Natural Heritage & Endangered Species Program

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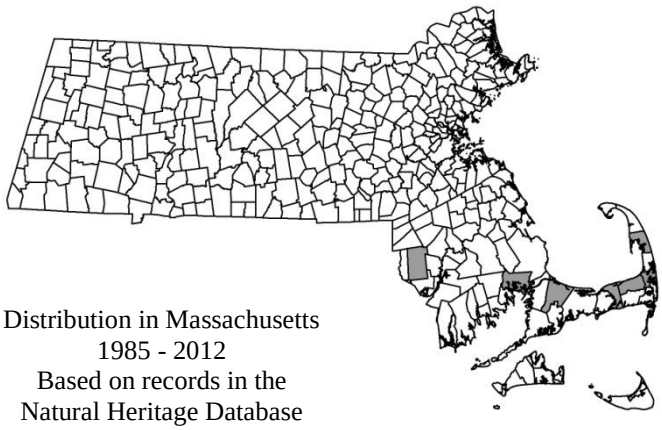
Massachusetts Division of Fisheries & Wildlife

Salt Reedgrass
Spartina cynosuroides
(L.) Roth

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

DESCRIPTION: Salt Reedgrass is a robust member of the Grass family (Poaceae), growing 1 to 3 m (3–10 ft.) tall. It is found in brackish marshes and the upper margins of salt marshes. The hard, coarse stems arise from stout underground rhizomes. Leaves from the lower stem are 8 to 20 mm wide, with rough, sharp margins. The large, dense inflorescence has numerous straight, ascending branches attached to the central stem, or rachis, each densely set with spikelets of tiny flowers arranged on one side of the branch. The spikelets overlap each other giving a shingle-like appearance. Each spikelet has one flower with a 10 to 15 mm second glume that extends beyond the lemma and is sharply acuminate, awnless or short-awned, and has a scabrous keel. Salt Reedgrass often occurs in almost pure stands that take on a distinctive golden hue in late autumn.

SIMILAR SPECIES: Other members of the genus *Spartina* are generally shorter than Salt Reedgrass, although Saltmarsh Cordgrass (*S. alterniflora*) can reach 2 m. Saltmarsh Cordgrass has smooth or only slight scabrous leaf margins, whereas Salt Reedgrass has very rough leaf margins. Prairie Cordgrass (*S. pectinata*) has



Distribution in Massachusetts
1985 - 2012
Based on records in the
Natural Heritage Database

Salt Reedgrass is a robust species that often grows in dense stands in brackish marshes (above). It has dense spikelets arranged on one side of each branch (left). Photos by Bruce Sorrie.

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

Massachusetts Division of Fisheries & Wildlife

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upper glumes with long awns (3–8 mm), and lower glumes that are three-quarters or more the length of the adjacent lemma. In contrast, the upper glumes of Salt Reedgrass are awnless or short-awned, and the lower glumes are one-half to two-thirds the length of the adjacent lemma. Common Reed or Phragmites (*Phragmites australis*) is another tall grass that grows in brackish marshes and is often found near Salt Reedgrass. The feathery inflorescence of Phragmites is more dense than that of Salt Reedgrass, and the leaves are shorter, broader, and do not have a cutting margin.

AIDS TO IDENTIFICATION: Technical manuals should be consulted to confirm the identification of all grass species. Characters that help to identify Salt Reedgrass:

- Dense spikelets on one side of the branch
- Wide lower leaves with very rough margins
- Upper glume is awnless or short-awned
- Lower glume is 1/2 to 2/3 the length of the adjacent lemma

POPULATION STATUS IN MASSACHUSETTS: Salt Reedgrass 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. All current and historical records of this species in Massachusetts are from Bristol, Plymouth, and Barnstable Counties.

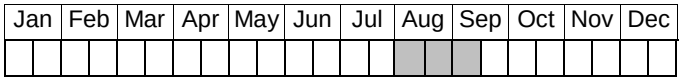
RANGE: Salt Reedgrass is found in brackish marshes from Massachusetts south along the coast to the Gulf States.

HABITAT: Salt Reedgrass is found at the upper margins of salt marshes, and in brackish tidal marshes and estuaries, usually above the level of mean high tide. Associated species include Hightide-bush (*Iva frutescens*), Common Reed (*Phragmites australis*), and Seaside Goldenrod (*Solidago sempervirens*).

THREATS AND MANAGEMENT RECOMMENDATIONS: Non-native Common Reed poses a serious threat to Salt Reedgrass. Common Reed is found in a wide range of wetland settings, including brackish marshes that provide habitat for Salt Reedgrass. Common Reed is often controlled with herbicides that can also kill Salt Reedgrass if misapplied. Sites supporting Salt Reedgrass should be monitored for invasions of Common Reed and other exotic species, as well as competition from native plants. If exotic or native plants are out-competing Salt Reedgrass, a plan should be developed, in consultation with the Massachusetts Natural Heritage & Endangered Species Program, to control or remove the competing species.

Salt Reedgrass is also potentially threatened by development that leads to increased runoff or siltation of wetlands, and by disruption of natural tidal flow. Sites supporting Salt Reedgrass should be protected from changes in light, moisture conditions, and natural tidal flow. Rare plant locations that receive heavy recreational use should be carefully monitored for damage or soil disturbance, and where necessary, trails should be re-routed to protect rare species. 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 Natural Heritage & Endangered Species Program.

Flowering in Massachusetts



REFERENCES:

Gleason, H.A. and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 2nd edition. The New York Botanical Garden, Bronx, NY.

Haines, A. 2011. *Flora Novae Angliae – a Manual for the Identification of Native and Naturalized Higher Vascular Plants of New England*. New England Wildflower Society, Yale Univ. Press, New Haven, CT.

NatureServe. 2010. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. http://www.natureserve.org/explorer.

Silberhorn, G. 1992. Big Cordgrass, Giant Cordgrass, *Spartina cynosuroides* (L.) Roth. Virginia Institute of Marine Science Technical Report No. 92-9. http://ccrm.vims.edu/publications/wetlands_technical_reports/92-9-big-cordgrass.pdf

Updated 2015

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