



Natural Heritage & Endangered Species Program

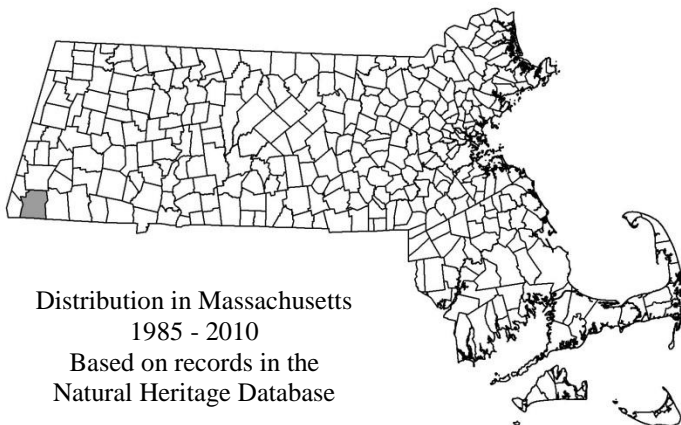
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Massachusetts Division of Fisheries & Wildlife

Hairy Beard-tongue *Penstemon hirsutus* (L.) Willd.

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

DESCRIPTION: Hairy Beard-tongue is a light green, erect, herbaceous perennial in the Snapdragon or Figwort family (Scrophulariaceae). The stem is hairy or “hirsute” – hence, the species name *hirsutus*. Hairy Beard-tongue’s stem grows from 4 to 8 dm (1–3 ft.) high and is covered with long, whitish hairs. Its stem-borne leaves are 5 to 12.5 cm (2–5 in.) long, oblong to lanceolate, opposite, stalkless, and finely toothed. A rosette of stalked leaves surrounds the base of the stem. The dull pink, purplish or violet flowers have petals that are partially fused into a narrow, five-lobed floral tube with two upper lobes and three lower lobes. The corolla is about 2.5 cm (1 in.) long and ends in white lips. Hairy Beard-tongue’s flowers occur in loose, stalked cluster. The fruit is an 8 to 9 mm long capsule (a dry fruit derived from a compound pistil that contains many seeds). At maturity, this capsule is more than half covered by the five-parted calyx. Like all members of the genus *Penstemon*, Hairy Beard-tongue has five stamens, one of which is sterile and topped by a tuft of hairs in place of an anther. Hairy Beard-tongue blooms from Late May to early July.



Top: Hairy Beard-tongue’s light purple flowers. Photo: Bruce Sorrie, NHESP. Bottom: Stem with opposite, stalkless leaves and hairy stem. Photo by and courtesy of Pamela Weatherbee.

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

Massachusetts Division of Fisheries & Wildlife

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SIMILAR SPECIES: Several non-native species of *Penstemon* occur in Massachusetts and could be confused with Hairy Beard-tongue. Foxglove Beard-tongue (*P. digitalis*), unlike Hairy Beard-tongue, has a smooth stem. Tube Beard-tongue (*P. tubiflorus*) has both a smooth stem and white flowers. Pale Beard-tongue (*P. pallidus*) has leaves that are hairy on both surfaces, while Hairy Beard-tongue may have a few hairs only on the midvein on the leaf under-side.

HABITAT IN MASSACHUSETTS: Hairy Beard-tongue is a plant of dry or rocky ground in woods, fields, and on hillsides. In Massachusetts, current habitats (1985-2010) include a dry, open but shaded area near limestone quarries; dry, dolomitic lower slopes and walls of two abandoned quarries; and a dolomitic limestone cobble rising abruptly from a river floodplain. Historical habitats in Massachusetts (unverified since 1978) include dry slopes, dry open woods, and dry roadside banks. Associated plant species include various junipers (*Juniperus* spp.), violets (*Viola* spp.) and dogwoods (*Swida* spp.). Yellow Oak (*Quercus muehlenbergii*) and Narrow-leaved Vervain (*Verbena simplex*) are two rare Massachusetts species that have been found with Hairy Beard-tongue.

RANGE: The range of Hairy Beard-tongue extends throughout northeastern North America from Quebec and Maine to Wisconsin, and south to Virginia and Kentucky.

POPULATION STATUS: There are four current locations (1985-2010) in one town in Berkshire County and the species was known historically (unverified since 1978) from Franklin, Hampshire, and Worcester Counties. Three of the current stations have fewer than 15 plants; at the other site numbers vary from year to year but are usually in the tens to several hundred plants. Hairy Beard-tongue is also considered rare in Vermont, Quebec, Wisconsin, and Virginia; it was present historically in Delaware. NatureServe ranks Hairy Beard-tongue as globally Apparently Secure, G4.

Hairy Beard-tongue is listed under the Massachusetts Endangered Species Act as Endangered. 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 AND THREATS: Threats include succession and lack of disturbance to rocky slopes and ledges. Two of the current sites are old disturbed areas with many shrubby and non-native invasive species. Populations should be monitored for invasions of exotic plants; if exotic plants are crowding and out-competing Hairy Beard-tongue, a plan should be developed, in consultation with the Massachusetts Natural Heritage & Endangered Species Program, to remove the invaders.

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.

REFERENCES:

- NatureServe. 2010. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: December 17, 2010).
- USDA, NRCS. 2010. The PLANTS Database (<http://plants.usda.gov>, 17 December 2010). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. <http://plants.usda.gov/java/profile?symbol=pehi>

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