



Natural Heritage & Endangered Species Program

www.mass.gov/nhesp

Massachusetts Division of Fisheries & Wildlife

Handsome Sedge *Carex formosa* Dewey

State Status: **Threatened**
Federal Status: **None**

GENERAL DESCRIPTION: Handsome sedge is a slender, grass-like, perennial in the Sedge family (Cyperaceae). It grows in clumps that are 3-7 dm (3/4 - 2 1/2 ft.) in height, and its culms, or stems, are tinged with purple at the base. The leaves are 3-7 mm (3/25 - 7/25 in.) wide, very thin, and hairy underneath. Handsome Sedge's much-reduced flowers are clustered in spikes (unbranched, usually elongate inflorescences in which the flowers are stalkless) that contain a mixture of male and female flowers. The terminal spike of *C. formosa* is mostly staminate, or male, with only a few pistillate, or female, flowers at its summit. In contrast, the 1-3 cm (2/5 - 1 1/5 in.) long lateral spikes are mostly pistillate--with a few staminate flowers at the base--and are borne on thin, downward curving peduncles (the stalks of inflorescences). These peduncles are longer than the spikes. The inflated, 3.5-5 mm (4/25 - 5/25 in.) long, perigynia (sac-like structures that enclose the female reproductive structures) are topped by short elongations or "beaks," and are subtended by scales that are slightly shorter than the perigynia. The bracts (modified leaves associated with flowers or inflorescences) sheath the stems and become much smaller toward the top of the plant. Handsome Sedge's perigynia-enclosed fruits mature from early to late June.



Illustration from 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: 408.

SIMILAR SPECIES: Handsome Sedge could easily be confused with Davis's Sedge (*C. davisii*). Unlike Davis's Sedge, however, Handsome Sedge has both male and female flowers on its lateral spikes. (The lateral spikes of *C. davisii* are entirely pistillate.) In addition, the pistillate scales of Davis's Sedge have very long awns (slender bristles located at the top of the scales); those of Handsome Sedge do not.

HABITAT: Handsome Sedge's habitats include the borders of calcareous marshes and seepage swamps (wet, wooded areas in which groundwater seeps to the surface from a calcareous, gravelly substrate); and moist, open forests. Among the species associated with Handsome Sedge are White Pine (*Pinus strobus*), White Ash (*Fraxinus americana*), Red Maple (*Acer rubrum*), and various species of sedges (*Carex* spp.).



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

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

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.

www.mass.gov/nhesp

RANGE: The Handsome Sedge occurs from southwestern Quebec and southern Ontario to North Dakota, south to western Connecticut and southern Minnesota.

POPULATION STATUS IN MASSACHUSETTS:

Handsome Sedge is listed under the Massachusetts Endangered Species Act as Threatened. 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 Berkshire,. There are four current stations (discovered or relocated since 1978) in three towns in Berkshire County. Handsome Sedge is also considered rare in Connecticut, Vermont, New York, Pennsylvania, Minnesota, North Dakota and Wisconsin. Handsome Sedge was present historically in Ohio.

MANAGEMENT RECOMMENDATIONS: All populations are in locations where natural processes or human activities have produced disturbed habitats. Competition from exotic invasive species is a potential threat to Handsome Sedge populations. Monitoring and removal of competing vegetation should be considered as a management strategy where appropriate. 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.

Updated 2015

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

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.

www.mass.gov/nhesp