



## Natural Heritage & Endangered Species Program

[www.mass.gov/nhesp](http://www.mass.gov/nhesp)

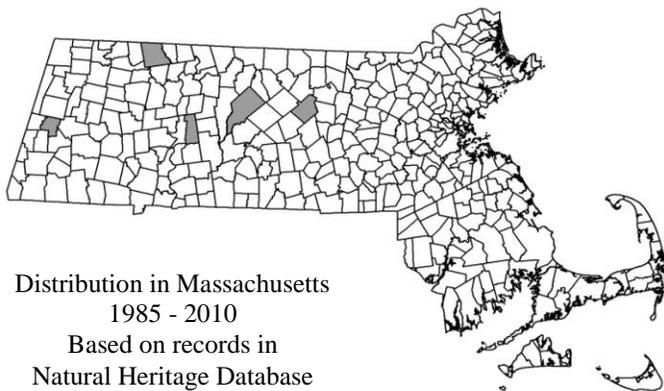
Massachusetts Division of Fisheries & Wildlife

## Back's Sedge *Carex backii* Boott

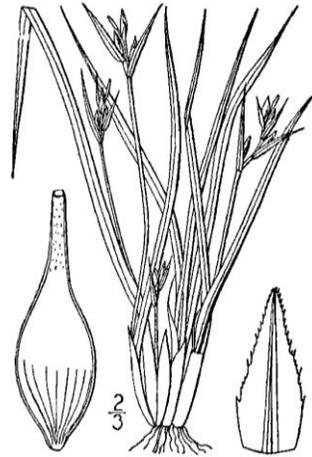
State Status: **Endangered**  
Federal Status: **None**

**GENERAL DESCRIPTION:** Back's Sedge is a perennial herbaceous sedge (family Cyperaceae) of dry, rich woodlands, named in honor of British naval officer and naturalist Sir George Back (1796–1878). It forms leafy tufts with the foliage overtopping the 1.4 to 25 cm (0.5–10 in.) tall reproductive stems (culms). The dead leaves of the previous year remain conspicuous at the base of the plant, and the reproductive spikes are partly concealed by enveloping leafy, bract-like pistillate scales.

**AIDS TO IDENTIFICATION:** To identify Back's 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. Each flower is unisexual, and is closely subtended by small scales that largely conceal the flowers. The staminate (i.e., pollen-bearing) flowers are subtended by a single scale. The pistillate (i.e., ovule-bearing) flowers are subtended by two scales, an outer flat scale ("pistillate scale") and an inner, sac-like scale, called a "perigynium," that encloses the flower, and later, the achene (a small, hard fruit).



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



Back's Sedge illustration: 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: 388.

Photo: USDA-NRCS PLANTS Database / Hurd, E.G., N.L. Shaw, J. Mastrogioseppe, L.C. Smithman, and S. Goodrich. 1998. *Field guide to Intermountain sedges*. General Technical Report RMS-GTR-10. USDA Forest Service, RMRS, Ogden.

Back's Sedge is a member of the *Carex* section Phyllostachyae; like other members of this group, it is caespitose (clump forming), with brown basal sheaths, and leaves that overtop the culm. The leaves of Back's Sedge are 10 to 40 cm (4–16 in.) long and 2 to 6 mm wide. Its terminal spike is androgynous (staminate portion above the pistillate portion), and has distinctive leafy scales at its base, which enfold a portion of the spike. The staminate portion of the spike is 2 to 4 mm long with just two or three flowers. The pistillate portion bears two to five (occasionally up to seven) dark green perigynia, which loosely envelope the achenes. Each perigynium is topped by three thick stigmas and is subtended by a green scale. The perigynia of Back's Sedge mature in mid spring and can fall off by early summer.

**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](http://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](http://www.mass.gov/nhesp)

**SIMILAR SPECIES:** Willdenow's Sedge (*Carex willdenowii*), a species of moist woods historically known from eastern Massachusetts is very similar but has pistillate scales with thin, translucent margins, thinner more threadlike stigmas, and up to 29 staminate flowers.

**HABITAT IN MASSACHUSETTS:** The known sites in Massachusetts are on gentle to steep forested slopes with rich, dry, and rocky or shallow-to-bedrock soil. In two cases the population is just below the crest of a ridge. Co-occurring plants include hickories (*Carya* spp.), Hop Hornbeam (*Ostrya virginiana*), White Ash (*Fraxinus americana*), Pennsylvania Sedge (*Carex pensylvanica*), Blue-stemmed Goldenrod (*Solidago caesia*), Poison Ivy (*Toxicodendron radicans*), and Marginal Woodfern (*Dryopteris marginalis*).

**RANGE:** Back's sedge is found across southern Canada and the northern United States, from British Columbia and Oregon east to Quebec and New Jersey.

**POPULATION STATUS IN MASSACHUSETTS:**

Back's 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. Back's Sedge was first discovered in Massachusetts in 1997; it is currently known from Berkshire, Franklin, Hampshire, and Worcester Counties. This species is rare because it is nearing the southeastern limit of its range in Massachusetts, and because of its fairly specific habitat requirements.

**THREATS AND MANAGEMENT**

**RECOMMENDATIONS:** Since Back's Sedge is only known to occur in wooded areas, forest clearing or other drastic habitat alterations would likely threaten a population; such projects should be planned to avoid physical harm to the rare sedge, excessive soil disturbance, and the introduction of invasive plants. Though not currently noted at Back's Sedge populations in Massachusetts, swallowwort species (*Cynanchum* spp.) and other invasives are cited as threats to this species in New York. Other species that could invade Back's Sedge habitat include Japanese Barberry (*Berberis thunbergii*), Asiatic Bittersweet (*Celastrus orbiculatus*), and exotic honeysuckles (*Lonicera* spp.). If exotic plants are invading Back's Sedge habitat, a plan

for control should be constructed and implemented. Plants along trail edges may be vulnerable to physical damage or soil compaction; such trails, particularly those used by motorized vehicles should be rerouted if possible.

All active management of state-listed 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

**REFERENCE:**

Dibble, A.C. 1993. Back's Sedge, *Carex backii* (Cyperaceae). *Maine Naturalist*: 1(1):33–35.

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.