



Maritime Erosional Cliff Community

Community Code: CT2B1E0000

State Rank: S2



Concept: Extremely sparse vegetation on cliffs being actively eroded by the sea.

Environmental Setting: The Maritime Erosional Cliff Community occurs on cliffs being actively eroded by the sea; storms particularly cause dramatic changes. The seaward-facing unconsolidated cliff faces above beach strand communities are in the salt spray zone where wind and salt spray constantly dry the vegetation. The cliffs themselves may be glacial deposits, best developed on terminal moraines usually with mixed material, including boulders, gravel, sand, and lenses of clay. There are also cliffs of sand from glacial outwash or dunes. The unconsolidated cliff material generally does not hold water which, combined with the wind, produces a very dry environment. Freshwater flowing through the cliff material may emerge as seepage at the base. With the constant erosion there is little soil development on the cliff face. Maritime Erosional Cliffs may be 100 ft. (~33m) or more high above the ocean and beach below.

Vegetation Description: The Maritime Erosional Cliff Community generally has extremely sparse vegetation that is typical of surrounding areas: shrubs and vines may include poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), wild roses (*Rosa carolina* and *R. rugosa*), bayberry (*Morella pensylvanica*), sweet fern (*Comptonia peregrina*), beach plum (*Prunus maritima*), black cherry (*Prunus serotina*), huckleberry (*Gaylussacia baccata*), bearberry (*Arctostaphylos uva-ursi*), catbriar (*Smilax rotundifolia*) or the non-native bush honeysuckles (*Lonicera* spp.) or multiflora rose (*Rosa multiflora*). Scattered herbaceous plants include native seaside yarrow and non-native yarrow (*Achillea millefolium* ssp. *lanulosa* and *A. millefolium* ssp. *millefolium*), non-native mugwort (*Artemisia vulgaris*), and other



species typical of disturbed areas. Vegetation is densest on less steep areas, especially steps in the cliff face that may support dunegrass (*Ammophila breviligulata* ssp. *breviligulata*) and non-native grasses. Some sites have dense non-native vegetation. The base of erosional cliffs is often moist from seeps. In areas with freshwater seepage common horsetail (*Equisetum arvense*) and the non-native orache (*Atriplex patula*) often grow.

Differentiating Occurrences: Maritime Erosional Cliff Communities are made of mixed unconsolidated material. Maritime Rock Cliff Communities are bedrock. Both are in the salt spray zone next to the ocean. The vegetation of the Maritime Erosional Cliff Community is sparse and species are typically weedy species from the surroundings. The substrate is steep and close to vertical in places, and usually is actively eroding.

Associated Fauna: Bank Swallows (*Riparia riparia*) nest in the top parts of the cliffs. Migrating Peregrine Falcons (*Falco peregrinus*) regularly perch on and hunt from the upper part of sea cliffs during the fall migration.

Public Access: Maritime Erosional Cliffs are extremely fragile and visitation is discouraged due to potential for erosion from disturbance.

Threats: Bank stabilization interferes with natural processes of erosion. But erosion becomes severe with added human-induced disturbance, including from foot traffic and climbing.

Management Needs: Naturally disturbed, but don't want to enhance the disturbances. Continue to keep pedestrian traffic off cliff faces.

USNVC/NatureServe: A3992 Erosional Bluffs Alliance Maritime Erosional Cliffs CEGLO06618. (described for BoHa); inclusions of *Smilax glauca* - *Toxicodendron radicans* Vine-Shrubland (CEGL003886). In Ecological system: Northeastern Erosional Bluff (CES203.498). Sand Cliffs are similar to Sand Dunes with *Ammophila breviligulata* - *Lathyrus japonicus* Herbaceous Vegetation (Beachgrass Dune) and *Cakile edentula* ssp. *edentula* - *Chamaesyce polygonifolia* Sparse Vegetation.