



Maritime Beach Strand Community

Community Code: CT2B1A0000

State Rank: S3



Concept: Sparsely vegetated, long, narrow community between wrack line of high tide and foredunes.

Environmental Setting: Usually part of a barrier beach system, seaward of dunes, but above the daily high tides. Beach strands are subject to overwash during storms and spring tides. Sand is the primary substrate for the community, but cobble substrate is included in the community type.

Vegetation Description: Sparsely vegetated community with scattered cover of sea-rocket (*Cakile edentula* ssp. *edentula*) and dunegrass (*Ammophila breviligulata* ssp. *breviligulata*). Beach pea (*Lathyrus japonicus*), seabeach orache (*Atriplex cristata*), seabeach sandwort (*Honckenya peploides*), seaside-flatsedge (*Cyperus filicinus*), seabeach saltwort (*Salsola kali* ssp. *kali*) and seaside goldenrod (*Solidago sempervirens*) occasionally occur at the foot of the dunes or on protected beaches, along with the non-native Russian thistle (*Salsola tragus*). The wrack line has seed sources for (re)establishment of plants on the beach.

Differentiating Occurrences: Maritime Beach Strand Communities are above the daily high tides, between the wrack line and the dunes, and have scattered vascular plants. 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.

Associated Fauna: Several species of shorebird are beach specialists, nesting and foraging on beach strands, including Least Terns (*Sterna antillarum*), Piping Plover (*Charadrius*



melodus), and American Oystercatcher (*Haematopus palliatus*). Beach strands are important shorebird staging areas: migratory shorebirds use barrier beach systems, including the beach strand community, for resting and congregating before and during migration. Merlins (*Falco columbarius*) and Peregrine Falcons (*Falco peregrinus*) forage on beaches during migrations. No amphibians or reptiles regularly occur on beaches. Mammal use of beaches tends to be for feeding, often on debris brought in with wrack and invertebrates under the wrack line, by species such as red fox (*Vulpes vulpes*), gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*). Generalist small mammals feed on debris, seeds, and invertebrates in the wrack line. Seals (mostly *Phoca vitulina*) haul out on beaches to rest. Invertebrate specialists include several species of tiger beetles, beach flies, and, on the south side of the Cape, ghost crabs at their northern limit of distribution.

Public Access:

Cape Cod National Seashore; Monomoy National Wildlife Refuge, Orleans/Chatham; Horseneck Beach State Reservation, Westport; Parker River National Wildlife Refuge, Newbury; Boston Harbor Islands, Boston area.

Threats:

Recreational use, foot and vehicular traffic. Invasive species: seabeach poppy (*Glaucium flavum*). Raking. Sea-level rise will swamp existing beach strand communities.

Management Needs:

Allow natural disturbances: deposition and erosion, and exposure to overwash and salt spray with wrack material left in place. Restrict or eliminate vehicle traffic.

USNVC/NatureServe:

Includes: Sand Flats- *Cakile edentula* Sparsely Vegetated Alliance -- *Cakile edentula* ssp. *edentula* - *Chamaesyce polygonifolia* Sparse Vegetation [CEGL004400]. (Park name at Cape Cod National Seashore - North Atlantic Upper Ocean Beach). In Ecological Systems: Northern Atlantic Coastal Plain Sandy Beach (CES203.301) Central Atlantic Coastal Plain Sandy Beach (CES203.064)