



Eelgrass, a typical species of Seagrass Communities, is usually found in calm waters with soft sediments. Photo: Wide-angle view of an eelgrass meadow, from P.J. Auster & R.E. DeGoursey, 2000. Photo by and courtesy of the authors.

Description: Seagrass Communities occur on estuarine or marine subtidal sand or mud flats, including beds of tidal creeks in salt marshes and river mouths. The salinity of the water changes with the tides and flow of rivers or streams. Actual species present at any place depend on salinity, water temperature, depth, and substrate type. Seagrass Communities are part of a mosaic with tidal marshes, other flats, deeper waters, and abutting uplands. In general, tidal flats are highly productive environments. Light levels are high in shallow waters so that productivity

Seagrass Communities occur on estuarine or marine flats with sand or mud substrates that are submerged by, usually, less than 2m of water at high tide.

is high. Nutrient — rich sediments from upstream and nearby salt marshes support a large biomass of invertebrates that feeds larger animals including waterfowl, gulls, fish, and larger invertebrates such as crustaceans. Inter- and subtidal flats are regularly disturbed by currents and tides, storms, and winter ice that move and redeposit sediments, and alter habitable areas.

Characteristic Species: Seagrass Communities are sparsely to densely vegetated, dominated by eelgrass and widgeon grass, either of which may be in dense beds. In estuarine areas with fresher water, waterweed, coontail, sago pondweed, and horned pondweed may be mixed in or form local beds. Macroalgae (seaweeds) can be locally abundant, although they are more typical of rocky sediments. Invertebrates vary with substrate and depth, and may control the vegetation.

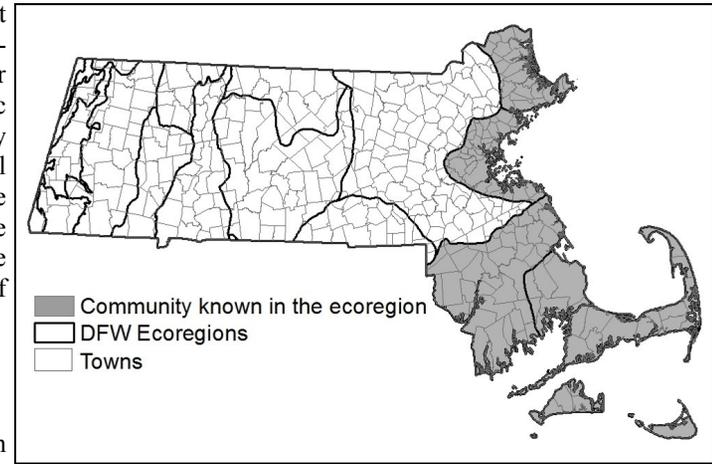
Differentiating from Related Communities: All Seagrass beds are included in this community type: Sand and/or mud flats often support seagrass beds. Submerged rocky habitats are often dominated by kelp and other algae. Occurrences in Coastal Salt Ponds are

included with that community type. Inter- and subtidal flats occur all along the Atlantic coast, and have many variants. A national classification of marine and estuarine communities is in the early stages of development.

Habitat for

Associated Fauna:

Submerged vegetation provides winter feeding sites for waterfowl including brant, American black duck, and sea birds. Vascular plant beds are key nursery habitat for larval and juvenile fishes; the plants also provide surfaces for attachment of invertebrates. Fish such as alewife, American shad, and striped bass are characteristic of estuarine subtidal habitats which also provide habitat for horseshoe crabs. Marine subtidal flats are spawning areas for winter flounder and other fish. Declines of once abundant Eelgrass beds have been attributed to stresses from excess nutrients in the ecosystem. Because Eelgrass beds provide important habitat for many fish and invertebrates they have been well surveyed by the Massachusetts Department of Environmental Protection (DEP) Eelgrass Mapping Project which began surveying seagrass in the 1990s; data are available from MassGIS and <http://www.mass.gov/eea/agencies/massdep/water/watersheds/eelgrass-mapping-project.html>



Examples with Public Access:

Billingsgate Shoals Wildlife Sanctuary, Wellfleet; Joppa Flats, Newbury.



Eelgrass with flounder: Photo: NOAA. <http://www.habitat.noaa.gov/about/habitat/underwatergrasses.html>

