Wildflower Spot – December 2006
John Clayton Chapter of the Virginia Native Plant Society

Winterberry

Ilex verticillata

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

Truly a spectacular sight in winter – long whips of red berries against a white background, or any place where a spot of bright red is welcome. This holly loses its leaves in late fall and until eaten by songbirds, the sharp red berries are a standout in the winter landscape. Winterberry likes soil somewhat wet and grows to 15 feet tall. It does well in light shade to full sun. Tiny white flowers appear in June, hidden among dull green leaves with coarse teeth. ❖

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

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

Yaupon Holly

Ilex vomitoria

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

This native evergreen shrub or small tree may be oval to rounded in shape and singlestemmed 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.

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.

A strong medicinal "black drink" once brewed by Native Americans is believed to have been of yaupon leaves. The caffeine-containing dried leaves reportedly make a desirable tea. Seeds are eaten by cedar waxwing, mockingbird and other songbirds after several freezethaw cycles.

The species name "vomitoria" refers to the emetic qualities of the fruits. ❖

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

Christmas Fern

Polystichum acrostichoides

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

One of the very few ferns which retain their green leaves all winter, Christmas fern is easily recognized by its dagger-like leathery leaves (fronds), which are often used in floral arrangements. Children like to be reminded that the individual leaflets (pinnae) have the shape of Santa's boot, and they are sometimes told that is the reason for the common name. Actually, it was the New England settlers' use of this fern for Christmas decorations that resulted in this common name.

Christmas fern grows in circular, arching clumps from a central rootstock, preferring partial shade in moist, acidic, well-drained soil. However, this plant grows well in most conditions with little maintenance and tolerates drought, heat, and poor soil. It serves as a good border plant, or as a backdrop for smaller plants in a shade garden.

As with all ferns, Christmas fern reproduces by alternation of generations. The spores are seen on the undersurface of smaller pinnae toward the end of the frond. The spores germinate to form tiny sexually-reproducing leafless plant bodies, almost invisible on the moist forest floor. New growth develops when male and female portions unite to produce the familiar bouquet of shiny evergreen fronds. For more information about native plants visit www.claytonvnps.org. American Indians made a root tea for chills, fevers, stomachaches and pneumonia. ❖

Photo: Christmas Fern (*Polystichum acrostichoides*) by Helen Hamilton
For more information about native plants visit www.vnps.org.

Common Ground-Pine

Dendrolycopodium obscurum

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

This familiar plant of rich woods looks like a miniature pine tree, hence its other common names of "Princess Pine" and "Tree Clubmoss." The stems are upright, to a foot tall, bearing several repeatedly forked, somewhat flattened side branches. With deep, creeping, underground stems, the plant often forms large colonies. From July through September, spores are formed in yellowish cylindrical "cones" arising from some upper branches.

Common Ground-pine occurs in every county of Virginia, usually in acidic upland forests, and rich, damp woodlands. The species is common eastern U.S. and Canada and ranges northwest into Asia.

Also found in every county in Virginia, Running-cedar (D*iphasiastrum digitatum [Lycopodium digitatum])* is common in dry open woods and meadows. Its branches form flattened

fans, their tiny leaves in four rows. A cluster of two to four cones form at the tip of a long erect stalk. This species, also known as Southern Ground Cedar, is native only to eastern North America.

Both these species have been heavily collected for wreaths and Christmas decorations. ❖

Photo: Common Ground-pine (*Dendrolycopodium obscurum*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Glasswort/Pickleweed/Samphire

Salicornia virginica (=S. europaea)

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

One of several low-growing, annual succulent plants composed of single or branched fleshy, jointed, jade-green stems with an erect main stem. In the past, the name *Salicornia virginica* has mistakenly been applied to woody glasswort, a perennial species with stems that trail along the ground.

Leaves are essentially absent, reduced to a pair of blunt scales at each joint, and in the upper part of the plant, a cluster of three tiny flowers appears to the naked eye as a yellow dot above each leaf scale. The entire plant turns yellow to red in autumn, forming masses of color in the salt marshes.

These plants are found only in salt or brackish marshes. Their succulent stems have the ability to store a large volume of water, which helps the plant maintain a critical water balance, necessary because of the salty soil in which it grows. The physiology of the plant is such that it cannot survive in freshwater areas.

Seeds of glasswort germinate best at low salinities when exposed to air, conditions which exist in April when the tides are lowest and heavy rains lower the salinity of the marsh soils. The seeds have only four days to germinate and produce a root long enough to attach the seedlings to the substrate. If not well established, the seeds will be washed away by the next high tide.

In Virginia, glasswort is found only in counties with coastal marshes. The plant is common in salt marshes from Quebec to Florida and in salty soil inland to Michigan; also from Alaska to California; also widespread in the Old World. Blooms August-November.

The name is composed of *sal,* salt, and *cornu,* a horn -- saline plants with horn-like branches. *Wort* is an old word for plant, hence "salt plant". The stem is translucent, and resembles green glass; however, the common name comes from the fact that this plant was reduced to ashes to provide alkali (carbonate of soda) needed in glass-making. The salty stems are eaten raw or cooked and pickled. ❖

Photo: Glasswort *(Salicornia virginica)* taken by Helen Hamilton on Eastern Shore
For more information about native plants visit www.vnps.org.

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

Spanish Needles

Yucca filamentosa

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

An unusual, tropical-looking plant, Spanish Needles forms clumps of stiff, dagger-like, bluegreen leaves, with loose threads on the edges. The leaves grow 2-3 feet tall, and have evergreen, woody stems. Cream-colored flowers grow in large terminal clusters on a six-foot tall stem, followed by an oblong, pickle-shaped fruit.

This is a plant of dry, sandy soils and sand dunes, especially near the coast. Spanish Needles is native to eastern and central United States and grows in nearly every county in Virginia, blooming June through September.

Yucca fruit can be cooked and eaten after the seeds are removed; the large petals are used in salads. Yuccas depend on the Yucca Moth as their agent of pollination, and these moths depend on yuccas for food. ❖

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

Black Walnut

Juglans nigra

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

Black Walnut is a large tree with a straight trunk and broadly ascending branches. The dark brown bark is deeply furrowed into scaly ridges. Compound leaves are alternate along the stem, with 9-21 long, pointed leaflets which are covered with soft hairs beneath. They are dark green, turning yellow in autumn, and when crushed, have a spicy scent. Small, greenish catkins (flowers) in clusters are usually drooping and fuzzy. The large fruits are spherical with green or brown husks; the thick-shelled inner layer covers one sweet edible seed.

Native to nearly every county in Virginia, Black Walnut grows in moist, well-drained soils from Vermont to Minnesota and south to Georgia and Texas. Flowers appear April through June and the tree forms fruits in October and November. In winter the large fruits on the ground signal the presence of this tree nearby, since the leaves are gone by the end of November.

This is one of our most valuable and beautiful native trees. Heavy, strong, durable heartwood is easily worked and in great demand for veneers, cabinetmaking, interior finishing, and gunstocks. Large trees have been almost exterminated in some regions. Since colonial days and before, Black Walnut has provided edible nuts and a blackish dye made from the husks. The delicious nuts must be gathered early, before squirrels and mice can consume them. Tomatoes, apples, and other species may not survive near large walnut trees. ❖

Photo: Black Walnut (*Juglans nigra)* taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Bushy Bluestem

Andropogon glomeratus

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

This perennial grass looks like a small upturned broom, with the flowers and seed heads in tight clusters, covered with many soft silky hairs. Bushy Bluestem grows about 4 feet tall, usually in clumps, the stems branching at the tips. The stem and leaves have a bluish cast early in the season, becoming tan later, and a deep orange-red in the fall and winter.

Bushy Bluestem is frequent in low, moist areas in full sun such as roadside ditches, meadows, and grassland swales. The plant is common in the Coastal Plain of Virginia and is scattered elsewhere in the state. The range extends along the Coastal Plain from Massachusetts south, and to California, the West Indies and Central America. Forming flowers in September through October, the stems and seedheads are visible all winter until new growth begins in early spring.

The genus name is composed of the Greek *aner (andr),* "man", and *pogon,* "beard". The Cherokee have used this species as a ceremonial medicine, dermotological aid, and to make a yellow dye. The seeds are eaten by birds and small mammals, and the sturdy stems provide nesting material for birds and good cover for small animals. Bluestem grasses are larval hosts for skipper and satyr butterflies. All grasses are highly deer resistant. ❖

Photo: Bushy Bluestem (*Andropogon glomeratus*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

Sea-beach Evening-Primrose

Oenothera humifusa

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

This perennial of sandy beaches blooms from May through October, but was recently seen in bloom in the Virginia Beach area. The stems are grayish-white, hairy, and somewhat woody erect, or prostrate, to two feet tall. Leaves on the stem are oblong, to 4 inches, petioles are tiny or absent. The lemon-yellow flowers (which darken with age) have four petals; in the center, 8 stamens surround the stigma which has four branches, forming a cross. The flowers open at twilight, and are pollinated by moths, notably the sphinx moth.

Seabeach Evening-primrose occurs along the coast from New Jersey to Louisiana, and has been recorded in 8 coastal counties of Virginia.

The genus name was used by Theophrastus for a related species; *humifusa* means "spreading on the ground." The Evening-Primroses group has been called "hopelessly confused and freely hybridizing" (Fernald 1950). ❖

Photo: Sea-beach Evening-primrose (*Oenothera humifusa*) taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

Wildflower Spot – December 2015
John Clayton Chapter of the Virginia Native Plant Society

Wax Myrtle

Morella cerifera

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

For fast, easy-care screening in southern gardens, Wax Myrtle is unbeatable. This shrub or small tree is not fussy about soil and light requirements, grows fast, and has attractive light olive-green, spicy-fragrant foliage. Branches can be pruned to encourage dense foliage and to create wildlife-friendly screens and hedges. It is winter-hardy in our area, with leaves that usually remain green through the winter.

Flowers are tiny and bloom before new leaves appear. In the fall, the pale blue, waxy berries which appear on female trees are eaten by a wide variety of birds, many of whom require the fat as fuel for migrations. The wax was a source for the colonists' bayberry candles.

This Virginia native is a dependable shrub, tolerant of wet soils, and is common everywhere in the Coastal Plain. A relative, Pocosin Bayberry, (*Morella caroliniensis*) likes the wet soils in bogs and peaty swamps, and occurs south of the James River, but is rare in the northern Coastal Plain. Preferring drier habitats like dunes and open sandy forests, Northern Bayberry, (*Morella pensylvanica*) is common in the outer Coastal Plain on the Eastern Shore and in Virginia Beach city. Fruits are somewhat larger and leaves are longer than those of Wax Myrtle. Northern Bayberry holds its leaves over the winter, but they will drop before spring.

Wax Myrtle fixes atmospheric nitrogen at a higher rate than legumes such as peas and beans, and so is able to thrive in infertile soils. This shrub was first cultivated in 1699 for medicinal purposes, since its leaves, bark, and fruit have chemicals with anti-inflammatory and antibacterial activity. Aromatic compounds present in Wax Myrtle foliage seem to repel insects, particularly fleas. It was traditionally planted around southern homes to help keep living spaces pest-free, and a sprig of wax myrtle in a closet or drawer is reputed to keep cockroaches out.

Familiar winter birds in our area, Myrtle (Yellow-rumped) Warblers are so named because they are often seen in these shrubs. These winter residents are able to survive on the fruits of juniper, poison ivy, and these bayberries. This has given them a large long-term advantage over most of our other warblers and many other birds which make increasingly perilous journeys to winter in the tropics. ❖

Photo: Wax Myrtle (*Morella cerifera)* taken by Helen Hamilton
For more information about native plants visit www.vnps.org.

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

American Bittersweet

Celastrus scandens

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

Bittersweet is popular for home decorations around the holiday season. Blooming in spring, the small green flowers produce yellow fruit that in the fall develop into hanging clusters of yellow-orange fruit, splitting open to show bright red-orange seed coats. Plants are male or female, and both sexes are needed for fruit set. Pollination is by insects, especially bees, and also by wind.

This twining woody vine grows vertically or sprawls horizontally over bushes and fences, growing in a wide variety of habitats including fencerows, forest edges and roadsides. Preferring rich, evenly moist soil in full sun or light shade, the plant will tolerate abuse, including heat, drought, and even salt. It is native to the Virginia peninsula and mountains and ranges south to Florida and Texas.

Unfortunately, the native American bittersweet is declining, while the nonnative Oriental bittersweet *(Celastrus orbiculatus)* is spreading and increasing in abundance. While the nonnative Oriental bittersweet carries small fruits in clusters all along the stem, the fruits of the native American Bittersweet are twice as large, and grow in profusion at the tips of the

stems. The broad oval leaves turn clear yellow in the fall, and then drop, allowing the berries to show to best advantage. This is a vigorous and robust vine that will grow to 20 feet or more but can be pruned to a desirable shape.

All parts of the plant are potentially toxic, but the bark extracts were a folk remedy for rheumatism, liver and skin ailments. American Indians used the leaf tea for diarrhea and dysentery. ❖

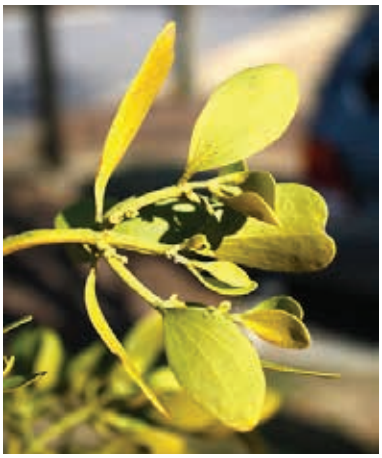
Photo: American Bittersweet (*Celastrus scandens*) taken by Phillip Merrit
For more information about native plants visit www.vnps.org.

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

American (Christmas) Mistletoe

Phoradendron leucarpum

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



American or Christmas Mistletoe is our only shrub that is parasitic on the branches of broad-leaved trees. The thick green leathery leaves are evergreen and wedge- to egg-shaped, 1-2 inches long. Tiny yellow flowers bloom on smooth, jointed stems in late fall, followed by round, white berries, but only on the female mistletoe plant.

Mistletoe plants are correctly a hemiparasite of trees, taking water and nutrients from the plant they grow on, but also producing some chlorophyll and drawing energy from the sun. Having no true roots, they produce structures called "sinkers" and "haustoria" which penetrate host tissues.

Native to nearly every county in Virginia, American Mistletoe is found on many species of trees from New Jersey to southern Ohio, southern Indiana and southern Missouri and south to Florida and Texas. In any given area, the plant tends to occur on only a few favored species. In some areas it exploits only hickories; in others oaks and hickories; in others either or both of those as well as other species.

For hundreds of years, the sprig of mistletoe hung in the house in late December has been a traditional stopping place for couples to kiss—a zone to linger in or scrupulously avoid, depending on the company.

But there's more to mistletoe than Christmas kissing—the plant has a long and interesting history in human tradition and lore that continues today: Celtic druids believed that European mistletoe contained the spirit of the tree in which it grew: this was the only part of the tree that stayed green all winter. In herbal lore, mistletoe is associated with communication, self confidence, romance, and an end to violence. Mistletoe has been used in exorcism and thanksgiving.

In medicine, European mistletoe has been used as an antidote to poison, and to treat seizures and headaches. It's currently being investigated as an anticancer treatment. However, all parts are poisonous to cats and dogs and some humans, causing gastrointestinal upsets, and even death.

Seeds are distributed by birds in any of three ways: they are eaten and passed in droppings, swallowed and then regurgitated, or they get stuck to the birds' beaks and are rubbed into crevices on trees when the birds clean their beaks on the bark. The seeds are covered with a sticky substance poisonous to man, but relished by birds. The plant provides important food and nesting sites for birds such as cedar waxwings and bluebirds.

While a very heavy mistletoe infestation (dozens of individual plants on separate branches) can be fatal to the host plant, the decline takes many years, and if the host dies, the mistletoe dies also. A few of these parasitic plants on a tree is not harmful. ❖

Photo: Mistletoe (*Phoradendron leucarpum)* taken by Phillip Merritt
For more information about native plants visit www.vnps.org.

Buttonbush

Cephalanthus occidentalis

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

Buttonbush has unusual, long-lasting blossoms that are well-named – they resemble pincushions followed by button-like balls of fruit. The one-inch flowers are in dense clusters, white or pale-pink, with a fringe of pistils protruding beyond the white petals. Subsequent rounded masses of nutlets persist through the winter. Buttonbush is a much-branched, native shrub which grows 6-12 feet, or occasionally taller. Glossy, dark-green leaves are in pairs or in threes, on stalks, with narrow, oval blades up to 8 inches long. The tips are pointed, and the edges are smooth.

This shrub or small tree grows in moist, humus soils in full sun to part shade, in swamps, thickets and stream/pond margins. Native to every county in the state of Virginia, the plant ranges from Nova Scotia, New Brunswick and Quebec to Minnesota, south to Mexico and the West Indies. The flowers appear from June through August.

The flowers are a nectar source for two species of sphinx moths and are attractive to many species of bees, birds and butterflies. Ducks and other water birds and shorebirds consume the seeds. The poisonous foliage of this species is unpalatable to livestock. While the bitter bark has been used in home remedies, its medicinal value is doubtful.

Cephalanthus comes from the Greek *cephale* for "head" and *authos* for "a flower." The species name *occidentalis* is Latin for "western." ❖

Photo: Buttonbush (*Cephalanthus occidentalis)* taken by Helen Hamilton at the Williamsburg Botanical Garden

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

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

Winterberry

Ilex verticillata

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

Truly a spectacular sight in winter – long whips of red berries against a white background, or any place where a spot of bright red is welcome. This holly loses its leaves in late fall and until eaten by songbirds, the glossy red berries are a standout in the winter landscape. The display of berries remains from September to mid-winter, since birds do not eat them until they have softened.

Winterberry is a small to large multi-stemmed shrub which can grow to 15 feet tall, but in cultivation it grows slowly, usually maturing at 8' tall x 8' wide. Tiny white flowers appear April through May, hidden among dark green leaves with coarse teeth. In nearly every county of Virginia, Winterberry grows in swamps, bogs, and moist forests. Its range extends from Nova Scotia, south to Florida and west to Missouri.

Copying its preferred location in nature, this shrub prefers moist, well-drained habitat, full sun to part shade, and acidic soils. In wet sites, Winterberry will spread to form a thicket; in drier soil it grows in clumps. One male plant should be planted in close proximity to 3 to 5 female plants to ensure good pollination and subsequent fruit set.

In the wild this plant spreads by seeds or suckers but in cultivation it grows slowly, acquiring an upright oval or spreading rounded appearance. Winterberry works well planted in masses, along water or as a shrub border, particularly where the fruit display in fall and winter can be appreciated. The berry-laden stems can be cut for long-lasting indoor arrangements in winter.

"Ilex" is the Latin name for an evergreen oak, noting the fact that most hollies are broadleaf evergreen. The species name "verticillata" refers to the flowers and fruits which are arranged in a whorl around the stems.

Many cultivars are available in nurseries, the most common being 'Red Sprite', also known as 'Nana' or 'Compacta'. The berries of all cultivars are enhanced, in color and profusion. ❖

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