

## **Natural Heritage** & Endangered Species **Program**

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Massachusetts Division of Fisheries & Wildlife

# Midland Sedge Carex mesochorea

Mack

State Status: Endangered Federal Status: None

**GENERAL DESCRIPTION:** Midland Sedge is a perennial member of the Sedge family (Cyperaceae) found in dry, open areas. Flowering stems that emerge from tussocks of long, narrow leaves (2.5–4 mm wide) are 15 to 100 cm (6-39 in.) tall, with compact inflorescences.

AIDS TO IDENTIFICATION: To identify Midland Sedge and other members of the genus Carex, a technical manual should be consulted. Species in this genus have tiny, wind-pollinated flowers that are borne in spikes. Midland Sedge is a member of *Carex* section Phaestoglochin, which is comprised primarily of upland forest species. Species in section *Phaestoglochin* have short, sessile spikes, each subtended by a bristle-like or scale-like bract. The spikes are all similar, each with several (3–15) perigynia and a staminate tip that may appear as an inconspicuous cluster of empty scales when the plant is in fruit. The perigynia are convex on the outer surface and flat on the inner surface, with a twotoothed beak: the achenes are lenticular. In Midland Sedge, the densely clustered spikes at the top of the stem may not be distinct; the whole inflorescence is one to one and a half times as long as wide.





Midland Sedge has dense, clustered spikes in inflorescences that are one to one and a half times as long as wide. USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions, 3 vols, Charles Scribner's Sons, New York. Vol. 1: 366.

**SIMILAR SPECIES:** Several other members of *Carex* section *Phaestoglochin* have densely clustered spikes. Bur Sedge (C. sparganioides) has wider leaves (5–10 mm) with loosely clasping leaf sheaths, and often occurs in mesic, shaded habitats. Oval-headed Sedge (C. cephalophora) has short pistillate scales, up to half the length of the perigynia, whereas those of Midland Sedge are longer than the perigynia. In Muhlenberg's Sedge (C. *muehlenbergii*), the inflorescence is usually more than one and a half times as long as wide and the scales are slightly shorter than the perigynia. Muhlenberg's Sedge also has more yellowish perigynia and larger achenes than Midland Sedge. The introduced European Star Sedge (C. spicata) has larger perigynia (4–5.5 mm) and

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

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longer ligules (appendages that project upward from the top of the leaf sheaf) than Midland Sedge, and usually has purplish-tinged basal sheaths.

**HABITAT:** The single known population of Midland Sedge in Massachusetts is a regularly mowed field on a sandplain. The field includes a mixture of European weeds and native sandplain grassland vegetation.

**RANGE:** Midland Sedge occurs from Quebec to Georgia, west to Nebraska and Texas. It is naturalized in California. It is listed as Endangered in Massachusetts and New York, and Threatened in Ohio.

#### POPULATION STATUS IN MASSACHUSETTS:

Midland Sedge 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. Midland Sedge is known in Massachusetts from a single site on the border of Hampden and Hampshire Counties. This species is near the northeastern limit of its range in Massachusetts.

#### MANAGEMENT RECOMMENDATIONS: Midland

Sedge occurs in early successional habitats, and populations may decline as a result of increased canopy cover associated with forest succession. Periodic mowing or burning may be needed to maintain appropriate habitat for this species. 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.

#### **MATURE PERIGYNIA PRESENT:**

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

#### **REFERENCES:**

Britton, N.L., and A. Brown. 1913. *An Illustrated Flora of the Northern United States, Canada and the British Possessions*. 3 vols. Charles Scribner's Sons, NY.

Gleason, H. A., and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 2<sup>nd</sup> edition. The New York Botanical Garden, Bronx, NY.

Haines, A. 2011. Flora Novae Angliae – a Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England. New England Wildflower Society, Yale Univ. Press, New Haven, CT.

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