



**Natural Heritage
& Endangered Species
Program**

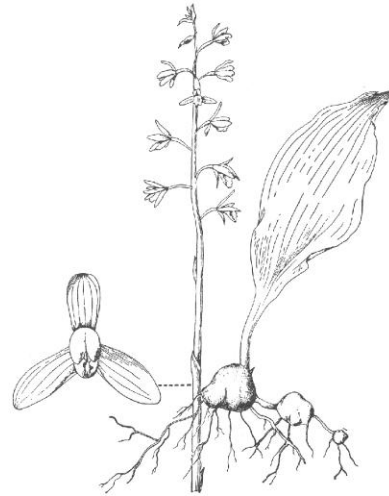
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Massachusetts Division of Fisheries & Wildlife

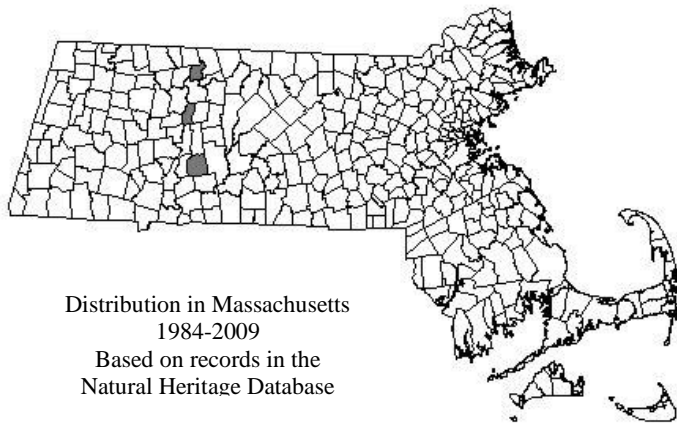
**Putty-root
Aplectrum hyemale
(Muhl. ex Willd.) Nutt.**

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

DESCRIPTION: Putty-root is a glabrous (hairless), herbaceous perennial in the Orchid family (Orchidaceae). It rises from globose corms (dense, vertical, underground stems, as in *Gladiolus*) that are filled with a glutinous matter. These corms usually occur in pairs. Putty-root's single, blue-green, elliptic basal leaf does not develop until late summer and is 10-20 cm (4 - 8 in.) long. By flowering season, from late May to mid-June, the leaf has usually withered. Putty-root's 3-6 dm (12 - 23 1/2 in.) high scape, or flower stalk, has only a few sheathing bracts (modified leaves associated with flowers). It has seven to fifteen, greenish, yellowish, or whitish flowers marked with reddish-purple, which occur in a raceme (an elongate, unbranched axis with stalked flowers). Three greenish or yellowish, spreading sepals (members of the outermost floral whorl) subtend shorter petals that arch



Gleason, H.A. 1952. *The New Britton and Brown Illustrated Flora of the US & Adjacent Canada*. New York Botanical Garden.



over the fused male and female flower parts. The lip, or lowermost petal, is three-lobed, whitish, and spotted with magenta. (The rare albino forms lack this spotting.)

SIMILAR SPECIES: The Crane-fly Orchid (*Tipularia discolor*) somewhat resembles Putty-root. However, Crane-fly Orchid's sepals and lateral petals are greenish-purple, and the lip is purple with two rounded basal lobes.

HABITAT IN MASSACHUSETTS: Putty-root is a plant of rich deciduous woods (a rich woods is one with moist, non-acidic soils and, usually, a great diversity of species.) Habitats in Massachusetts include a mesic hardwood forest subject to occasional flooding from a nearby stream, a narrow trough between rock outcrops at the headwaters of a brook, and a rich, vernal wet, wooded cove near the headwaters of a brook and surrounded by rocky slopes on three sides. Among its associated plant species are Sugar Maple (*Acer*

FLOWERS PRESENT:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

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

Massachusetts Division of Fisheries & Wildlife
1 Rabbit Hill Rd., Westborough, MA; tel: 508-389-6300; fax: 508-389-7890; www.mass.gov/dfw

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saccharum), White Ash, (*Fraxinus americana*), Red Oak (*Quercus rubra*), Showy Orchis (*Orchis spectabilis*), and Hemlock (*Tsuga canadensis*). White Adder's-mouth (*Malaxis brachypoda*) is another rare Massachusetts plant that has been found with Putty-root.

THREATS: In general, orchids are quite particular as to habitat and are especially threatened by land development.

RANGE: Putty-root is native to the eastern deciduous forest of North America, where it is the only ground-layer herb that produces a fully developed overwintering leaf.

Updated 2015

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