Coastal Sand Ecosystems

The interface between uplands and the marine environment, dunes and other sand dominated ecological communities provide significant buffers for upland areas from the effects of wind and tide. The unique soil conditions also limit the vegetation communities and associated fauna they support and like bogs this has meant distinct adaptive properties of the species that do survive in this community.
Large-headed sedge Image credit: D. Hanna

Beach pea Image credit: D. Hanna

Silky Beach Pea P. Zevit

Ambrosia and Yellow Sand Verbena P. Zevit
Characteristics

Coastal sand ecosystems encompass the terrestrial portion of beaches, spits, and dunes in which sand is the dominant substrate. They contain sparsely-vegetated or herbaceous ecological communities, as well as associated forest, wetland, and bluff communities. Coastal sand ecosystems occur at the intersection of marine and terrestrial realms where ecological patterns are structured by geomorphic and oceanographic disturbance processes (e.g., sand movement, wind erosion, tides, storm surges, ocean spray), soil development, local climate, and vegetation succession). Source: Coastal Sand Ecosystem Recovery Team. A number of red-listed communities occur on the South Coast including: northern wormwood - red fescue / grey rock-moss, large-headed sedge Herbaceous Vegetation, dune wildrye - beach pea. Both waterbirds and migratory songbirds are heavily dependent on sand communities for seasonal and year round nesting, foraging and refuge during storms and weather events.

Status

Global Status: G1-G1G2-GNR
Provincial Status: S1-S1S2
BC List Status: Red (Candidates for- Extirpated, Endangered, or Threatened status)

Ecology

Range

The majority of remaining coastal sand ecosystems are on the west coast of Vancouver Island, followed by BC’s mainland coast and Haida Gwaii

Threats
Habitat destruction, invasive plants and human recreational activities are part of the range of threats identified.

**Conservation and Management**

Apply conservation and management approaches identified in the Status Report on Coastal Sand Ecosystems in BC, the Multi-species Action Plan for Pacific Rim National Park Reserve of Canada [Proposed] and recovery strategies, management plans and status reports for species including the contorted-pod evening primrose, Aduoin's Night Stalking Tiger Beetle, Edward's Beach Moth and Yellow Sand Verbena Moth.

**Resources**

**Develop With Care Guidelines (see Lower Mainland Region section)**

Environmental guidelines for urban and rural land development in BC.

**Species at Risk & Local Governments a Primer for BC**

Learn what species are at risk in your area, search by name, habitat type, regional district and forest district.

**E-Flora the electronic atlas of the Flora of BC**

A volunteer-driven GIS-based biogeoclimatic atlas of the vascular plants, fungi, algae, bryophytes and lichens of BC.

**Credits**

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**Source URL:** [http://www.sccp.ca/species-habitat/coastal-sand-ecosystems](http://www.sccp.ca/species-habitat/coastal-sand-ecosystems)

**Links**

[5] [http://www.speciesatrisk.bc.ca/](http://www.speciesatrisk.bc.ca/)