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Invasive Plant Information Sheet


Autumn Olive Eleagnus umbellata Oleaster Family (Eleagnaceae)

Ecological Impact: Autumn Olive grows rapidly and is a prolific seed producer. It establishes in disturbed sites adjacent to ornamental plantings where it shades out other plants that require direct sunlight. It is widely disseminated by birds and can easily adapt to many sites including areas with infertile soil. Its ability to fix nitrogen can adversely affect the nitrogen cycle of native plant communities that depend on low soil fertility.

Control Methods: The most effective control method for Autumn Olive is to prevent establishment by annually monitoring for and hand pulling small plants. Cutting and burning stimulate sprouting. Repeated cuttings over several consecutive years will reduce plant vigor and may prevent spread. However, herbicide use in combination with cutting may be more effective.

Mechanical Control: Seedlings and small plants should be hand pulled when the soil is moist. Be sure to remove the entire plant including all roots, since new plants can sprout from root fragments. Root sprouts resemble seedlings, but are attached to a lateral root and are nearly impossible to pull up. Larger plants can be cut off at the main stem and treated with herbicide.

Chemical Control: Herbicides can be applied broad scale as a foliar spray, or to select individuals as injection or cut stump treatments. Foliar sprays are highly effective, but should be used only where contact with nearby native vegetation can be prevented. Injection treatment can inhibit or prevent sprouting if done at the right time of year.
1) Foliar Spray: This method is most effective on small stands. Spraying should be done in late August or September when plants are actively translocating nutrients to the roots. Use a 1-2% solution of glyphosate (e.g., RoundupTM or RodeoTM) and water. If plants are in or near wetlands, only RodeoTM should be used. Glyphosate is a non-selective herbicide that will kill all vegetation. Managers should be cautious not to spray so heavily that herbicide drips off the leaves. Other herbicides that have proven effective, but remain in the soil for longer, are specific for broadleaf and woody species. These include dicamba (BanvelTM), picloram (TordonTM), silvex, and 2,4,5-T applied in late June in a 90% water/10% diesel oil carrier. Dicamba applied in late June at 4 lbs./gal. (2 qts./100 gal./acre) with a surfactant is also effective.
2) Cut Stump Treatment: This method is most effective if done in late August or September. To ensure uptake of the herbicide before the plant seals off the cut, apply immediately after

cutting, within 5-15 minutes. Use a 10-20% solution of glyphosate (e.g., RoundupTM or RodeoTM) and water. Apply with a sponge or paint brush or spray with a spray bottle or backpack sprayer. Follow-up with a foliar spray or cut stump treatment the next year if sprouts appear.

3) Injection Treatment: This treatment is most effective if done during the dormant season, in March. Using a hand axe, make downward-angled cuts into the sapwood around the tree trunk. Make one cut for each inch of diameter, plus one extra (e.g., for a 10 inch diameter tree, make 11 cuts). Space the cuts so that 1-2 inches of uncut living tissue remains between them. Apply a low concentration (down to 1% in diesel oil) of oil-soluble triclopyr (Garlon 4TM) into each cut so that the bottom of the cut is covered, but not running over. A trigger spray bottle works well as an applicator. This method is relatively easy for one person to do, but working with a partner is recommended in case of accident. Follow-up with a foliar spray or cut stump treatment the next year to control any sprouts.

Biological Control: Currently, there are no known biological control methods.

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