

## Glossy Buckthorn



Leslie J. Mehrhoff

Glossy buckthorn (*Frangula alnus* Mill.) is a deciduous shrub or small tree that grows 6 to 24 feet (3 to 12 m) in height. It has many sprouts from the base, thornless stems up to 10 inches (25 cm) in diameter with glossy bark (thus the common name), and an oval, much-branched crown with many sprouts. Leaves appear early in spring and linger green into fall; leaves are dark glossy green and alternate with distinct parallel veins. Stemmed clusters of tiny, white trumpet flowers appear in summer and yield spherical, green berrylike fruit that turn red then black in the fall. Fruit consumed and spread by birds and mammals. Invades forest edges and understories and can form pure stands because seedlings can establish in shade. Resembles the native Carolina buckthorn [*F. caroliniana* (Walt.) Gray] that has finely serrated leaf margins and leaves that are three times as long as wide.

### **Management strategies:**

- Bag and dispose of fruit in a dumpster or burn.
- Treatment combinations must be planned and enacted that safeguard adjoining shrubs and overstory trees.
- Treat when new plants are young to prevent seed formation.
- Manually pull new seedlings and tree wrench saplings when soil is moist, ensuring removal of all roots.
- Prescribed burning has limited application in most situations and can worsen infestations.

### **Recommended control procedures:**

- When safety to surrounding vegetation is desired, thoroughly wet all leaves with a glyphosate herbicide or Garlon 3A as a 2- to 3-percent solution (8 to 12 ounces per 3-gallon mix) in water with a surfactant. Or if nontarget damage is not a concern, apply Arsenal AC\* as a 0.25-percent solution (1 ounce per 3-gallon mix) or Arsenal PowerLine\* as a 0.5-percent solution (2 ounces per 3-gallon mix). Apply July to October.
- For stems too tall for foliar sprays, cut large stems in winter at any time when the ground is not frozen and immediately treat the stump tops with one of the following herbicides: a glyphosate herbicide or Garlon 3A as a 25-percent solution (3 quarts per 3-gallon mix) or Garlon 3A as a 50-percent solution (6 quarts per 3-gallon mix) in water with a surfactant. Or when safety to surrounding plants is not a concern, Tordon RTU\*, Roundup Pro, 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). A subsequent foliar application may be required to control new seedlings and resprouts.
- For trees up to 4 inches in diameter, apply a basal spray of 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, fuel oil or diesel fuel (where permitted).

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