RARE COASTAL SAND ECOSYSTEMS

of Buccaneer Bay Provincial Park

The sand on North and South Thormanby islands supports unique ecosystems not commonly found in BC. The plants and animals found here are well adapted to their environment of ever-shifting sand and water. Coastal sand ecosystems sustain many endangered species and ecological communities. This area includes the rare large-headed sedge and dune wildrye-beach pea ecological communities. The benefits that sand ecosystems provide include contributing to BC's biodiversity and buffering inland areas from storms.



Buccaneer Bay

Please tread carefully. The plants are fragile and vulnerable to human disturbances.



Large-headed sedge (Carex macrocephala)



Gumweed (Grindelia stricta)



Beach pea (Lathyrus japonicus)



Dune wildrye, also known as dunegrass (Leymus mollis ssp. mollis)

RARE COASTAL SAND ECOSYSTEMS

of the Boundary Bay Wildlife Management Area

The sand in Beach Grove supports unique ecosystems not commonly found in BC. The plants and animals found here are well adapted to their environment of ever-shifting sand and water. Coastal sand ecosystems support many endangered species and ecological communities. This area supports the rare large-headed sedge ecological community. There are numerous benefits that sand ecosystems provide such as buffering inland areas from storms.



Beach Grove Area

Respect that the plants are fragile and vulnerable to damage from human disturbances.



Large-headed sedge (Carex macrocephala)



Gumweed (Grindelia stricta)



Beach pea (Lathyrus japonicus)

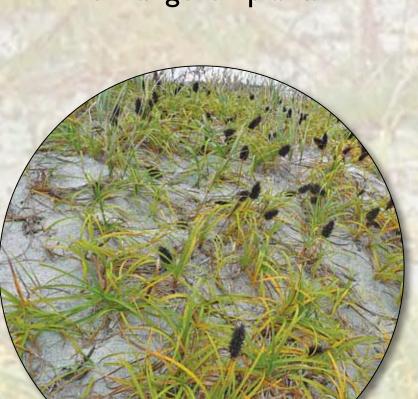


Dune grass (Leymus mollis ssp. mollis)





Contorted-pod evening-primrose (Camissonia contorta) Federally-listed endangered plant.



Large-headed sedge (Carex macrocephala) Related to grasses, this sedge plant has dense, dark spiky heads that are recognizable during the summer and fall.



Beach pea (Lathryrus japonicus) This sprawling plant with colourful, showy pink flowers is the most frequently found peavine on south

coast beaches.

Grey beach peavine

(Lathyrus littoralis) Provincially-listed threatened plant also known as silky beach pea.



Dune wildrye (Leymus mollis ssp. mollis) A tall grass that is dominant in sand ecosystems. Also known as dunegrass.



The sand dunes of Savary Island support unique ecosystems not commonly found in BC. There are relatively few areas on BC's South Coast that contain sand ecosystems and Savary Island contains some of the best examples in Western Canada.

The sparsely-vegetated areas found along the shores of Savary Island contain plants and animals that struggle for survival in a dynamic environment of wind, sand, waves and weather. Many endangered species and ecological communities live here in the shifting sand. Savary Island is also home to an ancient forested dune ecosystem that covers one third of the island.

Rare Coastal Sand Ecosystems

The world-renowned beaches, dunes and sand cliffs are made up of glacial sand deposits. Savary Island is essentially a migrating sandbar. The sand cliffs are eroding at an average annual rate of .025 meters in the north to .41 meters on the south side. Due to human-made threats, coastal sand habitats in BC are estimated to have declined between 35 and 95% since 1930. This makes the remaining areas, like those found on Savary Island, special and important to protect.

Enjoy Indian Point. Please be aware that coastal sand ecosystems are susceptible to human disturbances.

Please minimize your impact:

- Tread carefully. Stay on existing trails.
- Avoid playing on, digging or carving into, and sliding down dunes or sand cliffs.
- Keep wheeled vehicles off the dunes and beaches.
- Help stop the spread of invasive plants such as Scotch broom.
- Keep dogs on-leash. Pick up after your pet.



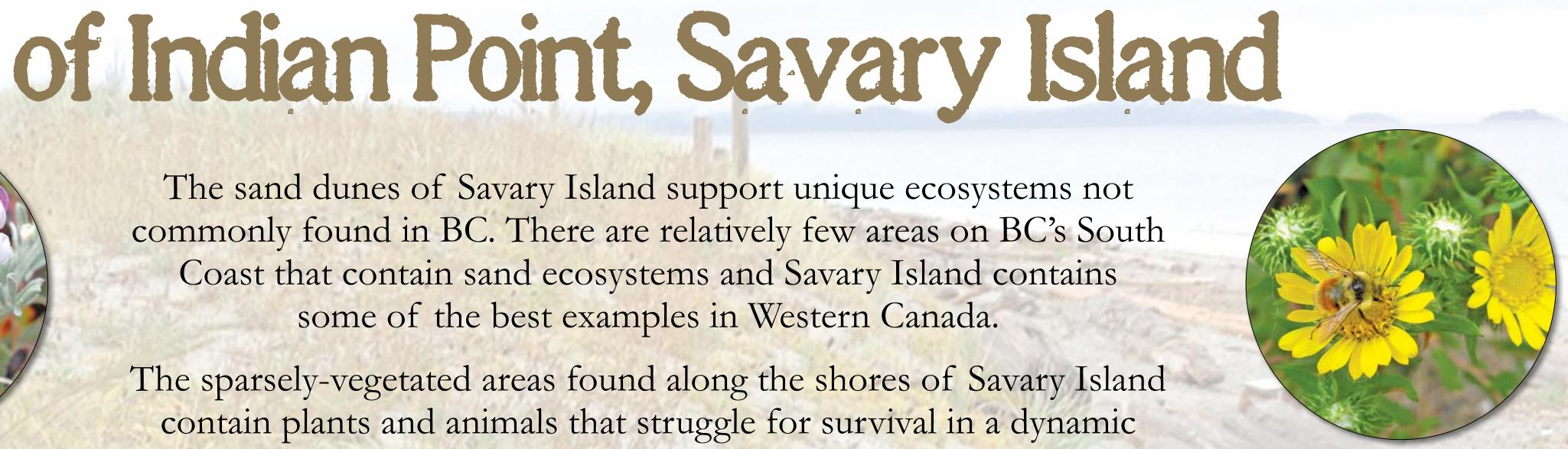
This is one of the first colonizers of the windswept sand near the ocean's edge. It is considered an introduction from eastern Canada, and often occurs with the similar European searocket.



his project was undertaken with the financial support of Ce projet a été réalisé avec l'appui financier de : Environment Environnement Canada Canada







Gumweed (Grindelia stricta) The daisy-like flowers are encircled by bracts covered in a sticky substance, giving it its name "gumweed".



Island Tiger Moth (Grammia complicata) Threatened moth whose world-wide distribution is almost exclusively on BC's coast. Has been found on Savary Island.



known as beach morning-glory. Scotch broom (Cytisus scoparius)

Northern wormwood (Artemisia campestris ssp. pacifica) When grouped with the red

fescue and grey rock-moss, this forms a provinciallylisted endangered ecological community.



Seashore lupine (Lupinus littoralis) A perennial herb often found in mats with flowers that range from blue to purple with some white.



(Calystegia soldanella) A threatened plant with kidney-shaped leaves and attractive pink-purple flowers that are insect-pollinated. Also

Hanna, Jennifer Heron, Claudia

This is a prolific invader that forms dense stands that stabilize the sand and increase soil fertility, changing the nature of the ecosystem.



Contorted-pod evening-primrose (Camissonia contorta) Federally-listed endangered plant.



Large-headed sedge (Carex macrocephala)
Related to grasses, this sedge plant has dense, dark spiky heads that are

recognizable during the

summer and fall.



(Lathryrus japonicus)
This sprawling plant with colourful, showy pink flowers is the most frequently found peavine on south coast beaches.



American searocket (Cakile edentula)

This is one of the first colonizers of the windswept sand near the ocean's edge. It is considered an introduction from eastern Canada, and often occurs with the similar European searocket.

Rare Coastal Sand Ecosystems of Savary Island

The sand dunes of Savary Island support unique ecosystems not commonly found in BC. There are relatively few areas on BC's South Coast that contain sand ecosystems and Savary Island contains some of the best examples in Western Canada.

The sparsely-vegetated areas found along the shores of Savary Island contain plants and animals that struggle for survival in a dynamic environment of wind, sand, waves and weather. Many endangered species and ecological communities live here in the shifting sand. Savary Island is also home to an ancient forested dune ecosystem that covers one third of the island.

The world-renowned beaches, dunes and sand cliffs are made up of glacial sand deposits. Savary Island is essentially a migrating sandbar. The sand cliffs are eroding at an average annual rate of .025 meters in the north to .41 meters on the south side. Due to human-made threats, coastal sand habitats in BC are estimated to have declined between 35 and 95% since 1930. This makes the remaining areas, like those found on Savary Island, special and important to protect.

Enjoy Savary Island. Please be aware that coastal sand ecosystems are susceptible to human disturbances.

Please minimize your impact:

- Tread carefully. Stay on existing trails.
- · Avoid playing on, digging or carving into, and sliding down dunes or sand cliffs.
- Keep wheeled vehicles off the dunes and beaches.
- Help stop the spread of invasive plants such as Scotch broom.
- Keep dogs on-leash. Pick up after your pet.



Grey beach peavine
(Lathyrus littoralis)
Provincially-listed threatened
plant also known
as silky beach pea.



Beach bindweed
(Calystegia soldanella)
A threatened plant with kidney-shaped leaves and attractive pink-purple flowers that are insect-pollinated. Also



Dune wildrye
(Leymus mollis ssp. mollis)
A tall grass that is dominant
in sand ecosystems. Also
known as dunegrass.



Gumweed
(Grindelia stricta)
The daisy-like flowers are encircled by bracts covered in a sticky substance, giving it its name "gumweed".



Northern wormwood
(Artemisia campestris ssp.
pacifica)
When grouped with the red
fescue and grey rock-moss,

fescue and grey rock-moss, this forms a provinciallylisted endangered ecological community.



Silver burweed (Ambrosia chamissonis)

Has clinging seeds that will attach to clothes, making the name "burweed" quite appropriate. Can grow to form large clumps.



Seashore lupine (Lupinus littoralis)

A perennial herb often found in mats with flowers that range from blue to purple with some white.



Scotch broom (Cytisus scoparius)

This is a prolific invader that forms dense stands that stabilize the sand and increase soil fertility, changing the nature of the ecosystem.



Island Tiger Moth (Grammia complicata)

Threatened moth whose world-wide distribution is almost exclusively on BC's coast. Has been found on Savary Island.



known as beach morning-glory.

This project was undertaken with the financial support of Ce projet a été réalisé avec l'appui financier de :

Environment Environnement Canada Canada





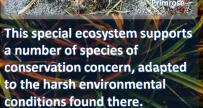
Photo credits: Tamsin Baker, Dawn Hanna, Jennifer Heron, Claudia Schaefer. Elizabeth Watkinson, Liz Webster. Kym Welstead

Coastal Sand Ecosystems: a disappearing ecological community of the Salish Sea

The South Coast Conservation Program focuses on protecting and conserving endangered species and spaces of southwest BC from Desolation Sound, inland to Pemberton and south to the Washington State border. Coastal Sand Ecosystems ("CSEs") are a unique ecological community encompassing the terrestrial portion of beaches, spits, and dunes in which sand is the dominant substrate. Sparsely-vegetated and dominated by herbaceous species, this ecological community can be bounded by forest, wetlands or sand bluffs. Shaped by tide, wind and erosional forces, development, climate change and invasive species continue to put pressure on the future of this unique community.

www.sccp.ca, info@sccp.ca







Ecosystems on the South Coast check out the

CSE profile under Species Profiles >>

Ecological Communities at www.sccp.ca

Andy Teucher, Andy Reago &

Chrissy McClarren, Nick

Page, Claudia Schaeffer