

Conservation Issue: Recognizing and Controlling Invasive Species

Common Forest Invasives



Autumn Olive (*Elaeagnus umbellata*) – A large, broad shrub that grows to 20 ft., with silvery gray-green leaves, yellow flowers and ¼ inch red to yellow seeds. Invades disturbed areas, old fields, pastures; resprouts vigorously. It threatens native ecosystems by out-competing and displacing native plant species, creating dense shade and interfering with natural plant succession and nutrient cycling. Because autumn olive is capable of fixing nitrogen in its roots, it can grow on bare mineral substrates. Control by basal bark application of herbicide or by herbicide treatment of freshly cut stumps.

Common Buckthorn (*Rhamnus cathartica*) – A large shrub that grows to 26 ft., with dark green, glossy leaf, yellow-green flowers, glossy black ¼ -inch berries; short thorns at twig's end. Invades open areas and forest understory; forms dense stands that crowds out desirable native plants. The plentiful fruit is eaten by birds and mice and is known to produce a severe laxative effect, helping to distribute seeds through birds, often far from the parent plant. Control by pulling or herbicide treatments of freshly cut stumps.



Garlic Mustard (*Alliaria petiolata*) – A 3 to 4 foot tall herb with distinctive garlic/onion smell of crushed vegetation, has white flowers from spring through June, individual plants can produce 350 to 7900 seeds annually. Invades disturbed areas, but can dominate the understory even in natural areas, not eaten by native insects or herbivores. Garlic mustard displaces many native spring wildflowers and is also credited with the decline of the West Virginia white butterfly because chemicals in the plant appear to be toxic to the butterfly's eggs. It can be controlled by hand pulling, using a weed torch in wet conditions, and cutting it just above the soil before flower opens and using one or two percent glyphosate herbicide.

Honeysuckle (*Lonicera spp.*) – A branching deciduous shrub 10 to 15 feet tall. Leaves are opposite and egg shaped. Paired berries and flowers on mature plants. Common in disturbed areas and along roadsides. Many different species of honeysuckle exist; most are invasive to the United States. Control by hand pulling small plants or herbicide treatments of freshly cut stumps.





Japanese Barberry (*Berberis thunbergii*) – A spiny 3 to 6 ft., tall deciduous shrub with small green leaves, small yellow flowers, and 3/8 to 1/2 inch elongated, bright red, hard berries. Crowds more desirable understory plants out of forest stands. Deer will not browse it. Control by pulling small plants, use foliar herbicides, treat freshly cut stumps with herbicide.

Japanese Knotweed (*Falopia japonica*) – Forms 10 ft., tall bamboo-like, dense stands. Leaves are 3 to 6 inches long by 2 to 4 inches wide, greenish-white flowers mid to late summer; 3-winged seeds. Invades disturbed areas, stream banks, ditches, and crowds out desirable, native riparian zone plants. Control by repeated cutting and treating freshly cut stems with herbicide.



Multiflora Rose (*Rosa multiflora*) – A 5 to 10 ft., tall shrub with arching, briar canes, with clusters of white to pink flowers; small bright red rose hips in fall. Tolerates a wide range of soil and light conditions. Forms dense, impenetrable thickets in disturbed areas, old fields and can dominate forest understories. Originally introduced to help control erosion and act as “living fences” to contain livestock and as a cover for wildlife. Control by repeated mowing and cutting; treat freshly cut stumps with herbicide.

Websites:

Weeds Gone Wild: Alien Plant invaders of Natural Areas – Plant Conservation Alliance

<http://www.nps.gov/plants/alien>

The Global Invasive Species Initiative – The Nature Conservancy

<http://tncweeds.ucdavis.edu/esadocs.html>

Exotic Invasive Plant Species in Minnesota Forests – Community Forestry Resource Center, Inst. For Agriculture & Trade Policy

<http://www.forestrycenter.org/library.cfm?refID-76483>

18 Common Invasive Plants in New York State – Lake Ontario Shoreline Stewardship Guide –New York Sea Grant

<http://www.nysgextension.org/glhabitat/epacd/pages/plants/invasives.htm>