



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Heartleaf Twayblade *Neottia cordata* (L.) Rich.

State Status: **Endangered**
Federal Status: **None**

DESCRIPTION: *Neottia cordata* is a very slender, perennial orchid with two (or sometimes four) opposite, heart-shaped leaves, ½ to 1 inch (1 to 3 cm.) long, which appear halfway up the single green stem. The flowers, which are arranged as a raceme, stand much higher than the leaves, the entire height of the plant being 4 to 8 inches (10-20 cm.). The flowers are small, 1/8" (0.3 cm) across, light green to dusky purple, and have one slightly longer, linear, cleft petal called the lip. The flowers appear from late May to early July, which is the best time to identify this orchid. The name, "twayblade," means "two-leaved," as the plant usually only has two leaves on each stem.

SIMILAR SPECIES IN MASSACHUSETTS: White Adder's Mouth (*Malaxis brachypoda*) and Green Adder's Mouth (*M. unifolia*) are similar, tiny orchids of coniferous swamps and forested fens, but they differ from Heartleaf Twayblade primarily in having only a single leaf.

HABITAT IN MASSACHUSETTS: *Listera cordata* occurs in wet, mossy, coniferous woods. The only Massachusetts site is an acidic swamp of Atlantic White Cedar (*Chamaecyparis thyoides*) with Inkberry (*Ilex glabra*), sedges (*Carex* spp.), Cinnamon Fern (*Osmunda cinnamomea*), Round-leaved

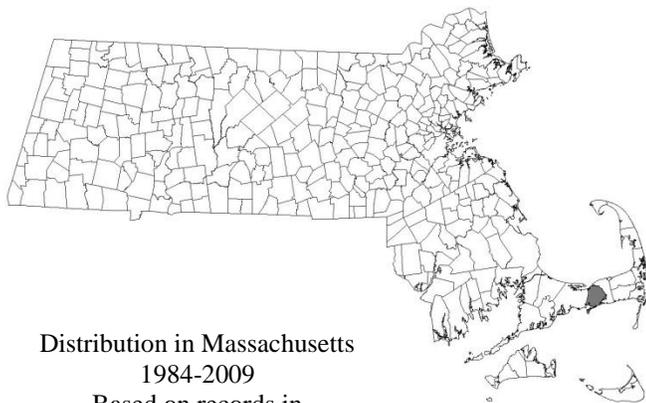


Holmgren, Noel H. 1998. *The Illustrated Companion to Gleason and Cronquist's Manual*. The New York Botanical Garden.

Sundew (*Drosera rotundifolia*), and sphagnum. This species is often associated with clear patches of sphagnum and mossy hummocks.

RANGE: *Neottia cordata* is found from Greenland to Alaska, south to Massachusetts and Michigan, and scattered down the Appalachians to North Carolina. It is found in cool, moist, mossy environments throughout.

POPULATION STATUS IN MASSACHUSETTS: There is only one verified current site of Heartleaf Twayblade in Massachusetts, though there are eight historical records. It is listed as Endangered in Massachusetts. It is on the edge of its range here, and it exhibits a scattering of populations, though suitable habitat appears to be relatively common. This is typical of many plant species at the edge of their range.



Distribution in Massachusetts
1984-2009
Based on records in
Natural Heritage Database

Updated 2015

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

Massachusetts Division of Fisheries & Wildlife

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