

Home of the endangered Piping Plover

What is a Coastal Dune?

Beaches and associated dunes are part of an interconnected system. Coastal dunes are reliant on the beach for their formation, building along the shoreline from blowing sands during low lake level periods.

Vegetation is critical to dune formation and stabilization. Marram grass and other dune-adapted grasses, herbs, and shrubs trap blowing sand and stabilize the dunes. Without this vegetation, windblown sand from the beach would continue to move inland and be lost from the beach/dune system.

During periods of high lake levels and storm events, the dunes provide important shoreline protection. The beach also relies on the dunes' sand reservoirs to replenish sand on the beach during these periods. This is particularly important for Wasaga Beach where new, incoming sources of sand are not present.

What is so special about the Coastal Dunes?

Beach and dune vegetation must be able to tolerate strong winds, accumulating sands, temperature extremes, drought conditions, occasional flooding and low nutrient soils. This results in the formation of rare vegetation communities adapted to these extreme conditions.

Open (grassed) sand dune and shrub sand dune communities along Wasaga Beach are considered provincially rare. Dune species such as sand cherry, beach pea, shrubby cinquefoil and smooth aster provide colourful displays from spring through fall.

The endangered piping plover has nested in Wasaga Beach since 2006. This small shorebird nests on the sand between the dunes



Beach Pea



Piping Plover



Shrubby Cinquefoil



and water's edge, feeding along the shoreline and using beach/dune vegetation for shelter.

What threatens Wasaga Beach's Coastal Dunes?

Dune vegetation is highly vulnerable to trampling by pedestrians and damage by ATVs and other vehicles. Loss of vegetation from these impacts can lead to "blowouts" and the loss of sand from the beach system. Dunes can also be removed through shoreline development.

What can you do to help?

- Maintain dune habitat on your own property.
- Plant marram grass and other native dune species.
- Maintain one narrow trail through the dunes to the beach.
- Learn how to identify and manage invasive species on your property.

Did you know?

- Shoreline protection services provided by coastal dunes are valued at \$2,000 per metre!
- Dune vegetation can be killed by fewer than 50 passes of foot traffic in one growing season.
- Dune building is associated with low lake levels when beach sands are blown inland by the wind.
- Most dune building takes place when wind speeds exceed 20 km/hr.



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