

## WHAT YOU CAN DO TO STOP THE INVASION

**Buy Local.** Natives often are adapted to a specific environmental niche, and have natural controls that keep them in balance.

**Minimize landscape disturbance.** Invasive plants thrive on bare soil and disturbed ground where the native plant community has been displaced.

**Remove invasives before they are a problem.** Scout for invasives while they are still small and easily controllable. Mechanical removal through digging or cutting is preferred. Large populations of invasives may need to be stopped chemically with spot applications of herbicide by trained individuals or by homeowners carefully following label instructions.

**After removing a landscape invasive, replace with non-invasive or native alternatives.** When you remove an invasive plant, unless there is another plant substituted, the invasive will tend to come right back. What comes up next year depends largely on what is there now; so fill that niche with a desirable plant that will provide seed for the future. And of course, don't buy invasive plants.

**Spread the word.** Make others in your neighborhood or town aware of invasive plants and the harm they can do to our native ecosystems. Promote the use of native plants and set an example for others by using them in your garden.



Buttonbush (Cephalanthus occidentalis) is a native shrub that grows near wet areas. The fruit is a favorite food of wildlife.

## SOURCES OF INFORMATION ON INVASIVE PLANTS

### Looking for more information on invasive and native plants?

These web sites can provide background information on native plants, invasive plants, and fact sheets on certain invasive plants.

#### Government

[www.usna.usda.gov/Gardens/invasives.html](http://www.usna.usda.gov/Gardens/invasives.html)—National Arboretum

[www.invasivespeciesinfo.gov/plants/main.shtml](http://www.invasivespeciesinfo.gov/plants/main.shtml)—US Department of Agriculture, National Agricultural Library

[www.nps.gov/plants/alien/](http://www.nps.gov/plants/alien/)—National Park Service

[www.nj.gov/dep/parksandforests/natural/heritage/InvasiveReport.pdf](http://www.nj.gov/dep/parksandforests/natural/heritage/InvasiveReport.pdf)—State of New Jersey

[www.dcnr.state.pa.us/forestry/wildplant/invasive.aspx](http://www.dcnr.state.pa.us/forestry/wildplant/invasive.aspx)—State of Pennsylvania

#### Non-Profit/Educational Organizations

[www.bhwp.org](http://www.bhwp.org)—Bowman's Hill Wildflower Preserve

[www.nature.org/initiatives/invasivespecies](http://www.nature.org/initiatives/invasivespecies), and <http://tncweeds.ucdavis.edu> — The Nature Conservancy

[www.npsnj.org](http://www.npsnj.org)—Native Plant Society of New Jersey

[www.pawildflower.org](http://www.pawildflower.org)—Pennsylvania Native Plant Society

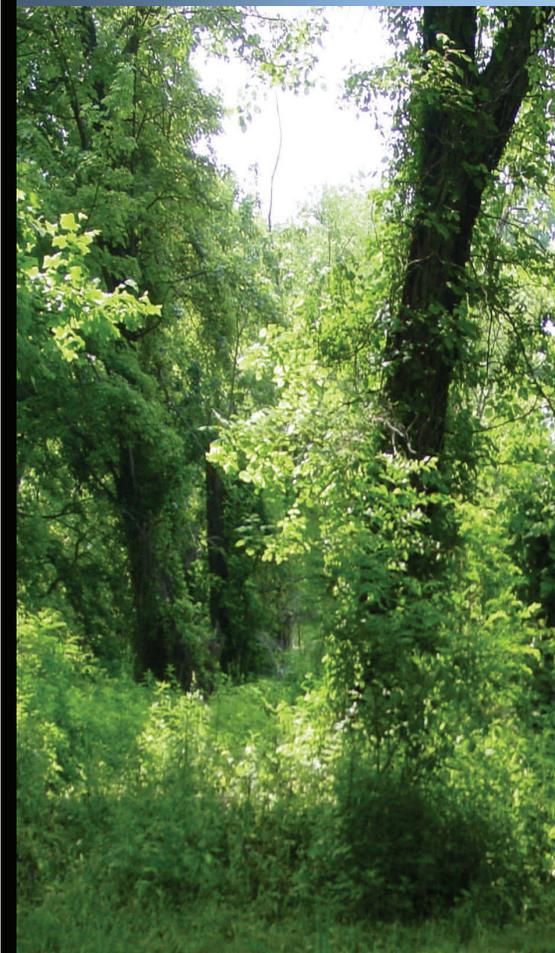
[www.paflora.org](http://www.paflora.org)—Morris Arboretum



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## AN INTRODUCTION TO INVASIVE PLANTS IN THE DELAWARE VALLEY



A PROGRAM OF  
DELAWARE RIVER  
GREENWAY  
PARTNERSHIP

# WE'RE BEING INVADED BY ALIENS!

You may not realize it, but there are aliens among us—plants and animals that are battling against our native species. They come from a variety of places—nursery stock gone awry in a new environment without natural controls, species introduced into this country to control a particular problem such as proliferation of another undesirable species, or unwitting stowaways on boats visiting other countries and finding their way to our shores. But no matter what the method of arrival, they're here now and we have to try to prevent them from continuing to spread into our waterways and destroying native habitats.

**What makes them invasive?** According to the US Department of Agriculture, an invasive species is “an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health.” For the most part, they are so successful and aggressive that they spread into natural areas and become dominant or disruptive to those ecosystems. Once established in a new area, they take over and out-compete the native species. The seeds of many invasive plants are carried by birds, wind, or water currents, allowing them to spread far beyond the area of original introduction.



Purple Loosestrife

## SOME COMMON INVASIVE PLANTS IN THE DELAWARE VALLEY'S FOREST AND RIVERS



Garlic Mustard

### **Garlic Mustard (*Alliaria petiolata*).**

This is an aggressive invader of wooded areas. Plants produce a 1-4 feet tall flowering stalk with small, white flowers. It can easily be recognized by the garlic odor when crushed.

A high shade tolerance allows this plant to invade mature woodlands where its dense stands shade and out-compete native understory flora.

**Japanese Knotweed (*Polygonum cuspidatum*).** This species spreads quickly to form dense thickets that exclude native species and are of little value to wildlife. Its



Japanese knotweed

extensive rhizome system enables the plant to achieve early emergence and great height, which allow it to shade out other vegetation, and reduce native species diversity. At the end of the season, a mass of dead

stems further inhibits native plant regeneration and leaves river banks vulnerable to erosion and flooding.

**Multiflora Rose (*Rosa multiflora*).** Native to northern Asia, This attractive rose plant is frequently found in meadows and open areas, especially areas subject to land disturbance. For this reason, it is particularly troublesome next to trails. Multiflora rose is extremely pro-

lific and can form impenetrable thickets, excluding other species.

**Purple Loosestrife (*Lythrum salicaria*).** Another attractive plant, purple loosestrife can reach a

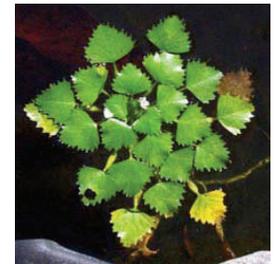


Multiflora Rose

height of three to four feet tall near river banks. One mature loosestrife plant may produce up to two million seeds a year that could easily become thousands of plants the next year. At a certain point it just overwhelms the other plant species in these wetlands, and the diverse animals depending on those other plants disappear.

**Water Chestnut (*Trapa natans*).** Water chestnut can grow in any freshwater setting, but it prefers nutrient-rich lakes and rivers.

Water chestnuts can form dense floating mats, severely limiting light, a critical element of aquatic ecosystems, and reduce oxygen levels, which may increase the potential for fish kills. It competes with native vegetation and is of little value to waterfowl.



Water Chestnut

**Wineberry, also called Wine Raspberry (*Rubus phoenicolasius*).** Wineberry is easily mistaken for a raspberry bush and has similar-looking fruit. It is a vigorous grower and can form dense thickets covering large areas, displacing many native plants. Wineberry poses a threat to the native plants that grow in forest, field, stream and wetland edge habitats.



Wineberry