

Riverbend Naturalist

Riverbend Naturalist is the newsletter from the Friends of Riverbend Park (FORB).

Riverbend Park is located at 9700 Potomac Hills Street, Great Falls VA

www.fairfaxcounty.gov/parks/riverbend-park/ 703-759-9018

Vol.15, Issue 1, Cynthia Fisher, Editor



Canoe, Kayak and Row Boat Rentals: May 20-October 16.

Canoes and rowboats:

Half Day Rental \$18

Full Day Rental \$30

Single Kayak:

Half Day Rental \$15

Full Day Rental \$25

Tandem Kayaks:

Half Day \$25

Full Day \$35.

EVENT CALENDAR:

Saturday, April 16th: 10am-2pm

Bluebells at the Bend Festival:

There is no better place to be than Riverbend Park to celebrate the Virginia Bluebells as they blanket the banks of the Potomac River. Bring the whole family!

www.fairfaxcounty.gov/parks/riverbend-park/calendar.htm

Saturday, April 16th: 7pm-10pm:

4th Annual Great Falls Bluebell Benefit.

Come have some fun, meet your friends and neighbors, and help preserve the park's resources for generations to come. More information within.

Saturday, April 21st: 7pm

Public Meeting regarding the proposed picnic pavilion. More information within.

Saturday, April 30th: 8am-11am:

FORB's Annual Native Plant Sale. Great Falls Grange Pavilion: Buy and plant natives in your yard or garden. Read more about harmful invasive species within.

An Important message from John and Caren Backus:

Please join us for the 4th Annual Great Falls Bluebell Benefit, to support Friends of Riverbend Park (FORB). Come have some fun, meet your friends and neighbors, and help preserve the park's resources for generations to come!

Valet parking, heavy hors d'oeuvres and cocktails. Adults only, smart casual attire. **RSVP by April 6th.**

Approximately 95% of the ticket proceeds go directly to the park via FORB. Ticket prices are tax deductible above \$20 per person; donations are 100% tax deductible. Sign up information within.

DON'T MISS THE NATIVE PLANT SALE.

Save Saturday, April 30th for FORB's annual Native Plant Sale from 8am – 11am at the Great Falls Grange, 9818 Georgetown Pike, Great Falls. We will have a variety of Virginia wildflowers, including bluebells, ferns, and other plants. This is a major fund-raiser for FORB, so come by and fill the empty spaces in your garden. Proceeds help support the educational programs at Riverbend Park.

Brush up on your Latin Roots and Buy our Natural Roots—Here is the Plant list for the Native Plant sale!

MERTENSIA VIRGINICA	DRYOPTERIS MARGINALIS
SPIGELIA MARILANDICA	EASTERN WOOD FERN
CALISSIA MORNING	ADIANTUM PEDATUM NORTHERN
GRACE	MAIDENHAIR FERN
CAMASSIA CUSICKII	ATHYRIUM FELIX FEMINA LADY
ANEMONE CANADENSIS	FERN
AMSONIA BLUE ICE	IRIS CRISTATA
STYLOPHORUM DIPHYLLUM	CHELONE TINY TORTUGA
ASCLEPIAS	TIARELLA COL WHERRYI TIARELLA
GAY BUTTERFLIES	CORDIFOLIA CHRYSOGONUM
PHLOX DIVARICATUS	VIRGINIANM
HEUCHERA AMERICANA	SISYRINCHIUM SUWANNEE
AQUILEGIA CANADENSIS	SENECIO AUREUS

A Message from FORB President, Tim Hackman:

Dear FORB Members & Friends,

Spring has finally arrived in Great Falls – at least astronomical spring, that is. With it activities are ramping up at FORB and at Riverbend Park. Don't miss seeing the bluebells at Riverbend. They are popping up and some are starting to bloom. The peak is likely to be in early April.

4th Annual Bluebell Benefit. This soiree supports FORB's mission, and Riverbend's activities, and is FORB's biggest fund-raiser of the year. It is a delightful evening of socializing with beverages and heavy hors d'oeuvres. **The benefit will be held on Saturday, April 16, 2016 from**

7pm – 10pm, and hosted by John & Caren Backus at their house near Riverbend Park. By now you should have received your emailed invitation. If not, please let me, Tim Hackman, know. Just send an email to forbpark@gmail.com and I will make sure you receive an invitation. **(There is no public webpage to register – this event’s registration is accessible through the invitation only!) Registration closes in just over two weeks on April 6th, so get you will need to sign up soon to attend.**

The Annual Bluebells at the Bend Festival at Riverbend Park.

Not to be confused with the Bluebell Benefit, this family-friendly festival from 10am – 2pm on Saturday, April 16th, celebrates the blossoming of the Virginia Bluebells at Riverbend. The Festival includes wagon rides, moon bounces, face-painting, puppet shows, and nature activities, among other things. Live singing and music will be provided by guitarist Andrew McKnight. Admission is \$5 per person, and no advance registration is required. As a special perquisite, we anticipate that there will be bluebell plants available for purchase. The sale of these plants (procured from a nursery, not from the Park itself) will benefit FORB. (See, below, for information about FORB’s own Virginia Native Plant Sale on Sat., April 30th.)

Proposed Outdoor Education Pavilion. Many of you are aware of the proposal to build a new outdoor education pavilion at Riverbend Park, and have commented to the Fairfax County Park Authority (FCPA) and local officials about it. The pavilion would add flexibility to Riverbend’s education programs. FCPA has recently raised the possibility of locating this pavilion across from the existing house on the Park’s main access road, Potomac Hills St., instead of near the Nature Center. Engineering and other surveys are being done to see whether this new, more centrally located, site would be feasible. Once the results are in, a

follow-up community town hall meeting will be held On April 21st to discuss this new proposed location, which would be farther away from residential areas.

Riverbend Park Summer Programs. Thanks to your generous support of FORB, we are able, this year, to provide almost \$15,000 for Rivebend's very popular summer programs. Some of these programs, such as the Primitive Camps, are almost full within a short time of registration going on-line. This year Riverbend will be hiring 6 college-level students to support the summer programs, including one student focusing primarily on the Primitive Camps and the Fishing Program (the latter making full use of the fishing boat FORB bought for Riverbend Park last fall).

Shout-out to Karen Sheffield. Karen Sheffield, who late in 2015 was appointed manager of Huntley Meadows Park, a Fairfax County Park in Alexandria, Virginia. Karen was a naturalist at Riverbend Park from 1999-2012 (and a volunteer before that), and many children and adults enjoyed seeing her enthusiastically share her expertise about Riverbend and its flora and fauna. FORB extends hearty best wishes to Karen in her new role.

A Big Thank-you to Bechtel National. Bechtel National Corporation gave FORB a significant number of pieces of surplus office furniture in late 2015. From this surplus, and in direct support of FORB's mission, FORB gave a number of pieces of this furniture, including desks, credenzas, white boards, chairs, and bookcases, to the Fairfax County Park Foundation for Riverbend Park use. A number of pieces of this executive furniture replaced furniture at Riverbend which was over 30

years old. In addition, FORB was able to sell furniture Riverbend did not need for cash and additional chairs for the Nature Center.

Rabies Awareness. You may be aware that a few weeks ago there was an incident where a jogger on the fire road near the Riverbend Nature Center was bitten by a fox, and required medical treatment. There have also been other instances near the park of animals acting strangely. It is not known if the fox or other animals were rabid, but, given that these animals are normally people-shy, that could have been the case. In instances where you see an animal acting strangely, try to stay at a distance from it, and report the animal's behavior to the Riverbend Park staff at: 703-759-9018. In addition, you may also report this to the Fairfax County Police non-emergency number at 703-691-2131. The Police will notify Animal Control, which is part of the Police Department.

FORB Website. Do you believe that FORB's website, www.forb.wildapricot.org could use a refresh? If you have the technical skill, and would like to be FORB's volunteer webmaster, FORB would be most grateful. This position is likely to require, at most, only a few hours a week. Contact FORB President Tim Hackman, forbpark@gmail.com if you are interested.

(The following article is a reprint from last year. Planting Virginia natives, and removing or avoiding invasive alien plants is a better strategy, because many of them crowd out or are destructive to native plants. Some of these aliens are well known plants, and are identified in the article below. -Ed.)

Go Native: Avoid Invasive Alien Plant Species

By Conservation Currents, Northern Virginia Soil and Water Conservation District

Alien plants, also known as exotic or nonnative species, were intentionally or inadvertently introduced usually, but not always, by human activity into a region in which they did not evolve. In North America, plant species are generally described as native if they occurred here prior to European settlement. Some may have been introduced for horticultural purposes. Others arrived accidentally in seed mixes, packaging materials, ship ballast, and even on the shoes of international travelers. Within the United States, a plant native to one area may be carried to another part of the country and be labeled an alien species.

Native species are those that do occur in the region in which they evolved. They possess characteristics that make them uniquely adapted to local environmental conditions. Natives maintain or improve soil fertility, reduce erosion, and often require less fertilizer and pesticides than alien species.

Invasive alien plants threaten biodiversity. Biodiversity refers to the variety of all living things and their interconnectedness. As a general rule, the more biodiverse an ecosystem is, the healthier it is. Less diverse ecosystems are more fragile and less resilient in the face of threats like the introduction of new species. Without natural controls

such as insect pests and competitors, some alien plants easily can become established in new areas. Once established, the alien plant species can out-compete and displace the native plant species, disrupting ecological processes and significantly degrading entire plant communities.

Take a ride south on I-95 and you will see kudzu, a fast growing vine that is blanketing the landscape, choking off trees and dependent wildlife in its path. Here in Fairfax County, invasive oriental bittersweet grows along I-66 from Arlington to Fairfax. Mile-a-minute plagues our stream valleys. Garlic mustard threatens wooded areas. And phragmites runs rampant in wet areas such as ponds and drainage ditches.

All plants are native to some region and offer a variety of ecological, economic, and aesthetic benefits. It is only when a species is out of place that we should become concerned. Like a wildfire, invasive plants can seriously damage native plant and animal communities, increase soil erosion and sedimentation, and interfere with outdoor recreation. However, unlike wildfire damage, which soon heals, the effects of plant invasions can be long lasting. **As biological pollutants, invasive plant populations can grow, adapt, multiply, and spread to unmanageable levels over time.**

How can you help? Use native plant species grown from local stock for conservation and landscaping purposes whenever possible. If you do use alien plants, avoid highly invasive species. The Virginia Department of Conservation and Recreation in partnership with the Virginia Native Plant Society provides a comprehensive list of plant species native to Virginia.

Invasive Species of Concern

The following species have been listed as invasive species of concern by the Fairfax County Park Authority. Information about these invaders has been taken from the National Park Service' Mid-Atlantic Exotic Pest Plant Council Plant List and Invasives.org. and articles written by Jil M. Swearingen, of the U.S. National Park Service, Washington, DC.



Burning Bush: Burning bush (*Euonymus alatus*) is a deciduous shrub (berries shown above), up to 20 ft. (6.1 m) in height, which invades forests throughout the eastern United States.

Occasionally, four corky ridges appear along the length of young stems. The opposite, dark green leaves are < 2 in. (5 cm) long, smooth, rounded and taper at the tips. The leaves turn a bright crimson to purplish color in the fall. The flowers are inconspicuous, greenish yellow and have 4 petals. Flowers develop in the spring and lay flat against the leaves. Fruit are reddish capsules that split to reveal orange fleshy seeds. Winged burning bush can invade a variety of disturbed habitats including forest edges, old fields, and roadsides. Birds readily disperse the seeds, allowing for many long dispersal events. Once established, it can form dense thickets that displace native vegetation. Winged burning bush is native to northeastern Asia and was first introduced into North America in the 1860s for ornamental purposes. It currently continues to be sold and planted as an ornamental or roadside hedge.



Multiflora rose: Multiflora rose (*Rosa multiflora*) is a multi-stemmed, thorny, perennial shrub that grows up to 15 ft. (4.6 m) tall. The stems are arching canes which are round in cross section and have stiff, curved thorns. Small, white to pinkish, 5-petaled flowers occur abundantly in clusters on the plant in the spring. Fruit are small, red, rose hips that remain on the plant throughout the winter. Leaves are pinnately compound with 7-9 leaflets. Leaflets are oblong, 1-1.5 in. (2.5-3.8 cm) long and have serrated edges. The fringed petioles of multiflora rose usually distinguish it from most other

rose species. Multiflora rose forms impenetrable thickets in pastures, fields and forest edges. It restricts human, livestock, and wildlife movement and displaces native vegetation.

Multiflora rose is native to Asia and was first introduced to North America in 1866 as rootstock for ornamental roses. During the mid 1900s it was widely planted as a “living fence” for livestock control.



Japanese Barberry:

Japanese barberry (*Berberis thunbergii*) is a small deciduous shrub from 2-8 ft. (0.6-2.4 m) tall. The thin, grooved branches have thin, straight spines. The leaves are up to 1 in. (24 mm) long and wedge-shaped. The pale-yellow flowers occur in drooping clusters of 2-5 and develop in mid-spring to early

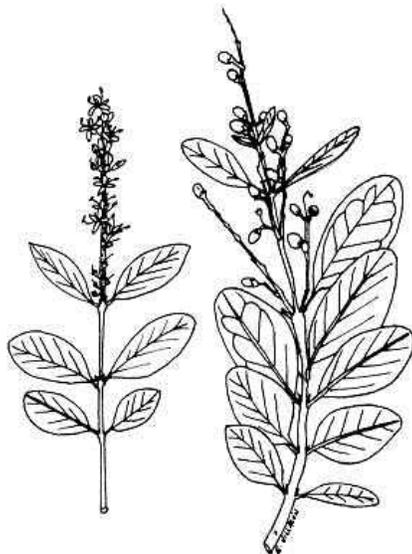
summer. The berries ripen to a bright red color and are 1/4-1/3 in. (7-10 mm) long. Japanese barberry invades a variety of habitats from shaded woodlands to open fields and wetlands. It is very shade-tolerant and can form dense stands which shade out and displace native species. Japanese barberry is rapidly spread by birds that eat the

berries thus dispersing the seeds. It is native to Asia and was first introduced into The United States in 1864 as an ornamental. It is still widely planted for landscaping and hedges.



Autumn Olive:

Autumn olive (*Elaeagnus umbellata*) is a deciduous shrub from 3-20 ft. (0.9-6.1 m) in height. It is easily recognized by the silvery, dotted underside of the leaves. Leaves are alternate and 1 in. (2.5 cm) wide. Small, yellowish flowers are abundant and occur in clusters near the stems in May to June. Fruits are red, juicy, and edible. Fruits ripen from September to November. Autumn olive invades old fields, woodland edges, and other disturbed areas. It can form a dense shrub layer which displaces native species and closes open areas. Autumn olive is native to China and Japan and was introduced into North America in 1830. Since then, it has been widely planted for wildlife habitat, mine reclamation, and shelterbelts.



Privet: Chinese privet (*Ligustrum sinense*) is a semi-evergreen shrub or small tree that grows to 20 ft. (6.1 m) in height. Trunks usually occur as multiple stems with many long, leafy branches. Leaves are opposite, oval, pubescent on the underside of the midvein and less than 2 in. (5 cm) long. Flowering occurs in late spring, when small, white flowers develop at the end of branches in 2-3 in. (5-7.6 cm) long clusters. Fruit are oval, fleshy, less than 0.5 in. (1.3 cm) long,

ripen to a dark purple to black color and persist into winter. Several

privet species occur and they are often hard to distinguish. Chinese privet commonly forms dense thickets in fields or in the understory of forests. It shades and out-competes many species and, once established, is very difficult to remove. Chinese privet was introduced into the United States in the early 1852 as an ornamental.



Bradford pear:

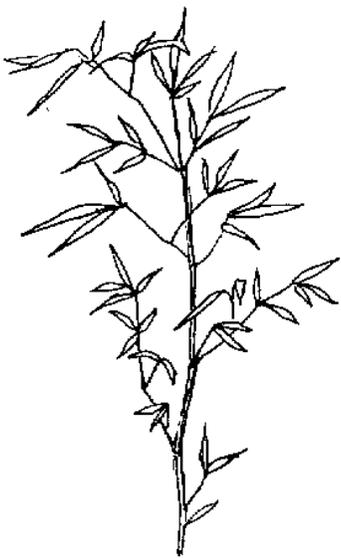
Callery pear, or Bradford pear, (*Pyrus calleryana*) is an ornamental, deciduous tree that can grow up to 40 ft. (12.2 m) in height. Some non-sterile cultivars of this species have escaped and are invading natural areas throughout the eastern United States. The leaves are alternate, simple, 2 to 3 in. (5.1-7.6 cm) long, petiolate and shiny with wavy, slightly-toothed margins. The overall

shape of the tree is often described as a tear-drop that often spreads out with age. Flowering occurs early in the spring (April to May) before the leaves emerge. The flowers are 1 in. (2.5 cm) wide, showy, malodorous and white. Fruits are round, 0.5 in. (1.3 cm) in diameter and green to brown in color. The “Bradford” variety of pear, which produced sterile fruits, has been widely planted throughout the United States since the early 1900s, but recent cultivars, bred to reduce the tendency of the tree to split in snow or high winds, have produced viable seeds and escaped to invade disturbed areas.



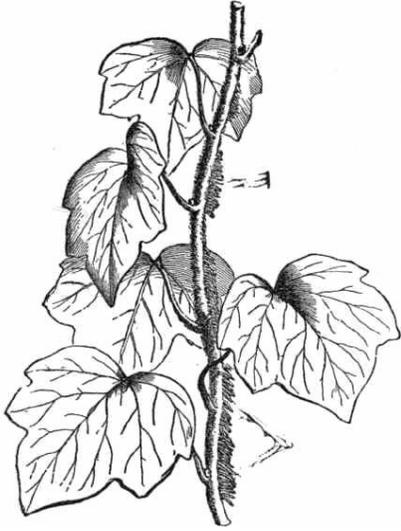
Pachysandra:

Pachysandra terminalis is an evergreen perennial herb groundcover in the Boxwood family (Buxaceae) that can reach twelve inches in height and spread to form dense mats. Small oval-shaped leaves, generally two to four inches in length, alternate about the stem. Flowers are white and appear between March and April. Fruits are on terminal branches and are extremely small. Reproduces vegetatively through underground stems and roots. It is prominent along forest and meadow edges.



Bamboo: Golden bamboo (*Phyllostachys aurea*) is a perennial, reed-like plant that can reach heights of 16 to 40 ft. (5-12 m). The canes (stems) are hollow with solid joints and can be 1 to 6 in. (2.5-15.2 cm) in diameter. Leaves are alternate, 3-10 in. (7.6-25.4 cm) long and 0.25-0.75 in. (0.6-1.9 cm) wide. Flowering is very rare (maybe once every 7 to 12 years). Plants spread by rhizomes. Infestations are commonly found around old home sites and can rapidly expand in size. Golden

bamboo can form dense, monoculture thickets that displace native species. Once golden bamboo is established, it is difficult to remove. Golden bamboo is native to China and was first introduced into the United States in 1882 for ornamental purposes.



English ivy: English ivy (*Hedera helix*) is an evergreen vine that can grow to 100 ft. (30.5 m) in length. Leaves are dark-green and waxy with palmate veins. Leaf shape is very variable, but commonly occurs as a 3-5 lobed leaf with a heart-shaped base. Flowering (maturity) is triggered by sunlight, such as when the vines climb into taller vegetation. In the late summer mature plants produce terminal clusters of greenish-yellow flowers. Fruits are black and fleshy. English ivy can invade woodlands, fields and other upland areas and is spread by runners. Seeds can also be spread by birds. It can grow both along the ground, where it can displace native understory species, and in the tree canopy, often covering branches and slowly killing trees. English ivy is native to Europe and was introduced into North America by early settlers for ornamental purposes. It continues to be widely planted as an ornamental



Oriental Bittersweet: Oriental bittersweet (*Celastrus orbiculatus*) is a deciduous, climbing, woody vine that can grow to lengths of 60 ft. (18.3 m). The alternate, elliptical leaves are light green in color and 2-5 in. (5-13 cm) long. Small, inconspicuous, axillary flowers develop in the spring. Fruits are round and green when young and ripen to yellow and split to reveal showy, scarlet berries that persist into winter. It closely resembles American bittersweet (*Celastrus scandens*), but can be

distinguished because American bittersweet has flowers and fruits at the ends of branches, rather than in the axils of the leaves. Oriental bittersweet is commonly found through the southern Appalachians in old home sites, fields, and road edges. Some shade tolerance allows it to also grow in open forests. Prolific vine growth allows it to encircle trees and girdle them. Vines can completely cover other vegetation and shade, out-compete and kill even large trees. It can be dispersed widely and quickly due to birds eating the berries and spreading the seeds. Oriental bittersweet was introduced from China around 1860 as an ornamental. It has also been shown to hybridize with American bittersweet, potentially leading to a loss of genetic identity.



Japanese honeysuckle: Japanese honeysuckle (*Lonicera japonica*) is an evergreen to semi-evergreen vine that can be found either trailing or climbing to over 80 ft. (24 m) in length. Leaves are opposite, sessile, pubescent, oval and 1 to 2.5 in. (2.5-6.4 cm) long. Flowering occurs from April to July, when showy, fragrant, tubular, whitish-pink to yellow flowers develop in the axils of the leaves. Fruits develop in the fall and are small, shiny black berries. Japanese honeysuckle invades a variety of

habitats including forest floors, canopies, roadsides, wetlands, and disturbed areas. Japanese honeysuckle can girdle small saplings by twining around them, and it can form dense mats in the canopies of trees, shading everything below. A native of eastern Asia, it was first introduced into North America in 1806 in Long Island, NY. Japanese honeysuckle has been planted widely throughout the United States as an ornamental, for erosion control, and for wildlife habitat.



Stiltgrass: (*Microstegium vimineum*), also known as Nepalese Browntop, is an annual plant in the grass family (*Poaceae*). It has a sprawling habit and grows slowly through the summer months, ultimately reaching heights of 2 to 3 1/2 ft. (6-10 dm.). The leaves are pale green, lance-shaped, asymmetrical, 1-3 in. (3-8 cm.) long, and have a distinctive shiny midrib. Slender stalks of tiny flowers are produced in late summer (August - September). The fruit or achene matures soon after flowering and the plant

dies back completely by late fall.

Stilt grass is especially well adapted to low light conditions. It threatens native plants and natural habitats in open to shady, and moist to dry locations. Stilt grass spreads to form extensive patches, displacing native species that are not able to compete with it. Where white-tail deer are

Stilt grass is a colonial species that spreads by rooting at stem nodes that touch the ground. Stilt grass reproduces exclusively by seed. Individual plants may produce 100 to 1,000 seeds that fall close to the parent plant. Seed may be carried further by water currents during heavy rains or moved in contaminated hay, soil, or potted plants, and on footwear. Stilt grass seed remains viable in the soil for five or more years and germinates readily.



Asian Wisteria--Chinese wisteria and Japanese wisteria

(*Wisteria sinensis*) and (*Wisteria floribunda*).

Wisteria is a long-lived, vigorous, deciduous, woody, climbing and twining vine. Wisteria vines may climb to a height of 60-70 feet or more if suitable support is available. Wisteria stems twine around any solid support, including trees, fences, buildings, and even each other. They are smooth and gray in color and can attain diameters of up to 5 inches or more. The leaves of wisteria are pinnately compound with 7-19 leaflets; they are arranged alternately on the stem. Wisteria flowers are showy, violet-blue in color, and occur in 6-18 inch-long, drooping clusters that appear before the leaves have expanded. The fruits of Chinese and Japanese wisteria are fuzzy, flattened pods about 4-5 inches long containing 4 -6 seeds. Wisteria is a popular ornamental landscape plant, esteemed for its showy blooms. Although there is a native North American species of wisteria, Chinese and Japanese wisteria are preferred by the horticultural industry because the inflorescences are larger and the plants more vigorous. Besides its smaller inflorescence (3-4 inches long), the native wisteria (*Wisteria frutescens*) may be distinguished by its smooth seed pod.

Naturalized populations of Chinese and Japanese wisteria seem to result from abandoned plantings at former home sites or old nurseries. The vines can spread over large areas of forest, twining around trees and eventually competing for space in the canopy. A dense, nearly impenetrable thicket has resulted in some areas; normal forest succession can be inhibited. The native wisteria (*Wisteria frutescens*) is

a good alternative to non-native wisterias, especially in areas adjacent to forests.



Chinese Lespedeza

Sericea lespedeza is an upright semi-woody weed reaching 3 to 6 ft. (0.9-1.8 m) in height with one to many slender stems. Leaves are thin, alternate, abundant and three-parted. Leaflets have wedge-shaped bases and are 0.5-1 in. (1.3-2.5 cm) long and hairy. Flowering occurs from mid-summer to fall, when small, creamy-white flowers with purple throats develop in clusters of 2 to 4.

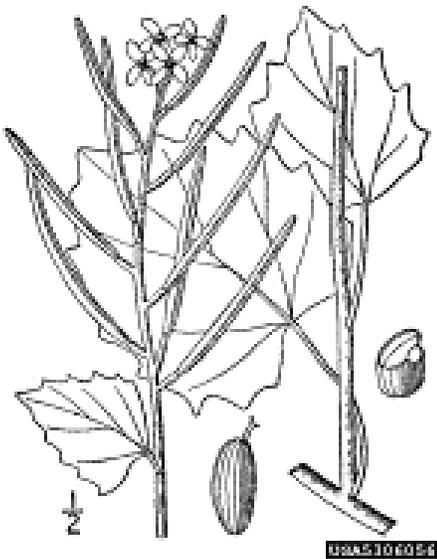
Sericea lespedeza is an extremely aggressive invader of open areas and out competes native vegetation. Once established, *sericea lespedeza* is very difficult to remove due to the seed bank which may remain viable for decades. Native to Asia and introduced into the United States in the late 1800s, *sericea lespedeza* has been widely planted for erosion control, mine reclamation and wildlife habitat.



Tree of heaven

Tree of heaven (*Ailanthus altissima*) is a rapidly growing, typically small tree up to 80 ft. (24.4 m) in height and 6 ft. (1.8 m) in diameter. It has pinnately compound leaves that are 1-4 ft. (0.3-1.2 m) in length with 10-41 leaflets. Flowering occurs in early summer, when large clusters of yellow flowers develop above the leaves. Fruit produced on female plants are tan to reddish, single winged and wind and water-dispersed. Tree of heaven resembles the sumacs and hickories, but is easily

distinguished by the glandular, notched base on each leaflet and large leaf scars on the twigs. It is extremely tolerant of poor soil conditions and can even grow in cement cracks. Trees are not shade tolerant, but thrive in disturbed forests or edges. Dense clonal thickets displace native species and can rapidly take over fields, meadows and harvested forests. Tree of heaven, native to Asia, was first introduced into North America in 1748 by a Pennsylvania gardener. It was widely planted in cities because of its ability to grow in poor conditions.



Garlic Mustard

Garlic mustard (*Alliaria petiolata*) is an herbaceous, biennial weed that is an aggressive invader of wooded areas throughout the eastern and middle United States. First-year plants are basal rosettes with green, heart-shaped, 1-6 in. (2.5-15.2 cm) long leaves. Second-year plants produce a 1-4 ft. (0.3-1.2 m) tall flowering stalk with small, white flowers in the early spring. Plants can be easily

recognized by a garlic odor that is present when any part of the plant is crushed and by the strongly toothed, triangular leaves. A high shade tolerance allows this plant to invade high-quality, mature woodlands, where it can form dense stands. These stands not only shade out native understory flora but also produce allelopathic compounds that inhibit seed germination of other species. Garlic mustard is native to Europe and was first introduced into New England during the 1800s for medicinal and culinary purposes.

Porcelain Berry: *Ampelopsis brevipedunculata*



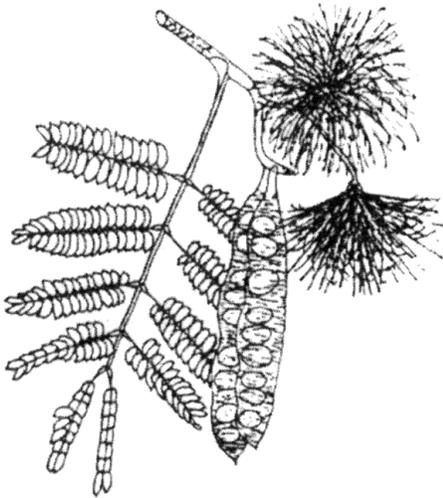
Porcelain-berry is a deciduous, woody, perennial vine. It twines with the help of non-adhesive tendrils that occur opposite the leaves and closely resembles native grapes in the genus *Vitis*. The stem pith of porcelain-berry is white (grape is brown) and continuous across the nodes (grape is not), the bark has lenticels (grape does not), and the bark does not peel (grape bark peels or shreds). The leaves are alternate, broadly ovate with a heart-shaped

base, palmately 3-5 lobed or more deeply dissected, and have coarsely toothed margins. The inconspicuous, greenish-white flowers with "free" petals occur in cymes opposite the leaves from June through August (in contrast to grape species that have flowers with petals that touch at tips and occur in panicles. The fruits appear in September-October and are colorful, changing from pale lilac, to green, to a bright blue. Porcelain-berry is often confused with species of grape (*Vitis*) and may be confused with several native species of *Ampelopsis* -- *Ampelopsis arborea* and *Ampelopsis cordata*.

Porcelain-berry is a vigorous invader of open and wooded habitats. It grows and spreads quickly in areas with high to moderate light. As it spreads, it climbs over shrubs and other vegetation, shading out native plants and consuming habitat.

Porcelain-berry was originally cultivated around the 1870s as a bedding and landscape plant. In spite of its aggressiveness in some areas, it is still used in the horticultural trade (for example, the ornamental *A. brevipedunculata* 'Elegans' is often recommended as a landscape plant with a cautionary note that "care must be taken to keep it from

overtaking and shading out small plants"). The same characteristics that make porcelain-berry a desirable plant for the garden -- its colorful berries, good ground coverage, trellis-climbing vines, pest-resistance, and tolerance of adverse conditions -- are responsible for its presence in the United States as an undesirable invader.



Mimosa/Silktree: *Mimosa (Albizia julibrissin)* is a small tree that is 10 to 50 ft. (3-15.2 m) in height, often having multiple trunks. It has delicate-looking, bi-pinnately compound leaves that resemble ferns. Flowering occurs in early summer, when very showy, fragrant, pink flowers develop in groups at the ends of the branches. Fruit are flat, 6 in. (15.2 cm) long seed pods that develop in the late

summer. Mimosa invades any type of disturbed habitat. It is commonly found in old fields, stream banks, and roadsides. Once established, mimosa is difficult to remove due to the long lived seeds and its ability to re-sprout vigorously. Mimosa is native to Asia and was first introduced into the U.S. in 1745. It has been widely used as an ornamental.



Mile-a-Minute/Devil's Tear Thumb: *Persicaria perfoliata (L.) H. Gross (formerly known as Polygonum perfoliatum L.)*

Mile-a-minute weed (*Persicaria perfoliata*) is an herbaceous, annual vine that invades disturbed areas in Oregon and portions of the northeastern United States. The delicate stems are reddish, highly

branched and covered with small, curved spines. Circular, leafy structures (ocreae) surround the stem at the base of the petioles. The alternate leaves are triangular, light green, 1-3 in. (2.5-7.6 cm) wide and barbed on the undersurface. Small, white, inconspicuous flowers arise from the ocreae. Fruits, present in mid-July through the first frost, are metallic blue and segmented with each segment containing a single black or reddish black seed. Mile-a-minute weed invades open disturbed areas such as fields, forest edges, roadsides, ditches and stream banks. Its rapid growth allows it to cover existing vegetation and restrict light availability, potentially killing plants below. Dense mats of mile-a-minute weed can also restrict establishment of new vegetation. Mile-a-minute weed is native to Eastern Asia and the Philippines and was introduced several times into the United States from the late 1800s to the 1930s.



Norway Maple

Norway maple (*Acer platanoides*) is a deciduous tree that grows 40-60 ft. (12.2-18.3 m) tall. The opposite leaves are palmately lobed with 5-7 lobes. The margins are marked with a few large teeth.

Flowering occurs in the early spring before the leaves emerge. The flowers are

inconspicuous and develop into large double samaras that mature in the late summer. Norway maple is very similar to sugar maple but can be distinguished by the fruit, sap and bark. The angle of seed wings of Norway maple is approximately 180 degrees, while the angle between the seed wings of sugar maple is near 120 degrees. Broken leaf petioles of Norway maple ooze white sap while the sap of sugar maple is clear. Norway maple bark is regularly grooved, and sugar maple bark has

irregular plates. Norway maple has invaded forested ecosystems throughout the northeastern United States and parts of the Pacific Northwest. Once established into a forest, it has the ability to shade out the native understory and out-compete the native tree species. Norway maple is native to Europe and was first introduced into the United States in 1756. It has been, and continues to be, widely sold as an ornamental.