



**FACT SHEET: INVASIVE WEEDS**

***AUTUMN OLIVE***

**A**utumn olive (*Elaeagnus umbellata*) is an exotic deciduous shrub originally introduced to North America from Asia in the 1830s. It seriously competes with native plant species and has been listed as a noxious weed throughout much of its range. It is also an invasive weed of pastures, hay fields, roadsides, and rights-of-way. Autumn olive is now found from Maine to South Carolina and west to Minnesota. The species was evaluated in the 1940s by the Soil Conservation Service and the strain ‘Cardinal’ was released in 1963 for commercial propagation. Autumn olive has been widely planted primarily to provide food and cover for wildlife but also for screens and barriers along highways, to stabilize and revegetate road banks, and to reclaim mine spoil.



**A**utumn olive is a rapid growing, medium to large shrub, often reaching heights of 20 feet. The upper leaf surfaces are dark green while the undersides are covered with grayish or silver scales which give the leaves a silvery cast. Small, light yellow flowers occur in clusters of 5 to 10 and bloom in late April and May. Small (less than ¼ inch) fleshy fruits range in color from pink to red and are produced in abundance each year.



**P**lantings for wildlife food and cover are a major factor in increased invasion of autumn olive. An individual plant can produce up to eight pounds of fruit each season. Birds seem to be the primary vector for dispersal. It can also grow in many different sites and conditions from disturbed areas, successional fields, pastures, open woodlands, forest edges, and roadsides. It has the ability to seed in entire areas creating monocultures that replace native species.

**W**hen considering controlling autumn olive you will need to not only look at the specific area but also at the surrounding areas that may have large seed producing populations. Removal of plants on site may only be a temporary solution. Plants will continue to seed in from adjacent areas causing a reoccurring control issue. Second, autumn olive also resprouts vigorously after mowing, cutting or burning, often becoming more vigorous with each regrowth even when repeated for many years.

**M**echanical controls, including pulling and digging, can be effective at eliminating small seedlings and sprouts. Pulling should take place when adequate soil moisture is available to allow the removal of the entire root system. Autumn olive is easily seen in the spring since it leafs out when most other native vegetation is still dormant.

**C**hemical control is the most effective method for controlling autumn olive. Numerous techniques exist for applying herbicides. But, the cut stump treatment is probably the most effective method. This technique involves two steps, first cutting the plant down close to the ground and then applying a liquid herbicide to the stump. The plant can be cut with a chainsaw, handsaw, or brush mower. A formulation of glyphosate, in a 20-50 percent solution, is then applied immediately to the cut stump surface by using a low pressure hand held sprayer. This type of treatment has proved effective in killing the root system and preventing resprouting when applied late in the growing season (July-September) but is also effective during the dormant season.



**F**oliar applications have also proven effective in controlling this species. Many different chemicals can be used including glyphosate, dicamba, and 2,4-D. This technique is most effective during the summer months from July to August. Complete coverage of the plant is necessary but do not spray to the point of runoff. Care must be taken to avoid herbicide contact with desirable vegetation since damage can result.

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