



Invasive Plant Atlas of New England

Catalog of Species Search Results



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Rhamnus cathartica

(Common buckthorn
European buckthorn)

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COMMON NAME

Common buckthorn
European buckthorn

FULL SCIENTIFIC NAME

Rhamnus cathartica L.

FAMILY NAME COMMON

Buckthorn family

FAMILY SCIENTIFIC NAME

Rhamnaceae

IMAGES



Fruits on branch



Staminate
flowers



Fruit and leaves
(note incurved
veins)



Pistillate Flowers

NOMENCLATURE/SYNONYMS

Synonyms: None

DESCRIPTION

Botanical Glossary

Rhamnus cathartica is a deciduous small tree or coarse shrub. It grows 2-6 m (6.5-20 ft.) tall. The glabrous branches usually have shoots that are tipped with stout spines. The leaves are opposite to subopposite, elliptic to ovate, 3.6-7.2 cm (1.5-3 in.) long and can be acute or obtuse. They are glabrous and have minutely serrate margins. The lateral veins (usually 3, but can be 2 or 4) on each side are strongly upcurved. The leaves remain on the plant late into the autumn, when most of the native species have already lost their leaves.

The fragrant, non-showy yellow-green flowers of *Rhamnus cathartica* are polygamodioecious, 4-petaled, and are present in clusters of 2-6. These flowers appear in the spring while the leaves are expanding, and are borne near the bases of the leaf stalks. The dark, purple to black fruit are globose drupes, about 0.6 cm (0.25 in.) across, contain 3-4 seeds and appear in the fall.

Page References Bailey 645, Fernald 992, Gleason & Cronquist 342, Holmgren 322, Magee & Ahles 724. See reference section below for full citations.

SIMILAR SPECIES

Frangula alnus Mill. (Glossy buckthorn)

Character	<i>Rhamnus cathartica</i>	<i>Frangula alnus</i>
Leaf arrangement	Opposite to subopposite	Alternate
Spines	Often present Ends of branches	Absent
Leaf venation	Lateral veins strongly upcurved	Pinnate

REPRODUCTIVE/DISPERSAL MECHANISMS

The seeds of *Rhamnus cathartica* are dispersed by birds.

DISTRIBUTION

Rhamnus cathartica is native to Europe, north and west Asia. It can also be found in low elevations in Morocco and Algeria. In North America this plant is present from Nova Scotia to Alberta, south to North Carolina and Utah, as well as in California. It is found in all the states of New England.

HISTORY OF INTRODUCTION IN NEW ENGLAND

Rhamnus cathartica was introduced to the United States before 1800, and probably started to invade native habitats around the early 1900's. In Gray's Manual of Botany (Fernald 1950), it is described as "often appearing as if native." This plant was often planted along fence rows, as well as for wildlife shelter.

HABITATS IN NEW ENGLAND

Abandoned Field
Early Successional Forest
Edge
Floodplain Forest
Open Disturbed Area
Pasture
Planted Forest
Roadside
Vacant Lot
Wet Meadow
Yard or Garden

Rhamnus cathartica can be located in open woods, pastures, fence rows, roadsides, moist and dry upland sites, floodplain and riparian forests and ravines. It grows in well-drained soils, preferring neutral to basic soils. In calcareous situations, it can form extensive monotypic stands.

THREATS

Rhamnus cathartica has the ability to form dense thickets under which native vegetation cannot survive due to shading and crowding. Many types of birds, as well as small mammals, eat its fruit, easily dispersing it over long distances. *Rhamnus cathartica* is a threat to agriculture because it is an alternative host for the crown rust of oats. This rust has a major effect on the yield and quality of the crop. *Rhamnus cathartica* plants can regenerate even after they are cut or burned.

MANAGEMENT LINKS

[The Nature Conservancy](#)

[Illinois Nature Preserves Commission](#)

[Illinois Natural History Survey](#)

General description and management guidelines

[Wisconsin Department of Natural Resources](#)

[Plant Conservation Alliance](#)

Fact sheet with management information

[The Connecticut Invasive Plant Working Group](#)

Invasive Plant Management Guide

DOCUMENTATION NEEDS

Documentation required: Specific photograph or mounted snippet of the tip of the branches or the leaves.

Best time for documentation: Spring, summer, fall.

ADDITIONAL INFORMATION

[Maine Invasive Plants, University of Maine](#)

General information and photographs

[Minnesota Department of Natural Resources](#)

General information and photographs

[Wisconsin Department of Natural Resources](#)

General information and control

[Integrated Taxonomic Information System](#)

Taxonomic information

[PLANTS database](#)

General information and a map

[The Nature Conservancy](#)

Extensive description and control information

[Illinois Nature Preserves Commission](#)

General information including control and photographs

[Plant Conservation Alliance](#)

General information and management

REFERENCES

Archibold, O.W., D. Brooks and L. Delanoy. 1997. An investigation of the invasive shrub European buckthorn, *Rhamnus cathartica* L., near Saskatoon, Saskatchewan. *Canadian Field Naturalist* 111 (4): 617-621.

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Heidorn, R. 1991. Vegetation management guideline: exotic buckthorns - common buckthorn (*Rhamnus cathartica* L.), glossy buckthorn (*Rhamnus frangula* L.), and Dahurian buckthorn (*Rhamnus davurica* Pall.). *Natural Areas Journal* 11: 216-217.

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DATA RETRIEVAL

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MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

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