



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**Large Round-leaved Orchid
Platanthera macrophylla
(Goldie) P.M. Brown**

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

SPECIES DESCRIPTION: Large Round-leaved Orchid is similar to the slightly smaller Round-leaved Orchid (*P. orbiculata*). Both are perennial wildflowers of moist woods or bogs and have variously been lumped as one species with two varieties and as two species. The Large Round-leaved Orchid has two large opposite basal leaves which lie on the ground, ranging in size from 7-24 by 5-19cm. The flowers are in a raceme and the petals range from white to greenish-brown. This species has unusually long nectar spurs, mostly 28 to 46mm in length, and pollinaria are 4.7 to 6.8mm in length. This species is pollinated by large moths. It has showy flowers that bloom from late June to early August.

DISTRIBUTION AND ABUNDANCE: In Massachusetts, Large Round-leaved Orchid is known only in the western counties, Berkshire, Franklin, Hampshire and Hampden. This species occurs only in northeastern North America and is considered imperiled in most of the Canadian provinces where it occurs, as well as Massachusetts, Vermont and Pennsylvania. It has apparently declined over much of its range, and is now thought to be extirpated from Connecticut and Rhode Island, is critically imperiled in New Brunswick and Newfoundland, and is ranked as S2 (imperiled) in Vermont, Massachusetts, Quebec, Ontario and Nova Scotia. Massachusetts has only four current populations documented.

HABITAT DESCRIPTION: This plant grows in forested swamps and wetlands, including rich mesic to wet coniferous and deciduous forests with no or little understory species. Mixed hardwoods make up the canopy and *Mitchella repens*, *Coptis trifolia*, *Aralia nudicaulis*, *Lysimachia borealis*, *Medeola virginiana*, and *Chamaepericlymenum canadense*.

THREATS: The primary threats to Large Round-leaved Orchid are not known, but may include changes in hydrology. For some of the known occurrences in MA, off-road vehicles (ORV) use of trails has been a problem. An increase in canopy cover over most of its range may provide excessive shade to the plants. As with many of the showy orchid species, deer browse on flowers poses a significant threat to their survival. Climate change, both warmer temperatures and changes in rainfall, may negatively affect this species. Finally, changes to the mycorrhizal community on which this species depends are another threat.

REFERENCES:

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

Massachusetts Division of Fisheries & Wildlife

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