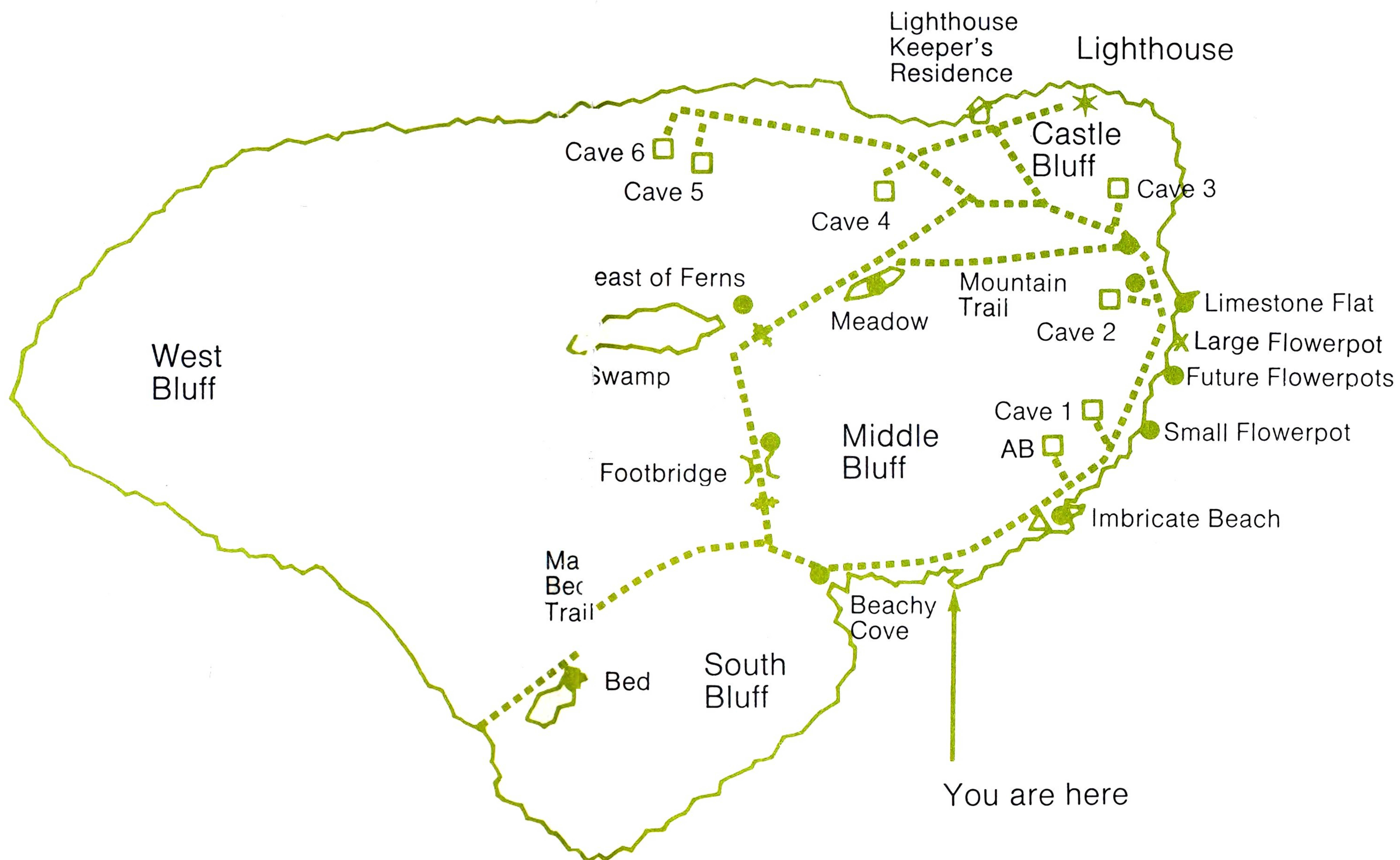




Flowerpot Island

Self-guiding Trail

**Georgian Bay Islands
National Park**



500 0 500 1000
Scale in feet

- Stops described in pamphlet
- ▲ Picnic shelter
- ↕ Stairs
- Caves

Take nothing but pictures . . .
leave nothing but footprints.

Flowerpot Island

A reminder . . .

Fire is a constant hazard on Flowerpot Island.
Please help protect this area, by refraining from smoking along the trails.

Flowerpot is an island of white rock. It has cliffs, caves and flowerpots. These cannot be found on the other 49 islands of Georgian Bay Islands National Park which are all of ancient Canadian Shield rock. Just why Flowerpot Island is unique can be discovered while hiking its trails.

The stops for the self-guiding trail are not marked but can be recognized by referring to the map on pages 2 and 3. The first stop is near the picnic shelter. It will take an hour, at a leisurely pace, to go to the large flowerpot and back. If you wish to go further, allow 20 minutes for returning to the dock from Cave 2. Two hours will allow you to make the 1-¾ mile loop around the island by way of the Mountain Trail.

As a suggestion, wear sturdy footwear. Exercise caution on loose rocks and in caves where it may be wet and slippery.

The Story of Flowerpot Island

Five hundred million years ago you would have seen the Canadian Shield lying here. Now it is hidden under Flowerpot Island. What happened?

First, the area was flooded with a tropical sea. Fragile animals lived in it – small, flower-shaped crinoids and corals like those that form reefs in the Caribbean today. As these animals died, they sank to the sea floor forming layers of skeletons. After



Rocky shoreline, an ideal spot for garter snakes.

millions of years, the layers got so thick and heavy, that they were pressed into rock. The sea drained and revealed its floor as a vast plain of layered rock called limestone. This is the “white rock” of Flowerpot Island. You can still see the layers and fossil corals in the rocks and cliffs around you.

Then, ancient seas cut the plain to form cliffs and valleys. The climate changed from tropical to arctic. Glaciers advanced and melted to form lakes which flooded the area, then slowly receded.

You can find traces on Flowerpot Island that all this happened. Let's start looking . . .



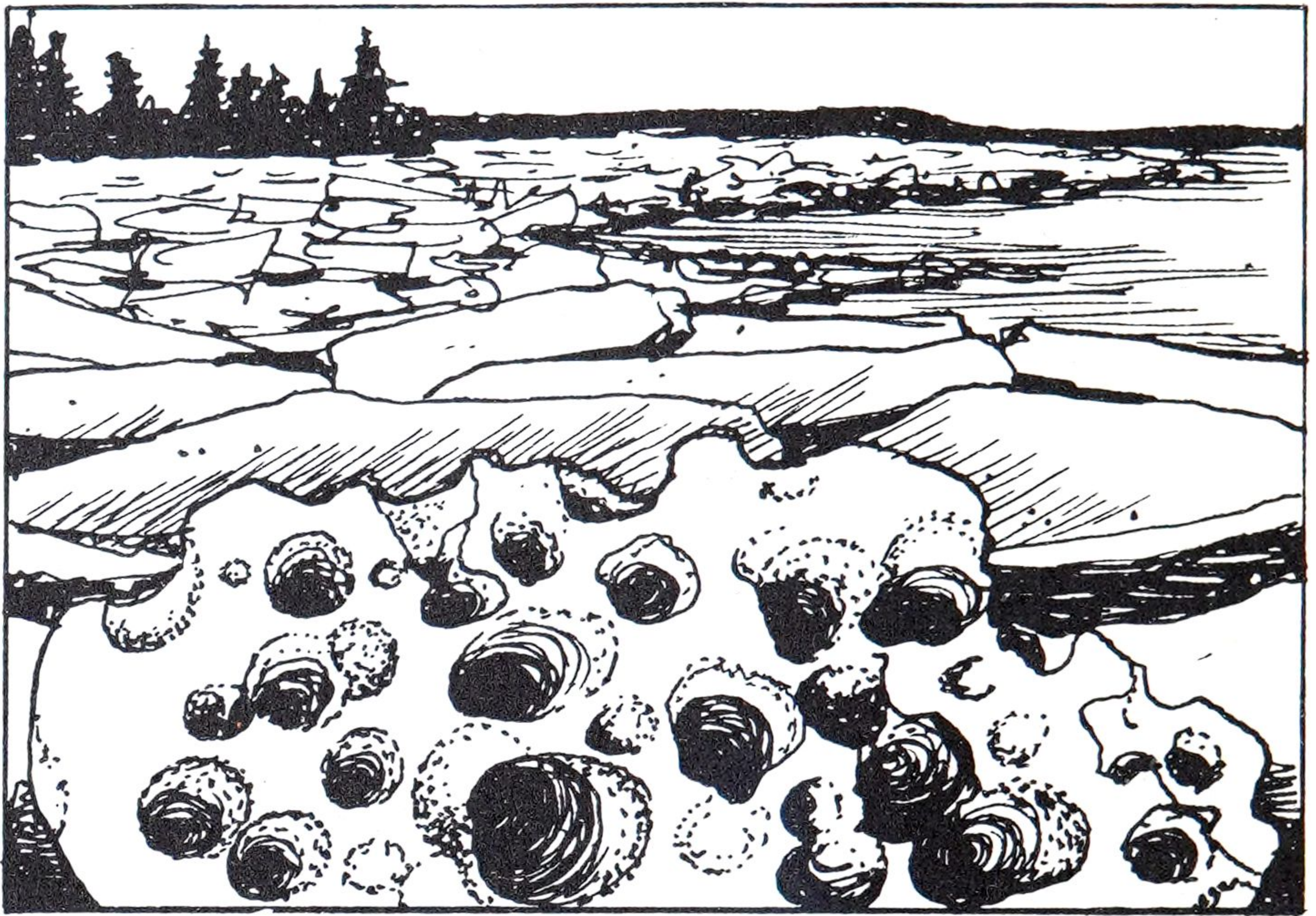
● **Imbricate Beach**

On Flowerpot Island, even the beaches are of limestone! The slabs beneath your feet have broken from the cliffs. This happened because limestone is a layered rock. Water or plant roots can wedge their way into cracks and force off a slab.

Why the name “imbricate”? The word means “shingled”. If you were to come here after a storm, the slabs would be arranged by the waves like the overlapping shingles of a roof.

Look West. You have an excellent view of the South Cliff or “Bluff”. This is one of the four bluffs making up Flowerpot Island. It is evidence that rivers did rage across the plain of limestone and

Waves constantly work at the rock, wearing away soft spots.



erode it into an irregular landscape. Today one half of South Bluff still lies below water.

Back on the Trail

The trail winds through a dense forest. In places you will see slabs like those on the beach, but there are also rounded boulders. Where did they come from? Picture Flowerpot Island as a three-storey building: the top storey is hard and crusty, the bottom two softer. The boulders have tumbled from the tops of the bluff. How do we know? They are of a hard, compacted limestone called dolomite. It makes up the upper parts of Flowerpot Island. The lower parts (from which the slabs came) are of softer, bedded limestone. Watch for these stacks of flat rocks along the trail.

● **Small Flowerpot**

This flowerpot was once part of the cliff you are standing on. That was thousands of years ago. When glaciers melted, lakes were formed that were higher than today. As levels slowly dropped, wave action carved away the cliff to leave a rock pillar standing out in the water.

With a little imagination, it does look like a real flowerpot, though the only flowers that it supports

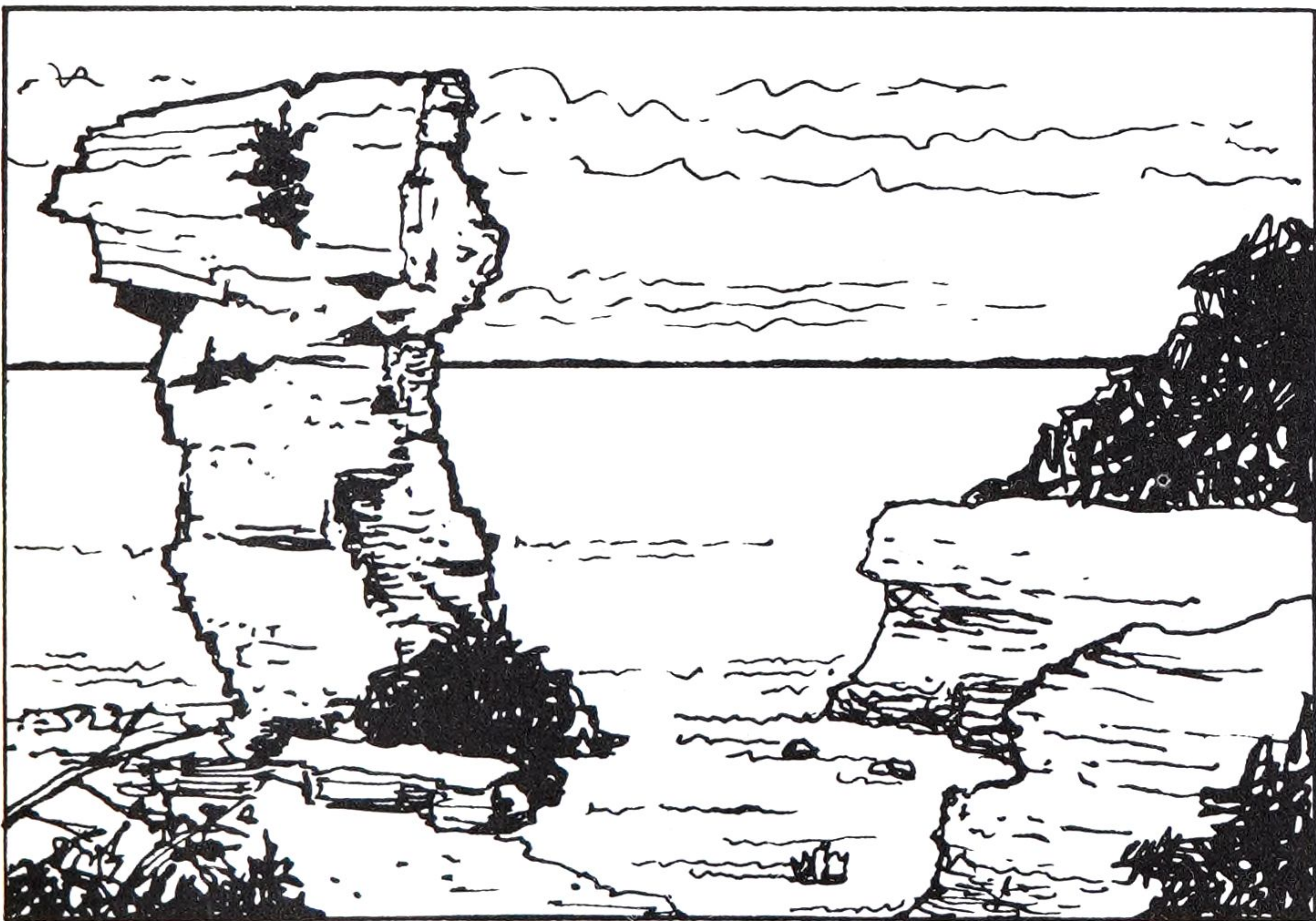
Large flowerpot carved away from the shore.

are hardy blue Harebells. Cedars have wedged their roots into the sides. Waves are wearing away the base. How long will the small flowerpot resist the forces of erosion?

● **Flowerpots of the Future**

From the lookout, just beyond the huge boulder in the path, you can see flowerpots in the making. Parts of the cliff extending into the water before you are being carved out like the two actual flowerpots were.

Can you spot any joints? These are vertical splits in the rock, formed as the limestone dried and shrank. Today waves surge into these crevices and wear away the rock on both sides. The space will get wider and wider until a section of the cliff is separated from the shore. It will take many human generations, but these cliff fragments may eventually stand out as small flowerpots.



● **Limestone Pavement**

Another limestone “beach”! This time, ice and waves have worn the rock along a flat, bedding surface. One entire layer of sediments now lies exposed. If water levels were to drop, this limestone platform would remain as an elevated bench. You are presently standing on one such bench. It is an old beach line marking a former lake level.

Limestone pavement marking present lake level.



● Cave 2

As you approach cave 2, you will feel the air cooling. Why? Listen for the dripping of ground water. Evaporation not only keeps the area moist, it cools it as well.

At one time, this spot over 100 feet above the shoreline trail, was under water. Waves of an old glacial lake washed into this cave making it deeper and deeper. Today, similar caves are being formed along the South Bluff. They will stand as reminders of the present level of Georgian Bay.



Left: One-leaf rein orchis. Right: Menzie's rattlesnake plantain.

There are no stalactites, those rock icicles, hanging in the cave. Scars mark the spot where souvenir-collectors have broken them off. This will no longer happen. The caves are closed except with written permission from the Superintendent and are preserved forever as part of this National Park.

Time to Check Your Watch

You've now read most of the story of Flowerpot Island in the rock. You know how the island was formed, and why it looks the way it does. You can complete the loop around the island by following the Mountain Trail. The shoreline trail will take you North to the lighthouse property, or Caves 4, 5 and 6.



● **Mountain Trail Fork**

Now, we leave the limestone to enjoy the richness of the forest. White cedar with its spreading ever-green leaves provides shade. Small, inconspicuous orchids dot the trail.

But, the “white rock” is never far away. Beneath your feet is a thin layer of dark soil. Under that lies limestone. Tree roots struggle for anchorage in the cracks and joints of the bedrock but strong winds easily loosen their foothold. To the left, the white

cliffs of Middle Bluff will become visible. The Mountain Trail follows these cliffs along an ancient valley to the center of the island.

● **The Meadow**

Sunlight streams in. Sweet smells rise from the grassy floor. You are in the meadow. Once a fertile valley, it was cleared years ago by the lighthouse keeper and used as a vegetable garden. A single apple tree remains. Today, the meadow is the quiet home of sunloving plants whose seeds were carried here by wind, birds or people.



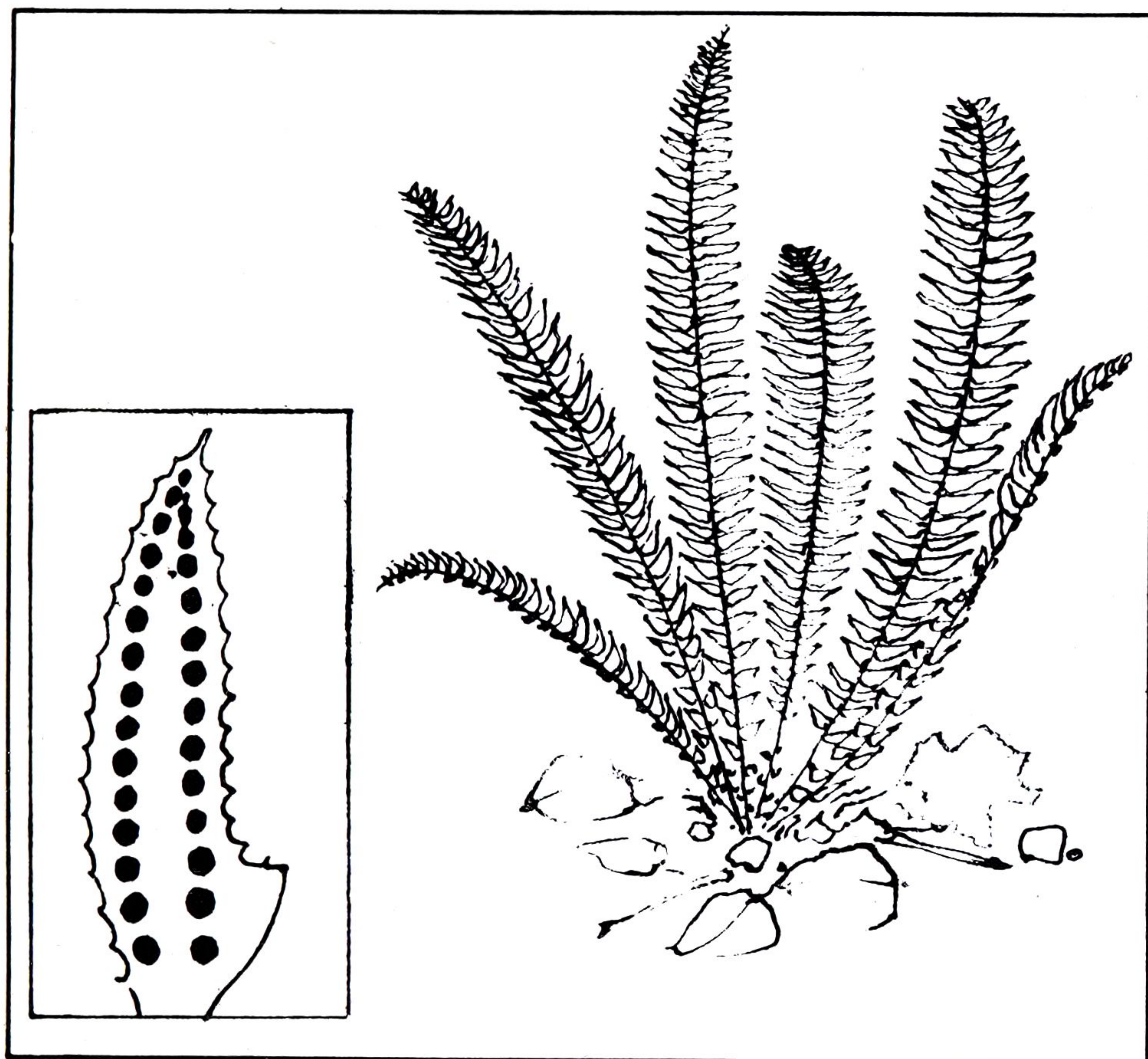
Look for the pile of dark, round rocks near the trail. The lighthouse keeper removed them from his garden site, but where did they come from? Surely not from the limestone cliffs! These are hard, granitic rocks that belong hundreds of miles north of here. They are silent reminders left by the glaciers that moved over this area thousands of years ago. Look for more of these “glacial erratics” as you follow the Mountain Trail over Middle Bluff.

Going Up

As it leaves the meadow, the trail slowly winds its way upwards. It enters a sheltered community where special plants thrive. Some are thought to be “left-overs” from the ice ages. Why do they still survive here? The climate is especially cool and moist along this North side of the bluff.

Top: Northern Holly Fern is recognized by its rigid evergreen leaves and “chains” of brown fruitdots.

Bottom: Watch for the bright red berries of yew, a shrubby evergreen.

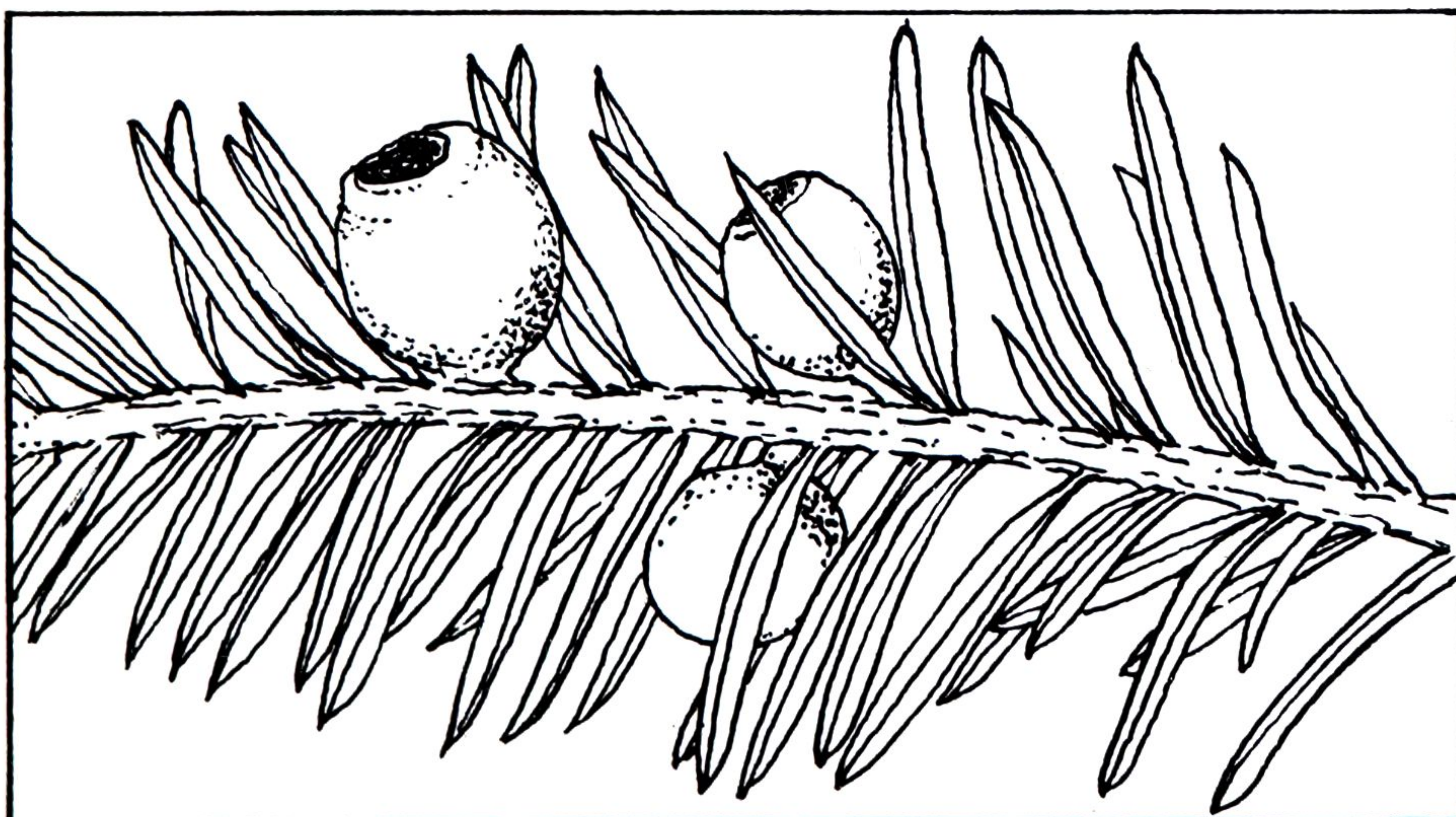


● **Feast of Ferns**

Catch your breath a moment at the base of the stairs. Before you, ferns and mosses cling to the limestone. In this shady pocket of the forest, they grow richly, covering every bare rock. They are preparing the way for larger plants to take root.

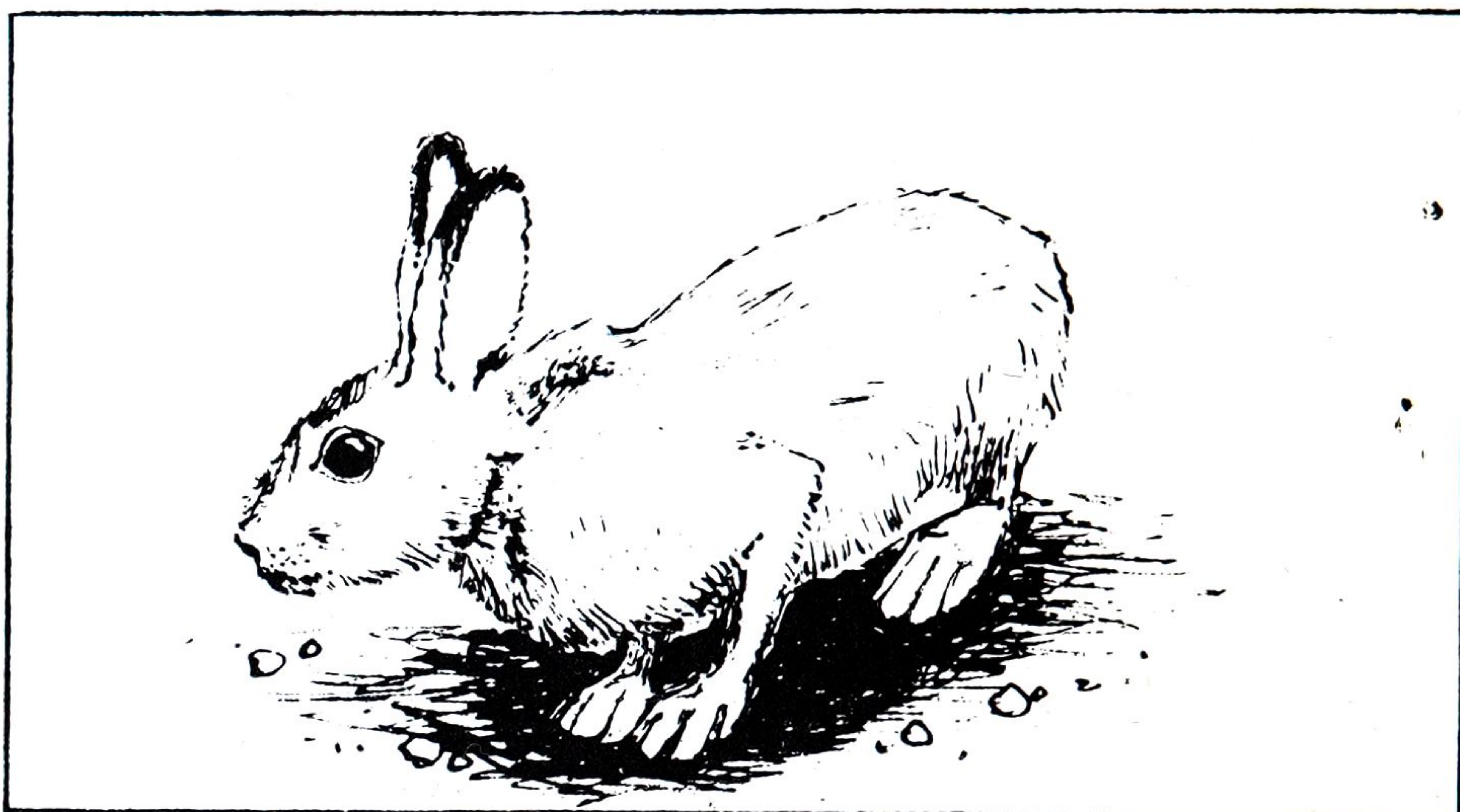
Atop Middle Bluff

The forest here is still young. How can you tell? Look at the undergrowth. It is thick because trees have not completely shaded out the sun. Clumps



The thick undergrowth is ideal habitat for snowshoe hare.

Listen for the "teacher-teacher-teacher" call of the ovenbird.



of yew (ground hemlock) and dogwood, early-forest shrubs, abound.

Now, look at the size of the trees. They are not large. Why? Both logging and fire during the last century destroyed the older forest. Regeneration on the limestone bedrock is a slow, ongoing process.

Footbridge Over a Crevice

How does it feel to be walking across the top of Flowerpot Island? It should be reassuring to know that there are hundreds of feet of limestone beneath you. The bluff is not as solid as it looks though. You may have noticed wide cracks, such as the one under this bridge, running along the ground. They are filled in with debris and plants have taken root, but they are deep. These are faults in the bluff. We are not sure how they were formed.

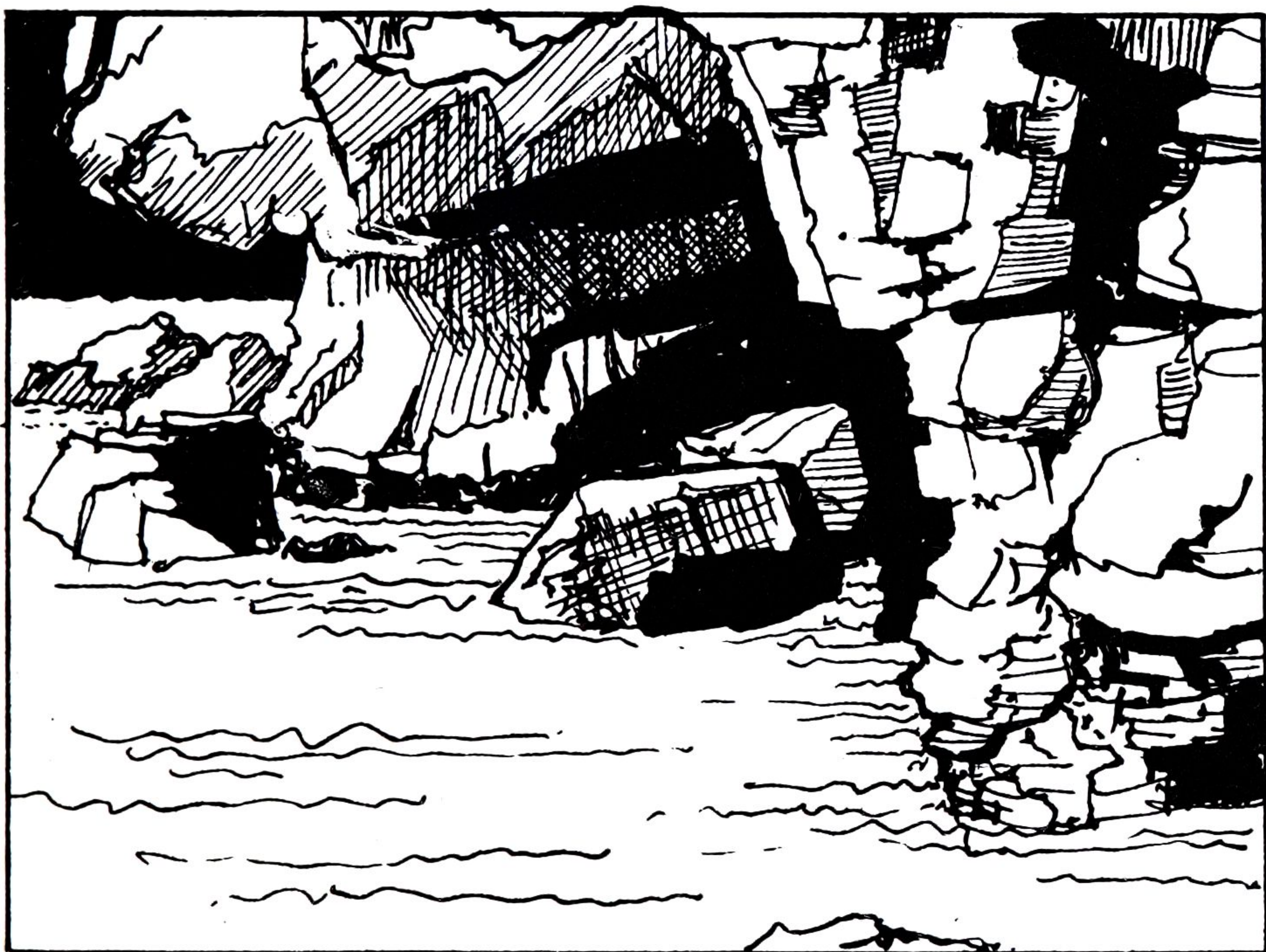


Waves are active now, forming shoreline caves.

Water from higher lake levels may have carved them out. Movements of earth's crust may have split the rock along these lines. You might have another explanation.

Going Down

The stairs will lead you back through the dolomite limestone to the bottom of the bluff. They offer an excellent opportunity to look into the canopy of the forest. You may glimpse a few of the warblers so common on this island. Try calling small birds in with a "swush-swush" sound.



● **Beachy Cove**

You are back near the water now, overlooking a natural harbour. While hiking the trails of Flowerpot Island you have travelled back in time, many millions of years. You have seen the work of plants, water, wind and ice on the limestone. But the story is not over yet. With every wave that laps against the shore of Flowerpot Island, a few more words are added. It is this ever-changing story that is preserved here forever, as a part of Georgian Bay Islands National Park.

It is a five-minute walk back to the dock. Take the trail that leads past the washroom and around the *back* of the campsites.

- **The Marl Bed, Another Point of Interest**

The marl bed is a shallow inland body of water. A cobblestone beach adjacent to the bed indicates that this was once a small bay. Today, water runs off surrounding slopes and collects in the hollow. This water is rich in dissolved limestone which settles out as mucky, clay-like “marl”. Although the water is too acid for plant growth, numerous flowers grow along the fringe of the bed. Water snakes, frogs and birds are frequent visitors.



For more information contact the Park Warden
or write:

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