

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

Feathered Marvels at Montauk Point

by John L. Turner

For many Long Islanders the seasons are measured by weather - the predictable trends of warming in the Spring, hot temperatures in Summer, cooling in the Autumn and for the winter season air temperatures routinely dropping below freezing resulting in accumulations in the form of blankets of snow and sheets of ice.

Long Island naturalists, though, see the seasons through a different lens - through the unfolding and ceaseless procession of natural events involving the plants and animals that share the planet: the leafing out of trees and the return of migratory songbirds in the Spring, the full flowering of wildflowers in Summer, and the southbound movements of Monarch Butterflies and Common Nighthawks in the Fall as deciduous trees shed their leaves.

Winter also has its distinctive aspects: some mammals have entered hibernation, and all reptiles and amphibians have entered the mammalian equivalence of hibernation - brumation. Clearer night skies await, offering great conditions to enjoy a view of the planets and constellations. And winter can, of course, be measured by the movement of birds too, such as the sudden appearance of certain species



like Snowy Owls along the island's south shore barrier islands.

For the South Fork though, the most memorable and impressive winter highlight involves waterfowl, and lots of them, in the form thousands, of to tens of thousands, of sea ducks bobbing in the choppy waters Montauk around Point. Here, begin-

Snowy Owl - Xylia Serafy

ning in November and lasting into early April, large rafts of Surf, Black, and White-winged Scoters are joined by Common Eiders, with a sprinkling of King Eider thrown in. Other ducks that help to fill out the waterfowl picture (as an avian group waterfowl are restricted to ducks, geese, and swans) include the elegant Long-tailed Duck and Red-breasted Merganser, commonly seen, and Common Goldeneye which do not live up to their name here, as they are occasional. Even less than occasional is the stunning purple, orange, white, and black garbed Harlequin Duck, of which one or two, at the most, are seen each year in the area.

Other non-waterfowl waterbirds join the scene. Two loon species -

the thinner Red-throated and stockier Common Loons are common here as are Horned Grebes, but not Red-necked Grebes, which are occasional. Great Cormorants replace their more well-known and common brethren - Double-crested Cormorants, which have departed the colder waters here for more balmy climes. "Alcids", birds such as Razorbills and Murres, dressed in stark yet handsome blackand-white plumage overwinter here too and can sometimes be seen flying fast and low over choppy waters. The Northern Gannet is the largest bird; this ghost white species with striking black wingtips cuts distinctively through the air with a six-foot wingspan, wheeling abruptly to plunge dive into marine waters from as high as 100 feet in the air in pursuit of fish.

Harbor Seals are also regulars here and they can be seen swimming around amidst the birds in search of fish. Much less common are the larger Grey Seals or "horseheads" as they're called, due to the profile of their head.

These seasonal waterbird gatherings around the peninsula likely form the largest wildlife congregation that you can still experience on Long Island and the closest thing we have to a wildlife spectacle on



Common Eider – Corey Hayes

this crowded place we call home. The numbers that bear this out are impressive - a flock of 120,000 Surf Scoters was reported in 1930 although today a "mere" 2,000 - 3,000 scoters a season is more likely. The increase in Common Eider numbers here is a more recent phenomenon with more than 12,000 seen in the mid-1990s.

Given these numbers a visit here is certain to produce ceaseless motion as birds scatter all about. An excerpt from my book *Exploring the Other Island: A Seasonal Nature Guide to Long Island* reinforces the point. In the chapter devoted to Montauk Point I note: "Their [sea ducks] abundance was made clear to me on a winter trip in 1993. I had set up my birding scope to scan a flock of eiders several hundred yards from shore, but before doing that focused on the coastline of Block Island, shimmering in the distance. In doing so, I realized that steady streams of scoters, at a rate of at least ten a second, were flying past. The flight movement continued unabated, and after stopping the count forty minutes later, rather bleary-eyed, I estimated that approximately 25,000 ducks had flown past."

The reason for such avian abundance may be sitting in a small pewter dish on a shelf of my bookcase. It is a dried strand of seaweed with several dozen tiny Blue Mussels attached which I secured on a fishing trip with Carl Safina, the well-known author, naturalist, and SOFO board member, on his boat a few months ago. (Carl caught a few bluefish that trip and I caught only seaweed strands, but it's all good). The mussels, about one-eighth of an inch long gave a hint of the exceptional abundance that must be found at the bottom of

eco links

Continued from page 1



the ocean, serving to sustain some of these birds through this harshest of seasons. This small strand reminded me of the several occasions that I've seen scoters bobbing to the surface, after a dive to the

Surf Scoter – Alan D. Wilson

benthos, with a full grown Blue Mussel in their bill; they swallow them whole and let their powerful gizzard grind up the shell.

A good place to watch the comings and goings of pelagic birds is from the pavilion at Montauk Point State Park. You can usually position yourself out of the wind here, and with a cup of hot chocolate from the inside concession and the high vantage point of the pavilion you're all set to scan for seabirds along the northern shoreline of Montauk Point.

Why not put a visit to see this seabird spectacular on your "to-do" list this winter?

Editor's Note

For a spectacular opportunity to see many of these feathered marvels, join John on Saturday, January 25, at 10:30am at the pavilion at Montauk Point for Birding with John Turner—Feathered Marvels at Montauk Point. Please call (631) 537–9735 or email SOFO (info@sofo.org) to reserve a spot as soon as possible since this program will fill up quickly.

About John Turner

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

Footnotes <u>^{on} Nature</u>

March of the Mole Salamanders

by Sarah Bailey, SOFO Environmental Educator



As winter thaws into spring, snow melts and spring rains start to fall. Water starts to collect, forming temporary ponds called vernal pools. These pools fill during the winter and early spring and slowly lose water throughout

Blue-spotted Salamander - Greg Schechter

the summer, until they are completely dry. Since these pools are dry for a portion of the year, they are often a fishless haven for many amphibian species that lay their eggs in water. Young amphibians can grow from eggs, to aquatic larvae, to terrestrial adults, with a lower risk of predation.

The seasonal creation of these pools, combined with showers and warming temperatures, triggers an incredible migration of mole salamanders. As their name suggests, these salamanders spend most of



Eastern Tiger Salamander - Peter Paplanus surface to visit vernal pools where they breed

and lay eggs. These cold-blooded amphibians cannot produce their own body heat and rely on warming spring temperatures to activate their metabolism to support their long journey. Rainfall is also critical to triggering movement, as salamanders have very delicate skin that requires a high level of moisture. After the migration is complete and eggs are laid, the adult salamanders return to their burrows, and the race is on for the young to reach adulthood before the vernal pool dries up.

Eight species of salamanders are found on Long Island, four of which are mole salamanders. Spotted, Blue-spotted, and Eastern Tiger Salamanders migrate to breed and lay eggs in the water from late winter to early spring. Marbled Salamanders migrate to breed and lay eggs in the leaf litter at the bottom of dry vernal pools in the fall. They are smaller than the other mole salamanders, so eggs are laid in the fall to give their young time to grow before the larger salamanders arrive.

If you are interested in learning more about our native salamanders or seeing this remarkable migration in person, I invite you to the SOFO program "Meet the Salamanders" at 10:30 am on February 1st.



their lives in underground burrows. When

the perfect combina-

tion of temperature and

rainfall occur, a multi-

tude of mole salaman-

ders come to the

Spotted Salamander – Peter Paplanus

For an amazing nighttime adventure, join Andy Sabin (also known as "The Salamander Commander") on his annual field expeditions to search for these elusive amphibians as they make their way down to vernal pools to breed. Here are the four dates for Andy's 2020 salamander walks. Keep in mind that these walks are dependent on previous heavy rain.

> Saturday, February 15 at 7:30pm: Eastern Tiger Salamander Search Saturday, March 7 at 7:30pm: Blue-spotted Salamander Search Saturday, March 14 at 7:30pm: Another Blue-spotted Salamander Search Saturday, March 21 at 8pm: Spotted Salamander Search



Marbled Salamander

South Fork Natural History Museum (SOFO) Calendar At A Glance Winter 2020

377 Bridgehampton/Sag Harbor Turnpike P.O. Box 455 Bridgehampton, NY 11932-0455 www.sofo.org email: info@sofo.org.



Find us on Facebook 🗗 Twitter 🈏 Instagram 🧿

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



Museum Admission & Program Information SOFO Members Admission to the Museum is free. Programs are free unless otherwise specified. Advance reservations are required for all programs.

Special Winter Rates for Non-Members: January, February and March Museum Admission Only – Adults \$7.50, Children \$5 (Ages 3-12), Ages 2 and under free Museum Admission and Program – Adults \$10, Children \$7.50 (Ages 3-12), Ages 2 and under free Advance reservations are required for all programs.

To make reservations and find out about meeting places, please call SOFO at 631.537.9735 or email info@sofo.org.



SOFO's After School Science Enrichment Programs: Learning to Protect Our Long Island Environment

Classes meet at the museum on Tuesdays and Thursdays from 4pm to 5pm. Registration is required. This free, drop off program is made possible thanks to the support of an anonymous donor.

Session II: January 14 to February 27, 2020 Session III: March 3 to April 2, 2020

Contact Melanie Meade, SOFO Education & Outreach Coordinator, at mmeade@sofo.org or call her Sunday through Thursday, 9am to 5pm at (631) 537-9735

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.

> Drawdown East End* Winter Presentations at SOFO (dates and times to be announced) Plant Rich Diet – Creating Options & Making Choices
> Women & Girls as a Primary Impact on Climate Health
> Green & Sustainable Fashion

*Drawdown East End is an organization dedicated to finding local & global solutions to the climate crisis.

January	4	• Snowy Owls at Shinnecock Inlet: A/C8+ •	10:30am
5	5	• What Makes a Fish a Fish? AA •	10:30am
	10	• Full Moon Hike with Friends of the Long Pond Greenbelt: AA •	6-7pm
	10	• Nighttime Owl Prowl with Joe Giunta: A •	7pm
	11	• Intro to Out East Neighborhood Network for Active Adults 50+: A/T/	C8+•11am
	11	• SOFO Cleans the Beach—Help Needed! AA •	3pm
	12	• Two-Mile Nature Hike at Promised Land, Amagansett: A/C8+ •	10:30am
	17	• Star Viewing with the Montauk Observatory: A/C6+ •	6-8pm
	18	• SOFO's Young Birders Club: Ages 8-18 •	10am
	18	• Designing for a Future with Rising Seas— Hands-on Lego Workshop: C8+ •	10:30am
	18		n to Dusk
	25	• Birding with John Turner—Feathered Marvels at Montauk Point: A •	10:30am
	25	• First Winter Seal Walk at Cupsogue Beach County Park: A/C6+ •	2:30pm
	26	• Italian Wall Lizards—Our New Neighbors: A/C6+ •	10:30am



Great Horned Owl at Night



Italian Wall Lizard - Petar Milosevic



Harbor Seal

Eastern Box Turtle

Some of the animals you might see at a SOFO winter program: Great Horned Owl, Italian Wall Lizard, Harbor Seal or an Eastern Box Turtle.

February	1 1 8 8 9 9 15 15 15 15	 Birding with Frank—Shinnecock Specialties: A/T • Meet the Salamanders: A/C6+ • Highlights from the 2019 Shark Field Season and Q&A: A/C8+ • Winter Beach Walk at Sagg Main Beach: A/C6+ • SOFO Cleans the Beach—Help Needed! AA Discovering Insects with Arts & Crafts: C3-5 • Full Moon Hike with Friends of the Long Pond Greenbelt: AA • 6:30 SOFO's Young Birders Club: Ages 8-18 • SOFO to Mashashimuet & Back—Trail Walk with Frank: A/T • Andy Sabin's Annual Eastern Tiger Salamander Search: AA • My Ears Can See: A/C8+ • 	10am 10:30am 10:30am 3pm 10:30am 10:30am 0-7:30pm 10am 11am 7:30pm 10:30am
		Winter School Break—For Children of All Ages Free Programs—10:30am-11:30am Monday, February 17—Winter Weather Tuesday, February 18—Winter Homes for Bugs Wednesday, February 19—Evergreens in Winter Thursday, February 20—Winter Tracking & Animal Behavior Friday, February 21—Winter Birding Regular winter museum entrance fees apply after the 10:30am – 11:30am free p	programs
	19 22 22 22 22 29	 Owl Pellets—What, Why & What's Inside? C7+ • Birding with Frank—Winter Sea Ducks: A/T • Kitchen Table Conversations: East End Food Introduction & Tasting: A/T Second SOFO Seal Walk at Cupsogue Beach County Park: A/C6+ • <i>Box Turtle at Long Pond</i>—Storytime & Meet the Box Turtles: C3-5 • 	1pm 9am • 10:30am 1:30pm 10:30am
March	7 7 8 14 14 14 15 21 21 21 22 28 29	 "This isn't an Aquarium, it's my Classroom"— Southampton High School: AA Cure for Cabin Fever—Nature Walk at Morton Wildlife Refuge: AA Andy Sabin's Annual Blue-spotted Salamander Search: AA Full Moon Hike with Friends of the Long Pond Greenbelt: AA Bugs in Winter: A/C6+ COME DRAW WITH US—Drawing from Nature: A/T15+ SOFO Cleans the Beach—Help Needed! AA Another Blue-spotted Salamander Search with Andy Sabin: AA Invasive Species of the South Fork: A/C8+ Birding with Frank—Pond & Bay Waterfowl: A/T SOFO Young Birders Club: Ages 8-18: A/C6+ Andy Sabin's Annual Spotted Salamander Search: AA Third SOFO Seal Walk at Cupsogue Beach County Park: A/C6+ COME DRAW WITH US—Drawing from Nature: A/T15+. 	10am 10:30am 7:30pm 7-8pm 10:30am 10:30am 10:30am 10am 10am 10am 10am 10am 10am 10am 1

SOFO's 5th ANNUAL CLIMATE CHANGE CONVERSATION: HOW YOU CAN MAKE A DIFFERENCE IN REVERSING GLOBAL WARMING

Saturday, November 2, 2019

by Diana Aceti, SOFO Director of Development & Special Events

We are pleased to announce that our **5th Annual Climate Change Conversation: How You Can Make a Difference in Reversing Global Warming**, held at the museum on November 2, and sponsored by Dan's Hamptons Media, was an informative and thought-provoking afternoon attended by over 75 guests of all ages. The program began with an **Introduction to Project Drawdown**, a coalition of scholars, scientists, entrepreneurs, and advocates from across the globe that are mapping, measuring, modeling, and communicating about a collective array of substantive solutions to global warming, with the goal of reaching Drawdown, the point when greenhouse gas levels in the atmosphere start to decline. The program was presented by Drawdown East End's Founders Dorothy Reilly and Krae Van Sickle, who highlighted DEE's multifaceted plan of action and the 100 pathways for carbon reduction and carbon sequestration as a way to reverse global warming. A screening of a film clip exploring the ideas of renowned environmentalist and Drawdown Founder Paul Hawken with information about his best seller **Drawdown – The Most Comprehensive Plan Ever Proposed to Reverse Global Warming**, was shown.

The presentation was followed by a panel discussion and a Q & A exploring ways to reverse climate change with noted speakers Dorothy Reilly and Krae Van Sickle; Founder of the Safina Center and SOFO's Board Trustee Carl Safina; Peconic Baykeeper Pete Topping; President of Grace Richardson Fund and Co-founder of Clean Capitalist Leadership Council Rod Richardson; and Suffolk County Legislator representing the Second Legislative District Bridget Fleming, with a special introduction by SOFO's Board Trustee Bill Miller, who introduced SOFO to Project Drawdown.

A highlight of the day was the announcement of SOFO's new Young Naturalists Club, offering middle school age students and teens the opportunity to collaborate with their peers and SOFO environmentalists on ideas to fight climate change and ways to be advocates of our environment. The three founding members are Tyler, Theo, and Finny. The Young Naturalists Club is funded by an anonymous foundation, and meetings will begin in January 2020.

We send a special thank you to the Andrew Sabin Family Foundation, our esteemed panelists, Bill Miller, our enthusiastic guests, and to our sponsor Dan's Hamptons Media.



Our 5th Climate Change Conversation notable panel



A packed house at SOFO's 5th Climate Change Conversation



Young Naturalists Tyler (L) & Theo (R) at our 5th Climate Change Conversation



Dahlia demonstrates that one is never too young to save the earth!



Young Naturalist Finny joins our 5th Climate Change Conversation

We are happy to send a very special thank you to our friends in the community who support our museum throughout the year with cash and in-kind donations. In this issue, we would like to spotlight **Provisions of Sag Harbor and Water Mill**, our natural foods and organic café that opened thirty years ago, and has long been a favorite among full-time and seasonal residents of the Hamptons. Provisions kindly donated its Charity Bag proceeds, collected from fees for grocery bags, totaling \$1,361, during the month of July to support SOFO programming. Thank you to owner Rich Kresberg, manager Rita Mondragon, and Provision's entire staff for their generous support of SOFO!

Support our Sponsors:

A Year of Environmental Research at SOFO

by Melanie Meade, SOFO Education & Outreach Coordinator



Horseshoe Crab Egg Hatching Project

This summer, two high school student interns experimented with different culture methods to hatch Horseshoe Crab eggs using: 1) egg tumblers made from plastic drink bottles, and 2) fingerbowls. The students made the egg tumblers and monitored egg development until hatching. They found

that egg tumblers kept the eggs moving while eggs in fingerbowls remained still. Results: more of the eggs hatched in the tumblers than in the fingerbowls. The students created a PowerPoint presentation about the project and shared it with their teachers and students back at school.



Brand New Purple Martin Chicks!

This past year, the Purple Martin colony at SOFO hatched 113 chicks, and 104 of these survived to fledge and fly south all the way to South America on their own. Purple Martin Steward John Shemilt and SOFO staff checked nest boxes and collected data on eggs per nest, hatched chicks, and fledglings.



Horseshoe Crab Tagging at Havens Beach, Sag Harbor

SOFO staff teamed with East Hampton Town to help count and tag Horseshoe Crabs as they gathered at the full and new moon tides in May and June to lay their eggs on bay beaches. Volunteers counted 65 males and 60 females and measured and tagged 10 individ-

uals with a numbered reflective disk. Survey data provides information about the crabs' population size, and tag returns document the crabs' seasonal movements along the East Coast.

Bursting with Blue Birds!



The Blue Bird Nest Box Trail, located in Vineyard Field behind the museum, sheltered four baby blue birds this year. Blue Bird Steward Joe Giunta monitored nesting activity on bluebird trails throughout the eastern South Fork, gathering data on active nests, other bird species occupying bluebird

nest boxes, and the successful rearing of a total of 112 young Eastern Blue Birds. According to Joe Giunta this was the second best year in 25 years of blue bird monitoring.

Aquaponics Project—Growing Plants without Soil by Melanie Meade, SOFO Education & Outreach Coordinator



Students in the Environmental Science Class at Bridgehampton High School worked with SOFO staff to create a new museum exhibit about the technology of aquaponics—growing plants without soil. The fish produce nitrogen-based waste, which is carried by the water to the plant tray where it is broken down by bacteria and then taken up by the growing plants through their roots. Nitrogen, sunlight from a plant grow-light, and carbon dioxide from the air make lettuce grow quickly. All that is needed to complete the cycle is food for the fish!

SOFO Shark Research & Education Program-Montauk Expedition Update 2019

The 2019 Montauk expedition was a resounding success. Fishing occurred in the waters near Montauk Point from August 11 to 17. A panel discussion was held at the Museum on the evening of August 14, with over 85 people in attendance. All of the objectives of the research project were met or exceeded, including deploying all of the team's available satellite tags. Specifically, the following was accomplished:

Sharks captured: 7 white sharks—145-165 cm in length, 2 male 5 female

Sharks tagged: 7 white sharks—2 with PSAT* + FastGPS** + NMFS*** tag combo; 1 with PSAT + CATS Diary**** + NMFS tag combo; 3 with PSAT + NMFS tag combo; and 1 with NMFS tag only

Samples collected: Blood, fin clips, muscle biopsies, parasites, and water conditions

Documentation: Over six hours of video, including GoPro, Drone, and BRUV (Baited Remote Underwater Video) footage, and hundreds of photos were collected of sampling activities

The data collected from the sharks that were sampled and tagged during this expedition increased our total sample size to 30 Young-of-the-Year (YOY) white sharks since 2015. It is the largest data set of its kind for YOY white sharks in the Atlantic.

*Pop-up Satellite Archival Tag, **Fast Global Positioning System, ***National Marine Fisheries Service, ****Customized Animal Tracking Solutions





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

South Fork Natural History Museum (SOFO) Board of Directors

Andrew E. Sabin, President James T. Ash, Vice President Jonathan Sabin, Treasurer William G. Miller, Secretary

Newsletter and Calendar: Carol Crasson Melanie Meade

Steve Englebright Kimberly Goff Debra Halpert Jeffrey Keil Greg Lippmann Steven McKenna Russell Mittermeier Carl Safina Samriti Seltzer Scott Seltzer Daniel Shedrick John Turner Peddrick Weis Wayne Whitmore

Advisory Council Nejma Beard Peter Beard Peter Boyd Michael Cinque Leslie Clarke Nick Combemale Gerry Curatola Stanley Glinka April Gornik Alex Guarnaschelli Sarah Haley Kerry Heffernan Jane Held Nick Martin

Ada Samuelsson Irene Tully Staff Executive Director Frank Ouevedo Director of Education/ Communications Carol Crasson Director of Development & Special Events Diana Aceti Membership Associate Crystal Oakes

Education & Outreach Coordinator Melanie Meade Environmental Educators Xylia Serafy Miles Todaro Jackie Avignone Paul King III Sarah Bailey **Bilingual Intern** Janet Soledad



South Fork Natural History Museum (SOFO)

P.O. Box 455, Bridgehampton, NY 11932-0455 (631) 537-9735 email: info@sofo.org www.sofo.org The SOFO Naturalist is published quarterly as a benefit of membership Address Service Requested



Dated Material Printed on Recycled Paper with Soy Ink

BULK RATE Non-Profit U.S. Postage Paid Permit #5 Bridgehampton, NY 11932