

INVASIVE PLANTS OF OHIO

Fact Sheet 2

Glossy Buckthorn & Common Buckthorn

Rhamnus frangula, *R. cathartica*

DESCRIPTION:

Both glossy buckthorn and common buckthorn are non-native woody shrubs or small trees that can reach up to 20 feet in height. Cutting the stems of either species reveals a distinctive yellow sapwood and pink to orange heartwood. Glossy buckthorn has gray-brown bark and lightly colored lenticels which give the bark a speckled appearance. Leaves of glossy buckthorn are entire, 1-3 inches long, shiny on the upper surface, oval shaped and slightly wavy. Flowers are 5-petaled, greenish-white and the fruits are red, turning purplish-black when ripe. Plants flower from late May until the first frost and fruits ripen from early July to September. Common buckthorn has smooth, deeply veined, oval leaves (1-2½ inches long) with toothed margins. Common buckthorn is a dioecious species with male and female flowers on separate plants. Flowers are 4-petaled and yellow-green in color; fruits are black. Flowering takes place from May through June and fruits ripen from August to September. Twigs of common buckthorn are often tipped with short spines. A native species, Carolina buckthorn (*Rhamnus caroliniana*), also occurs in Ohio.



Glossy Buckthorn

John Watts

HABITAT:

Glossy buckthorn typically invades wetlands including swamps, bogs, fens and wet meadows but also occurs in upland habitats such as woodland edges, old fields and roadsides. Common buckthorn is primarily an invader of upland sites

including open woods, woodland edges, prairies and open fields. Both species are capable of growing in full sun as well as heavily shaded areas.



Common Buckthorn

Division Photo

DISTRIBUTION:

Glossy buckthorn and common buckthorn were introduced to North America from Eurasia as ornamental shrubs for fence rows and wildlife habitat and are still used in landscaping. These species are distributed throughout the northeast and north central U.S. Both species are frequent in the central and northern part of the state.

PROBLEM:

Both glossy and common buckthorn have a wide habitat tolerance, rapid growth rates and extensive root systems. Both species produce abundant flowers and fruits throughout the growing season. Seeds are widely dispersed by birds. Once established, these species aggressively invade natural areas and form dense thickets displacing native species. They leaf out very early in the growing season and keep their leaves late into the fall helping to shade out native trees, shrubs and wildflowers.

CONTROL:

Mechanical: Prescribed burning has been used to control buckthorns in some natural areas. Fire will top kill stems, however re-sprouting will occur and seed germination may increase. Several years of burning may be necessary to control these species and may not be appropriate in some natural areas. Hand pulling may be successful in small infestations, although several seasons may be required as re-sprouting will occur if part of the root is left behind. This method also disturbs the soil, increasing seed germination. Repeated mowing has been reported effective in maintaining open areas and preventing seedling establishment.

Chemical: Control of buckthorns with systemic herbicides has been successful in many situations. Application of Roundup®, Accord®, Glypro® or Garlon 4® to cut stumps during the growing season and in warm days of winter has proven to be effective. Other application methods may include basal bark and foliar application. A foliar application of Garlon 3A® in dense thickets may be very effective in the spring and fall. Without treatment, stems will re-sprout vigorously after cutting due to the extensive root system.

Biological: Biological controls are not available, however studies of possible fungal and insect pests are ongoing.

ADDITIONAL INFORMATION SOURCES:

Converse, C.K. 1999. Element Stewardship Abstract for *Rhamnus cathartica*, *Rhamnus frangula*. The Nature Conservancy.

Reinartz, J.A. 1997. Controlling glossy buckthorn (*Rhamnus frangula* L.) with winter herbicide treatments of cut stumps. *Natural Areas Journal* 17(1): 38-41.

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FOR MORE INFORMATION:



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