



## Sand Dunes FACT SHEET

# Sand Dunes: Eco-lessons from the National Parks in Atlantic Canada

## Introduction

Formed by wind, waves and time and held together by plants, sand dunes are an important habitat that is constantly changing.

The very beginning of a sand dune can be a pile of seaweed, a rock or a piece of driftwood behind which sand has started to fall. As the small mound of sand gets a bit bigger, plants such as sea rocket can colonize it. With a plant or two, the pile of sand gets bigger and it doesn't take long before marram grass can colonize the beginnings of the dune.

Marram grass is the most important plant on a sand dune. It spreads quickly by its specialized roots, called rhizomes, that grow not only down but sideways and through the sand. These rhizomes form a network that helps hold the sand dune in place.

A very important habitat, sand dunes are home to many plants and animals. Beach pea, bayberry, seaside goldenrod, wild rose and cranberry are just a few of the plants that are able to survive in this harsh environment after marram grass has stabilized the dune. There are many insects, such as leafhoppers, which scurry around the roots and leaves and feed on plants. Birds such as the Savannah sparrow feed on small seeds and berries and sometimes even on the insects! Also near the roots of the plants are small mammals like the meadow jumping mouse. They attract others to this habitat – red foxes will often make their dens in the backside of a dune and northern harriers hunt for food from overhead.



## Reasons for dune loss

Storms and strong winds can change the way sand dunes look and even push them inland.

One of the major causes of sand dune change is trampling by people. People walking and playing on sand dunes damage the marram grass that holds the dunes together.

In fact, it takes only ten footsteps to kill a marram grass plant. This means that the sand is no longer held in place and can be blown away, thus damaging the dune habitat.



## What you can do to help the dunes:

### Visit the Park

Visit the national park- you can learn more about dunes at the Greenwich Interpretation Centre, or participate in an interpretive activity

### Use Boardwalks

Use the provided boardwalks and paths to get to the beach

### Share

Let others know about our amazing dune systems

### Save the Grass

Stay off the dunes to prevent damaging the fragile marram grass

## Efforts to Conserve the Dunes at PEI National Park

Parks Canada uses a variety of methods for protecting the dunes. Some areas are given special protection and are closed to visitors completely.

In other areas, boardwalks have been installed for visitors to use instead of walking on the dunes to get to the beach, as seen in this picture.



Damaged areas are sometimes restored with the planting of marram grass.

Perhaps the best form of protection is education. Many people do not realize the effect their actions are having on the dunes. Park interpretation programs are a fun way to learn, and signs around the beaches and dunes help too!

## Want to know more?

### Prince Edward Island National Park

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Website: [www.parkscanada.gc.ca/pei](http://www.parkscanada.gc.ca/pei)

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