VIRTUAL GUIDED NATURE WALK

SHORE ACRES

Judy Hill gave this preserve to the trust in 2000. Her parents, pillars of the Deer Isle community, shared many of the ideas about self-sufficiency with their more famous contemporaries over at Cape Rosier, Helen and Scott Nearing.

White pines have long needles in bunches of five. They may be the first tree to grab your attention as you start down the trail here. We find pines more often on this side of the Island than on the rest of Deer Isle. In much of New England, white pine follows on the heels of juniper in old field succession. It is so much a New England classic that many people call all evergreens “pines” even where pines are far outnumbered by spruces. Pine prefers well-drained soils and is more common in the northeastern part of Deer Isle. You will see large white pines along the highway soon after you cross over the bridge to the mainland.

The stately White pines here obviously grew up in a field with full sunshine all around. These pasture trees were sometimes called “wolf trees” back in the days when foresters were primarily interested in how many board feet of lumber a forest could produce. These large-crowned trees were perceived as preying on others by stealing the available nutrients. Originally left by farmers to shade their livestock, today’s wildlife finds these trees particularly valuable.

Juniper, *Juniperus communis,* (above) is a low shrub common to old fields. The bane of farmers, it colonized the fields cleared by early settlers of New England. It can tolerate harsh environments such as rocky knolls, forming dense clumps such as you see here.

The female seed cones, or “juniper berries”, appear at irregular intervals and are used in traditional medicine. The woody taste is used for flavoring sauces for game, beers, and gin. Birds and small mammals enjoy them as much as we do. The Bar Harbor juniper so beloved of local landscapers is a related species.

Shore Acres is all about trees. Here you can lean to identify a number of species no matter what the time of year. As you walk these trails you may be concentrating on where you put your feet. Already you would have noticed the carpet of White Pine needles on the trail even before you looked around for the tree. The only oak species we usually find on Deer Isle is the red oak (above) and you will see oak leaves and even acorns (below with Wintergreen) on the Shore Acres trail most of the year.

Look up and the characteristic flared vase or bouquet shape of even bare branches says “oak”.

If that is not enough for you, learn to recognize the bark with its characteristic cracks with a reddish lining (below).

As you drive off the Island in autumn take a look at the Sedgwick hillside, the lovely and distinctive coppery brown color of oak trees. Before you know it, you will have memorized the look of oaks. This east side is the only side of Deer Isle blessed with many oaks. Here the inlets and shores are rather in the lee of the harsh winter winds that sweep directly down Penobscot Bay, buffeting the west side of Deer Isle. Archeological evidence of early settlements indicates that the forebears of the Penobscot and Passamaquoddy indeed took notice of that fact. So too did the Greenlaw family and their relatives who held this land from 1767 on.

You have a choice here as the trail to left, marked in orange, is called the Goldthread Trail. Since it makes one continuous loop around the preserve it is more accurate to refer to various sections of the trail. The part where the trail fronts the shore is called the Shore Trail, and the section returning to the start is known as the Stonewall Trail and becomes marked in blue. If all you want to do is the relatively short walk out to the shore and back, you can use this single section to acquire a good picture of mixed hardwood forests of New England.

Shore Acres is all about trees but it is also quite a bit about wet habitats, at least for most of the year. Skunk Cabbage, above, either in bloom in spring as pictured, or as parasol-like leaves seconds that observation. And where the forest floor is quite wet, the Red maple thrives. Red maples often grow in multi-stemmed groups, as below.

On Deer Isle most of the maples are Red maples, *Acer rubrum*, also called Swamp maple because this species does not “mind getting wet feet”. A walk on these trails in autumn rewards the hiker who pauses to look up with the sight of a flaming bouquet rising above the tree canopy here and there.

In Vermont whole hillsides are golden with Sugar maples. Here on the Island you can see where early settlers planted their favorite Sugar maple tree, but many of the mature maples in town are actually Norway maples, an aggressive invasive species despised by foresters but beloved of landscapers. The bark of Sugar maples, *Acer saccharum,* is more deeply grooved than that of Norway maple, *Acer platanoides.* The leaves of Sugar maples are more deeply lobed and more richly colored in fall than the shallowly-lobed leaves of the Norway maple, which turn to a monotone, a rather insipid pale yellow.

Look around this grove and you can pick out several other hardwood species. Most obvious perhaps are the White or Paper birch, branches of which litter the ground conspicuous even after death.

On Deer Isle we have very few Gray birch, *Betula populifolia,* with leaves that look like aspen or poplar as the name suggests. The young trees have quite dark reddish-brown stems and this species grows in clumps. Paper birch and White birch or Canoe birch are all names for *Betula papyrifera,* which has bark that is clearly ready to peel in broad sheets, good for working into containers and canoes (below). The bark is quite rot resistant so you often find it as an empty cylinder. It makes a great fire starter.

Yellow birch, *Betula alleghaniensis*, our other birch possibility, is distinguished by its horizontal strips of bark shredding into narrow golden ribbons, giving the trees a rather messy appearance (below).

Many species of moths and White Admiral butterflies feed on the birches. You can also see the zigzag tunnels of leaf miners at work in the leaves.

Goldthread, from which this section of the trail takes its name, is a perennial evergreen herb of the forest floor. Look for trios of shiny dark green leaves conspicuous long after the dainty white flower petals have fallen. The name Goldthread refers to the fine bright golden-yellow roots. Goldthread has been used extensively by the Chinese as well as in America as both an herbal and as a dye. It was chewed by Native Americans for canker sores, hence its folk name canker-root.

Harvesting here on the preserve, whether it be for plant parts such as roots or the mushrooms that spring up along the trail, means that the plants are not there for someone else to enjoy. You may find berries enough for both you and the wildlife that depends upon them, but please do use good judgment.

Sweet White violet (above) is just one of the spring ephemerals that bloom quickly before the deciduous trees send forth their leaves. You may find Mountain Cranberry, Starflower and Wild Lily-of-the valley in these woods as well. See the *Species Almanac* for more information about these small white gems.

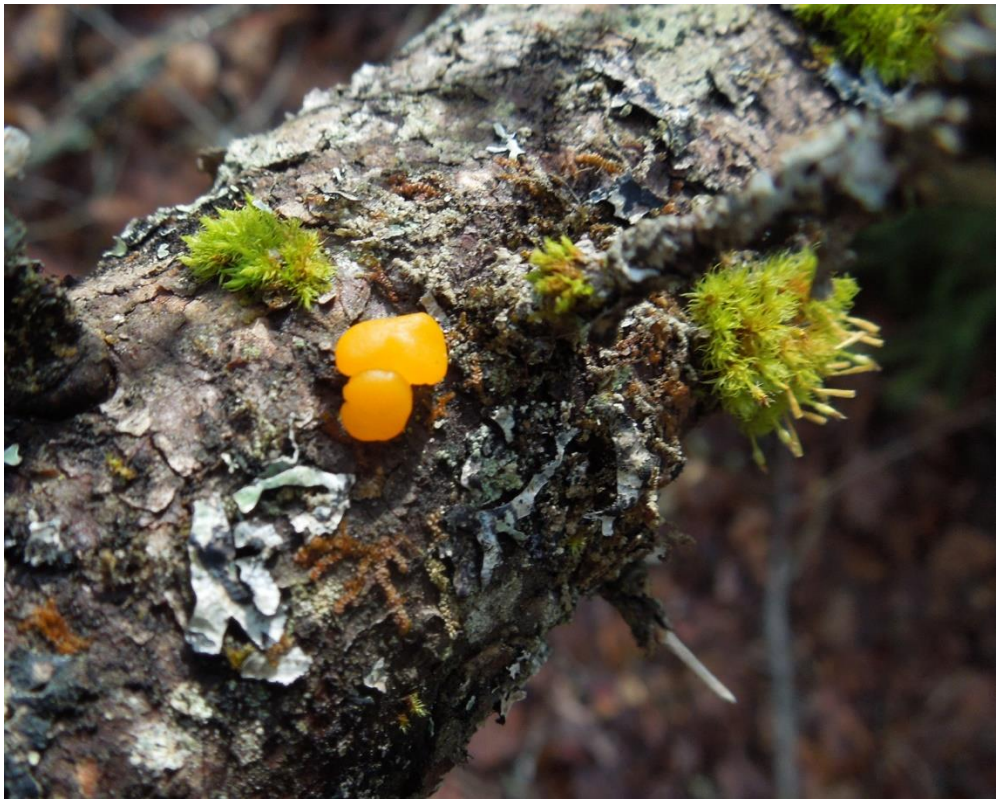
Browse the *Species Almanac* to refresh your memory about the half dozen most common mosses of Deer Isle. Shore Acres may be too wet for the slivery mounds of Pincushion moss that we meet at Barred Island and Crockett Cove woods, but substitute Delicate Fern moss, *Thuidium delicatulum* to keep your half dozen. On rotten logs and rocks and seen here (below) coating the nutrient-rich base of a tree like a hula skirt this moss is sure to catch your eye.

Or are you looking at the diamond-shaped fronds of Plume moss, *Ptilium crista-castrensis*, or the terraced growth of Stair-step, *Hylocomium splendens* ? To move on to Intermediate status, the budding bryologist needs to carry a hand lens and check for details such as midribs, spore capsules and the like. See *Learning Mosses*.

Poplars grace both sides of the trail here. Their leaves litter the trail conveniently showing that they are edged with large teeth, hence the name Big-toothed Aspen.
The deeply-grooved bark (below) is quite distinctive.

Even when you see other tree trunks of the same size, you can pick out the poplar, a.k.a. aspen, here below on the left. But what about the trunk in the middle?

Perhaps not dead for as long as the trunk on the right, the middle trunk is not just bark covered, but engulfed and encased now by fungi. Even the casual hiker in the woodlands will notice the variety of hardwoods here. Visitors can however be forgiven for failing to notice the full extent of the fungi that also inhabit the preserve. From the tiny dab of Witches Butter (below) to the tall trees sprouting growths, the fungi are here.



Shore Acres is the site of many IHT mushroom walks, but even that does not begin to address the variety of fungi, the bulk of which are invisible. Where trees have begun their dying process the mycelia of fungi, thread-like, are quick to take advantage.

We recognize mushrooms as the fruiting stage of fungi but so too are the shelf fungi on many of our trees. They infect the tree through a break in the bark and subsequently cause the tree to rot.

The entire trail loop here is a Pileated woodpecker paradise and there seems to be a relationship with the fungi. A pile of rotten chips will call your attention to the woodpecker work.

Was it the fungi growing on the dead trees that signaled to the woodpeckers that these particular trees were just “ripe” for working on? The squared holes of the photographs are a

sign that the Pileated was the species of woodpecker at work: our Hairy and Downy woodpeckers make smaller, rounded holes.

“Artists’ conks” are so called because their soft porous undersides are easily engraved, becoming popular mantelpiece souvenir decorations in the Victorian era. The brightly striped “turkey tails”, horse-hoof-shaped conks (above) and other species of shelf fungi all pose an interesting question: did they form before or after that log fell to the forest floor? (Clue: they use gravity to help shed their reproductive spores so they are attached to the tree trunk accordingly.)

Of course, the fungi in the soil outnumber everything above ground. Mycorrhizal (which literally means fungus root) associations form between the roots of most higher plants with fungi, for the long term benefit of both. Soil scientists are learning more and more about such invisible relationships.

The log lying on the ground in the back of the photograph below explains a mystery. Seeds of trees which have grown on top of logs like this may find themselves subsequently stranded. When the nurse log rots away it leaves the new generation perched as if on stilts. We end up with what looks like an enchanted forest, looking like something out of a Hansel and Gretel story or a house for a hobbit.

The last great spasm of clearcutting swept over the Island in the fifties. We have regenerating even-aged stands of predominantly spruce and fir as a result of this practice. Run your hand over a branch. Can you tell a spikey spruce (top left) from a flat fir (bottom right in the same photo)? If you are still wondering, give the crushed needles a sniff. The Fir balsam has a sweet aroma. Whether you have a White spruce with rather bluish needles or a red spruce with distinctly green needles, no one ever described either as smelling sweet. In fact the White spruce is the subject of many insults for its acrid odor.

Learn the classic blistered appearance (below) of Balsam Fir bark here at Shore Acres and you will be able to identify even the dead firs around the Island.

We know that spotted salamanders spend the majority of their life hidden in the forest duff. Only when the adults court and mate and the resulting eggs hatch into gilled juveniles do we see these amphibians at vernal pools.

"Vernal" means spring. The usual scientific definition of a **vernal pool** tells you that the salamanders and frogs lay their eggs in pools of water which are so small that they dry up over the summer. That means they are safe from predators such as fish species and bullfrogs whose tadpoles need two years to develop. We do not have many amphibian species here on the Island, but when the month of May arrives you will see their glistening egg masses in ditches, in pools made by wind-thrown tree roots, and in many swamp puddles.

Quickly the eggs develop, the young gilled forms mature, and the young damp-skinned, air breathing adults head off. They head to the forest floor to spend the year in the duff where they are rarely seen unless you turn over rotting logs. So far, we do not have bullfrogs on Deer Isle so we often find salamander eggs in almost any pool, even if the water never quite dries up. Let us hope no one brings species harmful to our native species here onto the Island.

You may hear wood frogs "quacking" and **spring peepers** "peeping" in early spring after a thaw. Later in the summer you may spot tiny frogs no bigger than your thumbnail hopping across our woodland trails. Wood frogs have a black mask across their face; peepers wear an x-shaped cross on their back. In early autumn, the peepers make calls that can be mistaken for birds in the trees.

Deer Isle has a relatively small number freshwater streams which flow out to the bay. Since black flies require moving water in which to lay their eggs, these are the sites where the annoying black flies are found for a brief time in April or May. The changes in insect populations and the diseases they carry (think ticks!) are interesting and challenging aspects of what we may have to cope with as our climate changes, our globe warms. The pools of water along these trails also provide habitat for mosquito larvae. Insect life is the price we have to pay for our natural world.

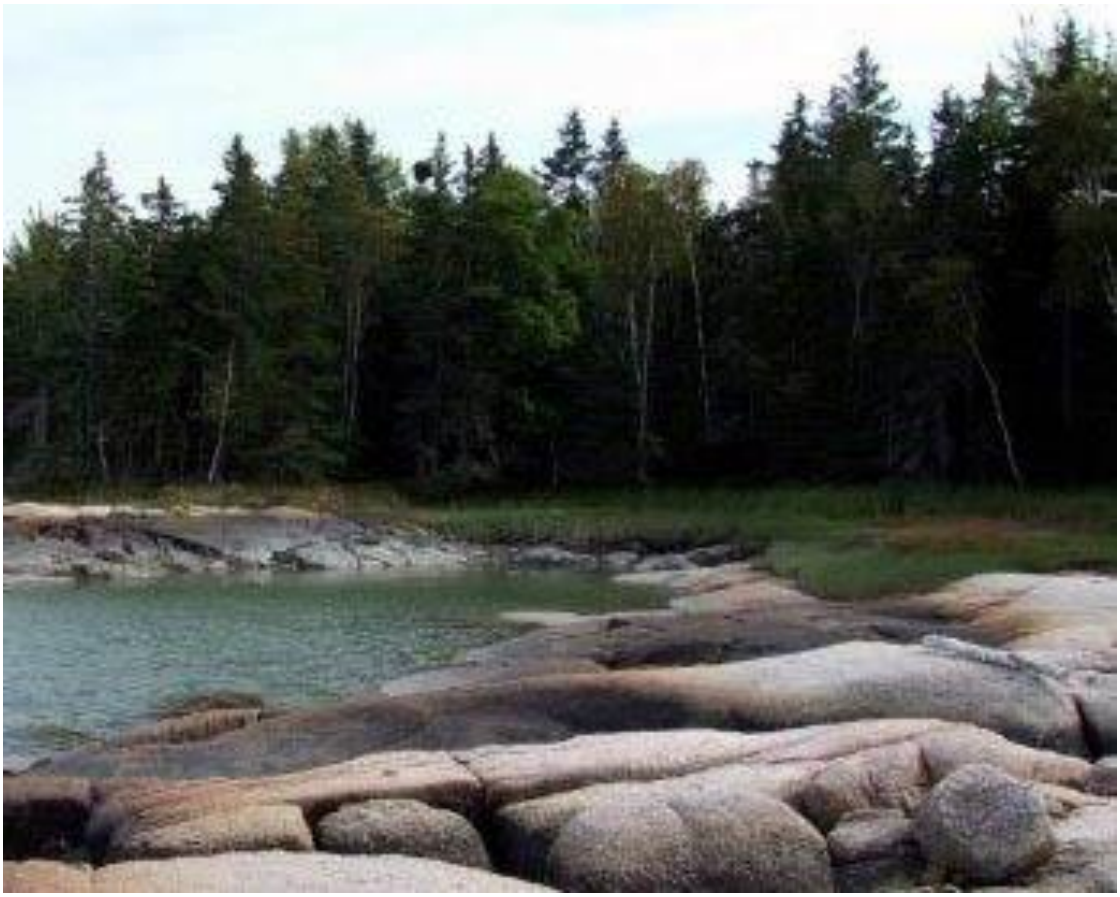
The song of the Winter Wren or the Hermit Thrush reward the early spring visitor to Shore Acres. For bird songs and identifications you might want to use your web browser to call up the Cornell Laboratory of Ornithology site if you do not have a good bird app. See www.birds.cornell.edu.

In these woods you are apt to see some of our day-flying moths such as Spear-marked Blacks, (below) on bunchberry. With their striking white chevrons on black wings they flutter like strobe lights on woods paths. Equally distinctive are lovely pink Maple Moths you might find here.

The Goldthread Trail turns into the Shore Trail at this point. As you look back along the shore, you see a white farmhouse. This was home to the Hill family for many years.

You have seen that the woods here are a mixture of species, resulting from early logging. Clark Hill worked hard at clearing his farm land, raising his own food and making his own tools. He also served as selectman and his wife was for many years the Deer Isle librarian.

Judy spent years in Alaska before returning to the land she loved. Here on Deer Isle she kept a relatively low profile; few realized that this woman had a PhD. Modest Judy Hill was philanthropy personified. Until her death not many realized just how many individuals she had helped, personally underwriting everything from eyeglasses and prescriptions to further education. Judy was a staunch and very public supporter of both the Deer Isle-Stonington Historical Society and Island Heritage Trust.



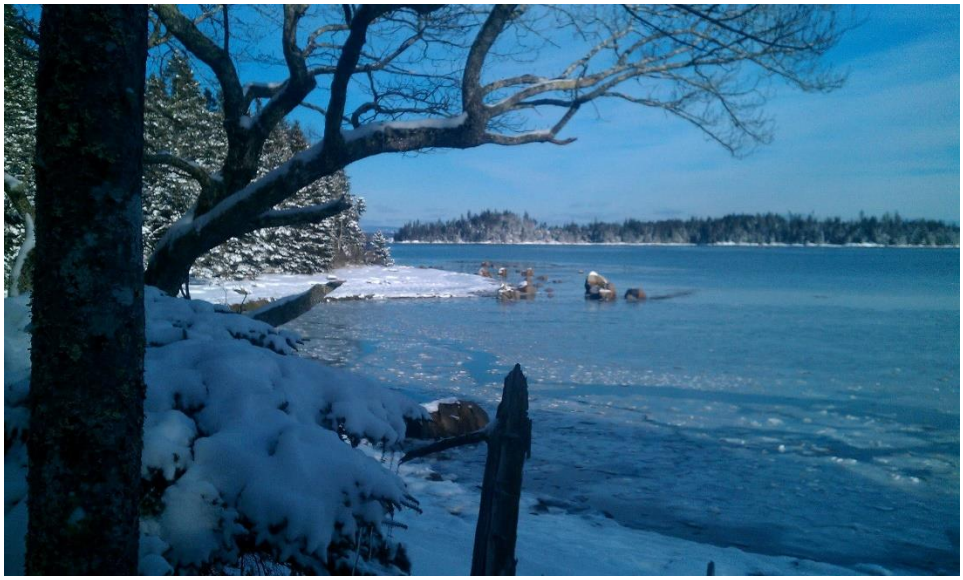
Nowhere is the ecological interface between land and sea more obvious than here at Shore Acres. *Spartina patens,* saltmeadow cordgrass, marks the high tide line. The roots of the various salt-tolerant grasses and other plants serve as mechanisms that gather the fine particles of silt and clay into a spongy layer that is quite visible along this shore. Although the small and vulnerable fringe of marsh plants here would barely qualify as a salt marsh, what plant life there is around the shores of Deer Isle serves in its own way as the invaluable nursery for marine organisms on which our local economy depends.

At mid tide or lower along here you may see rock forms streamlined by glacial erosion. These formations are known as *roche moutonnées*. The gentle slope is the side from which the glacier came, and the steep side was formed by plucking or quarrying by the ice as it moved away.

The shellfish flats here ring with the cries of gulls at low tide. As you look out at Campbell Island and Mount Desert blue in the far distance, you can often hear the crack of shells as the gulls drop them on the rocks open them. The trail here offers broken mussel and clam shells as forensic evidence.

In past years controversies have arisen here about the ruinous effects mussel dragging can have. The sea bottom may be decimated; rafts of wintering eider ducks must look elsewhere for subsistence. Elsewhere in the bay dragging for scallops raises the same concerns. On the other hand, divers may be accused of taking every last item, wiping out entire populations. Fortunately with our Island's clam committee, more properly called the Deer Isle-Stonington Shellfish Committee, we are moving toward sustainable harvest practices.

Runoff issues are dealt with by state and local shoreline ordinances. The fringe of shoreline vegetation helps preserve the quality of our salt waters. Campbell Island, just off-shore here, was owned by Camp Chewonki, well-known for its adherence to environmental principles. IHT holds the back-up easement. With its preserves and easements the trust has protected more than 20 miles of shoreline. Since elsewhere around the bay we see people rather selfishly pushing the limits of shoreland zoning, these protected lands assume ever-increasing importance for our marine ecology.



Increasingly Island year-round residents are using the preserves in all our seasons. Will you consider supporting our work? Whether you consider yourself an environmentalist or a philanthropist or both, this lovely walk may inspire you to join Island Heritage Trust.

You have reached the end of the described walk. For the shortest excursion, you may choose to return the way you came, but the trail continues on for two more sections, comprising 1.5 miles in all. The Goldthread Trail has become the Shore Trail where it follows the shoreline. The third of these sections is called the Stonewall Trail and completes the longer loop through the woods back to the parking lot.

Very near the shore is a section of stone wall (above) that we humans may read as a sign of farming in another era. Red squirrels however take the line of stones as ideal for dining. Their spruce cone refuse middens top the rocks just as they do many of the stumps left here by forestry of bygone days.

This last section of trail is named for the stone wall which divided one man's property from another, but do not get so engrossed in looking for the mark of man that you miss the beauty of the stone works of the hand of Nature.

Although you may have had to wear boots and bring poles to balance on the wet and slippery planks in places - and even think how to deal with the mosquitoes etc. - this lovely preserve rewards those who meet it on its own terms.

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. While you are at the Sunset campus, you will recognize the exhibit barn of the historical society. In the photograph above, the barn at the right on the farm at Shore Acres has been copied for a new exhibits building on the grounds of the Deer Isle-Stonington Historical Society.

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Text by Dr. Kenneth L. Crowell and Marnie Reed Crowell
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