



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**American Sea-blite
Suaeda calceoliformis
(Hooker) Moq.**

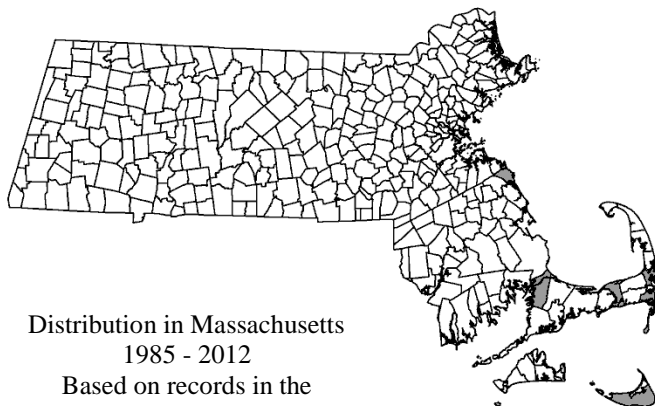
State Status: **Special Concern**
Federal Status: **None**

DESCRIPTION: American Sea-blite (*Suaeda calceoliformis*) is a widely branching annual member of the Amaranth family (Amaranthaceae) found along the coast of Massachusetts. It is 20 to 30 cm (8-12 in.) tall with fleshy, 2 cm linear leaves, and low, spreading stems with more erect flowering tips. Tiny (2 mm) five-parted flowers are arranged in 5 to 10 cm ascending spikes, and each is subtended by a 5 to 12 mm leaf-like bract.

AIDS TO IDENTIFICATION: The succulent leaves of American Sea-blite are plano-convex in cross-section, with a flat upper surface and a rounded lower side, giving the leaf a thick, fleshy feel. The lower parts of the stems are usually held almost horizontally, or even along the ground, while the outer stems and flowering spikes are ascending or erect. The green stems, leaves, and flowers may take on a red or purple tinge. American Sea-blite is often found in monotypic patches. After flowering, the tiny seed is held by the folded-over sepals in a capsule-like structure. At least one of the five sepals is sharply pointed at the tip.



(Top) American Sea-blite growing on sand, with erect red or purple flowering tips. (Bottom) The characteristic low, spreading growth form. Photos by Bruce Sorrie.



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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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.

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SIMILAR SPECIES: American Sea-blite is found with Saltmarsh Sea-blite (*S. maritima*) and Slender Sea-blite (*S. linearis*). Saltmarsh Sea-blite grows taller (up to 50 cm) than American Sea-blite, has longer leaves (3–5 cm), and is green with a whitish waxy surface. Slender Sea-blite is usually more erect than American Sea-blite, and the leaves tend to be longer and darker green. American Sea-blite is our only *Suaeda* that becomes reddish later in the season.

POPULATION STATUS IN MASSACHUSETTS: American Sea-blite is listed under the Massachusetts Endangered Species Act as a Species of 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. American Sea-blite is currently known from Plymouth, Barnstable, and Nantucket Counties and was also documented historically from Middlesex, Essex, Suffolk, Bristol, and Dukes Counties.

RANGE: American Sea-blite occurs in saline soils throughout western North America and along the sea coast from Newfoundland to New Jersey.

HABITAT: American Sea-blite is found in a range of saline habitats in Massachusetts, including salt pond margins, the sandy border of salt marshes and estuaries, sandy and gravelly beaches, and tidal flats. Several Massachusetts records are from moist salt flats on the protected sides of low dunes. On marsh edges, American Sea-blite grows below the zone of Saltmarsh Elder (*Iva frutescens*), and in a band between the *Spartina*-dominated marsh vegetation and the *Ammophila*-dominated dune vegetation. It is often found in monotypic patches on otherwise bare sand, or with Saltmarsh Sea-blite, Slender Sea-blite, Seabeach Orache (*Atriplex cristata*), Prostrate Orache (*A. glabriuscula*), Sea-lavender (*Limonium carolinianum*), Seabeach Knotweed (*Polygonum glaucum*), and Glasswort (*Salicornia ambigua*).

THREATS AND MANAGEMENT

RECOMMENDATIONS: Off-road vehicles and trampling from beach users are the primary threats at seashore locations; development is a threat at some estuarine locations. While this species is adapted to coastal conditions, shifting sand and storm damage present challenges and populations should be monitored to document long-term population trends.

Sites should also be monitored for invasions of exotic plants and over-abundance of native plants; if exotic or native plants are out-competing American Sea-blite, a plan should be developed, in consultation with the Massachusetts Natural Heritage & Endangered Species Program, to remove the competitors. Known habitat locations should be protected from dramatic changes in light or moisture conditions. Rare plant locations that receive heavy recreational use should be carefully monitored for plant damage or soil disturbance, and trails should be re-routed as needed. 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 in Massachusetts

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

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.

NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, VA. <http://www.natureserve.org/explorer>.

USDA, NRCS. 2010. The PLANTS Database (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Updated 2015

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

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