



**Natural Heritage  
& Endangered Species  
Program**

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

*Massachusetts Division of Fisheries & Wildlife*

**Saltpond Grass**  
*Leptochloa fusca* (L.) Kunth  
*ssp. fascicularis* (Lam.) N. Snow

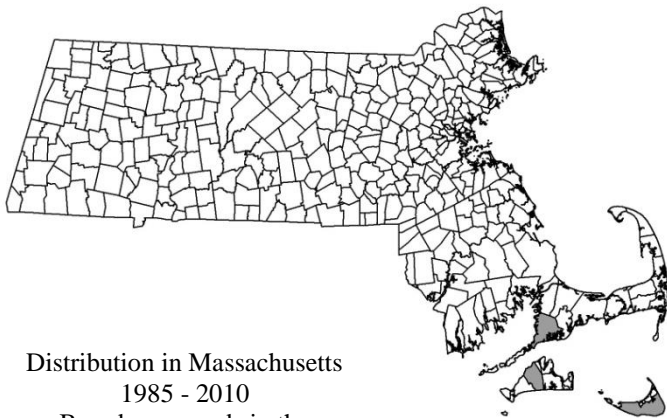
State Status: **Threatened**  
Federal Status: **None**

**DESCRIPTION:** Saltpond Grass is a low-growing (10–50 cm; 4–20 in.), spreading to weakly erect grass (family Poaceae) of coastal salt ponds. It is characterized by dense branching from the base and very narrow leaves. The leaf blades are rough to the touch, while the portion of each leaf that clasps the stem is smooth. The open, unorganized inflorescence gives this plant its other common name, Salty Sprangletop.

**AIDS TO IDENTIFICATION:** Positive identification of grasses often requires the use of specialized keys and comparison of fine details of flowering parts under magnification. The reproductive structures of grasses comprise flowers (florets) arranged in a spikelet, either singly or in clusters. Each floret is cupped by two small leaf-like bracts called the lemma and the palea, and the entire spikelet is subtended by two similar structures called glumes. Each of these structures can be modified or missing in various grass species. In Saltpond Grass, the spikelets, which are 5 to 12 mm in length, bear six to



*Illustration showing the needle-like awn of the lemma subtending the florets in their spikelet 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: 237.*



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

twelve florets, each subtended by a lemma with a needle-like awn ( $\leq 3$  mm) emerging between two minute teeth. Each lemma is grayish to white, and hairy with a dark spot at the base. The inflorescence, a panicle, is partially enveloped by the leaf sheath. Leaf blades are 2 to 7 mm wide and the upper ones exceed the inflorescence. The ligule is 2 to 8 mm, membranous, with an irregular margin.

**SIMILAR SPECIES:** There are two exotic species in Massachusetts that are closely related to Saltpond Grass; these are Mexican Sprangletop (*Leptochloa fusca* ssp. *uninervia*) and Needle Sprangletop (*L. panacea* ssp. *mucronata*). Unlike the rare subspecies, Mexican Sprangletop has a panicle that protrudes from the leaf

**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)

sheath, lemmas that lack a dark spot, and leaf blades that are shorter than the panicle. Needle Sprangletop has a shorter ligule (0.6–1 mm) than Saltpond Grass, and distinctive leaf sheath pubescence in which the hairs arise from pustules.

**HABITAT IN MASSACHUSETTS:** In Massachusetts, Saltpond Grass is native to sandy shores of brackish coastal ponds, often where freshwater enters the pond such as at a seep or small stream. Brackish ponds are made saline by seawater input either by high tides or storm water over-washing a barrier beach. The water levels can be influenced by tides as well as wider groundwater conditions, and the lens-shaped profile of these ponds can lead to wide areas of emergent sandy soils with small changes in water level. As a result, Saltpond Grass can be found in standing water as well as on exposed sandy or muddy substrate. Associated species include Saltpond Flatsedge (*Cyperus filicinus*), Sea-beach Knotweed (*Polygonum glaucum*; Special Concern), Fall Panic-grass (*Panicum dichotomiflorum*), Saltmarsh Fleabane (*Pluchea odorata*), Saltpond Spike-sedge (*Eleocharis parvula*), and Crabgrass (*Digitaria* spp.). Saltpond Grass has also been introduced to disturbed inland sites. One population occurs along a highway and was likely transported via machinery (e.g., mowers) or vehicles; it is probably surviving because of the influence of winter road salt applications.

**RANGE:** Saltpond Grass is known from much of North America.

**POPULATION STATUS IN MASSACHUSETTS:** Saltpond Grass 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. Native populations are currently known from Barnstable, Dukes, and Nantucket Counties. Saltpond Grass is introduced in Franklin, Worcester, Middlesex, and Suffolk Counties.

**MANAGEMENT RECOMMENDATIONS:** Saltpond Grass is threatened by lasting changes in water levels or chemistry (e.g., eutrophication and reduced salinity), which could favor colonization by exotic invasive and aggressive native species. Sites should be monitored for colonization of aggressive competitor species; if competition threatens a Saltpond Grass population, a plan to control the competitors may be warranted.

Browsing and eutrophication from Canada Geese could also threaten Saltpond Grass. Inputs of nutrients from goose waste and the surrounding landscape could induce eutrophication, especially in ponds that are cut off from tidal flow by a barrier beach. In the absence of natural breaching of a barrier beach, mechanical breaching may be considered.

Trampling from recreational activities could be a threat depending on the setting; locations that receive heavy recreational use should be carefully monitored for plant damage or soil disturbance. 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 florets present in Massachusetts**

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

**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.