

What is an Invasive Species?

Invasive species are non-native species that can cause harm to the environment, the economy or to human health. Invasives come from all around the world. As international trade increases, so does the rate of invasive species introductions. Invasive species are one of the greatest threats to New York's biodiversity. They cause or contribute to: habitat degradation and loss; the loss of native fish, wildlife and tree species; the loss of recreational opportunities and income; and crop damage and diseases in humans and livestock (from the New York Dept. of Environmental Conservation).

1 – Multiflora rose



Multiflora rose, also known as rambler rose and baby rose, is native to eastern China, Japan and Korea. It was introduced to the U.S. from Japan in 1866, as rootstock for grafted ornamental rose cultivars. The spread of the roses increased in the 1930s, when it was introduced by the U.S.

Soil Conservation Service for use in erosion control and as living fences, or natural hedges, to confine livestock.

Description

It is a perennial shrub. The red to green twigs may have numerous thorns. Its pinnately compound leaves grow alternately with 5, 7, 9 or 11 oval, saw toothed leaflets. The leaflets are nearly smooth on the upper surface and paler with short hairs on the underside. The base of each leaf stalk bears a pair of fringed bracts or stipules; these are the best characteristic to use to distinguish it from other species. Clusters of showy fragrant white to white pink flowers, bloom in panicles, inflorescences with side stems, in late May or June. 6 to 100 hips develop in the inflorescence in summer and turn red by mid-September.

Impact

It is extremely prolific and can form dense thickets, excluding native plants species. This non-native invasive rose invades open woodlands, forest edges, early succession pastures and fields. It also invades fence rows, right-of ways, roadsides, and margins of swamps and marshes.

2 – European spindle tree



European spindle tree also known as spindle, European spindle, common spindle is native to much of Europe. It is a popular ornamental plant in gardens and parks due to its bright pink or purple fruits and attractive autumn coloring. It has been introduced to North America where it has become an invasive species in some areas. Parts of the plant have been used medicinally. However, the fruit is poisonous.

Description

It is a perennial shrub. It has simple opposite leaves that is ovate shaped with serrated margins. In the summer the leaves are a dull green, in the fall the leaves are yellow to yellow-green to a reddish-purple fall color. The flowers are yellow-green, and blooms in May. It has a unique looking capsule fruit that is lobed and pinkish red color.

Impact

It is considered invasive in some parts of North America.

3 – Norway maple



Norway maples are native to Europe and western Asia. It was introduced to North America as ornamental plants.

Description

It has simple, green, and opposite leaves. Leaves of

Norway maples usually are broader (about 4"-7" wide) than they are high with 5 prominent lobes. The bark of a Norway maple is gray-ish black and furrowed in a diamond-like pattern. During the summer, fruits mature into helicopter-like blades with wide-spreading wings. In the fall, leaves usually turn a pale yellow.

Oakwood Invasive Trail

Impact

Forests that are intact are generally more likely to ward off invaders however, Norway maple has been found to be very successful at establishing itself in a variety of conditions including mature, deeply shaded forests. Due to the dense canopy of Norway maples, forest diversity is starting to decline because the excess shade they create inhibits the regeneration of sugar maples and other native seedlings. In urban environments, the root systems also destroys pavement causing money to be spent on damage repairs. Other species of flora and fauna, such as insects and birds may indirectly be affected due to the change in resource diversity and availability. Norway maple is also susceptible to certain types of fungi, such as Verticillium wilt and anthracnose and may also serve as a host for aphids.

4 – Common buckthorn



Description

It is a perennial shrub or small tree. Branches are tipped with a short thorn. The leaves may be opposite or in an alternating pattern. The leaves are egg shaped with small, serrated teeth. The leaf may be a dull green or a dark green with a lighter green on the underside. Flowers are small with four sepals and four petals and they form small clusters from the axils of leaves or on short twigs along the stem. The flowers are a yellowish to green color. The fruit or berries are small and are a dark purplish or black color. It can be distinguished from native and other non-native buckthorns by its sharp, thorn-tipped branches and from native Hawthorns (Crataegus spp.) on which the thorns grow from the sides of branches.

Impacts

It can form thick hedges with long branches that crowd out and shade out native shrub and herbaceous species, preventing regeneration of native plants. In fire prone areas the lack of herbaceous ground cover underneath the buckthorn hedge may prevent fires from spreading. It is a host for the crown rust fungus, an agricultural pest that inhibits the yield and quality of oats. Buckthorn leaves have a high concentration of nitrogen and the decomposition of leaf litter changes soil nitrogen content and can increase the pH levels in the soil. These changes create better growth conditions for the common buckthorn perpetuating their persistence.

5 – Tree-of-heaven



Despite its name, the tree-of-heaven is an invasive species in the US. It is native to China and was brought to the United States in the late 1700's as a horticultural specimen and shade tree.

Description

It has pale gray bark, light brown twigs and large pinnately compound leaves. It gives off a peanut butter-like scent when you break the leaves.

Impact

Invasive to many regions of the US. It is very rapid growing, can have detrimental effects on ecosystem processes, damage structures, and poses risk to human health.

6 – English ivy



English ivy is native to Europe, western Asia, and northern Africa. The plant has been introduced to other parts of the world.

Description

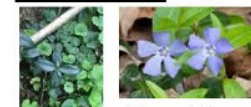
It is an evergreen climbing plant that can grow 66-98 ft high where there are suitable surfaces. It has thick, lobed, and often glossy leaves that are medium

to dark green in color and have light green, yellow, or white veins. There are three to five lobes on each leaf.

Impact

It is widely cultivated as an ornamental plant. It has been labeled as invasive in some areas where it is introduced and labeled as noxious weed in many parts of eastern US. It can be problematic on buildings that it covers; it is a fast-growing, self-clinging climber that is capable of causing damage to brickwork, guttering, etc., and hiding potentially serious structural faults, as well as harboring unwelcome pests.

7 – Periwinkle



Description

It is a groundcover shrub. It has small, oval, dark green, glossy leaves that are evergreen. The flowers are violet-purple (pale purple or white in some cultivated selections), with a five-lobed corolla.

Impact

It is a good groundcover grower that provides some benefits such as protection from erosion and drought. But despite the benefits, it is classified as invasive in parts of North America.

8 – Common reed



The non-native *Phragmites australis* was accidentally introduced from Europe in the late 18th or early 19th century in ship ballast.

Description

The non-native Phragmites is a perennial grass that can reach over 15 feet in height. Stems of the non-native Phragmites are

hollow, usually green with yellow nodes during the growing season, and yellow when dry in the winter. The leaves are blue-green to yellow-green, arranged all along one side of a stem. In late summer, it is in bloom with purple to gold highly branched panicles of flowers. The seeds are grayish and appear fluffy due to the silky hairs that cover each seed.

Impact

It outcompetes native vegetation and lowers the local plant biodiversity. It forms dense thickets of vegetation that is unsuitable habitat for native fauna. It displaces native plants species such as wild rice, cattails, and native wetland orchids. Gallic acid released by Phragmites is degraded by ultraviolet light to produce mesoxalic acid, effectively hitting susceptible plants and seedlings with two harmful toxins. It is so difficult to control that one of the most effective methods of eradicating the plant is to burn it over 2-3 seasons. The roots grow so deep and strong that one burn is not enough.

How You Can Help!

You can help by reporting invasive species via iMap Invasives, you will need to request an account here: <http://www.nvimapinvasives.org/request-login>, before you can submit observations to the public database using the iMap Invasives app. Reporting invasive species will allow EDRR (Early Detection and Rapid Response) and help eradicate invasive that are really problematic in an area as well as detecting new invasive that have never been discovered before. By knowing what is invasive and what is not, you can avoid planting them in your garden and as well as manage them if you happen to already have them.

For More Information!

These are just a select number of invasive species that can be found in Oakwood Cemetery, the following links will provide more information on EDRR, invasives species including animals that can be found in New York State and how to manage them.

<https://www.invasive.org/edrr/>

<http://ulster.cce.cornell.edu/environment/invasive-plants>

<http://nyis.info/>