

Invasive Plants in Pennsylvania

Glossy buckthorn

Frangula alnus



Deric Case, DCNR - BOF

Background:

Glossy buckthorn was first introduced into the United States in the mid 1800s as an ornamental. It has been used for hedges and wildlife habitat. A variety of cultivars are still sold in some nurseries.

Range:

Native to Eurasia, glossy buckthorn has invaded the Northeast and North-central regions of the United States.



John M. Randall, The Nature Conservancy

Description:

Glossy buckthorn is a shrub or small tree growing to a height of 10 to 25 feet. The bark is gray or brown with closely spaced, white lenticels. The simple, alternate leaves are papery and dark green with a shiny upper surface and a dull, hairy or smooth lower surface. Pale yellow flowers emerge in small clusters from the leaf axils throughout the growing season. The round fruit is red to dark purple.

Habitat:

This invasive can be found in a wide variety of habitats, including nutrient-poor soils, full sun and dense shade. It is particularly a problem in wetlands such as swamps, bogs, fens and wet meadows.



Brett Pifer, DCNR - BOF

Ecological Threat:

Glossy buckthorn is particularly aggressive in wet areas, rapidly producing a dense shade that eliminates native plants. It also engages in species-specific allelopathy, changing the structure of native plant communities.

Biology and Spread:

Glossy buckthorn spreads by seed, recruiting birds that eat its prolific berries. Seeds may also be spread by water since fresh fruit can float for over two weeks. Dispersal may be significant in areas that receive frequent and extensive fall and winter flooding.

Look-A-Likes:

Glossy buckthorn may be confused with native buckthorns (*Rhamnus* spp.) and cherries (*Prunus* spp.).



Robert H. Mohlenbrock, USDA NRCS

Glossy buckthorn (*Frangula alnus*)



Glossy buckthorn seedling.



Glossy buckthorn flower.

Brett Pifer, DCNR - BOF



Kelly Sitch, DCNR - BOF

Glossy buckthorn (*Frangula alnus*)



Lenticels on Glossy buckthorn

Glossy buckthorn Treatment Guidance

If only a few seedlings are present, hand pulling can be effective if the roots are removed. Small populations of saplings can be removed by digging or the use of a weed wrench. In any location where saplings/seedlings are mechanically removed, monitor the site for new seedlings or re-sprouts from missed root fragments. Repeated cutting or mowing can be successful as long as the plants are cut or mowed consistently for multiple growing seasons. If enough fuel is present, prescribed burns can have a large impact on seedlings and the current year's seeds.

For larger populations and larger diameter individuals, foliar or basal bark treatments with glyphosate or triclopyr can be used and are most effective in late Summer (after August 1st) or Fall. Brush applications on recently cut stumps will also achieve good results.