

## **Natural Heritage** & Endangered Species **Program**

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Massachusetts Division of Fisheries & Wildlife

# **Swamp Birch** Betula pumila

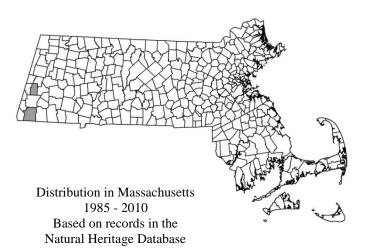
State Status: Endangered Federal Status: None

**DESCRIPTION**: Swamp Birch – also known as Dwarf Birch, Bog Birch, or Low Birch – is a medium-sized, bushy shrub in the birch family (Betulaceae) that sometimes attains a height of 4 m (13 feet). Its bark is brown, and its young leaves are covered with soft white hairs. (Young twigs may also be hairy.) The 2-3 cm (0.8-1.2 inches) long leaves are coarsely toothed and eggshaped, with the broader ends at the tops. They are lighter in color below. The unisexual catkins first appear in the fall; the erect, female catkins measure from 1 to 2 cm (0.4 - 0.8 in.) long. The winged, scale-like nutlets mature from late June to late September and are called samaras.

**RANGE**: The documented range of Swamp Birch extends from Newfoundland and Quebec to southern Ontario and Michigan, south to New Jersey, central Ohio, and northern Indiana. Its distribution is local in northeastern North America.



Photo: B.A. Sorrie, NHESP



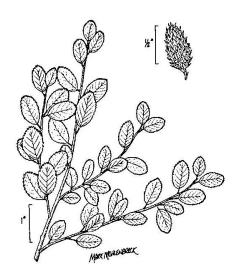


Illustration: USDA-NRCS PLANTS Database / USDA NRCS. Wetland flora: Field office illustrated guide to plant species. USDA Natural Resources Conservation Service

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

### Massachusetts Division of Fisheries & Wildlife

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Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget. www.mass.gov/nhesp

HABITAT: Swamp Birch is generally a calciphile. It is found in open and forested wetlands influenced by calcareous groundwater seepage. Specific habitats in the Commonwealth include a shrub-dominated peaty wetland that is fed by calcareous seepage, a larch bog, and calcareous fens. Associated species include Speckled Alder (*Alnus rugosa*), Larch (*Larix laricina*), Shrubby Cinquefoil (*Potentilla fruticosa*), Tussock Sedge (*Carex stricta*) and Hoary Willow (*Salix candida*).

### POPULATION STATUS IN MASSACHUSETTS:

Swamp Birch is listed under the Massachusetts Endangered Species Act as Endangered. There are 4 current stations (discovered or relocated 1985-2010) in 2 towns. Reasons for its rarity in Massachusetts include a scarcity of alkaline habitats and habitat destruction. Threats include degradation of habitat and the raising of water levels by beaver activity. Swamp Birch is uncommon throughout New England. 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.

#### MANAGEMENT RECOMMENDATIONS:

Observations of populations in Massachusetts seem to indicate that beavers can raise water levels to the point that Swamp Birch populations will die back. Competition from Phragmites (*Phragmites australis*) can be a real threat to Swamp Birch on disturbed habitats. Monitoring and removal of competing vegetation should be considered as a management strategy where appropriate. 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.

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