

## Invasive Plants Fact Sheet



### Common Buckthorn *Rhamnus cathartica* Buckthorn Family (Rhamnaceae)

**Status:** Invasive in Connecticut. **Description:** Common buckthorn is a deciduous perennial shrub or small tree that reaches up to 20 feet in height. The leaves are mostly opposite, smooth, dull green and one to two-and-a-half inches in length. Flowers are fragrant with four greenish-yellow petals, and stems that appear to originate from the same point to form a flat or rounded umbrella-shaped cluster (umbel). Gray-black bark and twigs have prominent raised areas (lenticels), and twigs may be tipped with sharp, stout thorns. Buckthorn can establish dense stands, choking out native shrubs and herbaceous plants.

**Preferred habitat:** Common buckthorn occurs in a variety of habitats, including woodland borders and wet areas. It has a preference for neutral or alkaline soils, and can be found in limestone wetlands.

**Seasonal cycle:** Buckthorn has a long growing season, with leaf-out in late April to mid-May, prior to most woody deciduous species. Each shrub typically bears either male or female flowers May through June. The female plants produce rounded black fruits, each with three or four grooved seeds, that ripen in August through September. Buckthorns retain their leaves late into the fall, and stems persist through the winter, as does much of the fruit. Seeds are spread by birds and mice, which eat the fruit.

**Distribution:** In North America, common buckthorn has naturalized from Nova Scotia to Saskatchewan, south to Missouri and east to Virginia.

**Other points of interest:** Native to Europe and Asia, common buckthorn was probably introduced to North America before 1800 and became widespread and naturalized in the early 1900s. It was cultivated for hedges, forestry uses, and wildlife habitat.

**Control:** Control methods include cutting/mowing, girdling, excavation, and chemical control. Seedlings or small plants may be pulled by hand or removed with a grubbing hoe. Excavation is most useful in areas with low density invasions. Repeated cutting, which reduces plant strength, is recommended twice each season for two or three successive years. Girdling may be done all winter, does not disrupt the soil, and does not affect sensitive wetlands. Combining cutting with herbicide use may also be effective; it is recommended the stems be cut in the spring at leaf expansion and again in August or September, at which time a 20% solution of glyphosate can be applied to the stump. (Glyphosate is a non-selective herbicide and great care must be taken when using it in order to not harm native plant species.) Additional information sources: Common Buckthorn and Glossy Buckthorn Element Stewardship Abstract. C.K. Converse. Unpublished report of The Nature Conservancy, 1984. Experiment Finds Less Herbicide Needed to Control Buckthorn (Wisconsin) S. Glass. Restoration & Management Notes, 12:1, Summer 1994. The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada. Fifth printing. H. Gleason. Haffner Press, New York, 1974. Diagnostic

information: Leaves: ovate-elliptic or subovate, glabrous and minutely serrate, 1" to 2-1/2" in length. Flowers: 2-6 fragrant, yellowish-greenish, 4 petals, perfect, in axillary or supra-axillary umbels. Fruit: black, berry with 3-4 separate seed-like nutlets of cartilaginous texture, the plump seeds with a deep and dorsal groove. Stem and branches: spine-tipped long shoots and branches, gray-black bark, twigs have prominent lenticels. This fact sheet has been prepared by The Nature Conservancy Connecticut Chapter in cooperation with The Natural Diversity Data Base of the Connecticut Department of Environmental Protection. It may be reproduced without permission.

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