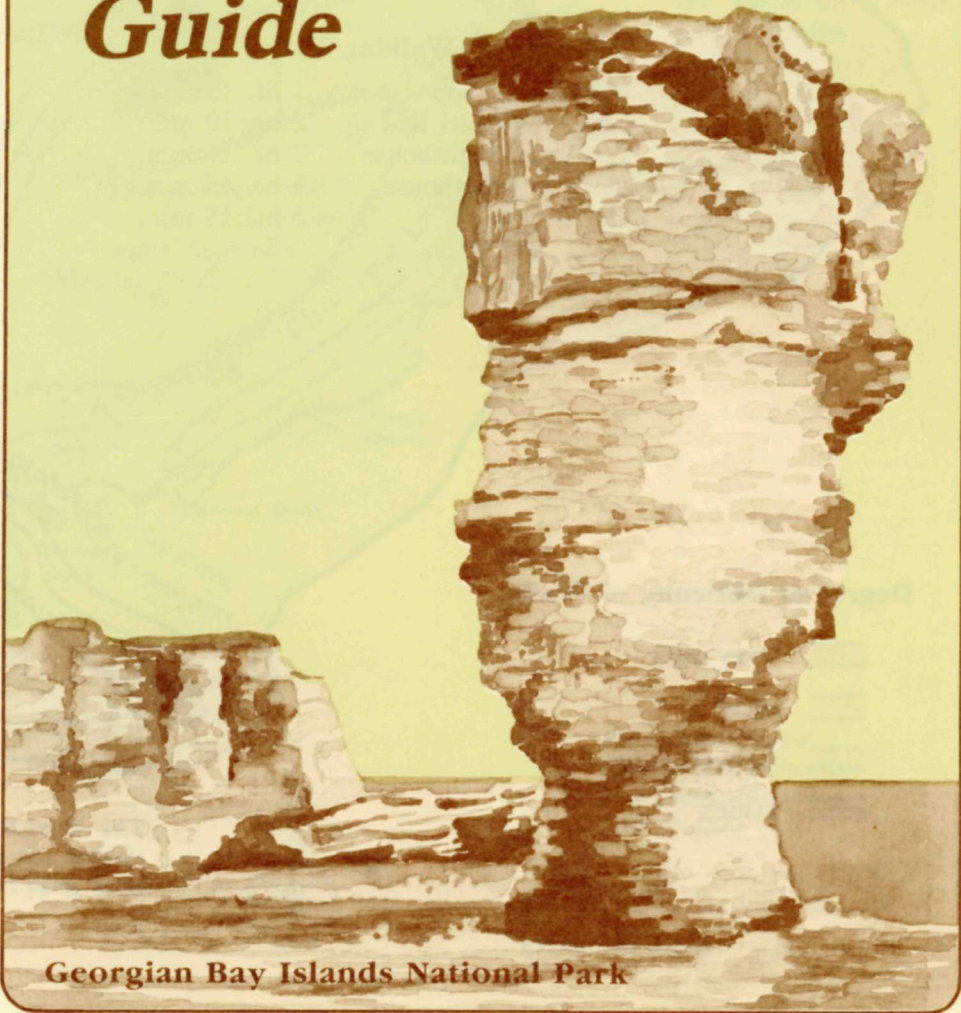




Parks  
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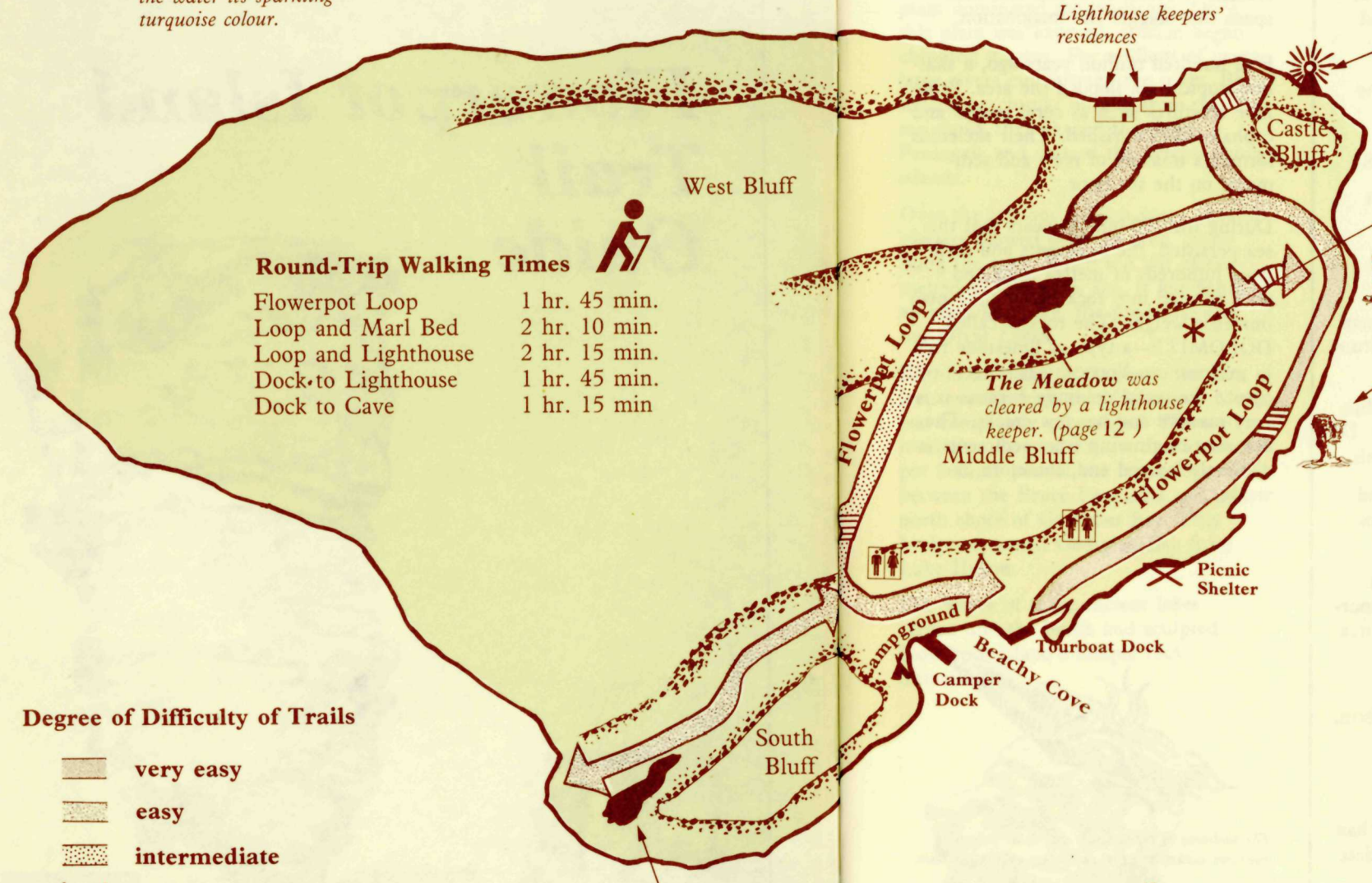
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# *Flowerpot Island Trail Guide*



**Georgian Bay Islands National Park**





Dissolved limestone gives the water its sparkling turquoise colour.

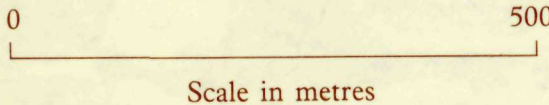


**Round-Trip Walking Times**

Flowerpot Loop	1 hr. 45 min.
Loop and Marl Bed	2 hr. 10 min.
Loop and Lighthouse	2 hr. 15 min.
Dock to Lighthouse	1 hr. 45 min.
Dock to Cave	1 hr. 15 min.

**Degree of Difficulty of Trails**

-  very easy
-  easy
-  intermediate
-  stairs



**The Lighthouse** marks the main channel between Georgian Bay and Lake Huron (page 17 )

**The Cave** was formed 4000 years ago when the lake was 30 metres higher than it is today. (page 7 )

**The Flowerpots** were once part of the bluff. (page 6 )

**The Meadow** was cleared by a lighthouse keeper. (page 12 )

**The Marl Bed** is a shallow, soft-bottomed pond. (page 11 )

**Flowerpot Island** became part of Georgian Bay Islands National Park in 1930.



## Before You Go:

Consult the map in this brochure. It gives you the approximate times needed to hike the trails. Because parts of the trails are rugged, we recommend durable and comfortable footwear. Remember, there are no stores on Flowerpot Island, so pack everything you need before you leave.

## A Few Simple Rules:

1. Fire is a constant hazard. Do not smoke along the trails.
2. The forest floor is very delicate. Please stay on the trails.
3. Please do not touch the wildflowers. Leave them in their natural environment for others to enjoy.
4. A national park protects all wildlife. Please help by leashing your pet. Do not feed or touch the wild animals.
5. Rocks, fossils, and even driftwood are all a part of this park. Do not collect them.
6. Burn only the firewood provided. Fallen trees and branches are important ground cover for wildlife. Fires are permitted in designated fireplaces only.
7. Cave features take centuries to form, but can be destroyed in seconds. Please view the cave from the platform.

There's more to Flowerpot Island than meets the eye. Some of its secrets date back millions of years. This guide reveals some of the island's past.

## THE ROCKS

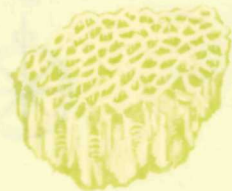
The bizarre rock features of the island reflect the rocks' variable resistance to erosion—a result of events and time spans that stagger the imagination.

Five hundred million years ago, a shallow tropical sea flooded the area. Primitive creatures such as coral polyps and cephalopods flourished. Their skeletons formed a mixture of reefs and sediments on the sea floor.

During the 100-million years that this sea persisted, the sediments and reefs grew hundreds of metres thick and were pressed into rock under their own immense weight. The rock is called **DOLOMITE**—a type of limestone rich in magnesium. You can easily recognize the reefal dolomite because it is very massive and has few cracks. The dolomite originating from sediments is distinctly layered and, therefore, is weaker.



*The skeletons of cephalopods and other primitive creatures accumulated as sediments on the sea floor.*



*Coral polyps secreted skeletons, which fused together and formed coral reefs.*

# Erosion, the Age-old Sculptor

After the sea receded, a large dolomite plain dominated the landscape. Once this plain was exposed, erosion began chipping it away. For millions of years, large rivers cut through the plain. By separating chunks of land from the mainland, they shaped the Bruce Peninsula and created the neighbouring islands.

Over the last one million years, several glaciers plowed over the area, crumbling the rock. When the last glacier melted 13,000 years ago, it left behind an enormous lake, the predecessor of our Great Lakes.

Within the last 10,000 years, the lake level rose so high that Flowerpot Island was completely submerged. The water level also dropped so low that Flowerpot became part of the landbridge between the Bruce Peninsula and the north shore of Georgian Bay. This bridge separated Georgian Bay from Lake Huron.

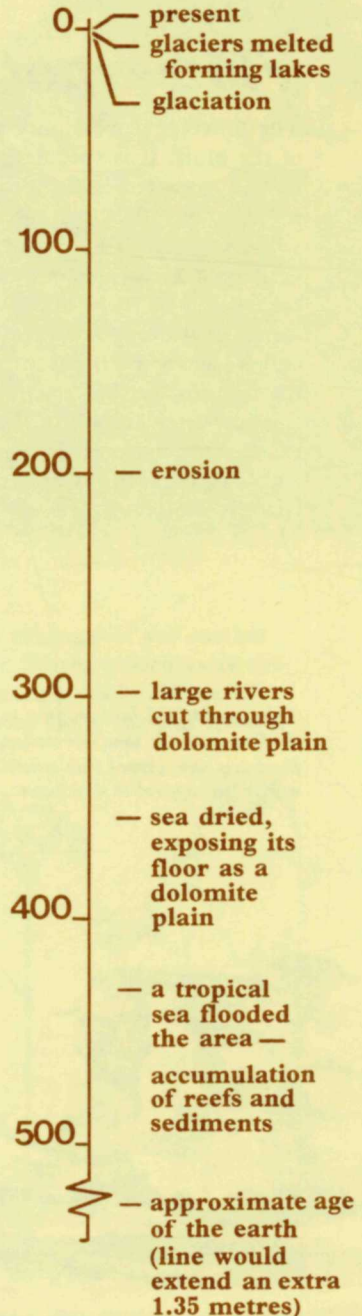
The waves of these ancient lakes carved into the bluffs and sculpted Flowerpot Island's unique rock formations.



*Waves of an ancient lake carved the Lion's Head into the face of Castle Bluff.*

## Time Scale

Age in millions of years





## *The Flowerpots*

The flowerpots were once part of the bluff. It is speculated that they started to form as recently as 1500 years ago while submerged in the lake. Underwater currents cut vertical fissures in the bluff. As the water level dropped, waves and frost dug even deeper into the fissures, further separating the pots from the bluff. Today the flowerpots stand as awkward decorations of the island's shoreline.

*Today, waves and frost continue to carve the flowerpots. To slow this erosion, the flowerpots were capped with concrete and mortar was applied to their bases.*



## The Cave



The cave, now 30 metres above the shore, is evidence of yet another ancient water level—one from 4000 years ago. Waves eroded away the softer bedded dolomite, leaving behind the stronger rock of the cliff above. Today the same process is forming caves along the shoreline of South Bluff by Beachy Cove.

The cave has been carved into the wall of a north-facing bluff. It receives little sunlight and the massive rock never shakes off the chill of winter. Even on a hot day, the air is cool and moist.

Notice the flowers blooming around the base of the cave. Because of the cool air, they bloom later here than they would in warmer spots on the island.



*Bird's-eye Primrose*

*Harebell*

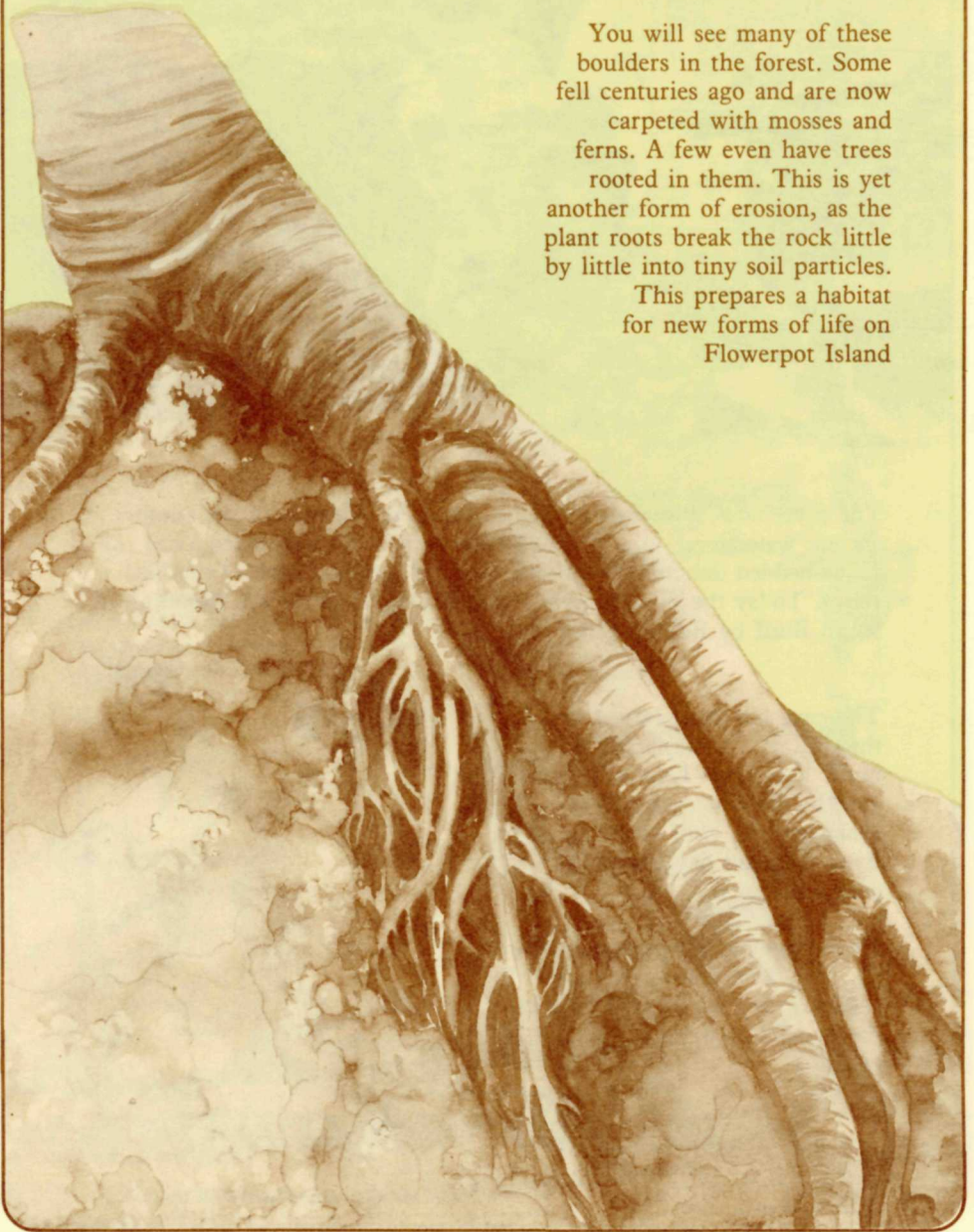
*Some of the late bloomers at the cave.*



Ice and frost action also continue to shape Flowerpot Island. As water in the cracks freezes, it expands with enough force to pry huge overhanging boulders off the bluffs, sending them thundering below.

You will see many of these boulders in the forest. Some fell centuries ago and are now carpeted with mosses and ferns. A few even have trees rooted in them. This is yet another form of erosion, as the plant roots break the rock little by little into tiny soil particles.

This prepares a habitat for new forms of life on Flowerpot Island



# LIFE ON FLOWERPOT ISLAND

The forest on Flowerpot Island is young and the trees are still struggling to establish a grip in the shallow soil. They take root in the rock crevices but are often blown down by high winds. Each time a tree falls, a patch of forest is opened up to sunlight and shrubs and flowers begin to flourish.

The forest on Flowerpot Island is more than just trees. It is a living community of plants and animals, including reptiles, birds, and insects.

## Flora

You can visit Flowerpot Island anytime between May and September and see a display of wildflowers. If you stayed a while, you would notice different species coming into bloom as the days change in length. This chart shows the approximate flowering times of several wildflowers. These dates may vary from year to year, of course, and they depend upon the exact location of the flower.

Flower/time	May	June	July	August	Sept.
Bird's-eye Primrose		—	—		
Columbine	—	—			
Fringed Polygala		—	—		
Herb-Robert			—	—	
Harebell		—	—	—	
Green-leaved Rattlesnake Plantain				—	—
Large-leaved Aster				—	—



*Round-leaved Dogwood*



*Fringed Polygala*



*Herb-Robert*



*Large-leaved Aster*



*Green Spleenwort*



*Common Polypody*



## Ferns

Many plants are very selective about where they will grow. Some ferns are rare because they will grow only in the cool, moist shade of limestone bluffs. Many orchids will survive only if a specific soil fungus infects their roots. This is a delicate partnership where the orchid provides food for the fungus and the fungus helps the orchid to absorb soil nutrients. Some orchids may take up to 16 years from seed to flower.



*Rattlesnake Fern*

*Northern Holly Fern*



Please protect the delicate forest floor by staying on the trails. The healthiest wildflowers are the ones left untouched.

## Orchids



*Green-leaved Rattlesnake Plantain*



*Alaska Orchid*

*Calypso*



*Spotted Coralroot*

## *The Marl Bed*

The marl bed is a shallow, soft-bottomed pond. Dissolved limestone settles out of the water and forms a mucky, marl bottom.

One would expect a pond this shallow to be clogged with plants, but few grow here in the orange-colored water. The dissolved limestone makes the water unsuitable for most common aquatic plants. Even around the fringe, where it is drier, only the most specialized plants can survive the extreme conditions of the marl bed.

*The Horned Bladderwort and the Fringed Gentian grow around the fringe of the marl bed.*





## How's Your Time?

At the junction to the lighthouse, stop to check your watch. You've reached the halfway point along the Flowerpot Loop. Can you take an extra 20 minutes to visit the lighthouse?

### *The Meadow*

Nestled between Middle Bluff and Castle Bluff, this deep valley was a trap for glacial till and lake sediments. The accumulated layers of sand and gravel formed a thick base for a healthy soil, which was perfect for a lighthouse-keeper's garden. Today a single apple tree is all that remains of that garden.

Until the mid-seventies, the lawn here was maintained meticulously throughout the summer. Now nature landscapes the meadow.

Wildflowers alien to Flowerpot Island have invaded. You may

recognize many as common garden weeds. They thrive on the bright sunlight and out-compete Flowerpot's native plants.

The meadow is changing constantly. The encroaching aspen saplings you see around the fringe will eventually shade out the weeds. When this happens, the shade-loving native wildflowers will again carpet the meadow.

The meadow has changed a great deal since the mid-seventies. Imagine the difference by the mid-nineties!



## Flowerpot's Wildlife

Flowerpot Island is 4 kilometres and 8000 years away from the mainland. This isolation has created an unusual population balance in the island's wildlife. Some animals, such as the red squirrel, the snowshoe hare, and the eastern garter snake, are unusually abundant, but several animals common to the mainland, such as raccoons and bears, are conspicuously absent. Foxes may venture across the ice from time to time, but for most animals the island is inaccessible.

The absence of particular animals explains why eastern garter snakes are so common on Flowerpot. With no weasels or skunks here, the snake has few predators and little competition for food—salamanders, insects, and frogs. The cavities between the rocks provide good cover and denning sites for these harmless snakes, and you will often see them sunning themselves, especially near Beachy Cove.





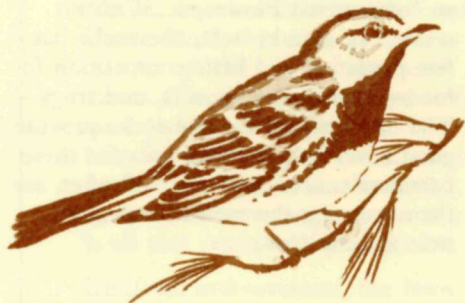
## Birds

Listen . . . .

You will likely hear more birds than you will see. Male birds sing energetically in May and June to establish their territory, and to attract a mate. By late July, mating is over and the birds are much quieter.

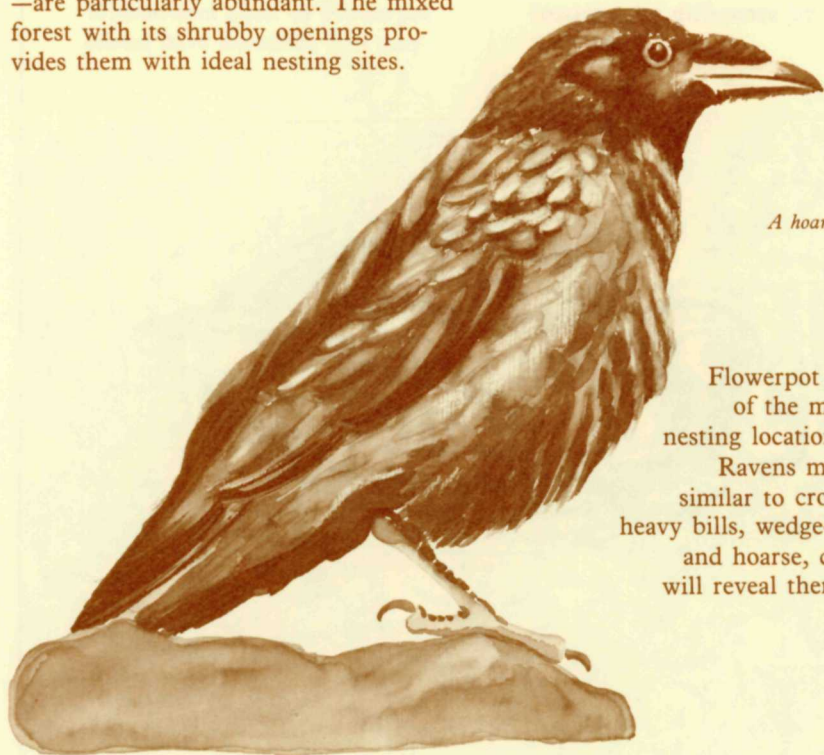


*American Redstart*  
Song: a weak "see see see seer"  
Colour: black with orange markings



*Black-throated Green Warbler*  
Song: "zee zee zoo zee"  
Colour: lime green with a black throat patch

Two warblers—the American Redstart and the Black-throated Green Warbler—are particularly abundant. The mixed forest with its shrubby openings provides them with ideal nesting sites.



*A hoarse crow?*

Flowerpot Island is one of the more southerly nesting locations for ravens.

Ravens may seem very similar to crows, but their heavy bills, wedge-shaped tails, and hoarse, croaking cries will reveal them every time.

## HISTORY

### *An Autumn Fishing Camp*

Local legend says that the Indians avoided Flowerpot Island because its mysterious caves and unearthly rock formations were shrouded in ancient taboos, but artifacts from a seventeenth-century Algonquian autumn fishing camp dispute this. The remains of 22 kg (50 lb.) lake trout were found here on Flowerpot Island.

The Indians fished with nets made from the fibres of nettle plants. Stone sinkers attached to the bottom line held the net to the lake bottom while pieces of wood floated the net to a vertical position. As the fish swam along the lake bottom, they became entangled in the net.

Lake trout were plentiful then, but the introduction of sea lamprey into the upper Great Lakes has reduced their numbers significantly.





## Shipwrecks and Lighthouses

During the mid 1800s, shipping was the primary means of transporting lumber, cereal, and grain. The shoal-lined channels here posed hazards to navigation even on the best days. Thick spring fogs, autumn gales, and poorly charted waters resulted in the loss of many ships and lives in this area.

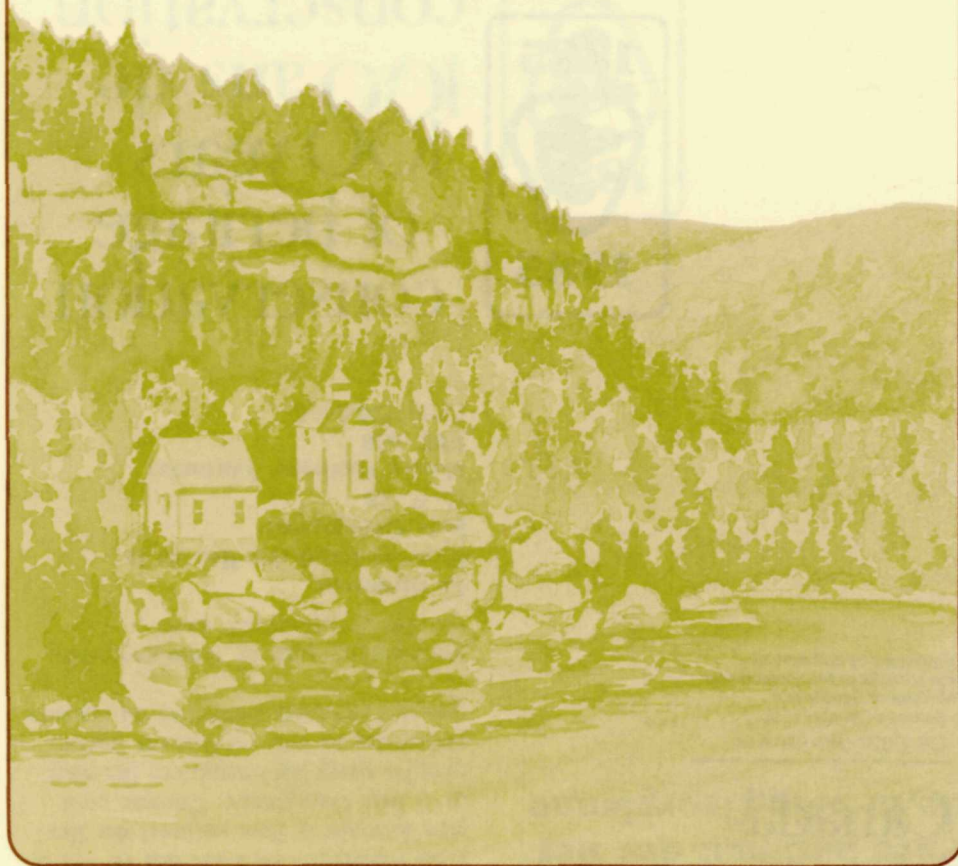
In 1882, the barque *Arabia* ran aground on Flowerpot Island, but was not damaged seriously. Two years later, however, it foundered during a gale and now rests in 30 metres of water just 3 km west of Flowerpot Island.

*The Arabia's rigging*



To improve navigation, the waters were charted and lighthouses were built. These lighthouses are still functional. From the trail to the lighthouse deck, if you look west, you can see the Cove Island lighthouse faintly. These two lights mark the main channel between Georgian Bay and Lake Huron.

*The first lighthouse keeper on Flowerpot Island lived in the base of the lighthouse. The original structure was replaced in 1969.*





# Georgian Bay Islands National Park

Flowerpot Island is one of more than 70 islands in Georgian Bay Islands National Park. Like all national parks, these islands are preserved as a significant part of Canada's landscape.

For more information contact:

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