

Marine Intertidal Gravel/Sand Beach Community

State Rank: S4 - Secure



Intertidal Beach, at low tide with scattered wrack near the high area and flattish mixed material and seaweeds nearer the water. Terns fly over the beach. Photo: Kim Justham, NHESP.

Description: Marine Intertidal Gravel/Sand Beach Communities are exposed between high tides: they occur below the wrack line and above permanent water. They often have intertidal pools interspersed in low areas. Wave action combined with alternating exposure to salt water and desiccation produces a highly stressful environment. Intertidal beaches are between Maritime Beach Strand communities above the high tide line and

marine subtidal communities below the low tide line.



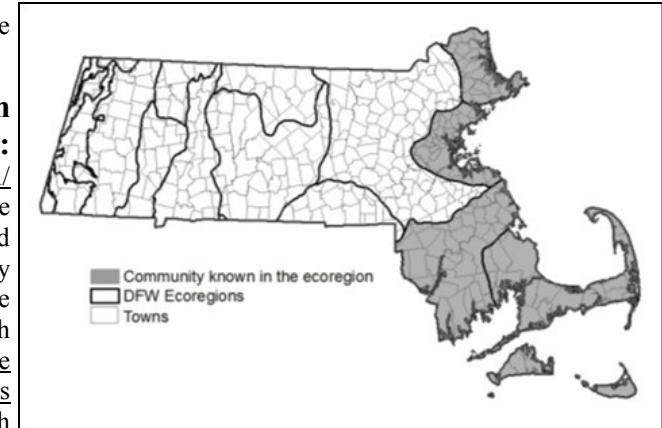
Wrack line, top of the Intertidal Beach, near a tern colony. Photo: Bill Byrne, MassWildlife.

Characteristic Species: In intertidal areas nonvascular plants and invertebrates are the dominate organisms. Shorebirds

are often the most visible animals in the habitat.

Differentiating from Related Communities:

Marine Intertidal Gravel/Sand Beaches are below the wrack line and submerged twice daily by tides. Any vegetation in the Marine Intertidal Gravel/Sand Beach is non-vascular. Maritime Beach Strand Communities are above the daily high tides, between the wrack line and the dunes and support scattered vascular plants.



ubiquitous in all shore and shallow water environments. Tiger beetles also forage on exposed portions of the intertidal beach. Atlantic horseshoe crabs spawn in intertidal beaches.

Examples with Public Access: Cape Cod National Seashore; Monomoy NWR, Orleans and Chatham; Horseneck Beach State Reservation, Westport; Parker River NWR, Newbury. Boston Harbor Islands, Boston area.



Wrack on sandy intertidal beach. Photo: Scott Melvin, NHESP.

Habitat for Associated Fauna:

Many shorebirds such as Semipalmated and Least Sandpipers, Sanderlings, Semipalmated Plover, and Rufa Red Knot forage along shorelines during migrations. Exposed intertidal beaches are part of important resting areas for shorebirds. Piping plovers nest on the beach strand and forage in the wrack line. Gulls are



Intertidal Beach adjacent to a dense maritime shrubland. The wrack line is near the base of the shrubs. Photo: Patricia Swain, NHESP.

Invertebrates and nonvascular plants dominate the resident organisms of Marine Intertidal Gravel/Sand Beaches, a highly stressed community in the intertidal (wave action) zone of beaches, below the Beach Strand community.

