

Invasive Plant Atlas of New England

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Catalog of Species Search Results Rhamnus cathartica



(Common buckthorn European buckthorn)

Common Name(s) | Full Scientific Name | Family Name Common | Family Scientific Name | Images | Synonyms | Description | Similar Species | Reproductive/Dispersal Mechanisms | <u>Distribution</u> | <u>History of Introduction in New England</u> | <u>Habitats in New England</u> | <u>Threats</u> | Early Warning Notes | Management Links | Documentation Needs | Additional Information | References | Data Retrieval | Maps of New England Plant Distribution

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)

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Character	Rhamnus cathartica	Frangula alnus
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 calcarious 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

<u>Illinois Nature Preserves Commission</u>

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

<u>Documentation required</u>: 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

<u>Integrated Taxonomic Information System</u> 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



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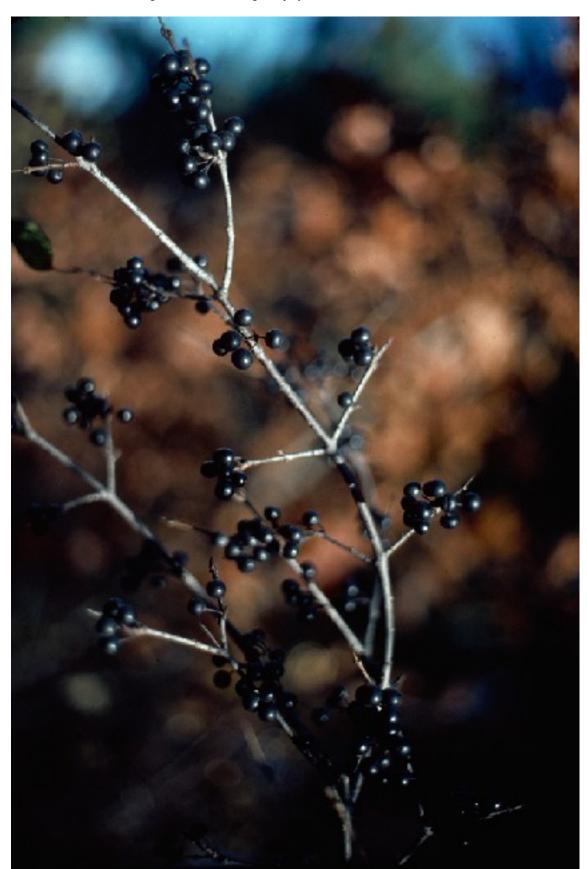


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