

autumn olive

Elaeagnus umbellata

Identification:

Elaeagnaceae (Oleaster family)

Uncommon Perennial shrub, deciduous Height: 6-20' **Width:** 4-15'

Leaf Arrangement: alternate

Flower: Yellow, Cream

Blooms: Mid-spring to Late spring

Fruit: Red berry

Fall Color: Yellow, Green

Autumn olive are typically 5-20' tall. The leaves are alternately arranged, often with wavy leaf edges. The upper surface of the leaves are glossy with many speckles. The underside of the leaves are distinctive, with a very pale appearance due to appressed silvery hairs on this lower surface. The creamy yellow, four-petaled, flowers bloom in spring all-along the smaller branches. By late summer juicy red fruit, with many small speckles or divots on the surface, are arranged along the stem. Young twigs are a vibrant rusty brown color, often contrasting significantly with the more gray color of older branches. Some plants produce small, thorn-like twigs. In fall leaves change color to yellow, but they do so inconsistently, so that each plant has a mix of yellow and green leaves.



Weed Information Sheet:

autumn olive

Elaeagnus umbellata



NR-40 Restricted

AKA:

Description & Impact:

Autumn olive was brought to North America in 1830 for cultivation from China, Korea, and Japan. Native to southeastern Europe and western Asia, This species was planted by government agencies in the 20th Century in a misguided attempt to provide windbreaks and wildlife habitat. They have proven to be too vigorous in their new home, now being spread widely in bird droppings. They are particularly problematic in areas of well-drained, sandy or rocky soil. These dense growing shrubs can change the composition of the plant community by fixing nitrogen in the soil, allowing them to be very competitive against native species.

Control Methods:

Cut and Treat: The most effective control method is to cut each stem as close to the ground as is practical, and immediately treat the stump with concentrated herbicide at the rate recommended on the product label. Glyphosate (Round-Up®, etc.) mixed 1:1 in water is effective and has the lowest potential for negative impacts to surrounding vegetation. On very cold winter days or early-spring a solution of triclopyr (Garlon® 4, etc.) in mineral oil may be more effective. It is best to apply the herbicide to the cut stumps immediately after cutting so as not to lose track of them.

Basal bark treatment with triclopyr in oil is effective and time-efficient when dealing with large numbers of small stems. Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

Critical Period Cutting: A new technique to control invasive shrubs is called critical period cutting. This involves cutting the plants multiple times, with the first cut being between at roughly chest-height. This Initial cutting should be done in mid-May when the autumn olive are flowering and fully leafed-out. This is when the plant's root energy reserves are at their lowest. With this initial cut, also remove any lower branches that contain leaves. Follow-up in mid-September by stripping the newly sprouting branches either by hand or with hand pruners or a small electric saw. Monitor the plants the following growing season, and if necessary, repeat this stripping again after leaf-out in the spring and again in early-fall.

Pulling is not particularly effective on autumn olive as they have a much more robust root system than other invasive shrubs like honeysuckle. Saplings (less than 1/4" in diameter) can be hand pulled in loose or moist soils. Slightly larger individuals *may* be able to be removed with the aid of a tool like a Weed Wrench. But consider the effects of soil disturbance and erosion when uprooting plants, especially on slopes.

Prescribed fire will prevent the establishment of this species and help control seedlings, but will not kill established plants

Revegetation Recommendations: In borders and hedgerows use wild plum (*Prunus americana*), hazelnut (*Corlyus americanus*), gray dogwood (*Cornus racemosa*), and nannyberry viburnum (*Viburnum lentago*), all excellent replacements. Use pagoda dogwood (*Cornus alternifolia*) for shade and hawthorns (*Crataegus* spp.) or serviceberry (*Amelanchier* spp.) for sunny places. All these shrubs and trees provide showy spring flowers, attractive fall foliage and berries which feed songbirds.

Citations: