



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Labrador Bedstraw *Galium labradoricum* (Wiegand) Wiegand

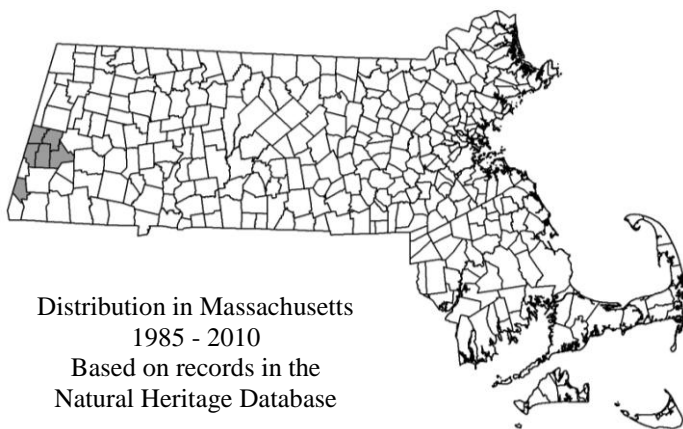
State Status: **Threatened**

Federal Status: **None**

DESCRIPTION: Labrador Bedstraw (*Galium labradoricum*) is a slender perennial herb of the madder family (Rubiaceae), known in Massachusetts from calcareous wetlands. Growing to 10 to 40 cm (4–16 in.) in height, this plant has multiple whorls of linear leaves in fours distributed along a slender stem, with a dense hairy beard at each node. The leaves are relatively short (8 to 15 mm) and narrow (mostly 1 to 2.5 mm) with one nerve. They are spreading to slightly recurved downward, and have margins that are coarsely hairy (hispidulous). The inflorescences are primarily terminal, branched up to two times, with three white four-petaled flowers, 2 to 3 mm wide.

AIDS TO IDENTIFICATION:

- Plants up to 40 cm in height
- Leaves whorled in fours each with one nerve
- Dense hairy beard at the leaf nodes
- Spreading or recurved leaves with hispidulous margins, usually glabrous midrib
- White flowers with four petals, in cluster of three on terminal inflorescences



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



Labrador Bedstraw: Upper photo shows the terminal flower clusters and the whorls of leaves with the typical slight downward recurving.
Photo: Bruce A. Sorrie, NHESP.

The bottom photo of a single whorl of leaves shows the single nerve and the hairy edges of the leaves (best seen on the upper leaves).
Photo: Jennifer Garrett, NHESP.

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

Massachusetts Division of Fisheries & Wildlife

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SIMILAR SPECIES: There are five other bedstraw species that have one-nerved leaves whorled in fours that could occur in calcareous fens in Massachusetts, but each has other characters that can be used to differentiate it from Labrador Bedstraw. Marsh Bedstraw (*G. palustre*) has a more highly branched inflorescence that bears at least five flowers. Three other species, Clayton’s Marsh-bedstraw (*G. tinctorium*), Northern Three-lobed Bedstraw (*G. trifidum*), and Short-stalked Bedstraw (*G. brevipes*), all have three-petaled flowers. Further, these species lack a dense hairy beard at the nodes. Blunt-leaved Bedstraw (*G. obtusum*), the species most similar to Labrador Bedstraw, does have hairy nodes, but its leaves are generally larger than the rarer bedstraw (10–30 mm × by 1–6 mm wide), are ascending to spreading (not deflexed), and can have coarse hairs on the underside along the midrib in addition to the margin. Also an overall larger plant, Blunt-leaved Bedstraw can be up to 80 cm in height.

HABITAT IN MASSACHUSETTS: Labrador Bedstraw inhabits calcareous fens, wet meadows, and swamps, often on hummocks or tussocks in full or filtered sunlight. Associated species include sphagnum mosses (*Sphagnum* spp.), Lakeside Sedge (*Carex lacustris*), Inland Sedge (*Carex interior*), Cinnamon Fern (*Osmundastrum cinnamomeum*), Bog Buckbean (*Menyanthes trifoliata*), Shrubby Cinquefoil (*Dasiphora floribunda*), Tamarack (*Larix laricina*), Red Maple (*Acer rubrum*), Black Ash (*Fraxinus nigra*), Alder-leaf Buckthorn (*Rhamnus alnifolia*), Silky Dogwood (*Cornus amomum*), and willows (*Salix* spp.).

RANGE: Labrador Bedstraw occurs throughout all of Canada (except Yukon Territory), south to North Dakota, much of the upper Midwest and New England (minus New Hampshire), and New York, Pennsylvania, and New Jersey.

POPULATION STATUS IN MASSACHUSETTS: Labrador Bedstraw 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 only from Berkshire County.

THREATS/MANAGEMENT

RECOMMENDATIONS: Threats to Labrador Bedstraw include competition and shading from native and exotic plants, flooding due to beaver activity, and anthropogenic changes to water quality (e.g., from road salt, nutrient inputs from fertilizers) or hydrologic regime. Habitats should be monitored periodically for invasive plants such as Common Reed (*Phragmites australis* ssp. *australis*) and Purple Loosestrife (*Lythrum salicaria*), and for competition or shading by native wood plants. If necessary, a plan for vegetation control should be constructed. Also, beaver activity should be noted and reported if habitat is in danger of being inundated. 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

Fruiting time in Massachusetts

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

Updated 2015

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