



Invasive Plant Species of Monmouth County

www.MonmouthCountyParks.com

What Are Invasive Species?

Invasive species are non-native plants or animals that have been introduced through anthropogenic means and cause environmental harm, outcompeting native plants and animals for resources such as habitat, food, sunlight and water. Native plants are important to an ecosystem because native animals, such as birds, mammals and pollinators, depend on them for survival. Native plants also provide a variety of other ecosystem services that benefit human society. Because they crowd out native plants, invasive species are one of the planet's greatest threats to biodiversity. Invasive plant species in Monmouth County parks may be the most significant threat to the county's natural resources.

There are many sources of invasive plant species, such as ornamental plants intentionally planted on the landscape that are non-native and escape cultivation into parklands. Many common landscape plants sold at plant nurseries are invasive, and the seeds are carried by wind or wildlife onto parklands where they cause major damage. Not all non-native plants are invasive, but it is always beneficial to plant native plants in your yard. Other invasive species may come into our landscapes unintentionally through shipping containers, international travel, ballast water, and transport of goods.



Invasive tree-of-heaven invades the forest edge and outcompetes native wildflower species in a meadow.

The Monmouth County Park System has two environmental centers dedicated to nature education. Each has a trained staff of naturalists to answer questions, and a variety of displays, exhibits, and hands-on activities where visitors of all ages can learn about area wildlife and natural history.

The **Huber Woods Environmental Center**, on Brown's Dock Road in the Locust Section of Middletown, features newly renovated exhibits about birds, plants, wildlife and the Lenape Indians. Miles of surrounding trails offer many opportunities to enjoy and view nature.



The **Manasquan Reservoir Environmental Center**, on Georgia Tavern Road in Howell specializes in wetland species. The center has many water-related displays and exhibits to learn about local plants and wildlife. The 5-mile perimeter trail is a great place to explore and enjoy nature.



Monmouth County
Board of County Commissioners
Board of Recreation Commissioners



Why Should We Manage Invasive Species?

In order to preserve our parks' natural resources, invasive species must be managed. Invasive species are not natural to our native landscape and are the direct result of human activities. Invasive species crowd out our native plants, removing food sources for our native wildlife species. While some birds and other wildlife will eat the invasive species, they do not provide adequate nutrition and do not provide the necessary resources for native wildlife. Additionally, some invasive species physically harm our native species, by strangling and girdling the native trees and shrubs, or by emitting chemicals into the soil that keep our native plants from growing. Overall, the presence of invasive species reduces the biodiversity of a site. Increased biodiversity in an area leads to healthy ecosystems, which in turn helps to fight climate change, conserve cultural resources, protect human health, and stimulate our local and global economies. Therefore, invasive species must be managed and cannot be left to degrade our natural environment.



Invasive porcelain berry smothers the forest edge and topples large trees at Huber Woods Park

How Do We Manage Invasive Species?



Mechanical removal of invasive Autumn olive at Thompson Park

The best way to manage invasive species is to prevent them from establishing in the first place. Being a conscientious consumer when buying plants is a great way to start. Once invasive plants are established, it is very difficult to remove them, requiring abundant resources. Unfortunately, many invasive plant species are established throughout Monmouth County. There are four main methods to invasive species management: mechanical, cultural, chemical, and biological control. The Monmouth County Park System uses an approach called Integrated Pest Management, which uses all four control methods in a coordinated manner to control invasive species. Invasive species are managed through various methods such as mowing or hand pulling, biological control releases, seeding native plants for competition, and herbicide applications. Each control method has advantages and disadvantages, and every invasive plant species creates a unique problem that requires a unique solution, depending on the environmental circumstances.

To control certain invasive species, the park system implements the use of herbicides in conjunction with other control methods when necessary. In some cases, herbicide is the only effective control method for managing particular invasive species. The park system limits the use of herbicide as much as possible, and carefully considers the impact on native wildlife before using herbicides. When necessary, herbicide applications are targeted and carefully timed to prevent collateral harm. Without herbicide use in some cases, landscape restorations that help preserve resources to sustain our native wildlife would not be possible. The Park System always uses the most up-to-date scientific research when making decisions about invasive species management.

Want to **HELP BATTLE** INVASIVE SPECIES in the parks?

Check out regional volunteer opportunities at monmouthcountyparks.com to join the **Invasive Plant Strike Force!**



Autumn olive
(*Elaeagnus umbellata*)

This large, multibranched shrub can be identified by its silvery undersides of leaves and its red fruits from late summer through fall. Autumn olive grows in fields and along forest edges.



Common mugwort
(*Artemisia vulgaris*)

This herbaceous plant is found mostly in fields and along trail edges, with silvery leaf undersides and fragrant leaves when crushed.



Japanese knotweed
(*Reynoutria japonica*)

Often found along streambeds and wet areas, the stem of this plant resembles bamboo. In late summer, it is identified by its papery white flowers.



Phragmites
(*Phragmites australis*)

Also known as common reed, Phragmites is a tall grass that invades our wetlands and marshes throughout the county.



Chinese silver grass
(*Miscanthus sinensis*)

A common landscaping plant, Chinese silver grass can be found invading our parks' fields. This grass is identified by a prominent silver mid-vein on the blades of grass and its curly, decorative seed head in the Fall.



Porcelain berry
(*Ampelopsis brevipedunculata*)

This climbing vine is found in many of our parks blanketing forest edges and fields, smothering native plants. Porcelain berry has distinctive colorful purple-blue berries in the fall.



Asian bittersweet
(*Celastrus orbiculatus*)

This climbing, strangling vine can be found throughout the parks in forests and forest edges girdling and smothering native trees. Bittersweet has prominent red berries with yellow seed capsules that are highly visible during Winter.



Multiflora rose
(*Rosa multiflora*)

This shrub forms thickets of green thorny branches arching toward the ground. Multiflora rose has white fragrant flowers in May and June, which are then replaced by clusters of red rosehips that persist through the winter.



Tree-of-heaven
(*Ailanthus altissima*)

This fast-growing tree is found throughout our parks, identified by large compound leaves, bark resembling a cantaloupe rind, and distinct odor described as "rotten peanut butter." A favorite host of the spotted lanternfly.



Norway maple
(*Acer platanoides*)

A common tree sold at plant nurseries as cultivars such as 'Crimson King' and 'Emerald Queen'. Found throughout park forests, this large tree can be differentiated from native maples by its horizontal winged fruits and milky sap.



Japanese barberry
(*Berberis thunbergii*)

This small, thorny shrub is a prolific invader of forests. This common landscaping plant can be found with red, yellow, and green spoon-shaped leaves. Starting around mid-summer, red egg-shaped fruits appear hanging from the shrub's branches.



Burning bush
(*Euonymus alatus*)

Burning bush, aka winged-euonymus, is a popular landscaping plant desired for its bright red foliage in Fall. It invades forests and is identified by its football shaped leaves and green stems with raised cork-like 'wings' along the twigs.



Callery pear
(*Pyrus calleryana*)

Also known as Bradford pear, this small tree invades park fields and excludes native field species. The Callery pear can be identified by its shiny, teardrop-shaped rippled leaves and bundles of white flowers emerging in early Spring.



Japanese honeysuckle
(*Lonicera japonica*)

Japanese honeysuckle is a woody, climbing vine that can strangle our native trees and shrubs. This vine typically has deep green oval-shaped leaves and is found in the parks' forests and forest edges.



Garlic mustard
(*Alliaria petiolata*)

An annual herbaceous plant that colonizes forest floors, it releases chemicals into the soil inhibiting native plants from growing. It has scalloped edged kidney-shaped lower leaves, a garlic scent when crushed, and white clustered flowers in Spring.



Mile-a-minute vine
(*Persicaria perfoliata*)

This climbing vine is found throughout park fields and open forests. Mile-a-minute can be identified by its triangular leaves, clusters of blue berries, and barbed stems.