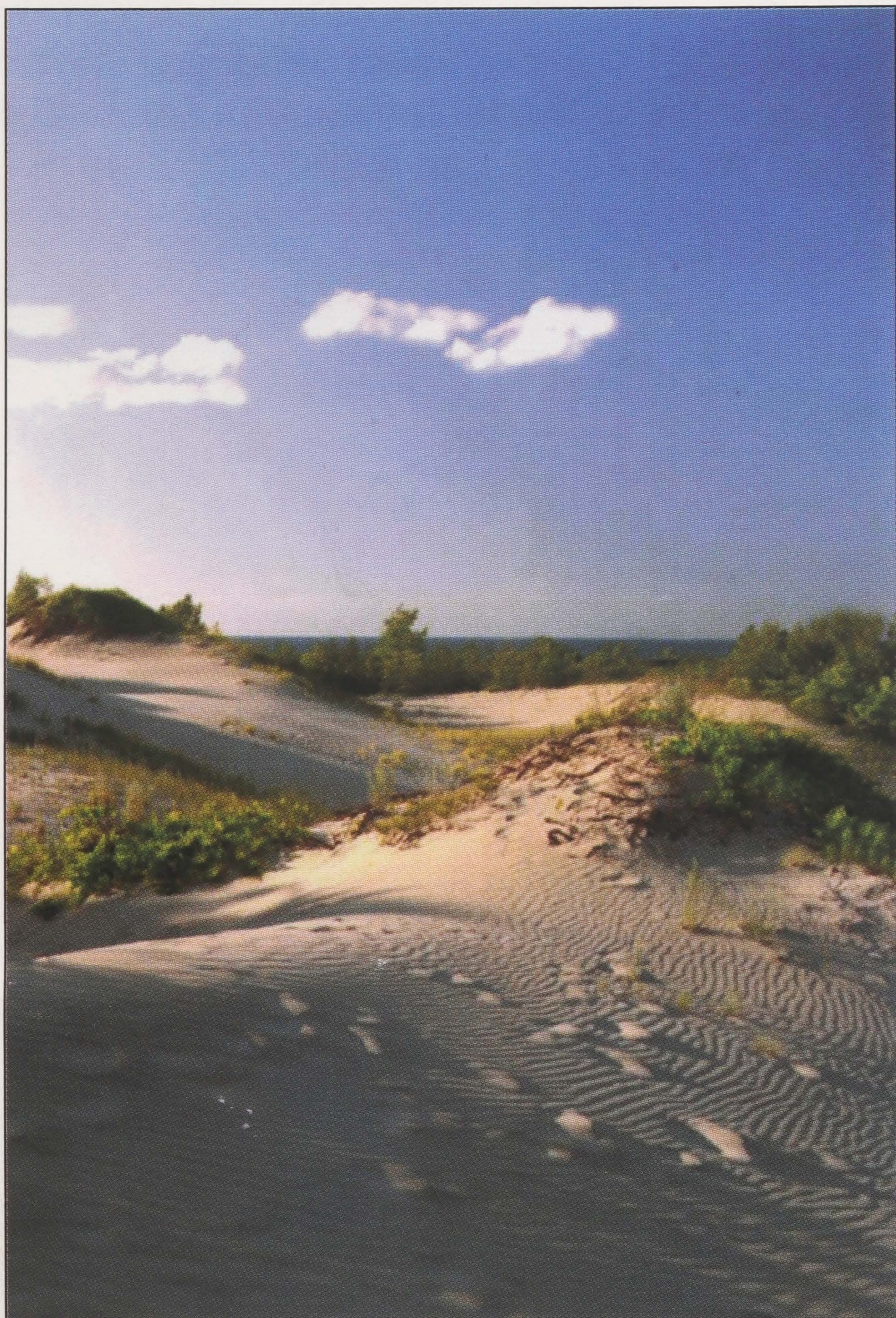


Sandbanks Dunes Trail



Hoary Puccoon

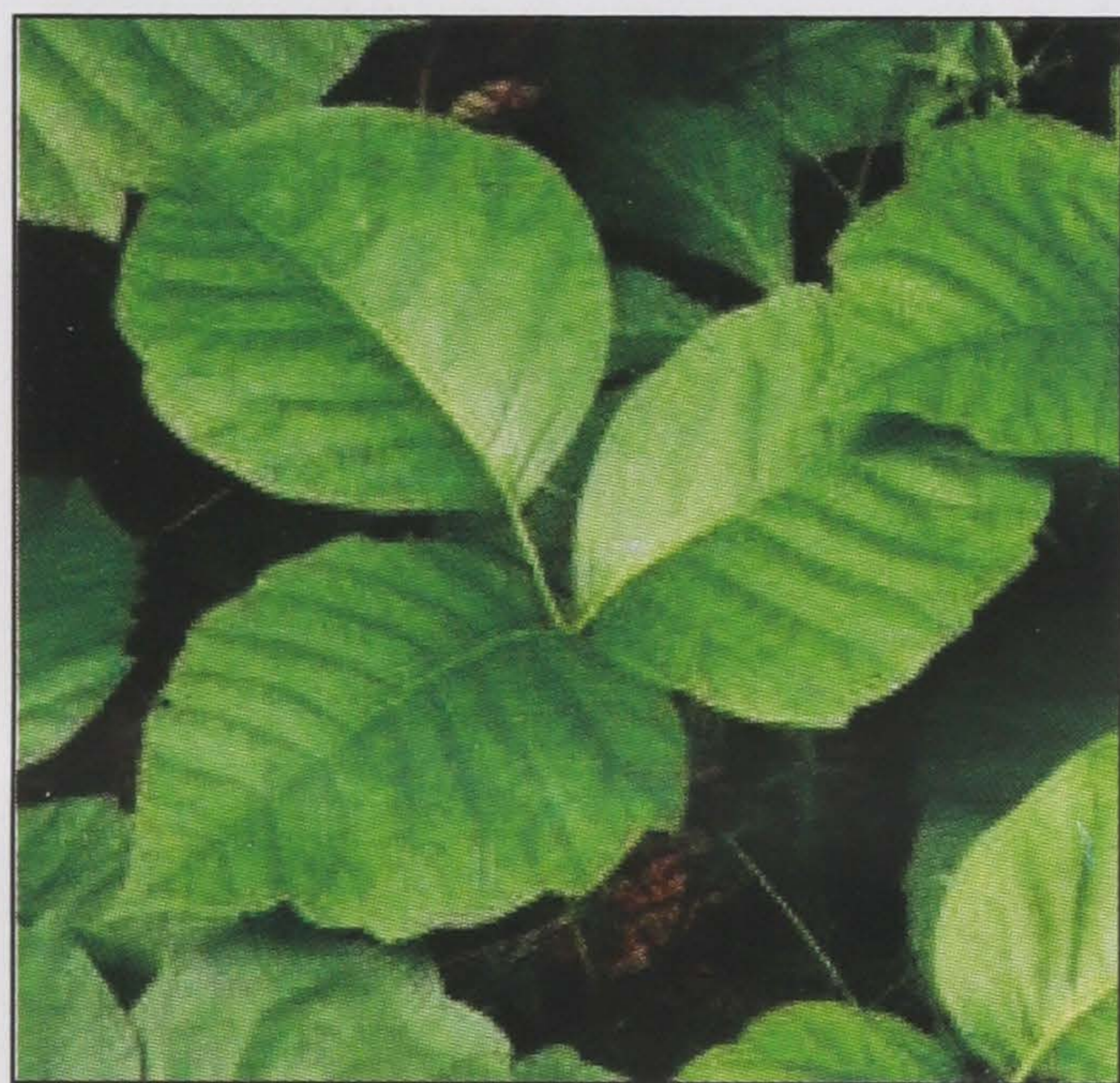


Red Fox

Welcome!

This 2.5 kilometre trail loops through a unique and fragile dune habitat and travels along the edge of several pannes. The dune system is the largest of its kind in the world and the pannes are a rare wetland habitat that supports wildlife and unusual flora.

In addition to the main trail, there is also a one-kilometre barrier-free trail. We ask that you please stay on the trail to minimize your impact and to avoid **Poison Ivy**, which is common throughout the area.



Poison Ivy
"Leaves of 3,
Let It Be"

This guide corresponds to numbered posts along the trail, which will provide some insight into the world's largest freshwater **baymouth barrier dune system**.

1. The Great Divide

At this point, you can choose the main trail to your left (a two kilometre loop) or the barrier-free loop trail (one kilometre) to your right. The panel here describes the formation and significance of the area that you are going to walk through.

2. Sand Dunes: Recreation or Resource?

The area below you is a **panne**, a unique wetland that can be full of water at certain times of year, but can dry up completely at other times. Although we have many natural pannes at Sandbanks, this particular one is artificial.

Initially, the bar you are standing on was Crown Land. The West Lake Brick Factory operated here in the 1900's, until sand threatened to bury the building. More recently, an agreement was put in place that allowed sand to be removed for the production of cement. Public opposition caused the cancellation of this lease and instead, the area was protected under the Ontario Provincial Park system for the future enjoyment of all.



While the removal of the sand destroyed one of the largest dunes in this area, it did create a panne in its place. This is now home to many plants and animals, some of which are rare in Ontario.

4. The Natural Pannes

The area in front of you is one of the many natural pannes that can be found along the bar. Full of water in spring after the snow melts and spring rains, this



American Toad

area is a diverse wetland, with breeding frogs, birds, insects and other wildlife. The water level is also connected to Lake Ontario; sudden changes can occur after heavy rains as well. Generally, as we go from summer into fall, the area begins to dry up, and in some years, the water may disappear completely. The plants and animals that live here must be able to adapt to these changing conditions. In dry years, tadpoles may not have enough time to emerge as frogs and toads; fish aren't able to live here at all.

If you look closely at the area, you will see that trees tend to prefer slightly raised areas called hummocks, where the water fluctuations are less. Wildflowers often grow here as well, taking advantage of the less extreme conditions.



Fringed Gentian

Many of the plants that grow in the pannes are not commonly found in other habitats. The showiest ones tend to flower in August and September, and in some years, can turn the pannes into subtle shades of purple.

5. Between Two Worlds

The trail crosses a small dune at this point, with pannes on one side and a forest on the other.

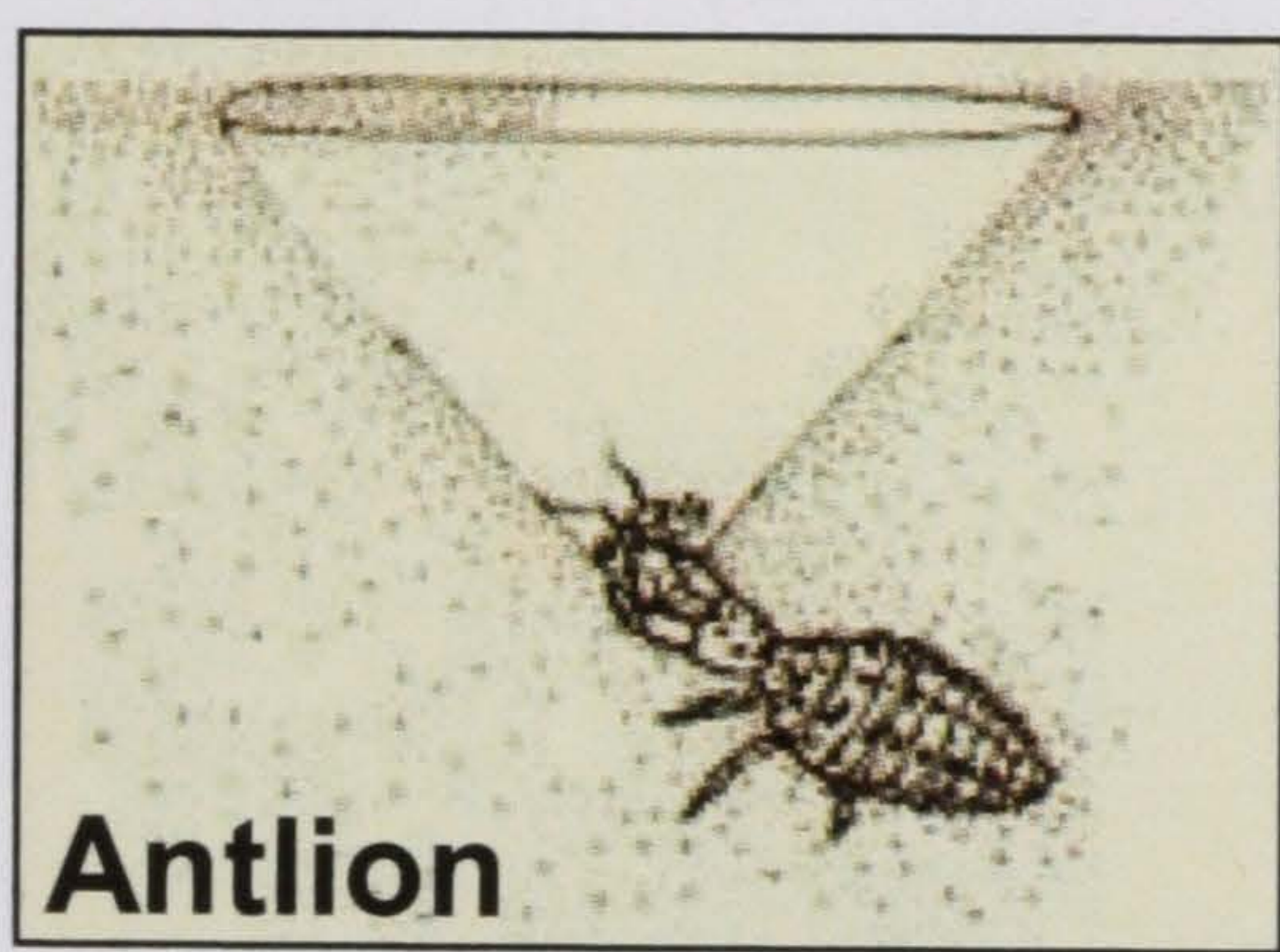
The dunes themselves are a difficult place for plants to survive. Hot, dry, shifting, nutrient-poor sand makes for poor growing conditions. Plants that do manage to



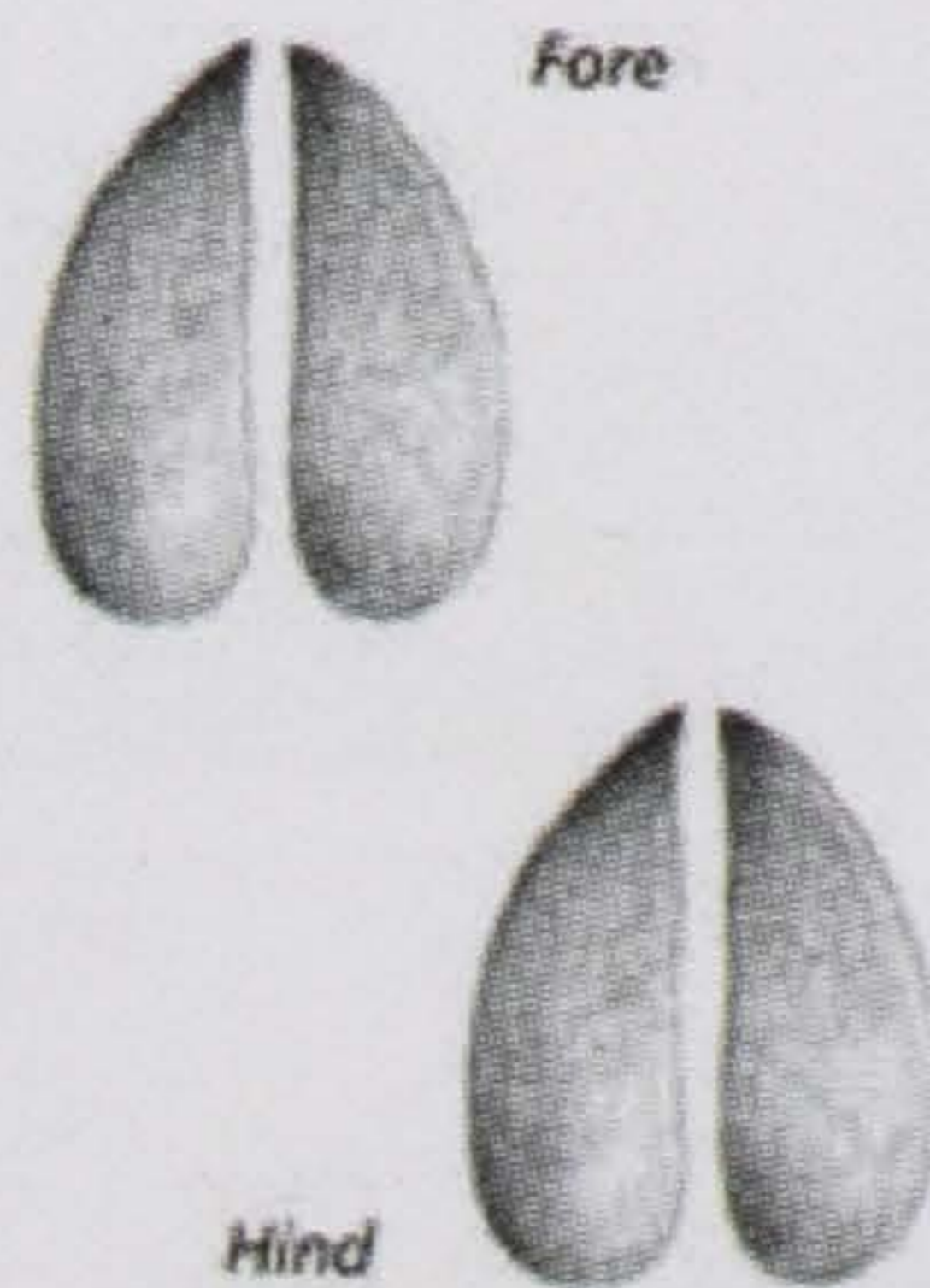
Wormwood

live here must be specially adapted to this habitat. Wormwood has tiny white hairs that reflect heat from the surface of the plant, while Wild Grape leaves have a waxy cuticle or layer that prevents moisture loss. Star-flowered Solomon's Seal's stiff leaves create a funnel effect which directs dew and rainwater down to the roots.

Animals also have a difficult time in this harsh environment. Wolf Spiders build deep holes in the sand, only emerging at night to chase down their prey. Antlions



build cone-shaped pits and lie under the surface of the sand, awaiting small insects to fall into their traps.

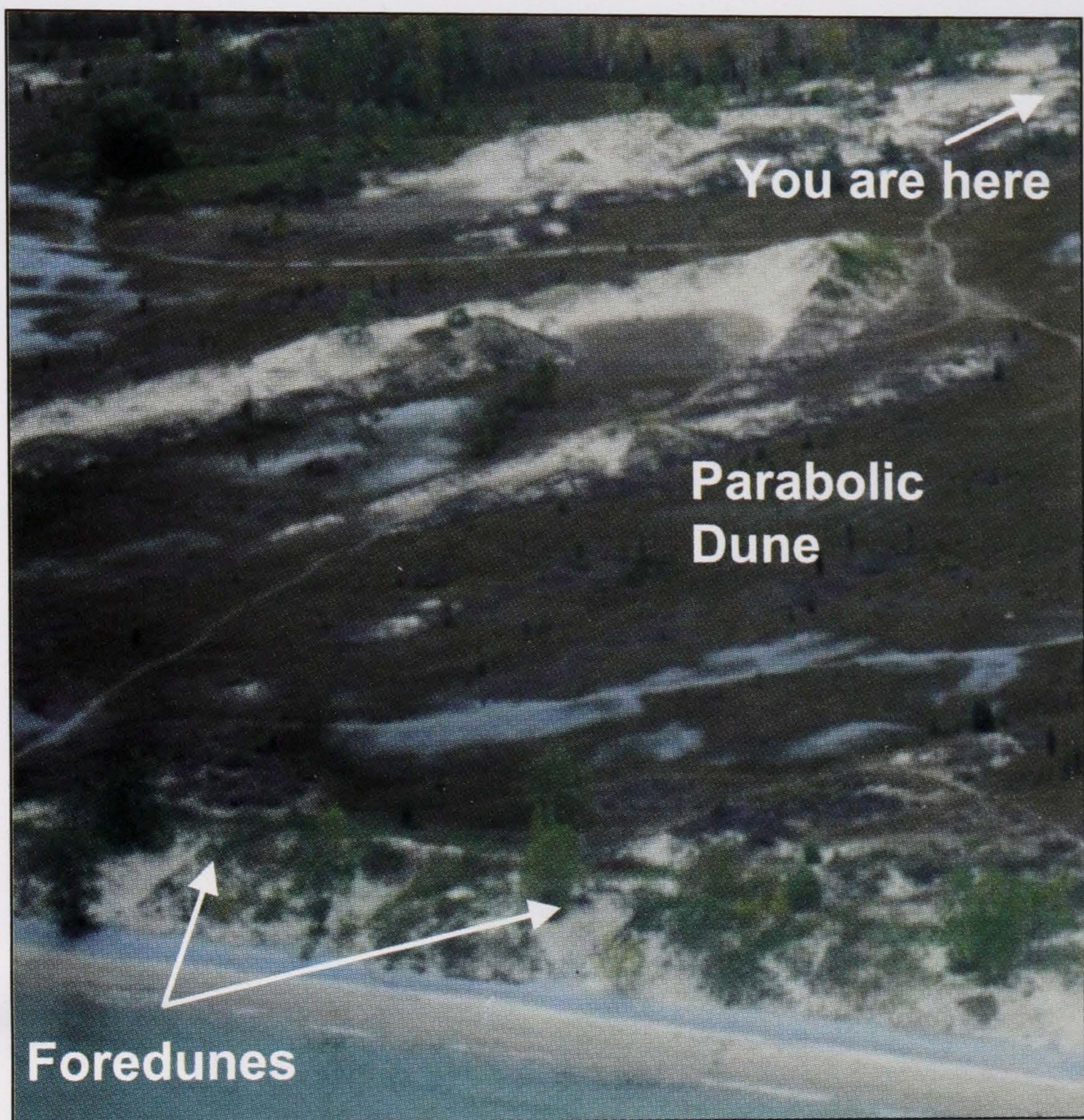


Other than invertebrates, there aren't many animals that would call the open dunes home. Many live in the more inviting forested areas, travelling back and forth to drink and feed in the pannes. White-tailed Deer (above) and Wild Turkey (below) tracks are commonly seen, but look also for foxes, rabbits, snakes and even turtles!



6. Marching Across the Landscape

The dune about 300 metres in front of you is an unusual formation called a **parabolic dune**. It's difficult to see from the ground, but an aerial view shows the characteristic horseshoe-shape of this moving landform.



The foredunes (the small, protective dunes found directly behind the beach on Lake Ontario) are extremely important for protecting the bar behind them. Severe storm events or disturbance by people can create a **blowout** – an area where the natural vegetation has been removed. Once this happens, wind acts on the area and the sand begins to move inland.

The prevailing southwest winds drive the isolated, parabolic dune across the sand bar. The "head" moves more quickly than the "tails," which are more vegetated, slowing the movement of sand. This difference in plant cover - and therefore sand movement - is what creates the horseshoe shape of the parabolic dune.

7. What Lies Beneath

Healthy dune systems are not stable habitats. They are constantly shifting and changing, with the natural plant cover trying to hold them in place. Sandbanks has also had its share of man-influenced movement. Buried soil lines are one of the indicators of these movements.



A buried soil line shows where the surface of the ground used to be. They are most easily seen on the side of the dune, and you can imagine the line continuing into it. They are darker in colour because they are the organic remains of the plants that were growing there.

8. As You Return

At this point, the trail joins the barrier-free loop again. You can take either direction back to the beginning of the trail.

We hope you have enjoyed discovering more about this significant landscape. You are welcome to keep this guide, but if you have no further use of it, please return it to be used again.