

Marine Intertidal Gravel/Sand Beach Community

Community Code: CM2B000000

State Rank: S4

Map: No Marine Intertidal Gravel/Sand Beach Communities are documented in the

NHESP database.

Concept: Invertebrates and nonvascular plants dominate this highly stressed community in

the intertidal (wave action) zone of beaches.

Environmental Setting: Marine beaches are exposed between high tides: they occur below the wrack line

and above permanent water, and are often interspersed with low areas that contain intertidal pools. These are high-energy habitats. Marine beaches are between Maritime Beach Strand Communities above the high tide line and marine

subtidal communities below the low tide line.

Vegetation Description: Sparse non-vascular plants. Invertebrates are the most abundant resident group,

with shorebirds among the most visible animals in the habitat.

Differentiating Occurrences: Marine Intertidal Gravel/Sand Beach Communities are below the wrack line and

submerged twice daily by tides. Any vegetation in the Marine Intertidal Gravel/Sand Beach Community 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. Seagrass Communities tend to be subtidal communities, occurring

below the low tide line.

Associated Fauna: Many shorebirds such as Sanderlings (Calidris alba), Least Sandpipers (C. minutilla),

Semipalmated Sandpipers (*C. pusilla*), Semipalmated Plover (*Charadrius semipalmatus*) and Red Knot (*Calidris canutus*) forage along shorelines during migrations. When exposed, the sites are part of important resting areas for shorebirds. Piping Plovers (*Charadrius melodus*) nest on the beach strand and forage in the wrack line. Gulls (*Larus* spp.) are ubiquitous in all shore and shallow water environments. Tiger beetles also forage on exposed portions of the intertidal

beach. Few mammals use this portion of the beach for more than passing through.

Horseshoe crabs spawn in intertidal beaches.

Public Access: Cape Cod National Seashore; Monomoy National Wildlife Refuge, Orleans and

Chatham; Horseneck Beach State Reservation, Westport; Parker River National

Wildlife Refuge, Newbury; Boston Harbor Islands, Boston area.

Threats: Disturbance of foraging and resting birds by domestic animals and people, off-road

vehicles, and recreational boaters.

Management Needs:

USNVC/NatureServe: Sand, non-vegetated.