



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Long-beaked Bald-sedge *Rhynchospora scirpoides* (Torrey) A. Gray

State Status: **Special Concern**

Federal Status: **None**

DESCRIPTION: Long-beaked Bald-sedge is a caespitose annual in the Sedge family (Cyperaceae) that occurs on coastal plain pond shores in Massachusetts. The genus name *Rhynchospora* (“beaked seed”) refers to the tubercle (triangular projection) that is found at the summit of the achenes (one-seeded, dry, fruits). The species name *scirpoides* means “resembles a bulrush” (*Scirpus*), referring to the growth form and the shape of the spikes. Long-beaked Bald-sedge grows 20 to 80 cm tall. It has both terminal and axillary inflorescences, with long, leafy bracts that exceed at least the axillary ones.

AIDS TO IDENTIFICATION: A technical manual and hand lens or microscope are needed for identification of Long-beaked Bald-sedge and other *Rhynchospora* species. This species is best identified with mature fruits. The achenes are orbicular to lenticular, red-brown to dark brown, with a faintly rugose (horizontally wrinkled) body. The achene is 1 to 3 mm long, including a tall tubercle (0.5–0.9 mm) that is continuous with the ridged margin of the achene. The leaves are flat, narrow, 1 to 5 mm wide, and have glabrous sheaths. The lower portion of the culm (flowering stem) is leafy.



Long-beaked Bald-sedge has terminal and axillary inflorescences with long, leafy bracts (top); achenes are faintly rugose, with long tubercles (bottom). Photos by Jennifer Garrett.



Distribution in Massachusetts
1985 - 2012
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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SIMILAR SPECIES: Long-beaked Bald-sedge is distinct from other beaked-sedges (*Rhynchospora* spp., often referred to as beaked-rushes) in having a relatively long tubercle (beak). This species is very similar to Short-beaked Bald-sedge (*R. nitens*), a Threatened species in Massachusetts that grows in the same habitats and may be found with Long-beaked Bald-sedge. Short-beaked Bald-sedge has a shorter tubercle (0.1–0.3 mm tall) and distinctly rugose achenes with ridged margins that end abruptly at the tubercle. Long-beaked Bald-sedge also may be mistaken for the more common Autumn Fimbry (*Fimbristylis autumnalis*), an associated species that is smaller, thinner, and does not have a tubercle on the achene.

POPULATION STATUS IN MASSACHUSETTS:

Long-beaked Bald-sedge is listed under the Massachusetts Endangered Species Act as Special Concern. 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. Long-beaked Bald-sedge is currently known from Barnstable, Plymouth, and Middlesex Counties, and an inland coastal plain pond shore in Hampden County. Curiously, this species has not been found in coastal plain pond habitats in Bristol, Dukes or Nantucket Counties.

RANGE: Long-beaked Bald-sedge occurs in the eastern coastal states from Massachusetts, Connecticut, and Rhode Island south to Florida, where it can be found year-round. Its range extends west in the southern coastal states to Texas; it is also found in Michigan, Indiana, and Wisconsin.

HABITAT: Long-beaked Bald-sedge is found in wet, peaty sands of gently sloping coastal pond shores and depressions with seasonal and annual water level fluctuations. This species can be found when pond levels are drawn down and the pond shore becomes exposed, often growing with a suite of annual sedges, grasses, and herbs characteristic of coastal plain ponds. Long-beaked Bald-sedge grows with several other rare species, including Short-beaked Bald-sedge, Wright's Panic-grass (*Dichanthelium wrightianum*), and Plymouth Gentian (*Sabatia kennedyana*). Associated species on the Plant Watch List are Annual Umbrella-sedge (*Fuirena pumila*), Black-fruited Spike-rush (*Eleocharis melanocarpa*), Pink Tickseed (*Coreopsis rosea*), and Hyssop Hedge-nettle (*Stachys hyssopifolia*). More

common associates include other beaked-sedges (*Rhynchospora* spp.), spike-rushes (*Eleocharis* spp.), Autumn Fimbry, Canada Bluejoint (*Calamagrostis canadensis*), Warty Panic-grass (*Panicum verrucosum*), White Water-lily (*Nymphaea odorata*), Yellow-eyed Grass (*Xyris difformis*), and many other coastal plain pond shore species.

THREATS AND MANAGEMENT

RECOMMENDATIONS: Protection of natural hydrological conditions is critical for conservation of Long-beaked Bald-sedge and other species restricted to coastal plain pond shore habitats. Water withdrawals and residential development near coastal plain ponds should be limited to avoid disruptions to these sensitive ecosystems. Regular monitoring of known occurrences of rare pond shore species is important to identify threats to specific populations. Surveys should be conducted when water levels are low and pond shore habitat is exposed, as seeds survive in the seed bank and germinate on exposed substrate. Beach use and small boat launches should be located in areas that will not threaten known populations. Off-road vehicles and bicycles should be strictly prohibited on pond shores, and trails should be located along upper shore lines and shrub borders so that trampling of sensitive vegetation is avoided. Although invasive species monitoring is recommended, caution is needed with herbicide or other treatments to avoid damage to populations of rare species. 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.

Flowering and Fruiting in Massachusetts

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

REFERENCES:

Flora of North America Editorial Committee, eds. 2002. *Flora of North America North of Mexico*, Vol. 23. Oxford University Press, NY.
 NYNHP Conservation Guide - Long-beaked Beakrush (*Rhynchospora scirpoides*). New York Natural Heritage Program, Albany, NY.

Updated 2015

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