



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Slender Blue-eyed Grass *Sisyrinchium mucronatum* Michx.

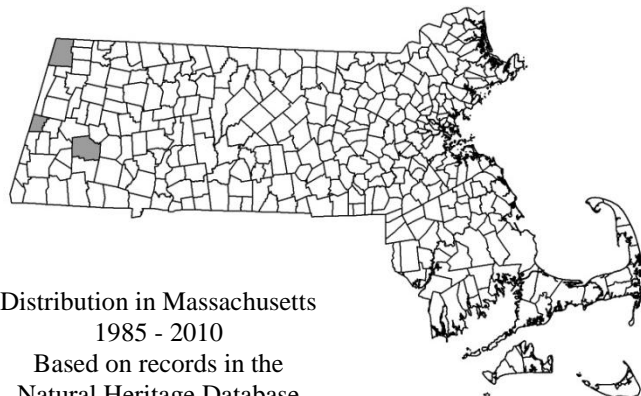
State Status: **Endangered**
Federal Status: **None**

DESCRIPTION: Slender Blue-eyed Grass, a member of the Iris family (Iridaceae), is a low, dark green, grass-like perennial. Its unbranched scape (naked flowering stem) is thin, wiry, narrowly winged, and 1.5 to 4.5 dm (0.6 – 1.5 ft.) high. The very narrow, 1-2 mm broad leaves are much shorter than the scape. Blue to violet flowers, each with a yellow to greenish-yellow "eye," occur in a cluster at the scape's terminus. A red-purple—or, rarely, green—spathe (modified leaf sheathing an inflorescence) extends beyond the cluster of flowers. The plant's capsules (dry fruits derived from a compound pistil which contain many seeds) are globose in shape and 2-4 mm long. Slender Blue-eyed Grass flowers from mid-May to June.

SIMILAR SPECIES: Meadow Blue-eyed Grass (*Sisyrinchium montanum*) is the only other Blue-eyed Grass in Massachusetts that normally has an unbranched scape. However, its leaves are much wider, 3-4 mm wide, and are a light shade of green, and its capsules are larger. Finally, the red-purple spathe of Slender Blue-eyed Grass is seldom seen in other *Sisyrinchium* species. Although not a large genus, it is very conservative in its features, and it takes practice to separate and identify the species.



Slender Blue-eyed Grass showing the narrowly winged, purplish scape. In the lower photo, the scape clearly extends beyond the flower buds. Photos: B.A. Sorrie, NHESP.



Distribution in Massachusetts
1985 - 2010
Based on records in the
Natural Heritage Database

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

Massachusetts Division of Fisheries & Wildlife

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Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget.

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HABITAT IN MASSACHUSETTS: Preferred habitats are sunny, calcium-rich wetlands. These include fields, meadows, borders of calcareous fens (wet, generally open areas where cold, calcium-rich water seeps to the surface) and, occasionally, moist roadsides with limey soils. Current sites in Massachusetts include a wet meadow, an open, alkaline seepage fen (an unforested, peat-forming habitat where very cold, nutrient-poor water seeps through limey gravel to the surface), and a shallow roadside ditch. Associated species in the graminoid ground cover include various sedges, among them Yellow Sedge (*Carex flava*), Bush's Sedge (*Carex bushii*, Endangered), Small Yellow Sedge (*C. cryptolepis*), Fen Cotton-grass (*Eriophorum viridicarinum*) and old-field species such as Timothy (*Phleum pratense*) and goldenrods (*Solidago* spp.).

RANGE: The documented range of *S. mucronatum* extends from Maine to southern Manitoba, and south to North Carolina and Illinois. NatureServe ranks it as G5, Globally Secure. It is considered historic in Vermont and New Hampshire and rare in Maine and New York.

POPULATION STATUS IN MASSACHUSETTS:

Slender Blue-eyed Grass 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. It is currently known from three sites in Berkshire County and is historically known from four towns in Hampden and Berkshire Counties.

MANAGEMENT AND THREATS: Threats to the species include general reforestation and loss of meadow habitats. Several of the sites are mowed on a regular basis to keep them open and to keep invasive shrubby plants under control. The timing and frequency of the mowing should be reviewed for effects on the rare species and the habitats. Invasive non-native species occur at all the sites. Sites should be monitored for invasions of exotic plants; if exotic plants are crowding and out-competing this species, 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.

Flowering time in Massachusetts

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

REFERENCE:

NatureServe. 2010. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: January 28, 2011).

Updated 2015

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