Isle Royale

National Park Service U.S. Department of the Interior

Isle Royale National Park

NATIONAL PARK SERVICE

Windigo Nature Trail

Welcome to the Windigo self-guided nature trail. This trail is a one mile loop that begins near the store.

Have you experienced changes in your life? What influences have shaped the person you are? The Windigo area, too, has been altered by numerous influences. Along this trail you will explore some of the forces that have shaped the island landscape you experience today.

1. Members Only

Look towards the store and then at the photograph. If it was 1910, the large building pictured would be right in front of you. You might have seen wealthy men dressed for outdoor pursuits lazing on the big front porch, smoking cigars and enjoying the view. This was the Washington Club, an exclusive hunting and fishing lodge for Duluth businessmen. Times have changed and Windigo is no longer "for members only." Since the turn of the century other things have changed as well. As you walk, pay attention to what else has changed since this photo was taken.



2. Look to the Trees

Take a moment to observe the forest scene in front of you. What do you notice about these trees? Most of these trees are the same species and are about the same size, and therefore the same age. Aspens, like these, are among the first trees to grow after a disturbance. Human disturbance cleared this area years ago; and sun-loving aspens soon began to grow. As these aspens age, a new forest of evergreen trees is waiting beneath. As the forest grows it disguises past human disturbances. Can you spot where humans have influenced the landscape?

3. Copper Fever

What change to the landscape do you see beyond the sign? This large mound was not naturally formed. Beneath the ground cover is a large pile of rocks and soil moved by human hands. Why were these rocks moved? Turn around and look behind you. This trench was made by miners searching for copper. If it were the early 1890's you would have seen the employees of the Wendigo Copper Company digging this costean with hand tools. Think about the hours of labor, the buckets of sweat, the blistered hands and the aching backs it took to produce trenches like this one. Unfortunately, the digging did not produce any signs of copper and the company folded after a few short years. But, humans are not the only ones with the ability to influence the landscape. As you walk, watch for signs that other animals have altered the forest.

4. Bonsai Trees



What do you think is wrong with these evergreen trees? They have been eaten! Balsam fir, like these, are the main food source for moose during the winter. When moose population is high, the fir trees become over-browsed. On the western half of the island, moose browsing creates stunted trees that will never reproduce. These trees may be upwards of forty years old. By their food choices, moose influence forest composition. In 1995 there were 2400 moose on the island – now that's a huge influence! High moose population caused rapid changes to the forest. But not all changes happen quickly. Some take a long time.

5. Slowly but Surely

This rock is being returned to the soil. Lichens growing on them create acids that help break down the rock. After lichens exert their influence, mosses are able to gain a foothold by growing on the rock where soil has been created. This powerful change occurs slowly; lichens on rock grow an average of 0.5-2 millimeters each year. Over 600 species of lichens, some growing on rock, some on trees, some on the ground, are found on Isle Royale. As you continue look for evidence that lichens are exerting their influence on the rocks.

6. Life after Death

Just as rocks are slowly changed to soil, dead trees are recycled into the forest. Many trees that sprouted after the land was cleared by miners and resort owners are now just standing snags. These dead trees become nurseries for life, as they provide habitat for many species. Who has been working on the snags in front of you? Large rectangular holes are evidence of pileated woodpeckers (above) in search of ants. The small circular borings indicate where yellow-bellied sapsuckers (below) drilled for a sugary snack. With all its snags, Windigo supports a large population of woodpeckers – six species in all. Look for other changes in the forest that might provide habitat for varied species.



7. When a tree falls...

Small changes in nature can have a large impact. A cedar tree has fallen, allowing sunlight to penetrate into this dark forest. Perhaps it was blown over in a violent wind storm or toppled by the weight of heavy snow in its branches. Light-loving trees, such as tag alder and yellow birch, have taken advantage of a break in the canopy of cedars; and have grown quickly. Blowdowns, like this one, influence structure of the forest by creating a mosaic of habitats. What other factors might shape forest variety?

8. Walk the Line

Look to your left. Now look to your right. What are some differences you notice between the forests on either side of you? To your left, the wet lowlands are dominated by cedar. To the right is higher, drier ground, covered by hardwood trees. You are on an edge; at a change in the forest. Topography shapes the forest. The lava ridges provide habitat for certain species, the poorly-drained valleys in between provide for others. Many species of plants in the uplands need significant amounts of soil to grow. Lichens cannot take all the credit for creating the soil. But if lichens did not make all this soil, where did it come from?

9. One of these things doesn't belong...

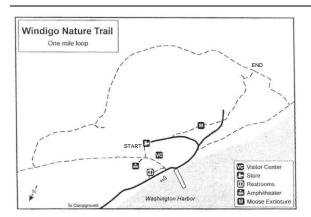
What is this big rock doing here, and what does it have to do with the soil? Thousands of years ago, glaciers covered these islands. As they advanced and retreated, glaciers had an enormous influence on the land. They carved valleys between lava ridges and brought foreign rocks from the North, like the erratic in front of you. The most recent glacier receded slowly, leaving large deposits of soil and rocks of every size on the western end of the island. Deep rooted trees like sugar maple and red oak took hold in the thick rich layer of glacier till. Melting glacial ice created an enormous lake, isolating Isle Royale from the mainland and forming many miles of shoreline. Where would you like to live...here in the forest surrounding you or the approaching shoreline?

10. A Superior Challenge

Not everyone is interested in waterfront property. Some species, like the yellow birch in front of you, prefer the warm summer temperatures here to the cooler, breezy shorelines. But even inland, the influence of Lake Superior on the island is profound. Species of mammals that would normally utilize these yellow birches: deer, porcupine, raccoon and bear, were unable to make the crossing from the mainland. Even some trees, like hemlock, have been excluded. The island ecosystem is relatively simple because of the lake's insurmountable barrier to many species. If you are lucky, you may see signs of moose and red squirrel, the most commonly seen of the nineteen species of mammals on the island. Although Lake Superior guards Isle Royale, it cannot protect the island from some recent influences.

11. A Never-ending Story

Influences continue to shape Isle Royale. Just as you continue to change, so does this island. Today, many of the influences on this place are human-driven. Invasive species, air pollution and climate change have the potential to dramatically alter this protected island. How might we maintain the fragile balance between the outside world and Isle Royale National Park? What will your influence on this landscape be?



Returning to Windigo

To get back to the Visitor Center, you can go straight which will lead you to the shoreline; or you can turn right to go through a fern gully, the moose exclosure and end up behind the Windigo Store. On your way back, move with the land and see with new eyes the influences that shape Isle Royale National Park.

Help reduce our impact on the Earth by returning this brochure.