



Natural Heritage & Endangered Species Program

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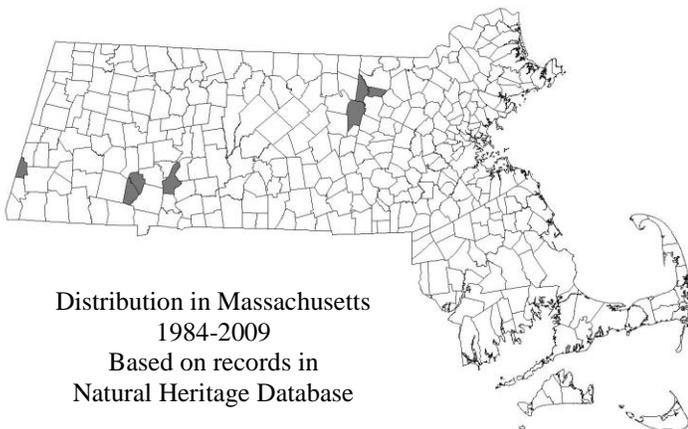
Massachusetts Division of Fisheries & Wildlife

Houghton's Flatsedge *Cyperus houghtonii* Torr.

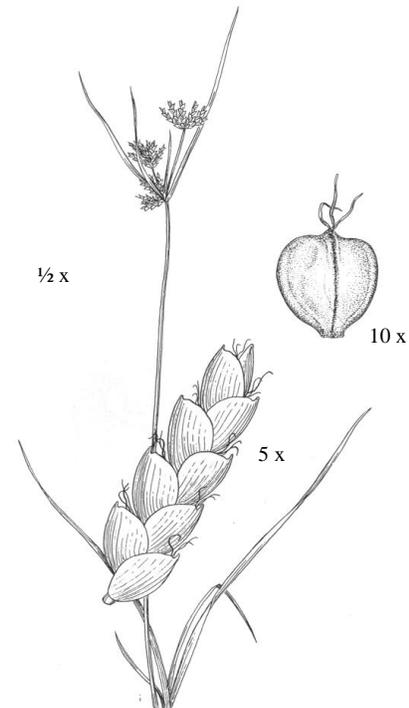
State Status: **Endangered**
Federal Status: **None**

GENERAL DESCRIPTION: Houghton's Flatsedge is a perennial plant of dry, often sandy, soil. A member of the Sedge family (Cyperaceae), it has triangular stems and is 2-6 dm (8 in.-2 ft.) tall. Its inflorescences are borne at the top of the stems. Each inflorescence branches from a central point, so that the inflorescence resembles the spokes of an umbrella. Accordingly, some members of this genus are called "umbrella-sedges."

AIDS TO IDENTIFICATION: Identification of species in the genus *Cyperus* can be difficult, and a technical manual should be consulted. Like all members of the genus *Cyperus*, Houghton's Flatsedge has elongate clusters of small, inconspicuous flowers and subtending scales, called "spikelets". In this genus, the flowers and associated scales are arranged in two vertical rows along the inflorescence stem axis, giving the flowering stems a flattened appearance ("distichously" arranged). In Houghton's Flatsedge, each spikelet is ascending and is 5- to 15-flowered. The scales are rotund, 2-2.5 mm (0.08-0.1 in.) long, many-nerved, and tipped with a very short, sharp, slender point. The achenes (one-seeded fruits) are trigonous (three sided) with concave faces. They are 1.5-2 mm (0.06-0.08 in.) long.



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



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

SIMILAR SPECIES: Twenty species of flatsedge have been documented from Massachusetts. Many have inflorescences which do not closely resemble umbrella spokes because the spikelets diverge from many points along a central axis, rather than all from one central point. The flatsedge most likely to be confused with Houghton's Flatsedge in upland, dry, sandy habitats is the Sand Flatsedge (*Cyperus lupulinus*). The Sand Flatsedge differs from Houghton's Flatsedge in that the longest bract beneath the inflorescence is horizontal to reflexed, compared to ascending in Houghton's Flatsedge. In addition, the achene sides are markedly concave in Houghton's Flatsedge, and not or only slightly so in Sand Flatsedge. Dune Flatsedge (*Cyperus grayi*) is another dry-land flatsedge that could be

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

Massachusetts Division of Fisheries & Wildlife

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confused with Houghton's Flatsedge, although as its name suggests, its habitats are typically coastal; Houghton's Flatsedge is found along the coast only atypically. Like the Sand Flatsedge, the Dune Flatsedge does not have the markedly concave achene sides of Houghton's Flatsedge.

HABITAT: Unlike most flatsedges, which prefer shores of ponds and rivers and moist ground, Houghton's Flatsedge prefers dry soil conditions. In the northern portion of its range, it is commonly found growing with Jack Pine (*Pinus banksiana*). Habitats in Massachusetts include dry, open, rocky summits; the exposed fine sand of a large esker with heavily eroded sand gullies; and a broad, gently sloping sandplain. Associated herbaceous species include Horsetweed (*Conyza canadensis* var. *canadensis*), Sand-sedge (*Bulbostylis capillaris*), Dune Flatsedge (*Cyperus grayi*), Blue Curls (*Trichostema dichotomum*), Little Bluestem (*Schizachyrium scoparium*), and Wild Lupine (*Lupinus perennis*). Associated woody species are Red Pine (*Pinus resinosa*), Black Birch (*Betula lenta*), and Scrub Oak (*Quercus ilicifolia*).

RANGE: The documented range of Houghton's Flatsedge extends from Massachusetts, New Hampshire, Vermont and southern Quebec to Minnesota and northwestern Indiana. Isolated, disjunct populations occur in northern Virginia and eastern West Virginia.

POPULATION STATUS IN MASSACHUSETTS: Houghton's Flatsedge 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 RECOMMENDATIONS: As for many rare species, exact needs for management of Houghton's Flatsedge are not known. The following comments are based primarily on observations of populations in Massachusetts. Several of Massachusetts' populations occur on circumneutral rocky summits and rock outcrops. These open communities are dominated by grasses, sedges, and herbaceous plants. Grazing and fire may contribute to keeping these areas open. Suppression of natural disturbance regimes, which could be followed by succession, is likely the greatest threat to this species in Massachusetts.

MATURE FRUIT PRESENT:

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

Updated 2015

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