Invasive Alien Plant Species of Virginia

Autumn Olive (*Elaeagnus umbellata* Thunberg)
Russian Olive (*Elaeagnus angustifolia* L.)

Description

Autumn olive is a deciduous shrub or small tree in the Oleaster family. Leaves are alternate, oval to lanceolate, and untoothed. The underside of the dark green leaf is covered with silver-white scales. The plant may grow to a height of 20 feet. The small, light yellow flowers are borne along twigs after the leaves have appeared early in the growing season. The small, round, juicy fruits are reddish to pink, dotted with scales, and produced in great quantity. Autumn olive is easily confused with a closely related species, Russian olive (*Elaeagnus angustifolia*), which is also an invasive species. Russian olive has elliptic to lanceolate leaves, its branches are usually thorny, and its fruit is yellow, dry and mealy. Identification should be confirmed by a specialist.

Habitat

Autumn olive has nitrogen-fixing root nodules which allow it to thrive in poor soils. Typical habitats are disturbed areas, roadsides, pastures and fields in a wide range of soils. Autumn olive is drought tolerant and may invade grasslands and sparse woodlands. It does not do well on wet sites or in densely forested areas.

Russian olive can be found in dry to moist soils, but does particularly well in sandy floodplains.

Distribution

Autumn olive was introduced to the United States from east Asia in the 1830s. It is found from Maine south to Virginia, and west to Wisconsin. Autumn olive was planted in the eastern and central United States for revegetation of disturbed areas. Birds forage on its fruit and contribute to seed dispersal. It is widely distributed in Virginia, having been recorded in 46 counties.

Russian olive, native to Eurasia, was planted as an ornamental and escaped cultivation in the central and western United States. At this time, Russian olive is rare in Virginia, where it has been reported only from Accomack, Fairfax, Northumber-land and Warren counties.

Threats

Autumn olive is a very troublesome invasive species in Virginia. In addition to its prolific fruiting, seed dispersal by birds, rapid growth and ability to thrive in poor soil, Autumn olive resprouts vigorously after cutting or burning. It creates heavy shade which suppresses plants that require direct sunlight.

Although rare in Virginia, Russian olive poses similar threats. In the western United States it has be-

Autumn Olive *(Elaeagnus umbellata)*

For more information, contact the Department of Conservation and Recreation or the Virginia Native Plant Society.

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Autumn Olive
Russian Olive

come a major problem in riparian woodlands, threatening even large, hardy native plants such as cottonwood.

Control

Seedlings and sprouts can be hand-pulled when the soil is moist to insure removal of the root system. On larger plants, cutting alone results in thicker, denser growth. Burning during the dormant season also results in vigorous resprouting.

A glyphosate herbicide can be used to control larger plants. Foliar application has proven effective in controlling these species. Since glyphosate is nonselective and will affect all green vegetation, care should be taken to avoid impacting native plant species. At sites where this is a concern, application of the herbicide to the freshly cut stumps of the invasive shrub should achieve the desired results. This method minimizes damage to other plants. Glyphosate herbicides are recommended because they are biodegradable, breaking down into harmless components on contact with the soil. To be safe and effective, herbicide use requires careful knowledge of the chemicals, appropriate concentrations, and the effective method and timing of their application. Consult an agricultural extension agent or a natural resource specialist for more details on herbicide control measures.

Suggested Alternative Plantings

There are many native species which are attractive as ornamentals, stabilize soils, and provide food and cover for wildlife. Winterberry (*Ilex verticillata*), black haw (*Viburnum prunifolium*), gray dogwood (*Cornus racemosa*) and shining sumac (*Rhus copallina*) all provide a winter source of food for birds. Serviceberry (*Amelanchier* spp.) blooms early in the spring and its fruits are quickly eaten by birds. Other alternatives are evergreens such as American holly (*Ilex opaca*), bayberry (*Myrica pennsylvanica*) and wax myrtle (*Myrica cerifera*). All are available at local nurseries.

References

Alliance for the Chesapeake Bay. 1993. Environmentally Sound Landscape Management for the Chesapeake Bay.

Eckardt, N. 1987. *Elaeagnus umbellata*--Autumn olive. Element Stewardship Abstract. The Nature Conservancy, Minneapolis.

Harvill, A., et. al. 1992. Altas of the Virginia Flora. Virginia Botanical Associates. Burkesville.

Szafoni, B. 1994. Autumn olive (*Elaeagnus umbellata*). Vegetation Management Guideline, Vol. 1, No. 3, Illinois Department of Conservation, Charleston.

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