

SAND BEACHES & DUNES

Lake Huron is home to vibrant coastal communities that host thousands of visitors coming to enjoy the beautiful shoreline. Sand beaches and dunes are the most popular tourism destinations in summer months. In Pinery Provincial Park, 600,000 visitors enjoy the beaches and dunes every year, with almost 23,000 people visiting Grand Bend beach during Canada Day. Although popular areas to live and play, sand beaches and dunes represent only 2-3% of Lake Huron's total shoreline. Lake Huron's dunes are suggested to be of national significance due to their rarity and ecological fragility. The scarcity of sand beaches, along with the use of these habitats by Endangered Species including the Piping Plover, make them extremely important to Lake Huron's coastal ecosystem.

ECOLOGICAL SERVICES PROVIDED BY BEACHES & DUNES:

- 💧 Erosion protection from storm surges and powerful winds.
- 💧 Water filtration for inland water inputs.
- 💧 Critical nesting habitat for endangered species (e.g. Piping Plover).
- 💧 Rich feeding grounds for shore birds (e.g. Dunlins, Sandpipers, Sparrows).
- 💧 Dunes allow beaches to grow, and remain healthy by storing sand.

STRESSORS AND THREATS AFFECTING ECOSYSTEM HEALTH:

- 💧 Invasive species (e.g. Spotted Knapweed, Sweet White Clover).
- 💧 Vehicular use (e.g. ATV's) crushing dune vegetation and eroding sand.
- 💧 Mechanical beach grooming.
- 💧 Vegetation removal compromising habitat.
- 💧 Pedestrians meandering off designated pathways crushing vegetation on dune.
- 💧 Plastic pollution and garbage litter.
- 💧 Residential and infrastructure development reducing habitat size.



WHAT CAN YOU DO?

- Create 'S-shaped' pathways no wider than 1.2-m across dunes.
- Take your garbage home with you, and plan a low-waste visit.
- Maintain dunes by planting dune grass and protecting native dune vegetation.
- Remove invasive species from beaches and dunes by hand pulling and spading.
- Encourage dune growth, by putting up sand fencing (3-m wide, 1.2m tall) in the late fall and removing it in early spring.
- Remove turf grass from beaches and dunes. Turf grass attracts geese, contributing their waste on the beach.
- Keep machinery and vehicles off the beach, they crush dune grass and cause erosion.

FUN FACTS

A mature dune is valued at **\$3,000 CAD/ linear metre** for its services of shore protection, water filtration, and sand drifting prevention.

A mature foredune accumulates **1.074 pounds of carbon per year per 20-metre length**. Storing carbon reduces carbon emissions and mitigates effects of climate change

OTHER RESOURCES:

The Lake Huron Centre for Coastal Conservation

www.lakehuron.ca

Social @coastalcentre

Fact sheets produced as part of the Coastal Action Plan for the Southeastern Shores of Lake Huron

Funded Generously by the Ontario Trillium Foundation



SIZE UP YOUR DUNES!

Dunes should be 15-meters wide (from lake to inland) during high water levels to protect areas inland from storms.

KEEP THINGS NATURAL:

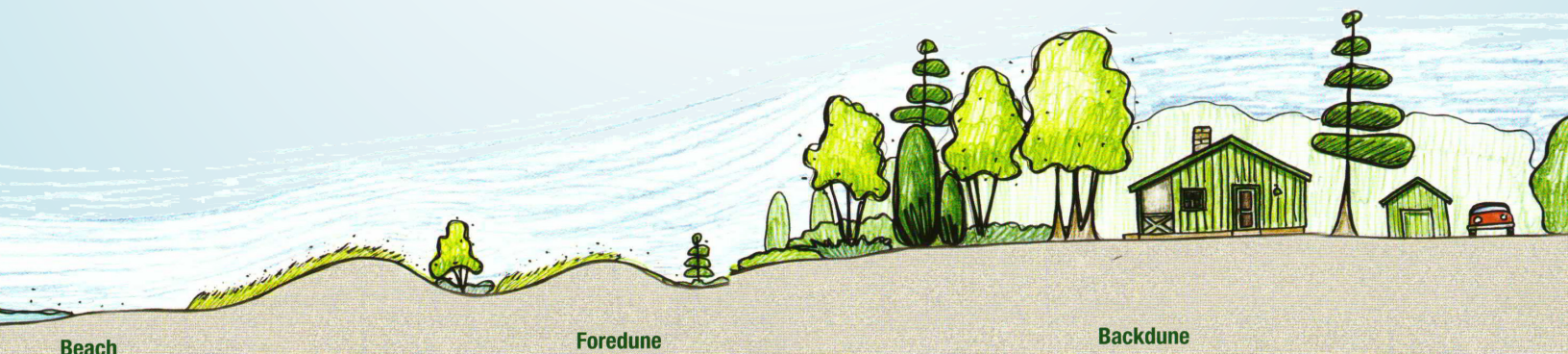
Hardened shorelines (groynes, sea walls, armour-stone, concrete sills) are less effective and more expensive than natural dune shorelines at protecting shoreline property.

CLEAN-UPS ALL YEAR ROUND!

Beach clean-ups and removing plastic and litter from dunes help prevent entanglement and consumption by wildlife, and reduce potential human safety risks. Join a local clean-up or do a weekly 5-minute beach clean on your beach visits.

GROOM YOUR PET, NOT YOUR BEACH

Mechanical beach grooming is extremely damaging to beach environments, as it loosens the sand causing it to blow off the beach, leaving a wet beach not desirable for laying out a towel. If you must pick up litter or large natural debris, the best way to do it is by hand.



Beach

Foredune

Backdune