turalist



Each quarter SOFO features eco-links, written by a member or friend of the Museum. If you wish to submit an article, please contact us.

eco links

The Skin of Trees

by John L. Turner

It's late morning on a deeply overcast day in early February and a uniform sky of pewter grey threatens rain but, so far, it's held out. So, wanting to get away from yet another day of news, as gloomy as the weather, I decide to do something that always works to pull me out of melancholy - a hike in nature's realm - knowing that at some point I'll connect with something - seeing or feeling - something that ushers in elation.

Given the season, I won't gain this expected happiness from seeing colorful things - nature's color palette this time of year is too subdued, basically a mosaic of brown, black, and grey. Instead, my mind latches on to the concepts of textures and patterns and I'm quickly rewarded by focusing on the skin of trees, many of which possess bark patterns distinctive enough to identify to species. From decades of hiking the Island's forests they are like familiar friends.

The heavily wooded preserve doesn't disappoint as I immediately pass several black or sweet birch trees of varying age. Black birch is widespread in the richer soils of Long Island's north shore. When young, black birch has generally smooth reddish-grey bark with distinctive horizontally parallel rows that are slightly elevated. These rows are known as lenticels and are thought to help the tree "breathe" by allowing gas exchange through the bark. In older specimens the bark becomes more three dimensional with cracks and fissures that look as if a black bear (or mythical dragon) ran its sharp claws down the trunk.

A few of the larger trees are afflicted with the Nectria fungus, or black birch canker, a disfiguring condition that can damage the tree and kill it in severe cases. When growing on the main trunk and larger branches it can cause hollows - while hiking the Tiffany Creek Preserve in northern Nassau County several decades ago, I spied a screech owl sitting in just such a canker-created hollow - the tree's loss was the bird's gain.

Another well-known aspect of black birch is that it was once a critical source for a tasty flavoring – oil of wintergreen. Indigenous people used the oil to treat muscle aches and to "purge the body," while its oil was used in a wider variety of foods and medicines. If you come across a black birch and break off a twig and begin to chew on it you'll immediately taste the refreshing flavor of wintergreen.

Moving further along the trail I pass by four of the ten or so oak species native to Long Island - white, black, scarlet, and red oaks. White oak, as its name suggests, has pleasant light-colored bark consisting of thin vertical plates. As the tree ages the bark gets a bit thicker (true for almost all trees) and more "sloughier" with the top and bottom of the bark plates curling a bit. The other three are a tougher group to identify to species absent their leaves, especially distinguishing the bark of black oak from scarlet oak. Red oak can be distinguished from the other two by its longitudinal "ridges and

valleys"; as one botanist has insightfully noted, the surface of red oak bark is reminiscent of what a ski course looks like from the air, the valleys serving as the ski courses while the ridges are the forests left intact in between.



Black Oak tree bark

Continuing the amble, I come to another medium sized tree standing alone although surrounded by oaks a little distance removed. I can tell from its somewhat smooth and attractive light grey bark with shallow fissures that I've not come across another oak but rather a pignut hickory, one of several hickories found on Long Island. The ridges diverge and blend in a random way creating an intriguing pattern that is fun to look at. This is the group of trees of barbeque fame, their wood imparting a distinctive smokiness to backyard barbeque fare. While I don't see any on my walk through this Setauket forest, a cousin to the pignut hickory has among the most distinctive bark of any you'll see on Long Island - that of the shagbark hickory. If you see the tree you'll immediately know why it got its name with large patches of shaggy bark curling away from the trunk. It is uncommon on Long Island. A more common hickory which I didn't see on the hike is mockernut hickory, so named because the very small nut "mocks" the person making the effort to harvest it.

A bit further on and from some light tan leaves fluttering lightly in the understory I knew I had yet another tree species – an American Beech. The bark of beech is light grey and is smooth, making it often an unfortunate target of etched initialed inscriptions. It's hard to look at the bark and trunk of a large beech and not think of an elephant leg, especially if the wood beneath the bark has a little wrinkle as it often does. The elephant leg analogy is even stronger at the base where the roots flare, looking like elephant toes. Over the past few years many beech trees have been afflicted with beach leaf disease which can be fatal; fortunately this tree shows no signs of the affliction.

One of the main purposes of bark is, of course, to protect the living tissues just underneath from pathogens such as numerous fungal species. Continued on next page Continued from page 1



American Reech tree hark

But it can also help to protect it from another force – wildfire. And nowhere can you see a better example of this than the bark of pitch pine, the dominant pine of the Long Island Pine Barrens. Pitch pine has very thick bark which provides an insulating layer to protect the living cambium tissue.



Pitch Pine tree bark

Near the end of the loop walk I hit a bunch of medium sized trees of another oak species – chestnut oak, including one multi-trunked specimen sending five, foot-thick trunks skyward. It's the largest tree in the preserve. Chestnut oak, common in rocky soils found on the Ronkonkoma Moraine, gets its name from the similarity of the leaves to those of the American chestnut, except in the oak the marginal lobes are rounded rather than having little bristles. Its bark is dark grey and deeply furrowed.

At the end of this grouping is another smaller chestnut oak, or so I thought at first. Deeply furrowed bark with inch high ridges – looks like chestnut oak but I realize the identification is wrong when I look up into the finer branches in the canopy and notice a few of them have smooth green bark (yet another function of bark is, in some trees, to photosynthesize). Suddenly it dawns on me I'm not looking at an oak but rather a mature Sassafras tree, a common species throughout Long Island. I realized I had been barking up the wrong tree.

About John Turner

John, a noted author and environmentalist, is a member of the South Fork Natural History Museum (SOFO) Board of Directors

A Top Predator Visits SOFO



Jake Kushner, SOFO's trail cam monitor for the Long Island Mammal Survey, was elated to share the news that in late October, one of the trail cams silently monitoring our property in Bridgehampton recorded an Eastern Coyote directly behind the Museum, in the Long Pond Greenbelt Preserve. This carnivore, which has occasionally been seen on the East End since 2013, is an indication that this species continues to naturally expand its range to include Long Island, which is the only major area in North America where coyotes have not colonized. Stay tuned for perhaps more sightings.

Bluebird Recovery Update

Joe Giunta, SOFO's Bluebird Steward and, since 2005, head of the Bluebird Recovery Program in Eastern Suffolk County, reports that the 2024 bluebird season was "a very good year for bluebirds" with 136 fledglings. The grand total since 2005 now stands at 1,764 fledglings.

Osprey Chronicles

The osprey pair nesting at SOFO this year successfully raised one fledgling. Three chicks hatched with only one surviving. The adults were observed bringing a steady supply of fish to the young but often one chick dominates and gets the most food. This year was only the second time an osprey pair successfully nested at SOFO. We will be watching the skies for their return in March, 2025.

Project Feeder Watch at SOFO

This winter, SOFO is participating in Cornell Lab of Ornithology's Project Feeder Watch. You can help us with this bird survey by stopping in at the museum to watch and count birds at the seed and suet feeders. Learn more about how to identify common backyard birds by watching which birds feed at each of the different types of feeders at SOFO. Join us from November 2024 to March 2025 each week, when SOFO staff will be watching birds on Saturday mornings from 10AM to 11AM. We will be counting all the birds that stop by, even if they are only on nearby trees and not perched on the feeders. We will report our count data along with daily weather observations to the Cornell Lab Feeder Watch website. You can join Feeder Watch, too, and count birds at home by going to feederwatch.org for details on getting started.

Purple Martin Colony Update



SOFO's purple martin colony in Vineyard Field had a successful nesting season, as reported by John Shemilt, SOFO's Purple Martin Colony Steward. There were 34 nests established. The first eggs were seen in early June, overall a total of 172 eggs were observed. Of these, 155 eggs hatched and 140 of the hatchlings fledged. John reports all of his data to the Purple Martin Conservation Association. We look forward to the colony returning again next year.

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Find us on Facebook Instagram

A full description of each program is listed on the SOFO website: www.sofo.org/calendar



For SOFO members: programs are free, unless otherwise stated.

Level of membership indicates the number of people entitled to a free program.

For SOFO non-members: there is a fee.

Please contact us at: info@sofo.org for fee information or refer to the SOFO website at: www.sofo.org.

If you are not already a member, we invite you to join the museum.

Find out about membership levels at www.sofo.org/membership.

For full information on the South Fork Natural History Museum (SOFO), including entrance fees and hours of operation, please refer to the website: www.sofo.org. Advanced registration is required for all programs.

Mammals and Other Wildlife Captured on SOFO's Trail Cameras



White-tailed deer



Canada goose



Red for



Wood ducks

Calendar At A Glance

Key: A-Adults T-Teens C-Children F-Family AA-All Ages

A full description of each program is listed on the SOFO website at www.sofo.org/calendar. Advance reservations are required for all programs.

January

Saturday, January 4, 10:00AM: FREE, Birding for Beginners: A/T/C10+

Saturday, January 4, 10:30AM: Ocean Trivia Challenge with Host Rob "Rockfish" Gelling: A/T/C12+

Sunday, January 5, 10:30AM: Winter Window "Glass" Art with Upcycled Materials: A/T/C6+

Saturday, January 11, 10:30AM: Make Your Own "Fossil" Shark Teeth: A/T/C8+

Sunday, January 12, 11:15AM: Searching for Seals with SOFO: A/T/C5+

Monday, January 13, 5:00-6:00PM: FREE, Full Wolf Moon Hike with Friends of the Long Pond Greenbelt: AA

Wednesday, January 15, 1:00-3:00PM: SOFO's East End Outdoor Nature Education with Crystal at Calverton Ponds Preserve, Manorville: C 3-7

Saturday, January 18, DAWN to DUSK: NYSOA 2025 Winter Waterfowl Count: A/T. Experienced and intermediate birders only, please.

Saturday, January 18, 1:00-2:00PM: Nature Art Workshop with Tony Valderrama — Making Wildlife and Habitats with Model Magic, Materials Fee \$10: A/T/C5+

Saturday, January 25, 10:00AM: FREE, Young Environmentalists Society (YES!) Meeting: Ages 10 - 16 and Junior Members Ages 5-9

Saturday, January 25, 10:00AM-12:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, January 25, 10:30AM: Celebrate Observe the Weather Day — Cloud Hunting: A/T/C5+

Saturday, January 25, 6:00PM: Owl Prowl with Frank Quevedo: A/T

Sunday, January 26, 10:30AM: Owl Storytime & Craft: F

Sunday, January 26, 2:00PM: Make Your Own Nature Suncatcher: A/T/C5+

February Saturday, February 1, 10:00AM: Birding with Frank — Shinnecock Specialties: A

Saturday, February 1, 10:30AM: Celebrate World Wetlands Day — Wetland Walk: A/T/C5+

Saturday, February 1, 4:00-5:00PM: FREE, East End Environment Series: Bats on the Beach, Bay, & Beyond with Delaney Costante: A/T/C10+

Sunday, February 2, 10:30AM: Let's Make a Bird Feeder! A/T/C5+

Saturday, February 8, 10:00AM-12:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, February 8, 10:00AM: FREE, Birding for Beginners: A/T/C10+

Wednesday, February 12, 5:30-6:30PM: FREE, Full Snow Moon Hike with Friends of the Long Pond Greenbelt: AA

Saturday, February 15, 2:00PM: Searching for Seals with SOFO: A/T/C8+

Saturday, February 15, 2:00PM-4:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, February 15, 10:30AM: Marine Mysteries — A Multi-Sensory Exploration with Rob "Rockfish" Gelling: A/T/C9+

Saturday, February 15, 7:30PM: Annual Eastern Tiger Salamander Search with Andy Sabin: F/C6+

February continued

Winter School Break February 17-21, 2025

Enjoy a Nature Themed Winter Walk with SOFO Staff 10:30-11:30AM Registration Required.

Members: Free, Non-Members: \$15 adult, \$10 children

Monday, February 17, Where Do Insects Go in Winter?

Wednesday, February 19, Scavenger Search Friday, February 21, Winter Bingo

Wednesday, February 19, 1:00-3:00PM: SOFO's East End Outdoor Nature Education with Crystal at Sagg Swamp, Sagaponack: C3-7

Saturday, February 22, 9:00-11:00AM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, February 22, 10:00AM: FREE, Young Environmentalists Society (YES!) Meeting: Ages 10 – 16 and Junior Members Ages 5-9

Sunday, February 23, 10:30AM: Animals in Winter Stories & Meet the Animals: F

Sunday, February 23, 1:30PM: Animals in Winter Stories & Meet the Animals: F

March Saturday, March 1, 10:00AM: FREE, Birding for Beginners: A/T/C10+

Sunday, March 2, 10:30AM: What is a Stick Bug? Learn About These Insects and Create Your Own Stick Bug: A/T/C5+

Saturday, March 1, 2:00-4:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, March 1, 7:30PM: Annual Blue-spotted Salamander Search with Andy Sabin: F/C6+

Saturday, March 8, 10:00AM-12:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, March 8, 10:30AM-12:00PM: Worms Eat My Garbage: Getting Started with Composting at Home with Rob "Rockfish" Gelling: A/T/C9+

Saturday, March 8, 7:30PM: Another Blue-spotted Salamander Search with Andy Sabin: F/C6+

Friday, March 14, 7:30-8:30PM: FREE, Full Worm Moon Hike with Friends of the Long Pond Greenbelt: AA

Saturday, March 15, 2:00-4:00PM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, March 15, 3:30PM: Searching for Seals with SOFO: A/T/C8+

Saturday, March 15, 8:00PM: Annual Spotted Salamander Search with Andy Sabin: F/C6+

Wednesday, March 19, 1:00-3:00PM: SOFO's East End Outdoor Nature Education with Crystal at Cupsogue County Park, Westhampton: C3-7

Saturday, March 22, 9:00-11:00AM: Seal Cruise, co-sponsored with CRESLI, cresli.org

Saturday, March 22, 11:00AM: FREE, Community Beach Clean-up: AA

Saturday, March 29, 9:00AM: Observing Glacial Erratics Along the Ronkonkoma Moraine: A/T

Saturday, March 29, 10:00AM: FREE, Young Environmentalists Society (YES!) Meeting: Ages 10 – 16 and Junior Members Ages 5-9

Saturday, March 29, 10:30AM: Celebrate National Plant a Flower Day: Planting Native Flowers: A/T/C5+

Saturday, March 29, 6:30PM: Searching for Woodcocks: A/T/C10+

Sunday, March 30, 10:30AM: Water Cycle Stories & Experiments: C3-7

Sunday, March 30, 1:30PM: Water Cycle Stories & Experiments: C3-7

Hayground School Apprentices at SOFO

For the second year, SOFO has welcomed apprentices from Hayground School. Nate and Dutch are 8th graders, and for eight weeks, they learned about everything needed to keep a museum running. Three days a week, for 1.5 hours, Nate and Dutch helped with tasks and learned all the ins and outs of running a local natural history museum.



Feeding the Fish and Making Salt Water

One of their main tasks was feeding our marine animals. Our marine invertebrates are fed a variety of items, including clams, ribbed mussels, shrimp, silversides, and more! The boys learned about who eats what and trained to prepare the food independently. In addition, they learned about other husbandry or animal care tasks, including cleaning exhibit tanks, making salt water, and how to safely handle some of our animals while caring for them. They even cleaned our rattlesnake terrarium. Don't worry—the eastern timber rattlesnake was safely put away by authorized SOFO staff before they started to change out the bedding material of eco-earth! Nate and Dutch also assisted SOFO Environmental Educators in preparing for and presenting the animals to a school group. They helped set up the educational materials and animals and observed the school group interact with the museum's exhibits and learn about reptiles and amphibians!

from the Past

Tigers Love Nasty Weather



Searching for Tiger Salamanders by Andy Sabin, President, SOFO Board of Directors

Nothing affects tracking the mole salamander's spring breeding migration more than the weather. On the South Fork there are four types of mole salamanders: the tiger, spotted, marbled and blue spotted. Their migration normally takes place at night and begins as these amphibians emerge from their underground hibernation, up to 1,000 feet away from the breeding pond. Salamanders, like reptiles, have a

body temperature the same as that of the ambient air or water temperature. Thus a salamander venturing out on an early migration may be caught by a freeze and die. Also, eggs deposited in water that later freezes may fail to hatch. But if once the salamander enters the pond and it ices over, the salamander survives because the water below the surface remains above the freezing and these salamanders are able to absorb oxygen through their skin.

Suitable conditions for emergence and breeding were summarized in 1927 by an upstate naturalist, F. C. Blanchard. His data on spring breeding mole salamanders showed they only migrate when the temperature is above freezing, usually between 45 and 50-degrees, and only when it is raining. Consequently, if rainfall is light in February and March, they may not make it to the breeding pond that year.

In the early 1940's William Todd Helmuth, MD, a South Fork naturalist, found tiger salamanders breeding in East Hampton from mid-March to early April. Considering the deadly chances taken by salamanders migrating early, I was amazed after analyzing my own documentation of migration dates starting in 1984. These dates for the Bridgehampton area are increasingly earlier and correspond with warmer temperatures, and may be evidence of global warming.

In 1984, when I first started tracking breeding salamanders and seeking the supposedly extirpated Tiger salamander, I followed Helmuth's mid-March date. But it wasn't until the rainy, 50-degree night of March 14, 1986, that I made the first Tiger salamander sighting on the South Fork since July 1966, when immatures were documented here by the American Museum of Natural History. The salamander I found appeared to have already bred and to be returning from the breeding pond to its upland habitat.

The following year, I went ten days earlier, on March 4, 1987, and found Tiger salamanders in a mostly ice-covered breeding pond. Still curious to discover their emergence date, I went out the next year, February 19, 1988, and found them. Then, even earlier, the first week of February 1989, I found them after heavy rain and a substantial thaw. Warm winters prevailed in 1990 and 1991, and again I found Tiger salamanders the first week in February. On January 9, 1992, warm winter temperatures, a January thaw, and rain triggered the earliest date on which I have documented salamander emergence. This find was just less than two months earlier than Helmuth's mid-March finds in the 1940's. Amazing.

This article was originally published in the South Fork Natural History Society's Newsletter, Vol. 4, No. 2, 1992.

Update: Since 1992, the South Fork Natural History Museum has been leading annual searches each winter for Tiger, Spotted, and Blue spotted mole salamanders. Tiger salamanders here on Eastern Long Island have been emerging ever earlier in Winter, as early as Christmas Eve one year, and as always their movements are dependent on the weather.

Salamander Searches with Andy Sabin

Saturday, February 15 at 7:30pm: Eastern Tiger Salamander Search

Saturday, March 1 at 7:30pm: Blue-spotted Salamander Search

Saturday, March 8 at 7:30pm: Another Blue-spotted Salamander Search

> Saturday, March 15 at 8pm: Spotted Salamander Search



SOFO IS VERY HAPPY TO ANNOUNCE OUR JANUARY BUSINESS OF THE MONTH: THE BELL & ANCHOR

THE BELL & ANCHOR OFFERS FRESH,
LOCALLY SOURCED SEAFOOD AND SEASONAL
DISHES IN A WELCOMING WATERFRONT
SETTING IN SAG HARBOR, SERVING THE
BEST PRIX FIXE MENU IN THE HAMPTONS!

OPEN TUESDAYS - SUNDAYS, FROM 5:30PM WWW.BELLANDANCHOR.COM

Congratulations to The Bell & Anchor, an acclaimed dining destination in Sag Harbor, celebrated for its exceptional seafood and dedication to the East End community for over a decade.

Overlooking the picturesque waters of Noyac Bay in Sag Harbor, The Bell & Anchor is a culinary haven that marries the region's maritime heritage with a contemporary dining experience. Opened in 2012 by renowned restaurateurs David Loewenberg and Chef Sam McCleland, the restaurant has become a beloved staple in the Hamptons, celebrated for its dedication to fresh, local ingredients and its warm, inviting atmosphere. Whether you're a seafood lover or seeking a memorable evening by the water, The Bell & Anchor offers something extraordinary.

We are honored to have been chosen as SOFO's business of the month. The Bell & Anchor has been open year-round for over 12 years. It has always been our goal to serve and highlight the best local products we can find. We believe the culture of our restaurants extend beyond our cuisine and hospitality. It resonates in the beautiful community we are part of. We believe supporting institutions such as SOFO goes hand-in-hand with truly being part of the fabric of our East End Family.

-Sam McCleland, Co-Owner & Executive Chef







DEVELOPMENT NEWS

A Productive and Exciting Fall Quarter

We are thrilled to share that SOFO wrapped up another remarkable fall quarter, building on the momentum of our highly successful **35th Annual Gala Benefit** held in mid-July. This milestone event celebrated 35 years of nature education and environmental stewardship.

In September, we launched our Annual Appeal campaign, "Empowering Our New Generation of Conservationists." Over Thanksgiving, SOFO's co-founder and Board President, Andy Sabin, announced his traditional Annual Appeal \$50,000 Challenge Grant, pledging to match every gift of \$10,000 and less. Thanks to your generous support, we are meeting the substantial costs required to maintain SOFO's high standards as the premier natural history museum for children and adults on the South Fork of Long Island. We extend our heartfelt gratitude to all our supporters for investing in the future of conservation.

Giving Back to the Community

This holiday season, SOFO was proud to contribute to our local community. Thanks to the generosity of our Gala attendees who supported our **Gala's Special Ask Appeal**, we made significant donations to the following food pantries serving the Bridgehampton area. We are honored to support these organizations as they provide essential services to families in need.

Membership Drive

This November, SOFO launched an exciting new **Membership Drive** with special incentives for both new and renewing members. We're offering a **15% discount** on memberships and exclusive new recognition benefits, including a **complimentary inscribed brick** for those joining at the Supporter Level and above.

As a member of the SOFO family, you enjoy a host of tax-deductible benefits, including:

- Free museum admission
- Free or discounted access to nature walks,talks,and events
- Discounts in our gift shop
- A subscription to our quarterly newsletter, The SOFO Naturalist

Your membership helps sustain our programs and initiatives while connecting you with a community that shares a passion for nature and conservation. Join us today and make a lasting impact!

Contact us at SOFO for more information and to join or renew your membership.

SOFO Mission

The mission of the South Fork Natural History Museum (SOFO) is to stimulate interest in, advance knowledge of, and foster appreciation for the natural world with special emphasis on the unique natural environment of Long Island's South Fork.

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