small plant, Wintergreen is well-named with its distinctive dark green leaves striped with white appearing just above the dry leaf litter. The leaves are pointed and finely toothed, wider toward the tip and whorled or scattered along the stem. Growing no more than 10" high, small white or pinkish, nodding waxy flowers appear in a cluster on a slender stalk. Flowers appear June through August, and mature to small capsules with seeds that are dispersed by the wind.

Wintergreen grows in dry, often sandy pine and oak forests. Found in every county in Virginia, and in the eastern United States, the plant ranges from Maine to Florida, west to Illinois and Mississippi, and also occurs in parts of Arizona.

This is not the edible wintergreen used to flavor candies – that species is *Gaultheria procumbens,* which grows in many counties of Virginia, other than those along the coast.

The genus name *Chimaphila* is derived from the Greek *chima,* meaning "winter" and *philein,* "to love." The species name *maculate* means "spot" or "spotted," referring to the coloration of the leaves, which are, however, striped, and not spotted. ❖

Photo: Wintergreen (*Chimaphila maculata*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

American Holly

Ilex opaca

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

Almost everybody is familiar with the American Holly, also known as the Christmas holly. Although American Holly is a common understory tree in the Virginia coastal plain today, it was not among the species mentioned by Captain John Smith. Perhaps it had become temporarily uncommon due to the forest burning practices of the Native Americans. This holly has long been one of the most popular trees in the eastern United States, its foliage and berries being used for Christmas decorations and for ornamental plantings.

The flowers of the American holly are functionally only either male or female and a given individual tree bears only one type of flower; thus the presence of trees of both types is required if the trees with female flowers are to produce berries. The small white and very fragrant flowers appear in late spring and the berries that form on the trees with female flowers mature in the fall and persist into winter. Mature trees may grow from a single trunk or be multi-stemmed. The bark is smooth and light gray.

American Holly survives on a wide variety of soils, but growth is best on moist, slightly acid, well-drained ground such as upland pine sites and well-drained bottomland. It is known to tolerate air pollution. Although reported to be toxic to some animals, the fruits are eaten by numerous songbirds, bobwhite, and wild turkey. ❖

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

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

Yellow Indian Grass

Sorghastrum nutans

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

Growing 2-8 feet tall, and topped by a large, plume-like, golden-brown seed head, Yellow Indian Grass is particularly attractive in the fall when the flowers produce dangling yellow stamens. The leaves are slender, ½ inch wide and 2 feet long, and blue-green, turning orange-yellow to purple in the fall. Blooming in September through October, the nutritious seedheads persist over the winter. Also in our area, Slender Indian Grass *(S. elliottii)* has narrower leaves, the panicle is less hairy, and the awns are noticeably bent.

Widespread in Virginia and over most of U.S. and Canada, Yellow Indian Grass grows in limestone soils, open woods, road banks and fields. It is easily grown in average, well-drained soils in full sun, and grows well in poor, dry and infertile soils. Slender Indian Grass occurs chiefly on the Coastal Plain from Maryland to Florida and Texas, and inland to Tennessee and Arkansas.

Along with Big Bluestem, Little Bluestem and Switchgrass, Yellow Indian Grass is one of the dominant grasses of the tallgrass prairie. Seeds are relished by birds and small mammals, and because the plant is tall and erect over the winter, it provides good cover for many kinds of birds and animals. This grass is a larval host plant for the Pepper and Salt Skipper butterfly. ❖

Photo: Yellow Indian Grass (*Sorghastrum nutans*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Baldcypress

Taxodium distichum

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

Baldcypress is a majestic, tall tree which drops its needle-leaves in the winter, leaving branchlets roughened by small buds. Nothing else resembles this tree, easily recognized in winter by its reddish-brown, peeling bark and cone-shaped "knees" that project from submerged roots, and the trunk is enlarged at the base.

Blooming March through April, the needles grow spirally on slender green twigs, crowded and featherlike. They are yellow-green in spring, becoming sage green in summer, and russet brown before falling. Both male and female flowers appear on the same tree. The male cones containing pollen droop in narrow clusters at the ends of branches. The female cones form at the ends of twigs, growing round and gray and somewhat woody, maturing in a year. They open in September and usually disintegrate.

Growing in very wet, swampy soils, often submerged and in pure stands, Baldcypress is found only in the Coastal Plain of Virginia. The range is from southern Delaware to south Florida, west to south Texas and north to Oklahoma and Indiana. A related species, Pondcypress (*P. ascendens*) is known from only one location in Suffolk County. The knees are flattened and dome-shaped and the needles are awl-shaped, often ascending on the branches. A mature Pondcypress tree grows in the Teaching Marsh at Virginia Institute of Marine Science in Gloucester Point. Some taxonomists suggest these are two varieties, not two species.

A relative of the Redwood, Baldcypress is called the "wood eternal" because of the heartwood's resistance to decay. One of the most valuable lumber trees, the straight-grained, durable wood is used for heavy construction, including docks, boats, bridges, as well as general millwork and interior trim. ❖

Photo: Bald Cypress (*Taxodium distichum*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Pink Hairgrass/Purple Muhly

Muhlenbergia capillaris

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

Few plants rival the breathtaking beauty of purple muhly in the fall -- clouds of purple wisps waving in the autumn sun. From March until mid August, the thin spiky blades add interesting contrast to broad-leaved blooming perennials and annuals and evergreen shrubs. In early fall, the seed heads begin to form where the blade bends at a right angle, and by the end of September, the tip of each blossoms into a 10 x 6-inch filmy purple haze.

In winter the purple stems and seed heads dim to tan, providing a lovely contrast to evergreens. In March the old stems can be cut back, when the new growth emerges, and dropped as mulch and groundcover.

Muhly grass is tough and loves the heat; many nurseries are now offering this plant for sale.

This grass is a native of dry woods and savannas near the Atlantic coast and parts of Mississippi and Texas. In Virginia it will grow in full sun or light shade and poor soil, and tolerates drought. Deer do not bother this plant, as there are no significant seeds or leaves for browse.

The genus was named in homage to G.H.E. Muhlenberg, a self-taught botanist of the 18th century, called by his contemporaries the American Linnaeus. "*Capillaris*" means "hair-like or delicate", referring to the tufted purple flowers. ❖

Photo: Pink Hairgrass (*Muhlenbergia capillaris*) taken by Jan Newton
For more information about native plants visit www.vnps.org.

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

Yaupon Holly

Ilex vomitoria

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

This native evergreen shrub or small tree may be oval to rounded in shape and single-stemmed or clump-forming. Yaupon can form dense screens of foliage and the female plant produces outstanding berries. The leaves are small, dark green and glossy with wavy edges. The fine-textured foliage makes it a perfect screen or tall hedge to contrast with bold plants.

From late summer through winter the graceful branches are lined with copious scarlet berries. Plant the female in a sunny location for good fruit production; the male trees can go in dark spots where you need foliage to fill in blank spaces. While male and female plants are needed for fruit set, this species is cross-fertile with other hollies. An excellent hedge plant, Yaupon Holly can be trimmed to produce a thick screen. Nurseries offer dwarf cultivars which do not require much pruning.

Cold-tolerant, yaupon is widely tolerant of soil types and moisture levels, as well as salt and pollution. This holly grows in any soil, and likes full sun or partial shade. From coastal Virginia west to Missouri, south to Florida and Texas, yaupon grows in low woodland edges, fields and marshy spots.

The Native Americans brewed a strong "black drink," used in ceremonies to cause vomiting or to act as a purgative. The leaves were probably those of Yaupon Holly, and the species name refers to this quality of the leaves and fruits. The dried leaves have the highest caffeine content of any North American plant.

Seeds are eaten by cedar waxwing, mockingbird and other songbirds after several freeze-thaw cycles. ❖

Photo: Yaupon Holly (*Ilex vomitoria*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

Bitternut Hickory

Carya cordiformis

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

Bitternut Hickory is easily recognized among the hickories, with its bright yellow-powdery buds. Like those of pecan trees, the buds of Bitternut Hickory are naked, not covered by bud scales. What we are seeing is actually minute powdery-yellow leaves.

Leaves are compound, the small leaflets usually 7-11, and usually hairy underneath. In the fall the leaves are bright yellow, and are retained on the tree longer than other hickories. The flowers are wind-pollinated; in April the male flowers are long graceful catkins.

One of the largest hickories, growing 50-100 feet tall, the tree typically develops several primary ascending limbs, forming an arched shape. The bark is tight with a network of fine smooth ridges.

The four-winged, cylindrical nuts have a very thin, rough husk which splits only to the middle. They are so bitter that even squirrels usually avoid them.

Bitternut Hickory is common throughout eastern and central United States and Canada. It is native to the eastern coastal counties of Virginia, and most counties in the state. The tree grows in a variety of habitats, from rich, moist lowlands to drier uplands, and is seldom cultivated.

Favored for smoking ham, bacon and other meats, Bitternut Hickory imparts a distinctive flavor. The tree furnishes food for the larvae of giant moths -- the luna, and the regal moth, whose fearsome caterpillar is known as the Hickory Horned Devil. ❖

Photo: Photo: Bitternut Hickory twig (*Carya cordiformis)* taken by Phillip Merritt
For more information about native plants visit www.vnps.org.

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

Winged Elm

Ulmus alata

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

Winged elm is well named for the corky ridges on the twigs, easily seen in the winter. These "wings" occur on the branches in one plane. This is a small to medium tree with a rounded open crown. The small, narrow leaves are thick and smooth above, with somewhat uneven bases and the edges with double sets of teeth. The undersides of the leaves are paler green with some tufts of hair. In the fall the leaves often turn dull yellow and small, narrow, oval fruits with hairy margins hang from the branches, by very short stalks.

This elm is common in dry to moist sandy soils with other hardwoods, particularly on streamsides and well-drained lowland soils. It is a fast growing, attractive shade tree. Winged elm grows in eastern Virginia counties and ranges from southeastern Virginia to southern Indiana, southern Illinois and Missouri, and south to Florida and Texas. Flowers appear February through April.

The common and Latin species names refer to the distinctive broad, corky wings present on some twigs; Wahoo was the Creek Indian name.

In the 18th and 19th centuries, the fibrous inner bark was made into rope for fastening covers of cotton bales. Native Americans seeped inner bark for diarrhea and to ease childbirth.

Winged elm is the larval host for the question mark butterfly, and provides seeds for small birds and small mammals. ❖

Photo: Winged Elm (*Ulmus alata*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

Witch Hazel

Hamamelis virginiana

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

This low-branching shrub or small tree can furnish year-round interest, with winter-blooming flowers. From late fall and into winter, fragrant yellow flowers, each with four crinkly, ribbon-shaped petals, grow in clusters close to the stem.

The botanical name, Hamamelis, translates to "together with fruit", which refers to the fact that the fruit and flowers occur on the same plant at the same time. This is a very unique feature of native North American trees.

Throughout the summer the branches are covered by broad, slightly pointed dark green leaves that turn a brilliant gold in the fall. In late summer the leaves often show small triangular growths – these are created by the witch hazel cone gall aphid. Although their presence on leaves suggests some type of disturbance, galls usually do not harm their hosts.

In late winter the flowers are replaced by greenish dry fruits (capsules) that become woody with age, maturing to light brown. These seed capsules mature in two years, splitting open the following fall to release black seeds over some distance.

Witch Hazel likes rich, acid soil and moist to dry drainage in full sun to part shade. It is easy to grow in the home landscape as a hedge, foundation planting, and in a rain garden.

There are only 5 species worldwide of *Hamamelis*, 3 that are native to North America, one in Japan, and one in China. *H. virginiana* is common in the mountains and Piedmont of Virginia, infrequent naturally in the Coastal Plain and throughout eastern U.S. and Canada. This rootstock of this species is often used when grafting cultivars of Asian origin. The Chinese Witch Hazel (*H. mollis*) is widely sold noted for its larger yellow flowers and stronger fragrance. Other cultivars are available in the nursery trade; many are hybrids between the two Asian species and/or Ozark Witch Hazel (*H. vernalis*).

A widely used medicinal herb, the North American Indians used Witch Hazel bark to heal wounds, treat tumors and for eye problems. The bark is astringent and hemostatic; a homeopathic remedy is made from fresh bark and used to treat nosebleeds, hemorrhoids and varicose veins. The bottled Witch Hazel is a steam distillate, used as an external application to bruises, sore muscles, and inflammations.

Seeds are eaten by ruffed grouse and squirrels. Witch Hazel is pollinated by winter moths that fly when temperatures are above freezing. Leaf litter protects the moths during cold nights. ❖

Photos: Witch Hazel (*Hamamelis virginiana*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.