

Riverbend Naturalist



Our native Virginia Bluebell (*Mertensia virginica*) is one of the many plants that will be for sale at our Native Plant Sale

***Riverbend Naturalist* is the newsletter from the Friends of Riverbend Park (FORB). Riverbend Park is located at 9700 Potomac Hills Street, Great Falls VA 22066. Phone: 703-759-9018**

Vol.14, Issue 1, Cynthia Nordstrom, Editor. Credit:
<http://www.hiltonpond.org/images/RoseMultifloraFlowers01.jpg>

Event calendar:

--FORB's Annual Native Plant sale is at the Great Falls Grange Pavilion on Saturday, May 2 from 8am to 11am. Buy and plant natives in your yard or garden. Read more about harmful invasive species within.

--Jon Boat and Kayak Rentals start in mid-May and go to mid-October. Canoes: Half Day Rental \$18; Full Day \$36. Single Kayaks & rowboats: Half Day \$15; Full Day \$25. Tandem Kayaks: Half Day \$25; Full Day \$35.

Call 703-222-4664 to sign up for rentals, Kayak Tours, and Classes.

John Callow is the new Manager at Riverbend Park.

We at FORB could not have been more delighted than when John Callow was named the new manager at Riverbend Park. He had the following to say:

Riverbend Park has been an important part of my life for a long time. My grandfather took me fishing at the park when I was 10 years old. When I attended college at the University of Montana, my summers were spent as a seasonal maintenance worker at Riverbend. Apart from three years working at another site, Riverbend has been the site of my professional career for close to fifteen years. In 2000 I became the program director before becoming the assistant manager in 2004. Riverbend is a special place for me and I know how important it is for so many people. As the manager I look forward to continuing to work

with the community to provide memorable quality programs and services while protecting this truly unique place.

Most of my workdays begin down at the riverbank. The river is never the same from one day to the next. New birds fly up and down the river, other wildlife are on the move, and river rocks that were under water become exposed. The river is powerful and dynamic and within a few minutes I am relaxed and ready for the day.

Dynamic is an appropriate word to describe Riverbend Park, its scenic beauty, wildlife, staff, and visitors. Natural beauty can be found in the diverse habitats, river, deep forests, and ponds. The staff with whom I have the privilege to work never stop amazing me with their creativity, drive and dedication. Visitors come to enjoy the park and create their own experiences. I know how special the park is to all the park neighbors that I have talked to and worked with over the years. The park is fortunate to have so much support from the community, neighbors, and the Friends of Riverbend Park.

Riverbend is about the resources. That is what draws visitors. As part of the Potomac Gorge, its resources need protection. As stewards of these resources we are all responsible for their protection. Managing this incredible gem is not something we do for tomorrow, but for the many years to come.

Management Transition at Riverbend

By Tim Hackman, FORB President

On December 12th, Park Authority and Riverbend staff passed along good wishes to Marty Smith on his retirement. Marty came to Riverbend in the 1990's and had been Park Manager since 2003. He was passionate about the park, and was knowledgeable about its flora, fauna, geology, and history. He was well respected by his staff, peers, and superiors. Marty was given a beautiful book about the "terroir" of viniculture by FORB. Marty has retired to his 21-acre farm in Southwestern Virginia, where he plans to start a vineyard, and be an environmental consultant.

John Callow, the new Riverbend Park Manager, was the Riverbend Assistant Manager for many years, and is well known to FORB and the community. He brings an equal passion about Riverbend, and a great commitment and wealth of experience to the job, and FORB is delighted that he was selected for this position.

A Word About Marty Smith From the New Park Director John Callow

When Marty Smith retired in December it was truly the end of an era. Marty was the assistant

manager until 2003 when he became the park manager. I consider it an honor to have worked with him for so many years. His passion for resource protection was truly contagious. He both valued and encouraged input. To say Marty had an open door policy is an understatement. The fact is he actually had the door to his office removed.

Marty accomplished so much during his tenure. He is particularly proud of the Virginia Indian Festival. This festival has become Riverbend's premiere event. Marty worked extremely hard over many years to establish relationships with Virginia tribes. He wanted a family festival that celebrated Virginia Indian culture, connecting visitors with the tribes. Marty's commitment to create an authentic event has earned the trust of the Virginia tribes as they recognize it as a truly valuable and traditional experience in a special place.

Marty's passion for this special place shines whenever you talk to him. For a park with the visitation Riverbend Park receives, protecting resources while providing recreational opportunities calls for tough decisions. On several occasions the decision was made to reroute trails so that sensitive plant communities could be preserved. One thing that I truly admired about Marty was that decisions were always made with the park mission in mind.

Marty developed long lasting relationships with community groups. He established

friendships with so many park neighbors. He loved talking to people about almost anything, but most of all he loved talking about Riverbend. No matter how busy, Marty always made time to chat.

Marty's legacy will live forever at Riverbend Park. He said he wanted to leave his stamp and that is exactly what he did. For me, I have a lot to live up to wearing the manager hat Marty left behind. Working in this incredible natural wonder is truly an honor. The scenery, resources, staff and visitors all make it a fantastic place to come to work each day. But there is one important thing missing now.....

My friend
Thank you Marty!

• Save Saturday, May 2nd for FORB's annual Native Plant Sale from 8am - 11am at the Great Falls Grange, 9818 Georgetown Pike, Great Falls, VA 22066. We will have a variety of Virginia wildflowers, 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. (A big thank you to Eleanor

Anderson for coordinating the Plant Sale!)

THANK YOU, ELEANOR ANDERSON! YOU REALLY ARE THE BEST!

By Cynthia Fisher, Ed.

Eleanor has been running the FORB Native Plant Sale for years and has raised thousands of dollars for FORB projects and consequently, Riverbend Park. She isn't retiring just yet, but she deserves a big thank you for many years of efforts. I asked two of her old friends to reminisce a bit about her. Here is what they said.

Dear Cynthia,

It's been a long time, so I've had to do a little reminiscing about Eleanor before responding. What comes to mind is that Eleanor has been completely committed to preserving the natural environment in Great Falls. I'm sure the challenge has been magnified since I moved away, but she deserves a lot of credit for keeping the forest setting in place. I remember her concern when her dog was bitten by a copperhead in the picnic grounds at Riverbend when the mowing was neglected. It got mowed.

Eleanor was president of Great Falls Citizens Association for several years in the 1990's. The minutes of those meetings were turned over to Fairfax Library's Virginiana collection, so if someone has time to make a little

trek to Fairfax City, there will undoubtedly be lots of reminders of her work in those files. And I'm sure you know, she and Paul were among the folks who helped start FORB and kept it going when I moved away. I remember her as a tireless advocate.

Best regards,

Cathy Mayes
[Founder & Past President of FORB]

Eleanor has ordered all of the native plants sold on behalf of Riverbend and in years past drove to Maryland to pick them out and bring them back-with help from a few of us. Tim Hackman handles the money and the rest of us tell what will grow under what conditions. She has a glorious native garden at her home-birds, butterflies and a pond for frogs. She has been recognized for her environmental efforts by the Fairfax County Park Authority.

Robin Rentsch
[Former Great Falls resident and parks activist]

I asked Eleanor what her plans were regarding future plant sales. Here is her response:

Hi Cynthia --- I think I will always be involved because I love this sale! But I am delighted that Nicki Costa and Phyllis Dahl have indicated to Tim that they are interested in helping with next year's process of ordering, etc. I will support their effort by

providing all the information I have from years of doing this and with contacting Babikow, picking up plants, etc. I just do not want to have to do so much of this by myself any longer; but the most important factor, to me, is having new people with new interests and perspectives to help make sure the tradition carries forward. I think there is a lot we could do to help people learn about gardening with natives in this time of global warming. I am seeing some real impacts, and I am sure I am not alone. Anyway, I won't be going away, just very happy to know I will be helping with, rather than leading, the effort.

Cheers, Eleanor

A Message from FORB President, Tim Hackman:

Dear FORB Members & Friends

There is so much going on, it is hard to know where to start. First of all, two more upcoming events:

No Spring Bluebell Benefit

If you've been wondering when the FORB Bluebell Benefit will be this year, there isn't one scheduled. You've been very generous in recent years, and, while we still need your membership renewals and other fund-raising support, we (hosts &

guests!) are taking a year off from the Bluebell Benefit.

Park Updates

Summer Interns; Bass Boat

Speaking of fundraising, your financial support and memberships are enabling us to provide \$12,000 for Riverbend Park to hire 5 college-level summer interns for this year's summer camps. One intern will be dedicated to fishing programs, which will be enhanced by a new Bass boat for Riverbend Park. The boat will be purchased with a \$15,000 grant provided by FORB. In addition to fishing and water quality-related programs, the boat will be available for photography and bird-watching charters (including to a heron rookery on a nearby island). Combined, the interns and the fishing boat should substantially enhance Riverbend Park income.

New Rental Pavilion

Later this summer, the Fairfax County Park Authority is planning to start building a new rental pavilion, to be located across from the meadow at the corner where Jeffery Road and the Nature Center parking lot meet. This pavilion, whose location and construction were included in the recently revised Riverbend Park Master Plan, will bring added revenue to the Park. Completion is planned for December 2015.

Park Authority Budget
Fairfax County continues to recover slowly from the economic downturn and the impact of federal sequestration on local jobs and businesses. On top of previous cuts and cost-shifting (over \$6 million, cumulatively since 2008), beginning July 1st, the Park Authority will have to absorb over \$720,000 in additional costs, and cut a number of positions. A significant portion of the absorbed costs will be shifted from the tax-payer financed General Fund to Park Authority revenue funds. (Revenue funds include income from RECenters, camps, golf courses, programs, telecommunications monopoly income, etc.) Park Authority fees are reviewed annually, and are adjusted accordingly, but the need to fund these new costs, previously covered by tax revenues, will result in less support for revenue-funded projects and programs. Continuing budget cuts for the Park Authority over several years have impacted long-term maintenance and the condition of facilities, and are starting to lead to a decline in customer use of some revenue-producing facilities, e.g., some RECenters, which have not undergone renovation for some time. Fortunately for Riverbend, these costs reductions and shifts are being taken mostly at Park Authority headquarters. However, there is some impact on Riverbend, because one merit position, a Recreation Specialist, has been vacant since last

summer, and has not yet been advertised to be filled. This Recreation Specialist is needed to help run the upcoming summer camps.

Bear(s) in the Park

About a month ago one of our members, a Riverbend Park neighbor who was walking his dog on the section of the river trail which traverses the ridge between the Potomac River and the fire road off Jeffery Road, opposite the meadow, saw a black bear ambling up the hill from the river. Bears normally try to avoid humans, as did this one, which was about 200 yards away. The sighting, while not unique in Fairfax County, was reported to Riverbend Park staff, who indicated they had not seen any bears, although they have seen claw marks. Females generally give birth in January and February, so stay well away if you spot any mothers and cubs.

Jeffery Road Trail

Riverbend neighbor, Nicki Costa, recommended to the FORB Board and to Riverbend Park that a trail be built in the meadow close to, and paralleling, the main section of Jeffery Road, past the Riverbend Park entrance. Currently, children walk on this active, limited-sight, and, therefore, dangerous section of Jeffery Road to get to and from their school bus stop. FORB and Riverbend Park support this worthwhile recommendation, and Riverbend

staff is working with a local Boy Scout to lay out and implement this new trail.

Friends of Riverbend Park Board Elections

Later this year, we will be holding elections for Friends of Riverbend Park Board members. Board members serve three-year terms, and are not subject to term limits. If you would like to run for a position on the Board of Directors, please send a note indicating your interest, to Tim Hackman, forbpb@gmail.com

After such a long winter, we hope you get a chance to renew your acquaintance with Riverbend Park. I know I'm looking forward to it, and to seeing you there.

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 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

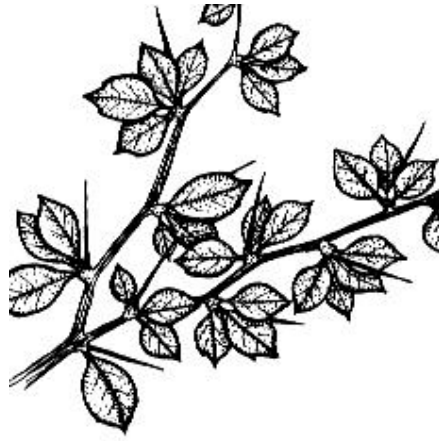
Multiflora rose (*Rosa multiflora*) is a multi-stemmed, thorny, perennial shrub that grows up to 15 ft. (4.6 m) tall. The stems are arching canes which are round in cross section and have stiff, curved thorns. Small, white to pinkish, 5-petaled flowers occur abundantly in clusters on the plant in the 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.

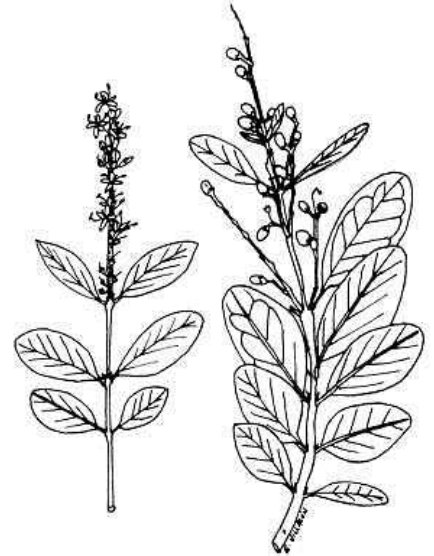
Autumn Olive



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

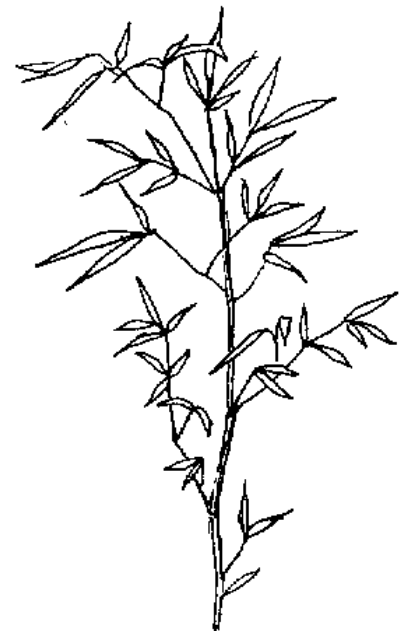
are invading natural areas throughout the eastern United States. The leaves are alternate, simple, 2 to 3 in. (5.1-7.6 cm) long, petiolate and shiny with wavy, slightly-toothed margins. The overall shape of the tree is often described as a tear-drop that often spreads out with age. Flowering occurs early 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. spurge grows very quickly, spreading by underground stems and forming a very dense groundcover that can displace other vegetation

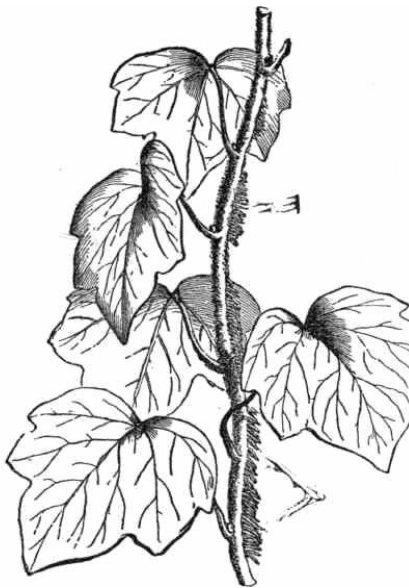
Bamboo



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 homesites and can rapidly expand in size. Golden bamboo can form dense, monocultural 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 fruits or achenes mature 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. 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 American 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 American 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.

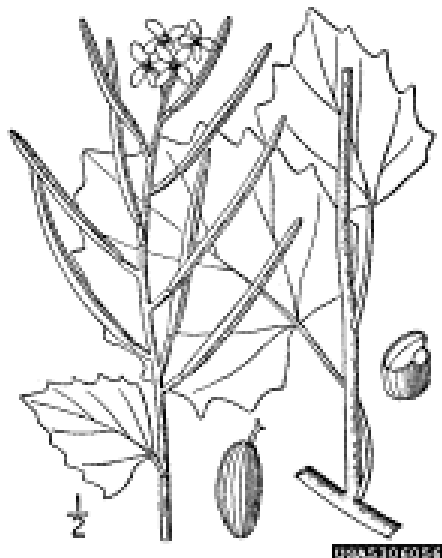
Tree of heaven

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.



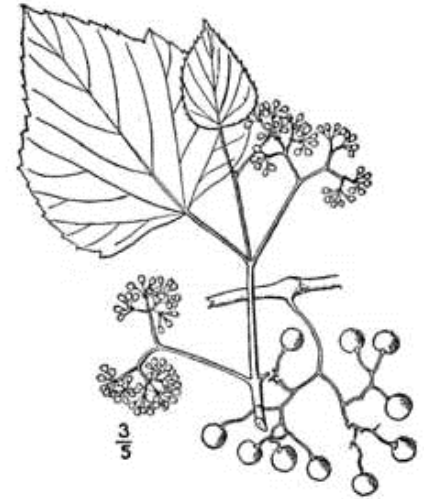
Plants can be easily recognized by a garlic odor that is present when any part of the plant is crushed and by the strongly toothed, triangular leaves. A high shade tolerance allows this plant to invade high-quality, mature woodlands, where it can form dense stands. These stands not only shade out native 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.*

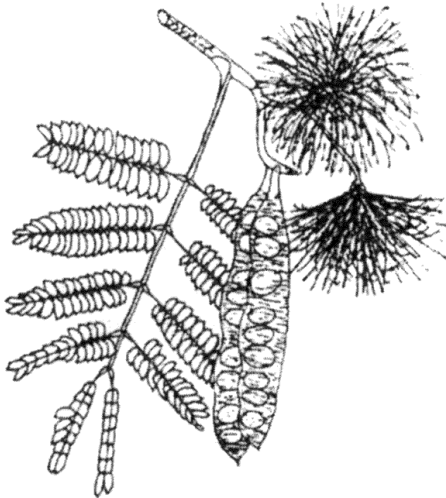
brevipedunculata

'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.



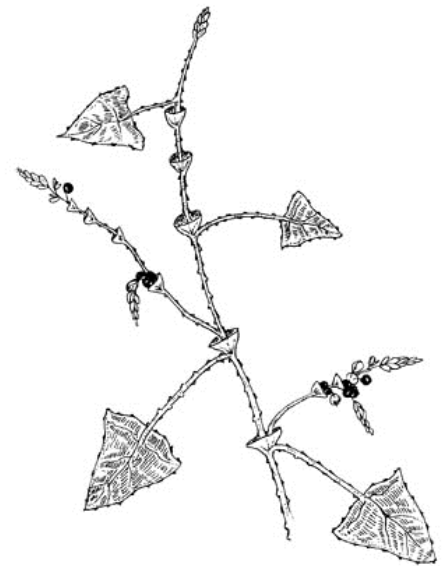
Mimosa invades any type of disturbed habitat. It is commonly found in old fields, stream banks, and roadsides. Once established, mimosa is difficult to remove due

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.

Sign-ups for Riverbend Park Summer Camps are still going on, although many are filling up fast.

Among the camps still available are:

Little Ducklings, ages 3-5 years;

Dinosaur Days, Ages 5-9 years;

Wetlanders, ages 6-9 years;

Wildlife Caretakers 6-11 years;

Aldea Naturaleza, ages 8-12 years;

Potomac Adventurers, Jr. 8-12 years.

Contact the park at 703-759-9018 for more information.