



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Red Mulberry *Morus rubra* L.

State Status: **Endangered**

Federal Status: **None**

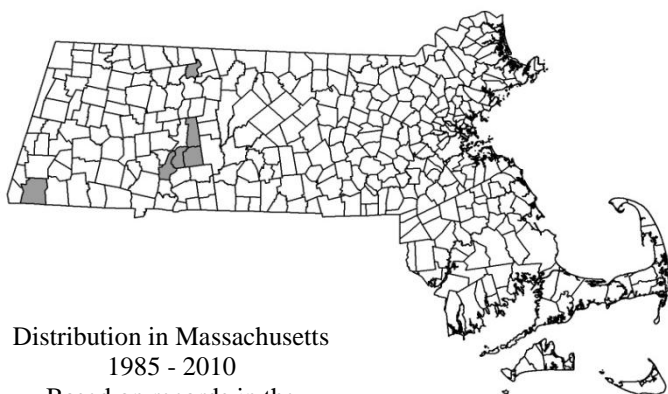
DESCRIPTION: Red Mulberry is a medium-sized, alternately leaved tree of rich woods. It bears red to dark purple, blackberry-like fruits that ripen in early summer.

AIDS TO IDENTIFICATION: Red Mulberry leaves are coarsely toothed, oval to heart-shaped, with a pronounced acuminate tip. They are sometimes mitten-shaped and on young shoots often have several lobes. Leaves may be rough or smooth above but are always downy on the underside. The flowers are borne in cylindrical catkins and the species is generally dioecious, with male and female flowers on separate trees. The fruits, also cylindrical, are 2 to 3 cm (0.8–1.2 in) long, with the remains of the styles protruding.

SIMILAR SPECIES: White Mulberry (*Morus alba*), introduced from Asia, is quite similar. Despite its common name, the fruits are generally red to dark purple as in Red Mulberry, though occasional individuals bear white or pink. The main difference is that the leaves are virtually hairless beneath (there may be some pubescence on the veins and in the vein axils). The leaf tips are not as pronounced as in Red Mulberry. If leaf buds are



The variable leaves of Red Mulberry showing the sharp tips. There are immature fruits in the top picture. Photos: Charles S. Eiseman.



Distribution in Massachusetts
1985 - 2010
Based on records in the
Natural Heritage Database

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

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present, Red Mulberry has a dark band along the margin of each scale, whereas White Mulberry bud scales have pale brown bands or lack bands along the margins. The two species can hybridize, producing offspring with intermediate characteristics.

American Basswood (*Tilia americana*) grows in the same habitats as Red Mulberry and vegetative individuals are superficially similar. They are easily distinguished by the buds, if present, because basswood buds are red with just two scales, unlike the several overlapping scales that make mulberry buds look like miniature pine cones. Additionally, basswoods lack the milky sap characteristic of the mulberry family.

HABITAT IN MASSACHUSETTS: All known occurrences of Red Mulberry in Massachusetts are on steep, east-facing ledges or rocky slopes. Elsewhere in its range, this species can be found on floodplains and in other rich woodlands.

RANGE: Red Mulberry is at its northeastern range limit in Massachusetts and southern Vermont. Its range extends west to eastern Nebraska and south to Florida and Texas.

POPULATION STATUS IN MASSACHUSETTS: Red Mulberry is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. NHESP has records from the past 25 years (since 1985) of several populations in Hampshire and Hampden Counties, and one population each in Franklin and Berkshire Counties.

THREATS: All Massachusetts occurrences of Red Mulberry consist of one or a few trees, so loss of individuals to natural occurrences like rockslides, disease, or shading by taller trees can seriously threaten a population. When growing in proximity to White Mulberry, the rare species may be overwhelmed with pollen from the more abundant exotic species, thereby becoming lost to hybridization over successive generations.

MANAGEMENT RECOMMENDATIONS: At sites where shading from neighboring trees is a threat, selective cutting of competitors may be appropriate. If possible, the vicinity of Red Mulberry populations should be kept free of White Mulberry. All active management of rare plant populations (including invasive species removal) is subject to review under the Massachusetts Endangered Species Act, and should be planned in close consultation with the Massachusetts Natural Heritage & Endangered Species Program.

Flowering time in Massachusetts

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
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Updated 2015

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