



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife
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Leafy White Orchis

Platanthera dilatata (Pursh)
Lindl. ex Beck

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

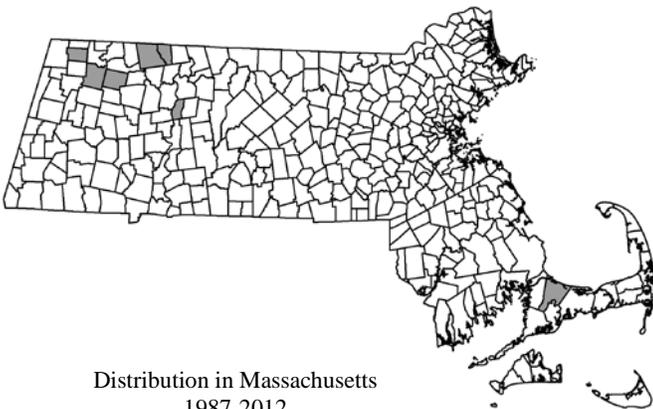
Description: Leafy White Orchis, or Bog Candles, is a tall, leafy-stemmed, stout or slender perennial in the Orchid family (Orchidaceae) that rises from fleshy roots and ends in a slender spike of white flowers. It is erect, hairless, and reaches up to 1 m (3 1/3 ft.) in height. The lanceolate leaves number about twelve and become progressively smaller toward the top of the plant. Leafy White Orchis's small flowers are generally bright white and are arranged in a 1-3 dm (1/3 to 1 ft.) long spike. Their delightful fragrance has been likened to cloves. The 5-10 mm (0.2 - 0.4 in.) long lip, or lowermost petal, widens near the base and has five to seven prominent veins. The spur (a hollow extension of the flower) is about as long as the lip. Leafy White Orchis's fruit is a 12 x 6 mm (0.47 - 0.24 in.) ellipsoid capsule (a fruit that is formed from a compound pistil and that contains many seeds). In Massachusetts, the plant blooms from mid-June through July.

Range: The North American range of Leafy White Orchis has been documented as extending across Labrador to Alaska and south to New Jersey, Wisconsin, South Dakota, New Mexico, and California.



Photo: Jennifer Garrett, NHESP

Similar Species: The White-fringed Orchis (*Platanthera blephariglottis*) and the Clubspur Orchis (*Platanthera clavellata*), two white to whitish-flowered orchids of somewhat similar habitats, could be confused with Leafy White Orchis. However, in our area, the lip of White-fringed Orchis is deeply fringed. The Clubspur Orchis is both shorter, 1-4 dm (1/3 to 1 1/3 ft.), than the Leafy White Orchis and, generally, has only one well-developed leaf on its stem. Finally, Northern Green Orchis (*Platanthera hyperborea*) is extremely hard to distinguish from Leafy White Orchis and often hybridizes with it. In contrast to Leafy White Orchis, it has green or greenish-white flowers. (Some authorities consider *Platanthera hyperborea* to be a green-flowered form of *Platanthera dilatata*.)



Distribution in Massachusetts
1987-2012

Based on records in Natural Heritage Database

Habitat in Massachusetts: Leafy White Orchis is a plant of sunny, wet areas, including bogs, seepage slopes and wet woods, especially where cold water surfaces to form springs. It prefers non-acid soil conditions. In Massachusetts, habitats include a cold, muddy and springy seep; a wet spot near a road; an area of sphagnum and rich muck, with springs and streamlets; a wet, sedgey open area; and an open, springy seep adjacent to a tributary. Plant species associated with Leafy White Orchis include sphagnum moss (*Sphagnum* spp.), various horsetails (*Equisetum* spp.), willows (*Salix* spp.), alders (*Alnus* spp.), Marsh Fern (*Thelypteris palustris*), Royal Fern (*Osmunda regalis*), and Yellow Sedge (*Carex flava*).

Population Status: Leafy White Orchis is currently listed as Threatened in Massachusetts. There are nine current stations (discovered or relocated since 1984) in seven towns and 15 historical stations (unverified since 1984) in 14 towns. Reasons for the plant's rarity in Massachusetts include loss of habitat, due both to development and forest succession, and scarcity of suitable habitat. Leafy White Orchis is also considered rare in Illinois, Indiana, New Mexico, Pennsylvania, and Wisconsin. It was present historically in Connecticut. The species is quite common in the far North, but becomes rare in the southern portions of its range.

Updated March 2012