CROCKET COVE WOODS PRESERVE

Formerly owned by The Nature Conservancy, this nature preserve does not allow dogs. The Emily Muir Nature trail is a short trail, down and back, which takes the visitor past boulder faces at eye level. A small bog is the destination and two kinds of insectivorous plants are the reward. The Indian Pipe trail, a loop branching off from that trail explores the looming granite outcrops. These heights are good places to look for stands of Indian pipes in midsummer.

Even more ambitious, with a couple of scrambles at first, is the Cedar Trail, a mile trail crossing a white cedar swamp to the Barbour Farm entrance. With planning you can make the trip one way by leaving a car at either end. The bog, the mossy boulders, and the swamp of this preserve are equally attractive year round, rain or shine.

Nature Activities: You will find information about family activities posted at the preserves and on the www.deerisle.com website.

Self-Guided Nature Trail

Look for **10 Points of Interest** signs along the trail.

#1 POINT OF INTEREST

As you walk along the trail, notice the boulder faces and all the mosses and lichens on them. The Island Heritage Trust office has superb triplex magnifying hand lenses for purchase or for borrowing.

When Emily Muir built the houses along the shore of Crockett Cove, she donated the 98 acres of back land for this preserve to The Nature Conservancy because she was so struck by the diversity of mosses and lichens here. It would take a specialist to identify all the species; but just marvel at the variety of colors and textures on the ground, rocks, and trees. They flourish because of the exposure to the prevailing moist southwesterly breeze.

Many lichens are popularly named with such descriptive words as soldiers, bayonets, pixie cups and the like, but it takes chemical analysis for most to be accurately identified. On these rocks are some impressively large foliose lichens known as rock tripe, below.

Identified by how they are attached to rocks and what color their undersides are, rock tripe is often touted as emergency food. Since lichens are famously slow growing, any trampling on them or harvesting here in the preserve is discouraged. Color will often tell you when you are looking at lichen, an association of a fungus and its photosynthetic partner, cyanobacteria or green algae. All are a somewhat grayish green.

Bryophytes, our mosses and liverworts, are fascinating viewed up close. Their cell walls are only a single layer thick. They do not have true roots or leaves with veins, specialized conducting vessels. From near or far you can make some deductions just by color. The mosses will be fairly deep green but none are as true emerald as the liverwort *Bazannia trilobata* (below), which is not a moss but another interesting early plant form.

Sharing ancestry with green algae, the liverworts are thought to have been among the earliest plants to colonize the land some 400 million years ago.

Pincushion moss forms silver-white mounds that are quite recognizable.

A mat of Schreber's or Red Feather moss has a coppery cast even before you look close enough to see the red central stem. On dry heights here on Deer Isle, the understory of spruces may be almost entirely an extensive carpet of this moss, below.

Along paths, especially where foot traffic—from humans or deer—compacts the soil, you will often find tiles of a green or brownish velvety moss, *Dicranella,* below. Common as this species is, there does not seem to be much agreement as to common name, so perhaps it is best to stick to the Latin name *Dicranella*.

Dicranum, Broom moss, below, looks combed or windswept. The genus names of this moss and the previous one alert you to the fact that one looks like a diminutive version of the other.

In some places, dry sandy roadsides for example, the most common moss of all may be Haircap, named for the cap-like lids of its spore-bearing structures, below.

The starry rosettes may be mistaken for tiny spruce seedlings. For much of the year the spore stalks are not in evidence but in fact they are the structures that bryologists use to make positive identification. This is not a problem for us with our common species here. They are not only common, they are quite distinctive.

If you get no farther than the first few hundred feet of trail on this preserve, you will make the acquaintance of an amazing number of mosses and lichens. Even if you are not able to negotiate the boulder heights farther on, this flat stretch will give you a glimpse of the drama to come. The shapes of the Stonington granite outcroppings on this preserve should stir even the most jaded imagination.

#2 Point of Interest

As you approach the wetland notice the clumps of cinnamon fern, here,

and also tall stately fronds of royal fern, pictured below. On this preserve you can learn most of the common ferns of the Island.

#3 Point of Interest

But what you really came to see may be the insectivorous plants. It is not that these plants love the nutrient-poor acidic watery conditions here; it is that they have mechanisms for surviving here that others lack. Look to the left and you will see the water-filled flasks that are pitcher plants. Lined with tiny downward-pointing hairs, these form a one-way trap for visiting insects.

#4 Point of Interest

On the right, along the planks is a diminutive shrub called Lambkill. It is also known as sheep laurel and is clearly a diminutive relative of the laurels sold by nurserymen. Other shrubs of the heath family line the path to the bog. Do check the *deeri*Nature Almanac for information about other species. Several young Red maples are part of this wetland association.

There are Skunk Cabbage plants scattered through the brushy swamp and mossy bog. Just after the ice melts in spring the interesting flowers of Skunk Cabbage bloom, as pictured here below. Through the whole summer their large leaves are quite conspicuous and if you break them off, a decidedly skunk-like smell will explain their name.

Bogs are characterized by Sphagnum moss, the starburst-like rather soggy moss pictured below.

Where it accumulates, sphagnum becomes peat and is marketed as such. Because bogs have poor drainage, the slowly-decaying vegetable matter renders them acidic. That means that only certain plants are likely to thrive here.

Among the shrubs associated with bogs are Viburnum or Wild-raisin, with shiny dry leaves, Speckled Alder, and Winterberry, our native holly, below.

#5 Point of Interest

The trail continues just a short way farther before it reaches the road. Drier here, the forest is characterized by many familiar wild flowers. Wild Lily of the Valley, *Maianthemum*, is a pretty sure possibility (below).

Retrace your steps to visit the rest of the preserve.

#6 Point of interest

Double back to where you encountered the Cedar Trail fork and the Island Heritage Trust letterbox. Heading uphill, the trail takes you to the top of the boulder outcrop. The orange blazes of the Cedar Trail continue, bearing left, all the way across the preserve to the Barbour Farm Road.

(The blue blazes of the Indian Pipe loop will return you promptly to the parking lot. If you choose to go all or part way out the long Cedar Trail, you may choose to do the Indian Pipe loop section on your return.)

This height of land is a good place to listen for the voice of the Northern Raven, which varies from harsh croaks to bell-like calls. You might want to use your web browser to call up the Cornell Laboratory of Ornithology site if you do not have a good bird app. See www.birds.cornell.edu or download their free app, see below.

Larger cousin of the crow, this is a bird of northern forests and coasts. With practice, you can usually tell it from the crow by the raven's flared tail and heavy beak. Crows are more apt to be seen traveling in groups than the more solitary ravens.

In high summer, spattered here and there in summer are what like pale yellow scrambled eggs. You are looking at *Physarum polycepahlum*, the most common slime mold. For part of its life this plasmodium streams like an amoeba looking for microorganisms to ingest. For the reproductive phase the slime mold forms upright sporangia, the bright yellow form. How to classify these organisms that are plant-like and animal-like and sometimes act unicellular and sometimes aggregate like a bunch of cheerleaders in a tower formation?

#7 Point of Interest

Suppose you have chosen not to follow the Indian Pipe loop trail back to the parking lot but opt instead for the lovely Cedar Trail longer hike out to the white cedar swamp. This is a dramatic forest. In the ‘30s and ‘40s, much pulpwood was cut here on the Island. In the years after the war, many large trees were spared because they were too big to tackle with ax and bucksaw. However, mature spruce trees face another challenge: the spruce bark beetle. The

beetle bores into trees stressed by age or other factors and lays its eggs under the bark. The larvae tunnel in the sapwood, eventually killing the tree. You may see the pitch tubes and bits of bark frass that indicate beetle infestation.

Because cutting near the coast often results in a domino effect of blowdown, and blowdown trees stress their standing neighbors further, inviting spruce beetle, forest management is especially challenging on Deer Isle. One of the benefits of standing trees is carbon offset through photosynthesis. Indeed, the great boreal forests of the northern hemispheres fix as much carbon as do the forests of the tropics.

#8 Point of Interest

The White Cedar swamp is one of the centerpieces of this preserve. You may recognize the northern white cedar, or arbor-vitae, as the species that is often found on the shores of lakes. The straight-grained wood resists rot and is used for fence posts, shingles, clapboards, and even decks and outdoor furniture. The native peoples used it for the interior ribs of their birch bark canoes.

#9 Point of Interest

At the Barbour Farm end, the final part of the Cedar Trail runs through a mixed forest with many hardwood trees. In dry, rocky areas you will find Bracken fern, Lambkill or Sheep Laurel, and Sweet Gale – which despite the name is not a fern, but a relative of Bayberry.

A glance at the map shows how irregular the preserve boundary is. Across the Island is a mosaic of private land, conserved and open to the public. Animals of course perceive habitat, not ownership; and conservation organizations can rarely protect enough land to provide sufficient habitat for all species. Large animals such as deer, and carnivores such as bear and foxes and bobcats have large home ranges. The river otters consider miles of coast their territory. Therefore, good stewardship by private land owners is essential. The more we "suburbanize" our yards, the more our Island mosaic of suitable wildlife habitat shrinks.

If you now retrace your steps you can enjoy once again the dramatic beauty of this preserve. Where shallow-rooted trees have been uprooted by high winds, pools form in the resulting saucers. Watching the water surface rise and fall here is hypnotic. What is happening here, so far from the moon-caused tides? The breath of the Gaia, the earth? The canopy tops of standing trees acting as levers on the roots to create the phenomenon.

Just before you once again encounter the Indian Pipe loop returning you to the parking lot, you will see on your right the handsome roots of a wind-thrown spruce. It is the full tops of the trees swaying in the winds off the bay that make the woods creak and sing in the wind. Weather that might dampen a visitor's enthusiasm for an outing only enhances a Crockett Cove Woods visit. After the autumn rains, just when the nights get cold, the pools along the Cedar trail become covered with panes of ice in marvelous patterns.

#10 Point of Interest

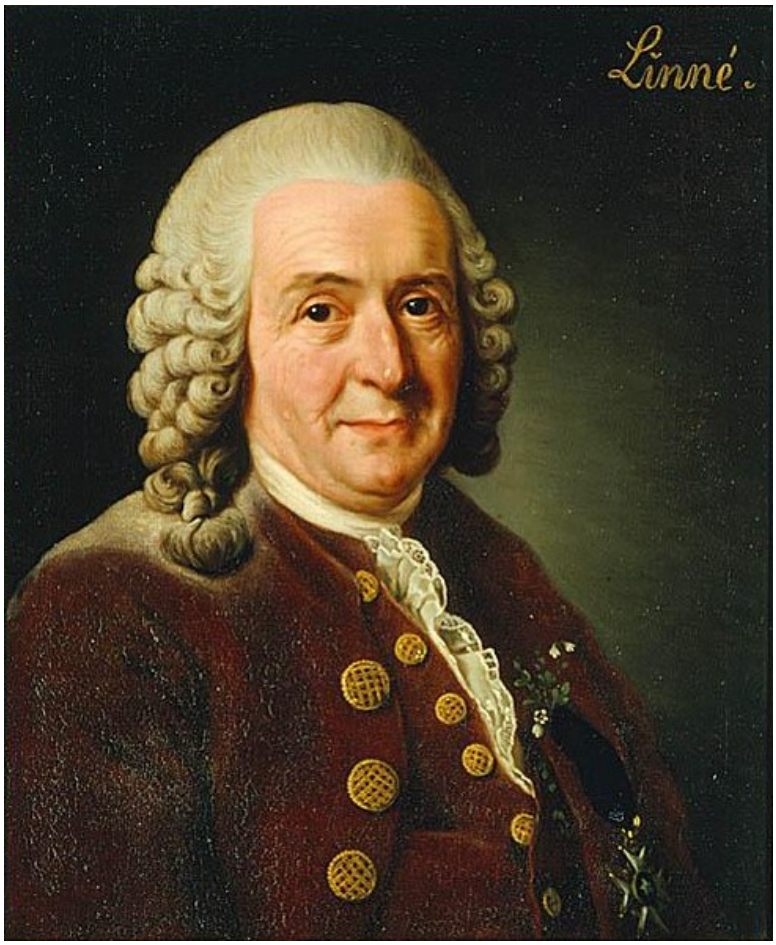
On either side of the Indian Pipe loop trail in early July you may find the upturned stems of Indian Pipes, *Monotropa uniflora*, a member of the heaths that contains no chlorophyll.

Instead the plant is parasitic on tree roots and in association with fungi that are in mychorrhizal with the tree roots. Some of the nodding flowers have a faint pink color. After they are fertilized their blooms turn upward and you can see the bright colors of the reproductive parts. When the blossoms and stems wither, the dried dark brown stalks remain for quite some time.

As the trail winds back to the parking lot you may find blooming forest wildflowers such as Bunchberry, below,

Mountain Cranberry, and Wild Lily of the Valley, *Mianthemum*, below.

Alexander Roslin, Swedish painter of the French aristocracy painted a formal portrait of Linnaeus which is now in Sweden's National Portrait Gallery in Gripsholm Castle. The great Swedish scientist is pictured with a sprig of Twinflower in his button hole just above the Order of the Polar Star.



You can find Twinflower in most of our preserves when spring is in full bloom. Linnaeus may have taken the name of this flower sent to him from the new world in celebration of his work

on binomial nomenclature, but we may also think of it as symbolizing the partnerships that almost always lie behind successful conservation projects.

We hope you have enjoyed your outing. Maps for all IHT preserves are available at the Island Heritage Trust Office in Heritage House in Sunset.

SELF-GUIDED NATURE TRAIL downloads for all our preserves
and The Nature Species Almanac download
and Nature Activities
available at
www.deerisle.com

Text by Dr. Kenneth L. Crowell and Marnie Reed Crowell
with information from the series of **Walks and Talks**
by geologist Dr. Roger LeB. Hooke
and marine biologist Dr. Robert E. Knowlton

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Marnie and Ken Crowell
Ann Flewelling
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