

Nature Activities for Preserves



Games and challenges for any age, any number of people, and any number of preserves are all yours for the downloading. You need add only a digital camera, tablet, smartphone or sketch pad. You are the sleuths using your powers of observations to solve these puzzles.

In any form of nature study or scientific research, there is material to be studied before an investigation, a visit, and there is information, data, to be digested afterward. We have included some suggestions for resources for those phases. For almost all of these family activities, you do have to actually go out and visit the preserves. You will find that these activities compliment the Self-Guided Nature trails and Species Almanac sections of *deeriNature*.

Adults, you know you are supposed to model the behavior you want to see in the young. You must ooh and ah over every discovery the child brings you, no matter how smelly or yucky it may be. You may however find yourself rediscovering the joy of personal exploration.

#1 Using your Mobile



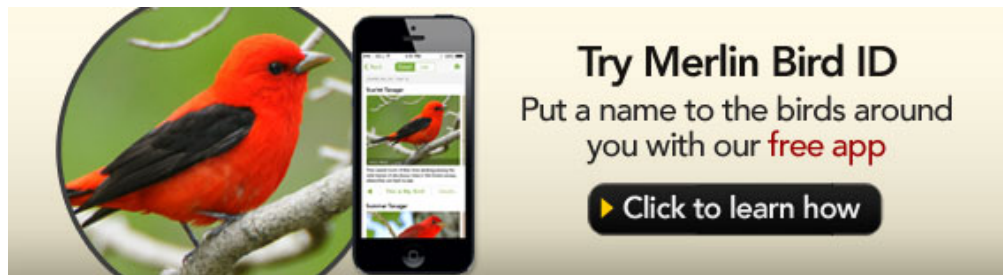
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For a youngster, finding the next QR code, using the Google Earth Interactive map, and locating Points of Interest is as good as an Easter egg hunt, treasure hunt and scavenger hunt all in one.

#2 Merlin Magic: Who is that bird?

With the free app from Cornell Laboratory of Ornithology on your mobile device, even a very young child can make the choices that will probably result in an accurate ID. See www.birds.cornell.edu or download their free app, below.



Using it works like a game the whole family can play. What size is that bird? Is it more like a turkey, a chicken, robin, a chickadee, a hummingbird? Where are you? What color is the bird, mostly?

The whole family is apt to be charmed by playing the bird song; but do remember, the birds on their territories out on our preserves are NOT charmed. They are alarmed. Where is that intruder? Can I tell him off? Now that thousands - yes, thousands - of visitors come to our preserves in a season that makes every individual's behavior matter more than they might ever guess. Day after day other innocent visitors repeat the action and the poor resident birds wear themselves out reacting to the phantoms. (That is also essentially the problem caused by dog visitors, even those on a leash.)

#3 The Case of the Royal Rainbow

This is perhaps a classic scavenger hunt; you cross the colors off your list once you have “captured” an image of something that shows off each color. The youngest members can scout out the colors; the next oldest can wield the camera. No one need feel above the challenge - see the advanced version, the challenge of the Tale of Two Newtons. All your images are treasures. It is quite obvious how to tailor this challenge to any age.

1. **Red Yellow Blue** : for beginners:

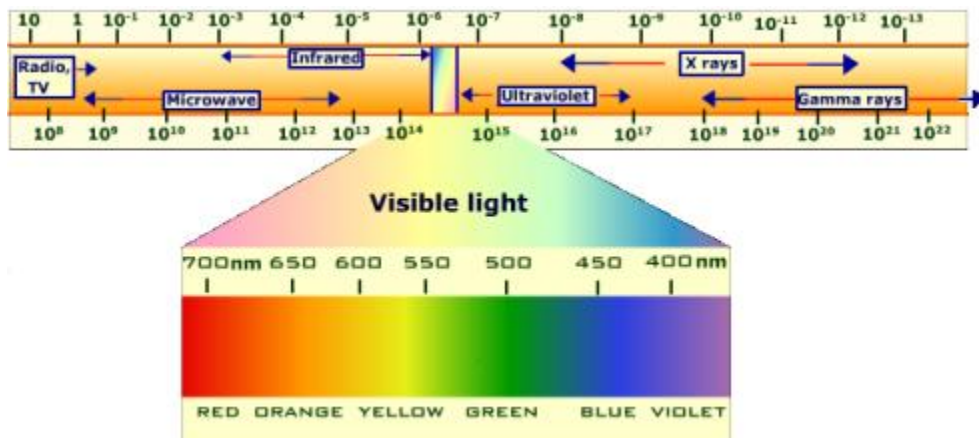
Use your camera or smart phone to take photographs from land and sea or sky for each of the colors of the rainbow. You know the names of the primaries: red, yellow, and blue, but what about green and orange and purple and brown? How about the Richest Red, Awesome Orange, Yummiest Yellow, Greatest Green? Best Blue? Inimitable Indigo? Very Violet, also known as Prettiest Purple? Hint: what are often called the secondary colors, orange, green and violet, are the easy ones to find. True red and yellow and blue? Now there’s a challenge.

2. **Tale of Two Newtons:** the Advanced challenge:

Mozart perhaps had perfect pitch and seems also to have had such a good sound memory that he was able to go home after listening to the choir in the Sistine Chapel and write down from memory Allegri’s *Miserere*. Similarly, some of us are so good with colors that we do not have to take that sweater with us to the store when we want to buy matching socks.

Western musicians have divided the audible (that humans can detect) range of sound waves into whole and half steps, black and white keys, on a piano tuned to 88 different pitches, or notes. We have assigned names to these notes based on the alphabet letters a-g and sharps and flats.

What is the equivalent for the range of the electromagnetic spectrum, the part that humans can see?



<http://physics.tutorvista.com/light/visible-light-spectrum.html?view=simple>

For the beginner's **Royal Rainbow** we used traditional names (from Isaac Newton) for the rainbow colors, but the well-known British watercolour firm, (Winsor Newton) produces an array of 96 named pigment colors for painters.

See <http://www.winsornewton.com/products/water-colours/artists-water-colour/chart/>

(Suppose you are more interested in the color palette as it relates to digital imaging and the RGB color space, Red, green and blue. See <http://www.centerkey.com/colors/> for words associated with HTML and hex codes and color swaths on your digital device screen.)

Why do this? Just as musicians improve with practice and training, your color training might make you a better naturalist. You are also likely to find that your enjoyment of the sea vistas of Penobscot Bay is magically enhanced once you are sensitive to Prussian Blue. After you know Alizarin Crimson, our sunsets will never look the same. And just what do you call that color red of those bunchberries?

#4 The Case of the Deer Isle Dinner Party

Now this is a Treasure Hunt; one clue leads you on to the next. The treasure? You end up with the knowledge of how to read the signs along a trail. Your collection of images proves your point and is a pleasant keepsake from your journey.

As you walk around the preserves see what signs you can find to draw or photograph as evidence to answer these questions:

Who came to dinner?

What did they eat?

- for **appetizer**?
 - nuts, seeds? flowers?
- for **drinks**?
 - nectar, water?
- for **salad** course?
 - can you name the leaves? Birds, insects, or mammals did the eating?
- for **veggies** ?
 - can you name any twigs or buds and tell whether deer or hare or grouse did the deed?
- any **meats**?
 - any piles of fur or feathers that indicate a hawk?
 - or have you found a pile of bones left by a fox or coyote?

- or a pellet coughed up by an owl?
- any odor? A fox often leaves a very distinctive smell on the trail.
- **seafood ?**
 - crab or shell fragments from a gull or otter?
- **dessert**
 - fruits? Can you name the berries?
- and **after dinner**
 - who set the table and left their middens?
 - can you identify any scats left behind?

#5 The Case Of The Deaths At The Shore:

Here is family fun forensics at its finest!

You, the forensic examiner, are presented with the following six photographs of the dead bodies that washed up with the tides. What do you deduce was the cause of death of each victim?

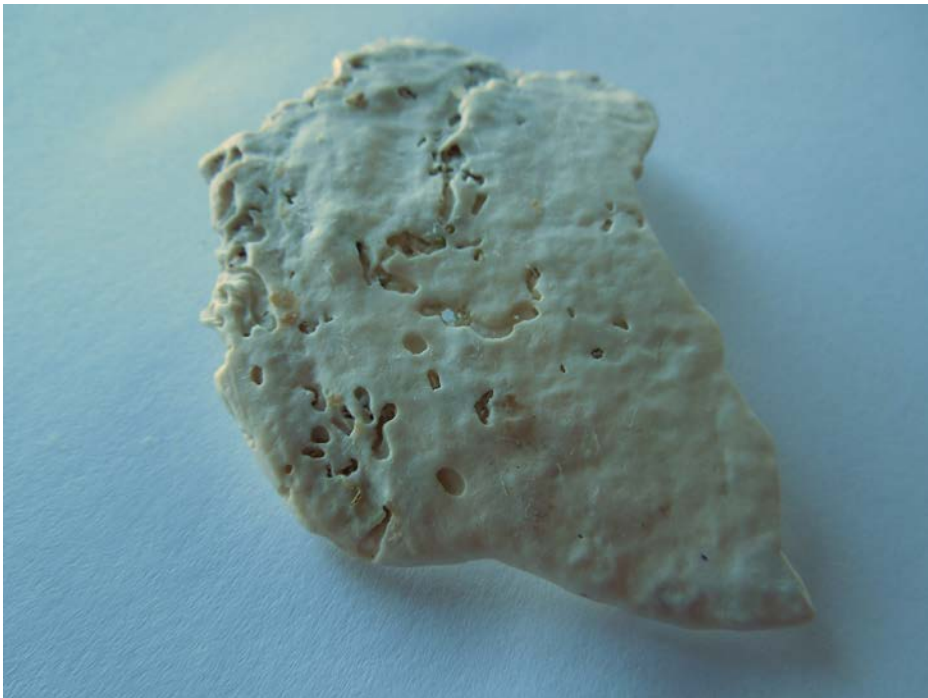
1. A shell dropped onto a rock to break it exhibiting a clean fracture:



2. The lip or turret of a snail shell has been sheared off leaving edges that look as if scissors or tin snips were used:



3. A number of small same-sized holes in a hen clam shell. See also #5; we could have gang operating here...



4. A single sizable hole with neatly beveled edges in a clam:



5. Shallow grooves trailing over a shell that look as if they were made by some sort of mini-router:



6. A small round hole, not beveled edges, in a mussel shell:



Now that you know what the evidence looks like, can you photograph some cases of your own, develop your evidence and make your own deductions? What's your verdict: was this murder or just breakfast, lunch, or dinner? You might consult the "judge" about your verdicts, i.e. see the Nature Almanac section on shore creatures for answers.

P.S. Don't be fooled by the hermit crabs in their disguise. They have backed into the shell of a mollusk but that does not make them a snail. Their shell may even be covered with pink "fur" - a growth of hydroids - but don't let that "fake mustache" equivalent fool you. Furthermore, these crabs are principally scavengers so they are not your perpetrators. They did not kill those periwinkles.

#6 Tiny Treasures



The gold standard of magnifiers has long been the Hastings Triplet 10x pocket lens. These are available at the IHT Nature Store and on line from various suppliers. You can also turn your binoculars around and use them as magnifiers.

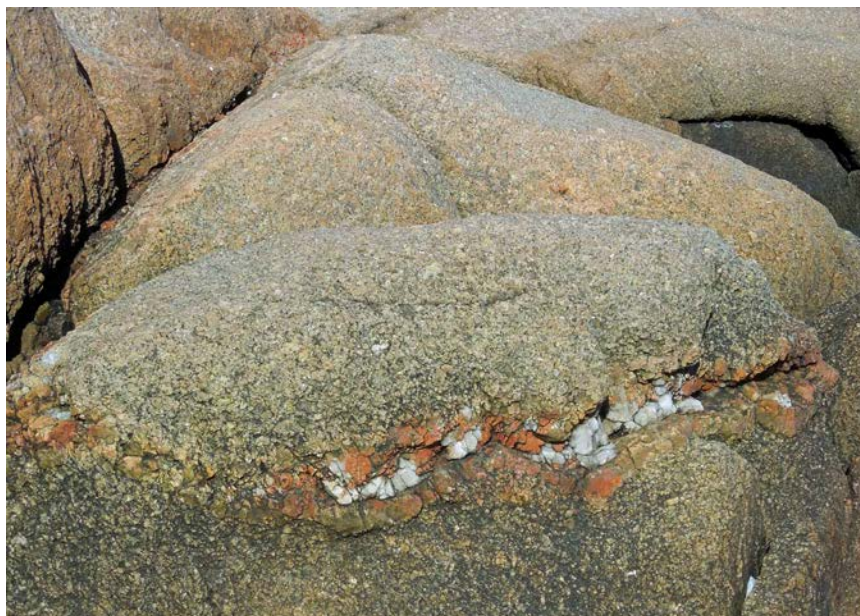
Have you noticed that in some ways you can see better with your digital camera? They are wizards at light gathering and at focusing. And they are quick! Welcome to the macro world. Digital cameras are also now incorporated in binocular microscopes at (almost) reasonable price. Just as binoculars have evolved to be better and less expensive, so too microscopes. Ever more amazing horizons are now a possibility for the dedicated amateur.

The reproductive parts of plants have long fascinated scientists. Linnaeus even made it rather respectable to study them in mixed company. Seriously, close-ups of even the most humble flowers take on a new and fascinating beauty when viewed magnified.

View insect parts close up for a scientific horror show no fantasy can match. Lepidoptera on the other hand look gorgeous when their wings are viewed highly magnified. The web site www.butterfliesandmoths.org will even direct you to LepWingID, the recognition software for your digital camera close-ups.

Scoop up a handful of beach sand and study the jewel-like grains of sand. You will be amazed at how different the sands of our beaches are one from another. But you won't know if you don't look.

#7 GeoQuestions



1. **Glacial Grooving** - photograph and measure the scratches and use a hand compass or your smart phone compass app. What is the alignment of the grooves, the striae? What do you think might be the relationship between that direction and what you can deduce about glaciers in Maine by looking at the profile of the Camden Hills to the west of Penobscot Bay? You may wish to gather your data from
 - a) Settlement Quarry
 - b) the Bowcat Overlook, at the Little Deer end of the Causeway
 - c) the top of Pine Hill
 - d) the far shore of the Tennis Preserve.
 - e) Are these all relatively the same?

2. **Sort-a-glacia**

Go to the beach at the far shore of Mariners Park. Walk south (toward Stonington) and look back up at the face of the bluff. You should not climb the face. It is not necessary to take accurate measurements but you can organize your estimates as follows.

- a) how many rocks are the size of a watermelon?
- b) of a softball?
- c) of a golf ball?

Photograph or draw a chart of the relative positions of these rocks. What sort of order do you perceive? How might you account for that? How might that relate to the profile of Camden Hills to the west of Penobscot Bay? Look at the gravels on the beach at the foot of the bluff. How are they sorted? How do you account for that?

3. **Rock Around Barred Island**



Go to Barred Island at low tide. Starting at the north end of the bar, walk the entire perimeter of the small island, about 10 feet below the line of vegetation. You will end up at the south end of the bar, towards Stonington.

Determine what you think bedrock looks like. Then make a data sheet for your categories and collect 15-20 photographs of rocks that are about the size of a watermelon or larger. Are most of these rocks the same as the bedrock? What types do you see?

1. How many are grey-green and foliated, like crushed puff pastry?
2. How many are fine-grained dark grey or black with or without bands of white?
3. How many are shaped blobs like a spoonful of hardened pudding?
4. How many are like fruitcake with various large additions in them?
5. How many have white stripes around them?
6. What other colored stripes have you found?
7. Where around Barred Island are there beaches of rocks smaller than baseballs? Why might that be?

Now that you have taken a good look at the rocks, you might try matching some of the following terms with your photographs: Stonington granite, Ellsworth schist, conglomerate, inclusion, basalt, quartz, aplite, diabase

4. Dike Detectives- Find the Intrusions

A dike, or dyke, is formed when molten rock is squeezed into cracks in existing rock. When the molten magma cools and crystallizes, a stripe of a different color may form in the rock. White stripes are common here and pink stripes are possible. Black stripes are likely farther downeast. Can you guess what mineral names you might assign to these colors? See the list in #2.

At Barred Island, Settlement Quarry and Scott's Landing see if you can find and photograph lines of light-colored rock that cut through the darker main body of rock. If the rocks are still attached to the bedrock, you might record color, how wide and how long the dikes are. If your rocks are not attached to the bedrock, you might say the stripes go "around" the rock. Think back to the bedrock with stripes. Are these stripes horizontal, slanted diagonally, vertical, or nearly so? If magma is squirting out from the central core of the earth globe, what direction do you call this? Now think about those stripes. Has the rock changed position since the magma intruded and the dike crystallized?

#8 PLANTS - The Botany Bottle

also known as *Parlez-vous chlorophyll* ?
or **Walking the PLANK.**

This activity requires commitment. You need some bottles and jars, some water, and the book **The PLants of Acadia National Park**. Not least of all, you need resolve - and a generous space of time before and after frosts. However, this is one of the most rewarding activities for an individual or a family. For the rest of your life you will enjoy the landscape around you with increased perception of the awe-inspiring diversity of the natural world.

The dedicated botanists who compiled and edited the guide to plants of Acadia, PLANK if you will, urged that the users carry the book into the field rather than that they pick the flower and bring it home to the book. A wise admonition for a national park with two and a half million visitors a season!

However, if your personal goal is learning to recognize plants, to make them your friends, a different tactic is required. Plants belong in your daily life. We urge you to put them there. Below is the **Flower Table** that the Fairbanks Museum in St Johnsbury, Vermont, has maintained for over a century. Every day, volunteers bring in a specimen and display it in a glass container with the plant's common and scientific name on a label.



Here is the **Botany Bottle** challenge: Every day that you have available, go out and get a plant specimen and bring it home to a bottle of water and display it prominently with its label. Of course that means you have to identify it and that is where “walking the PLANK” comes in. By the time your plant wilts, surely some of you will have learned its names. Your specimen is almost surely in that PLANK book. But are you likely to be decimating a population of rare plants? They are rare, so it is not likely, but do use your good judgment when you consider taking a specimen of anything. Maine does have a rare plant list and you can find a 40KB

download with fine descriptions and photographs at http://www.maine.gov/dacf/mnap/features/rare_plants/plantlist.htm. Many of the plants on the list are grasses and sedges, identification of which is a fairly specialized enterprise.

Maine does not have an official list of invasive plant species. Because you are indeed likely to encounter these species, the **Plants of Acadia National Park** botanists have included this list and we include it as well: amur maple, *Acer ginnala*; Norway maple, *Acer platanoides*; garlic mustard, *Allaria petiolata*; barberries, *Berberis xottawensis* *B. thunbergii*, *B. vulgaris*; narrowleaf bittercress, *Cardamine impatiens*; Asiatic bittersweet, *Celastrus orbiculatus*; Canada thistle, *Cirsium arvense*; winged euonymus, *Euonymus alatus*; Japanese knotweed, *Fallopia japonica*; alder buckthorn, *Frangula alnus*; shrubby St. Johns-wort, *Hypericum prolificum*; nonnative honeysuckle species, *Lonicera* spp.; privet, *Ligustrum* spp.; forest woodrush, *Luzula luzuloides*; purple loosestrife, *Lythrum salicaria*; ninebark, *Physocarpus opulifolius*; black locust, *Robinia pseudoacacia*; multiflora rose, *Rosa multiflora*; bittersweet nightshade, *Solanum dulcamara*; coltsfoot, *Tussilago farfara*.

These plants are characterized by their ability to proliferate. They may make fleshy fruits that birds eat and distribute; they may produce thousands of seeds, or they may be able to grow from root fragments of just a few cells. Some of these plants are familiar garden plants that, for reasons that scientists do not fully understand, in some places, in some times become nuisances by “going rogue”. Eradicating them while they are in small numbers, well before they manage to take over, is worth the effort.

Parlez-vous Chlorophyll? Make a checklist for your **FIRST 50 PLANTS** that you are familiar with, the “friends” that you have learned to recognize. Document them by “collecting” camera or sketch book images.

#9 The Nature Selfie Riddles

For the preserves with trails there are riddles to challenge your powers of observation in the field and your ability to guess the coded meanings. (Clues to solve the riddles are included in the e-book and mobile version as well as in the Nature Species Almanac.) Since it is likely that you have a camera or smart phone with you, why not take a photograph of yourself with the object that is the solution? A Nature Selfie.

When you have guessed the answer to the riddles you might take a photograph of yourself and your party posed with the natural feature that is the answer to the riddle. Post your answer photo as your own riddle: “For which IHT preserve riddle is this the answer?”

RIDDLES

Here are the riddles for **Barred Island**:

1. Landlubbers come down the trail too late
Right by me they have to wait
My bare white teeth too hard to chip
Flash a smile with my rosy lips.
Who am I?
2. Climate change may make me drown
Even the jewels in my nice crown
Until sunset you may clamber
Touch me gently, not with hammer.
Who am I?

Here are the riddles for **Crockett Cove Woods**:

1. My namesake and I
might not be to your taste.
Unless you are starving
Pick at leisure, regret in haste
Who am I?
2. Not Snaggletooth, Sweet tooth,
but definitely three
Ever since dinosaurs,
damp-footed knew me
Who am I?

Here are the riddles for **Scott's Landing**:

1. Though I sunbathe, I don't turn pink.
This egg won't hatch as you might think.
Not from the island; don't take me for granted.
I just sit here, where I was planted.
Who am I?
2. Some say I am a messy broom.
A clean sweep I am not.
Above the trees when dark clouds loom
Dramatic skyline you have got.

Who am I?

Here are the riddles for **Settlement Quarry**:

1. How odd a table the host has set;
just how divisive can you can get?
my split personality as a guest –
on wall or floor, whatever's best.
Who am I ?
2. When the oven cools I have some fun
into every crack I quickly run
Quartz and feldspar crystals look so fine
But finer yet those stripes of mine
Who am I ?

Here are the riddles for **Shore Acres**:

1. Who pulled out from under
I ask you to wonder;
what once was my chair
now is only a lair
Who am I?
2. What a story we can tell
being not just where we fell
an explanation that they say
goes indeed a quite long way
Who am I?

Here are the riddles for **Tennis Preserve**:

1. Though tides
may rise and fall
I sail the same
through seasons all
Who am I?
2. Look and down
for carpet brown.
All day long when I was young
in full sun my songs I sung

Who am I?

SPOILER ALERT: The answers to the riddles are found at the end of this PDF.



#10 The Century Checklist Club

A century is a hundred. How about a hundred Deer Isle plants and a hundred animals - or a hundred of just the bird species? - that you have seen and learned to recognize? (We offer a separate PDF so you can print out a paper sheet for recording your checklist candidates.)

100 PLANTS

You may be surprised at how many plants you recognize from the photographs and descriptions in the **PLANK**, [Plants of Acadia National Park](#). By now you should have recognized how important it is to acquire that good book.

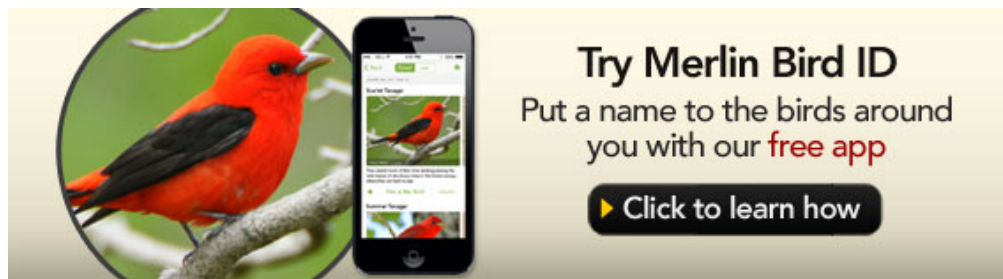
100 ANIMALS

Because it is an island, Deer Isle has fewer species than the adjoining mainland. If you are willing to include invertebrates on your list, you will have no trouble filling out a “century”. Consider especially adding marine invertebrates. Although the sea shows seasons, there are species to be found all year.

100 BIRDS

Dedicated birders here regularly log about 120 species of birds in a single day when they are raising money for Birdathons. Of course, these birders live here year round, they have gone out in advance and staked out areas where a certain species is likely to be found, and they work in teams. However, you might make this a personal challenge for a year: your own Big Year. (Some rainy day you might want to watch the funny movie called *The Big Year*, starring Jack black, Owen Wilson and Steve Martin, based on the book by Mark Obmascik called *The Big Year: A Tale of Man, Nature and Fowl Obsession*. A **Big Year** is a competition to see who can see and identify the greatest number of species of birds in North America north of Mexico in a calendar year.

To start any youngster off right in appreciating and identifying birds, you can't do better than downloading Cornell Laboratory of Ornithology's free app:



This amazing offering is so simple that any novice can handle it. You choose from 4 silhouettes to approximate the bird's size and then click on color swatches. You enter where you are seeing the bird and what it is doing, and CLICK! the answer pops up with range maps and audio. Absolutely wonderful!

#11 Phenomenal Phenology - your own *deeri*Nature Almanac



Phenology is the study of the sequence of natural events. An almanac is a calendar of those events. Across the nation, there is rising interest in phenology as it casts light on climate

changes. Citizen scientists, amateur naturalists, are being recruited by USA-National Phenology Network at www.usanpn.org. You may wish to join this exciting enterprise and subscribe to their e-mail Nature's Notebook.

Think local and join the Signs of the Seasons program coordinated by the University of Maine Cooperative Extension and the Maine Sea Grant. Help scientists document the local effects of global climate change through the work of volunteer citizen scientists. They offer webinars and training sessions for monitoring key species on land and sea. See <http://umaine.edu/signs-of-the-seasons/>.

Why not make your own calendar of natural events for Deer Isle? It would help you plan your outings for your year or for your vacation here.

January and February - arctic ducks wintering here in our coves, chickadees begin spring courting "fee-beee" song

March - Mourning doves bill and coo, salamander Big Night on first warm rain, wood frogs quack, peepers peep after three days (more or less) of 50 F, woodcock displays may begin

April - Scott's Landing: full moon woodcock skydance may go on all night, sunset/moonrise simultaneity may be observed

May - warblers return, shadbush, rhodora blooms, baby seals; orioles, indigo buntings and rose-breasted grosbeaks pass through, early butterflies and moths

June and July - just after dusk our meadows will be an enchanting sight with lightning bugs, aka fireflies, rising from the grasses. Worth seeking out!

August - *Noctiluca* and other species of bioluminescent organism glow when the water is agitated—by your hand, oars, or motor or simply wave actions. Go out to our coves on a warm night and be delighted.

September and October - clear bright days with the winds from the north bring us Sharp-shinned hawks – as the crows will tell you!

November and December - arctic ducks arrive; humans are busy with their own celebrations

See www.me.usarbors.com/monthly-tides/Maine-Downeast/Stonington/2014 for tide tables with sun and moon rise and set.

FURTHER RESOURCES:

A very fine – attractive, readable and trustworthy online and paper magazine version—available from Northern Woodlands. See www.northernwoodlands.org.

Maine Nature News offers both an interesting web site, www.mainenaturenews.com, and a free weekly e-mail newsletter.

The local chapter of Audubon, Downeast Audubon, offers a great way to keep in touch with area nature enthusiasts and opportunities for outings. See www.downeastaudubon.org. The photographs alone are worth the look.

Plain paper and snail mail are the hallmarks of the *Guillemot*, the amateur bimonthly newsletter concerning natural history in Maine, for what is called somewhat humorously the Sorrento Natural History Society. This covers astronomy and animal observations collected from area naturalists by former educator and park naturalist William Townsend. To subscribe send \$5.00 to Guillemot, Newsletter of the Sorrento Scientific Society, 12 Spring Street, Bar Harbor ME 04609-1330, preferably with a donation to support this amazing effort. This would be your membership fee to the society. As to membership obligations, "...we have not yet held a meeting, incorporated, elected officers, written by-laws or formed any committees."

#12 JUST GET OUT!



1. The Green RX

If your physician suggests that you begin walking for your heart, your lungs, your knees, your weight, your outlook on life, etc, we have some trail options just for you. Enlist a friend and you get your "social calories" while you walk. Just being out in nature seems to be good for us. Use the deeriNature PDFs to learn plant or bird species as you go and discover a joy that is almost like stamp collecting as you acquire each species on your list. Get yourself a pair of trekking poles, also called Nordic walking poles, from a sporting goods store or on line to make your upper body workout more effective and to help you deal with any balance issues.

The following trails are arranged according to difficulty. The challenges are described so you can make accurate choices about when you are ready for each trail. Your doctor can tell you how many repetitions to do and in what time.

1. Deer Run-Lily Pond

Here is a level special surface trail approximately .15 miles (750 feet) in length from parking lot to pond. Do that walk back and forth twice and you have a good mile. This is pleasant mixed forest, great songbird habitat. The view of the pond is lovely in early spring when shadblow is in bloom, in fall glory, and even in fog or light rain. There is a bench at the parking lot and another at the pond. You almost certainly can handle this trail.

2. Settlement Quarry

If you are ready to add a little uphill challenge to your walk, the old truck road to the face of the quarry is just right with its graded and hard-packed granite gravel surfaces. The bonus here is a geology lesson and a selection of granite-floored wanderings. There is a sheltered alcove with a great view of Isla au Haut for picnicking even in winter. Figure a generous quarter mile up to the alcove viewpoint so you can calculate how many times to do the round trip up and down the quarry road to meet your RX. Side trips around the quarry floor are a practical bonus, but know that the Glacial Erratic trail skirting the quarry is a more challenging trail (some roots and planks), with no short cuts.

3. Mariners Memorial Park

When you are ready to extend your distances, consider Mariner's Park. This little park has a mowed perimeter path of exactly .5 mile. Do the walk one way and then turn around and retrace your steps for a mile and enjoy quite different views as you do so. The pathway is quite flat and level overall but the mowed grass is not as quite as smooth a surface as the packed stoneways of the previous two preserves. There are picnic tables and benches. The park is not open in winter.

4. Crockett Cove Woods

Crockett Cove offers an attractive forest option, especially appreciated when elsewhere the trails are broiling in the summer sun. Attractive as it is in the rain, you had better have waterproof footwear here when the trail might be soggy. This preserve offers you a chance to try out coping with roots, rocks and planks - the hazards of our other trails - all in one place without getting stranded in an overly-ambitious outing you did not reckon on. A walk of some 200 yards takes you to a small bog - with pitcher plants no less - as a reward. If you feel up to negotiating the planks across the bog, another 250 yards of pleasant walking through the woods will bring you out to a private road for a total of a quarter mile. You can then return to your parking place by walking another quarter mile at a brisk pace with a moderate hill. Pace yourself and get your heart rate

up. (You will observe that you can only park at the place where you entered since leaving your car at the far end would block the private road.)

5. Scott's Landing

Much of the preserve here is gently contoured. However, to get there you have to cross a short stretch - a few hundred feet - of roots across the trail. If you have invested in walking poles, that won't deter you. That's the only real challenge; there are many options for following trails to make up your own mileage and time targets.

CAUTIONS

For the other preserves a few cautions will help you plan your outings.

The black haze on many of the rocks at the shore at Barred and Tennis Preserves is a coating of cyanobacteria which is very slippery when wet. Similarly, rock faces anywhere on the trails where there are nearly invisible seeps of water can be hazardous when the temperature is below freezing.

With the exception of the first three described above, most preserves have at least a few planks laid across wet spots. At Shore Acres there are many to be negotiated.

Consult the suite of deeriNature PDFs at www.deerisle.com for more complete descriptions of the preserves as well as maps.

2. Healthy Island Hike Five

Hike Five is a new effort by Healthy Island Project to encourage folks to get out, walk a bit and see our beautiful island. If you visit five of the locations on the island, and send a "selfie" of you at each of those spots, you will be eligible for a prize. Email your five photos to deerislehikefive@gmail.com and we will email you a gift certificate for an island ice cream cone!

3. A Natural Marathon

The Appalachian Trail is something like 2,200 miles long and 11,000 people have logged those miles. The Great Smokey Mountains 900 Miler Club boasts more than 300 members. The total of Island Heritage Trust Preserve trails total only half of something like a Marathon, 26 miles; but the number of people who can say that they have traveled that distance on our trails is remarkably small.

Here is our challenge. It is one challenge to hike all those miles and yet another to keep track of them. How do you keep from losing that piece of paper for a whole year? We hope your sheets will find a place on your refrigerator or pinned up on your bulletin board so you can enjoy the satisfaction of logging your miles and observations.

We can be proud of our trail culture. Although we have a paid steward who clears blown downs and oversees other trail maintenance tasks, it is primarily our hikers who keep our trails free of litter. Are the trails treacherously icy? Tinder dry? Our dedicated hikers can share their knowledge about such things as avoiding ticks, not stepping on slippery waterbars, and avoiding yellowjackets in addition to alerting the stewards about situations needing attention.

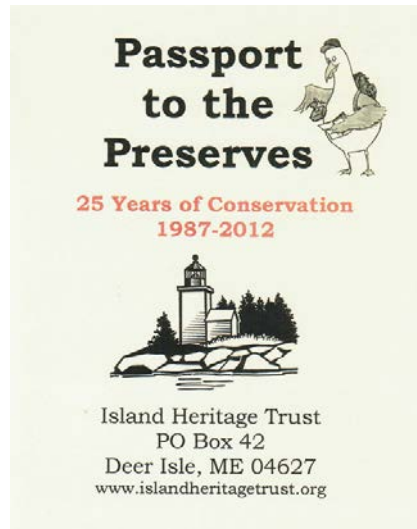
Recognize that walking ***all*** our trails in **both On and Off** seasons on ***all*** our preserves is a **Natural Marathon**. This is a way to acknowledge that you have made a contribution to our preserve system and to value your nature observations.

You decide whether you wish to approach your goal season by season or preserve by preserve. You decide whether your data are considered as winter or summer; are there any green shoots or just snow patches? When does summer become fall, become bleak November? You decide. Not only that, you decide whether you will tell us - Island heritage Trust, the Chamber of Commerce, or your friends, but we hope that you will. We are interested in recognizing the fact that you value all of our Island preserves, all the year round. IHT might decide to hand out certificates at their summer annual meeting; a patch could even be designed. Your achievement deserves to be celebrated. Perhaps in the newspaper, in the IHT newsletter or on our various web sites your name could be listed as a Nature Marathon CHAMP. Whatever you can do to encourage others to JUST GET OUT!

4. Letterboxing

is not a challenge in the sense of a scientific exploration, but it is a way to encourage youngsters to get out onto the preserves.

Letterboxing - an Introduction



IHT has set up a letterboxing trail through all its preserves, as well as Tennis Preserve, Barred Island, Crockett Cove Woods and Mariners Park. Somewhere along the trail you will find a "letterbox" with an official stamp and a notebook. Use the stamp in your "Passport to the Preserves" and write us a note in the booklet. Come to the IHT office (420 Sunset Road, Deer Isle) to get your official "Passport to the Preserves" - collect all the stamps and come back to IHT for a prize and get your name entered into the drawing for the grand prize (a Field Guide) to be drawn in September. The letterboxes come in two styles - a large deep box with a lid and a smaller open-faced box - inside is a plastic container with the stamp, etc. They are located along a trail on each preserve - they are not hidden, but they may not be obvious at first.

There are other Letterboxes on Deer Isle - though IHT cannot guarantee that they are actively maintained.

For more information visit: www.letterboxing.org

RIDDLE ANSWERS

- Barred Island:
1. Point of Interest # 10 granite boulder on shore at head of bar with quartz and apfite
 2. Point of Interest # 10 garnet-bearing boulder on far western shore, diametrically opposite the bar
- Crockett Cove Woods:
1. Point of Interest # 1 rock tripe on boulder
 2. Point of Interest # 1 three-tooth Bazzania
- Scott's Landing:
1. Point of Interest # 7 Sedgwick granite boulder at high
 2. Point of Interest # 8 witches' broom in spruce tops
- Settlement Quarry:
1. Point of Interest # 6 splitting wedge in table top at alcove
 2. Point of Interest # 8 apfite dike in wall
- Shore Acres:
1. Point of Interest # 7 stilted tree in front of nurse log
 2. Point of Interest # 10 stone wall fairly near turning point at shore
- Tennis Preserve:
1. Point of Interest # 7 sloop carving on tomb of David Billings
 2. Point of Interest # 4 white pine on shore edge

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www.deerisle.com

Text by Dr. Kenneth L. Crowell and Marnie Reed Crowell
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by geologist Dr. Roger LeB. Hooke
and marine biologist Dr. Robert E. Knowlton

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