



Autumn Olive / Russian Olive

Elaeagnus umbellata / *Elaeagnus angustifolia*
(Oleaster Family)

Threats to Native Habitats

In New England, autumn olive has escaped from cultivation and is progressively invading natural areas. It is a particular threat to open and semiopen areas. Russian olive may also escape from cultivation, but so far is less common. Both autumn olive and Russian olive tolerate poor soil conditions and may alter the processes of natural succession. The nitrogen-fixing capabilities of these species can interfere with the nitrogen cycle of native communities that may depend on infertile soils. Both species produce large amounts of fruit, which are readily consumed and dispersed by birds. Autumn olive resprouts vigorously after fire or cutting. Over time, colonies of these shrubs can grow thick enough to crowd out native plants. Highway plantings of these high-fruited species lure birds close to fast traffic, contributing to high mortality rates for some species of birds.

Description

Autumn olive is a large deciduous shrub that can grow to 20 feet. Leaves are alternately arranged, elliptic to lanceolate (shaped like a lance head), and smooth-edged. Mature leaves have a dense covering of lustrous silvery scales on the lower surface. Stems and buds also have silvery scales. Flowers are small, creamy white to yellow and tubular in shape; they grow in small clusters. The abundant fruits look like small pink berries, also with silvery scales. Autumn olive is easily confused with Russian olive, which has many similar characteristics. Unlike autumn olive, Russian olive often has stiff peg-like thorns, and has silvery scales coating both sides of its mature leaves.

Habitat

Autumn olive is somewhat drought tolerant and does well on a variety of soils including sand, loam and clay. Russian olive will grow along streams,



Autumn olive flowers (photo by Catherine Heffron, courtesy of the New England Wild Flower Society)

and in fields and open areas. Both species can quickly colonize infertile soils, outcompeting native woody species that grow more slowly on those sites.

Distribution

Autumn olive is native to eastern Asia and was introduced to the United States for ornamental cultivation in the 1800s. It now grows in most northeastern and upper midwest states. Russian olive was also introduced into the U.S. in the 1800s for horticultural purposes, and subsequently escaped into the wild. Russian olive is generally



Autumn olive (photo by Don Cameron, Maine Natural Areas Program)

more widespread in the U.S., except in northern New England, where it is less common than autumn olive.

Control

The best method of controlling these species is to prevent them from becoming established. Plants should be removed as soon as possible if they are found newly colonizing an area. Small plants and seedlings can be hand-pulled, especially when the soil is moist. Herbicide treatment is probably the best method for eradicating larger, well-established plants, as cutting only stimulates sprouting and leads to thicker growth. Herbicide options include cut-stump and foliar applications. A cut-stump treatment is done by cutting the trunk of the shrub near the base and applying (painting) a 10- to 20-percent solution of glyphosate-based herbicide to the cut area of the stump. The herbicide is absorbed into the roots where it kills the plant. A foliar application of a one- to two-percent solution of glyphosate should eliminate smaller patches. A late summer application is recommended for both herbicide treatment types. Use herbicides responsibly and follow manufacturer's directions. Contact the Maine Department of Agriculture for information on restrictions that apply to the use of herbicides. Consult a licensed herbicide applicator before applying herbicides over large areas.

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For more information or for a more extensive list of references on invasive species contact:

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