

AUTUMN OLIVE

invasive
fact sheet



© Chris Evans/River to River CWMA

Autumn olive is a sun-loving shrub that invades Vermont's open woodlands and fields. This plant is **easy to identify in the fall** when the red berries are most colorful.

The Problem

- ◆ Autumn olive (*Elaeagnus umbellata*) is a prolific fruit producer. Single shrubs have been observed to bear up to 80 lbs. of fruit per growing season.
- ◆ Due to its large size, Autumn olive interferes with natural succession by creating dense shade that prohibits native plants from growing.
- ◆ The nitrogen-fixing capabilities of this species can interfere with the nitrogen cycle of native communities.
- ◆ Autumn olive was historically planted along roadsides and in abandoned fields as an ornamental and wildlife food plant, this characteristic makes Autumn olive an aggressive and competitive threat in open communities.



Autumn olive

red, silver speckled
berries



© James H. Miller/USDA

silvery -
white scales



© Pennsylvania Dept. of Conservation and Natural Resources

nitrogen fixing
root nodules



© Leslie J. Mehrhoff/IPANE

AUTUMN OLIVE



Mechanical removal:

Hand pull: Any time of year when the ground is soft, especially after a rain, hand pull small plants by the base of the stem. Be sure to pull up the entire root system. Hang from a branch to prevent re-rooting. For larger plants, use a Weed Wrench™. Continue to monitor the area every year for new seedlings.

Cut stump: Repeated pruning of established plants to ground level without subsequent herbicide application is not effective for autumn olive control. Each re-growth results in a thicker stem base and denser branches.

Chemical removal:

Cut stump: Cut the plant 4 inches above the ground. Use a drip bottle to apply a 18-21% glyphosate solution to the stump within one hour of cutting. This is best done in late summer through winter when plants are transporting resources to their root systems.

Low volume foliar spray: This method is used for dense populations and best left to a contractor. During the summer months, July to August, spray a 2% glyphosate solution on the entire leaf surface of the plant. In order to avoid drift to native plants, spray only on calm days.

Safe Chemical Application

- ✓ **Develop an Integrated Plant Management approach.** Use chemical control as only ONE piece of your prevention and management strategy.
- ✓ **The label found on the herbicide container is the law.** It indicates the concentrations to use, what protective clothing to wear, how to apply the product, and what environmental and human health hazards are associated with the chemical.
- ✓ **Use aquatic formulations within 10 feet of water.** You need a permit to apply herbicides in wetlands. You cannot apply herbicides within 100 feet of a well-head. Contact VT DEC at 802-241-3761 for more information.
- ✓ **You need to be certified to apply herbicides on land that you do not own.**
- ✓ **Hire a contractor to manage large infestations.** A good contractor will have the knowledge to help create an effective management plan. For a list of certified contractors, contact the VT Department of Agriculture at 802-828-3482.



Non-invasive Alternatives



© Phyllis Weyland

russet buffaloberry
Shepherdia canadensis



© S&A. Wasowski

winterberry
Ilex verticillata



red chokeberry
Photinia pyrifolia