

## Invasive Shrubs

Invasive shrubs often occur with invasive tree species and present similar problems. Herbicide control options are similar to those for trees, with the exception that foliar sprays can be used more often. All are shade tolerant with bird-dispersed seeds, resulting in scattered plants under existing forest canopies, which require additional surveillance within the interior of forest stands.

### Autumn Olive



PA Dept. Cons. Nat. Res. - Forestry Archive

Autumn olive (*Elaeagnus umbellata* Thunb.) is a tardily deciduous bushy leafy shrub, 3 to 20 feet (1 to 6 m) in height, with scattered thorny branches. It has alternate leaves that are green above and silvery scaly beneath, with many red berries in fall having silvery scales. Species spreads by bird- and mammal-dispersed seeds. Often planted for surface-mine reclamation and wildlife food plots and escapes to forest edges and open forests.

#### Management strategies:

- Do not plant. Remove prior plantings, and control sprouts and seedlings. Bag and dispose of fruit in a dumpster or burn.
- Treat when new plants are young to prevent seed formation.
- Cut and bulldoze when fruit are not present.
- Minimize disturbance within miles of where this plant occurs, and anticipate wider occupation when plants are present before disturbance.
- Cutting and basal treatments are hindered by multiple thorny sprouts and eye protection should be used.
- Manually pull new seedlings and tree wrench saplings when soil is moist, ensuring removal of all roots.
- Burning treatments are suspected of having minimal topkill effect due to scant litter.
- Autumn olive seedlings are readily eaten by goats and sheep. Goats can deaden saplings by striping the bark and bending them over to eat the foliage.

#### Recommended control procedures:

- Thoroughly wet all leaves with Arsenal AC\* or Vanquish\* as a 1-percent solution in water (4 ounces per 3-gallon mix) with a surfactant (April to October). Or when safety to surrounding vegetation is desired, use Garlon 3A as a 2 percent solution (8 ounces per 3-gallon mix).
- For stems too tall for foliar sprays, apply (January to February or May to October) a basal spray using Garlon 4 as a 20-percent solution (5 pints per 3-gallon mix) in a labeled basal oil product, vegetable oil or mineral oil with a penetrant, or fuel oil or diesel fuel (where permitted), or undiluted Pathfinder II when safety to surrounding vegetation is desired. Elsewhere, apply Stalker\* as a 6-percent solution (1.5 pints per 3-gallon mix) in a labeled basal oil product, vegetable oil or mineral oil with a penetrant, or fuel oil or diesel fuel (where permitted) to young stems. Or cut larger stems and immediately treat the stump tops with one of the following herbicides in water with a surfactant: Arsenal AC\* as a 5-percent solution (20 ounces per 3-gallon mix); or when safety to surrounding vegetation is desired, a glyphosate herbicide as a 20-percent solution (5 pints per 3-gallon mix). ORTHO Brush-B-Gon, Enforcer Brush Killer, and Vine-X are effective undiluted for treating cut-stumps and available in retail garden stores (safe to surrounding plants).

\* Nontarget plants may be killed or injured by root uptake.