

SOFO naturalist



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

Floaters at Round Pond

by Jim Ash

■ If you visit Round Pond in the Long Pond Greenbelt during a year when the water level is at a low stage you may find the shells of one of Long Island's more interesting bivalves. This freshwater coastal plain pond, like the others in the greenbelt, is located south of Sag Harbor.



Round Pond

Photo: Friends of the Long Pond Greenbelt

■ These ponds vary dramatically from year to year depending on how much snow melt and rain we get in a particular year. In wet years, the water level can be so high that the water is right up into the tree line, but in dry years, there is usually a margin wide enough to walk entirely around some of the ponds. It is during those dry years that the ponds are most interesting, exhibiting a wide variety of plants that may have lain dormant underwater for years waiting for the shoreline to re-emerge so they can bloom and set seed again.

■ It is also in these low water periods when you can find the bivalve known as the Eastern Floater also called the Fragile Freshwater Mussel (*Pyganodon cataracta*).



Fragile Freshwater Mussel (*Pyganodon cataracta*)

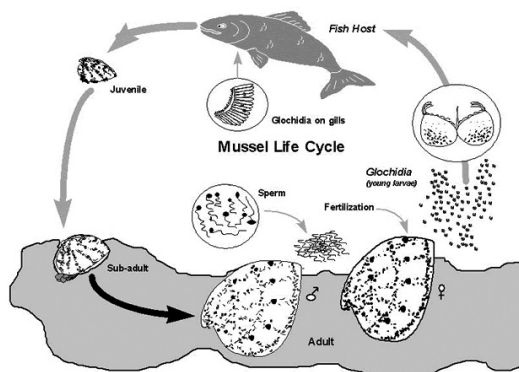
Photo: Jim Ash

■ These seldom-seen mussels have a fascinating life cycle and are often thought of as indicators of the quality of water in ponds, lakes, and rivers. North America is home to almost

three hundred species of freshwater mussels and many—if not most—are becoming uncommon and even endangered because of widespread pollution and poor water quality in our country.

■ A beautiful mussel, the Eastern Floater spends most of its life buried in mud underwater with enough of its shell exposed to extend its siphons out, enabling it to draw in water filled

with the microscopic aquatic life, mostly phytoplankton, which serves as its food. When it is time to reproduce, the male mussels release sperm into the water column and the females use their siphons to draw the sperm in. Fertilization takes place internally, and the fertilized eggs are incubated in a tubed section of the mussels' gill known as a marsupial gill.



Freshwater Mussel Life Cycle

Illustration: Freshwater Mussels of Iowa

■ After growing into a larval stage called glochidia, which takes several weeks to several months, they are ready to leave the female mussel. At this time, the mussel extends a part of its mantle flap outside the shell that resembles a worm, a small fish, or a tiny crayfish that will serve as bait to draw what will become a host fish to the gravid mussel. Imbedded in the modified flap is a conglutinate packet filled with glochidia, which bursts when a fish bites the bait and releases the larvae onto the fish. The larvae attach to the gills, fins, or scales of the fish and become encysted where they live as a parasite on the fish for two to three weeks until they metamorphose into miniature mussels and drop off into the mud below.

■ It will take two to four years for the mussels to become sexually mature. This method of reproduction insures good dispersal of the young mussels throughout the body of water.

■ Some freshwater mussels are very host specific and can only use one species of fish for a host. The Eastern Floater, however, is one that uses a variety of fish. These include Bluegills, Pumpkinseeds, Yellow Perch, Three Spined Sticklebacks, and Common Carp, all species that can be found in the ponds of the Long Pond Greenbelt. If for some reason the host fish disappear from a body of water, it follows that the mussel will disappear too.

■ As I mentioned before, the Eastern Floater is a beautiful mussel possessing a shiny greenish exterior with brown and tan concentric bands and light and dark bands radiating out across the shell

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from the hinge. The inside is lined with nacre, or mother of pearl. In the early twentieth century, many freshwater mussels were harvested extensively for the nacre, which was used to make buttons. But it is unlikely that the Eastern Floater was used for this purpose because the shell is so thin—which inspired its other common name, Fragile Freshwater Mussel. It is a large mussel reaching a length of seven to ten inches. Unlike saltwater mussels, it is not a sedentary species and does not attach itself to hard objects or substrate using Bissell threads. It moves freely around the pond using its large muscular foot which leaves a trail in the mud showing where it has wandered.

Almost invariably, the first time someone sees a freshwater mussel they say, “Are these things edible?” The short answer is yes; however, never having eaten one myself, I can only rely on what I have heard and read. The description is that they have the texture and taste of an old piece of shoe leather, so forget about freshwater mussels in white wine with garlic, lemon, and parsley. On the other hand examination of Native American middens shows that they harvested them extensively. Whether they were eating them or just using the mother of pearl for decoration and jewelry is the question.

Unfortunately, 70 to 75 percent of the freshwater mussels in North America are considered threatened or endangered, with a few species possibly having become extinct, making them the most vulnerable and threatened group of animals in the country. Because of the almost-never-ending effort by Congress to weaken and, in some cases, eliminate environmental laws like the Clean Water Act, this circumstance can only get worse. Whether freshwater mussels have the muscles to survive this onslaught remains to be seen.

Jim Ash is Vice President of the Board of Directors of the South Fork Natural History Museum (SoFo). He is one of the seven founders of SoFo and served as the museum's first Executive Director.

the
Nature
clubhouse

My Life as a Birder

... so far

by Wyatt “Hawking” Case, Birder and SoFo Member



Wyatt “Hawking” Case

At SoFo we are delighted to learn about young people who take a passionate interest in the natural world. Wyatt is one of these young people. He has been birding since he was 8 and possesses a prodigious visual and verbal ornithological vocabulary.

Wyatt splits his time between Aspen, Colorado, and East Hampton on the East End of Long

Island, where he spends his summers. We wanted to learn more from Wyatt about his interest in birding, so we asked him some questions about birds and birding when he visited the museum in June of last year.

SoFo: So, Wyatt, as with most birders, a particular bird first caught your interest. Birders call that a “hook bird”, because getting to know or see that bird gets them “hooked” on birding. What was your “hook bird”?

Wyatt: My hook bird was a House Finch. What happened was my dog got hold of a House Finch and started to treat it roughly—actually tried to eat it—and I saved its life. So I sort of felt connected to it. We took it to a wildlife rehabilitator and it spent the night there and then it was OK the next day and they released it.

SoFo: That’s very interesting; you really connected with that bird. So after that experience with the House Finch, did you discover other kinds of birds? What are your favorite birds?

Wyatt: My favorite birds are a Red-tailed Hawk, Barred Owl, Barn Owl, Elf Owl, Canada Goose, and King Eider. My most favorite is the Red-tailed Hawk. When I started birding, I was always interested in raptors, and the hawk has always been a spiritual symbol. Since civilization started, people were always worshiping the hawk; I’m not sure why—maybe because it has power over other animals.



Wyatt’s drawing of an Elf Owl drawn from memory during the interview.

SoFo: You’re also interested in other birds besides raptors, like the Canada Goose, is that right?

Wyatt: Yes, I did a presentation at school when I was in third grade about the Canada Goose. I talked about their diet, scientific classification, habitat, things like that. We had to research something, and I picked the Canada Goose, and I presented it to the other kids in the advanced program at my school.

SoFo: How is birding in Aspen different from birding here?

Wyatt: Here, everything is like forest and the beach, so you can just walk around and see birds

constantly when you look up. In Aspen, I like to bird on a mountain, right above my street, and then you can see all the birds from miles around, you can see more there. In Aspen, we have a feeder, which we don't have here, and we get a lot of House Finches, Black-capped Chickadees, and some—but not many—Mountain Chickadees. We occasionally get Cassins Finch. We have to go down the valley, to Glenwood, to see the rosy-finch; they get tanagers and migratory birds there, too.

Black-Capped Chickadee



Wyatt's drawing of a Black-capped Chickadee drawn from memory during the interview.

SoFo: Bird migration is fascinating; what makes it special to you? Do you know why birds migrate?

Wyatt: I don't usually see the migration, but in the fall it's great to see the Sandhill Cranes migrating in a giant flock; it's kind of cool that they can ride on currents and on drafts, like Red-tailed Hawks and other raptors. Birds migrate for a variety of reasons—to adjust to temperature, or they might need new food resources, or there might be too many of a certain kind of predator that they need to avoid.

SoFo: What birding field guides do you like, and why do you like them?

Wyatt: I like Sibley's when I'm trying to learn about a bird and I like the Audubon picture guides when I'm trying to identify a bird, because you can see what the bird actually looks like. Sometimes I use Petersen's Guide.

SoFo: So, if you saw a new bird that you thought might be a finch or a sparrow, how would you go about identifying it?

Wyatt: Well, I would look at the eye; finches usually have a small circular eye, while sparrow eyes are usually oval and tend to be more noticeable and pop out more. And then I'd look at the beak; sparrow's beaks are curved at the top and their heads usually have a different pattern than their stomachs.

We thanked Wyatt for talking with us, and we look forward to his sharing many more of his birding experiences with us during the years to come.

SoFo news

We are pleased to introduce you to SoFo's two new Nature Educators

Eleni Nikolopoulos and Xylia Serafy

Both are native East Enders

Growing up in Montauk

by Eleni Nikolopoulos

As anyone who has ever been to Montauk knows, it is a beautiful place filled with natural beauty. Growing up in Montauk, I've had a lot of experience with the outdoors. When I was younger, I didn't realize that kids living in the city didn't have the same amazing opportunities to explore the natural world. I didn't realize how lucky I was to live in a place where I have a beach minutes from my home, an abundance of trees to climb, forests to explore, and different plants and animals to observe.

My parents moved to Montauk in the 1980s—my mom grew up in Queens and my dad grew up in a tiny village in Greece.

After moving to Montauk, they bought a small diner and worked constantly. We lived in town, in an apartment just on the edge of Fort Pond. There were shadbush trees that grew on the edge of the pond that I loved climbing. I used to take a notebook with me and write down all the things that I saw and what I was thinking, but it was

Growing up in Sag Harbor

by Xylia Serafy

I can't fathom how different I would be if I didn't grow up in one of the most beautiful places in the world, specifically Sag Harbor. Of course in the summertime, the towns come alive on the South Fork with all of the summer visitors and beautiful beach weather, but the time I connected most with nature was when the cold started to bite during the autumn and winter time. During this time, the "Hamptons' mindset" dissipated with all of the stores and restaurants closing for the season, and I was left with nothing to do but explore the outdoors.

My parents are both naturalists, and during the winter, we would tackle the bitter cold at the ocean beach for walks and exploration.

To this day, I keep these experiences alive. I visited the ocean every time I returned from college on a holiday vacation, sitting on top of the cold snow with my layers of warm clothing, photographing how the sun's light bounced off the ice, collecting sand dollars that had been dredged inland. It

more creative observation than scientific. As an only child whose parents worked constantly, I had to entertain myself a lot.



Me and my dad (Stavros Nikolopoulos)

When I was a teenager, my parents bought a house. Because Montauk is tiny, the new house was actually less than a mile away from our old apartment, but it felt like a world away. I hated it at first, but over time I grew to love it, especially the forest. Walking in the forest gave me solace. It was the place where I found the most peace, the most spirituality, and where I felt the most comfortable in my own skin. The forest has taught me a lot throughout my life, but I think that the best lesson is that you don't need to know everything or explain everything. Sometimes nature is unexplainable, sometimes the best thing is just being in the moment observing.

When I was younger my father and I used to watch the nature programs on TV and he would always tell me that I needed to get an education and do something that I enjoy, something that he didn't have the opportunity to do. As I grew up, I realized that I wanted to work in a field where I could help to conserve the natural world, the places that I love so much. I graduated from Stony Brook University with a B.A. in environmental studies and recently graduated from Macquarie University in Sydney Australia, with a M.S. in Environmental Science/Biodiversity Conservation. Now that I have come home, I couldn't be happier to be working at SoFo, sharing my love of the natural world with others.

wasn't until I left Sag Harbor to move on toward my college degree at Ursinus College that I realized how much I missed the variety of different habitats. In Collegeville, Pennsylvania, there are really only forests or agricultural land. I spent my four years working towards a Bachelor of Arts in both Environmental Studies and Spanish, graduating with Departmental Honors in Environmental Studies due to my honors thesis, "Conservation of the Antillean Manatee in México." My experiences at Ursinus College changed my life for the better. That being said, I always knew that the nature there wasn't enough for me. I craved the coastline and the salt spray in the ocean breeze.



Me and my dad (Dr. Keith Serafy) and a Dogfish Shark onboard the Southampton L.I.U. Research Vessel

Returning home, and to SoFo again after having a summer internship with them two years prior, was the best thing that could happen to me out of college. As a Nature Educator, I am learning so much about the relationships between humans and the world around us. I plan to continue on to Graduate School in a few years, focusing on Wildlife Conservation in areas where there are conflicts with human culture. Finding the balance between indigenous culture and conservation for the future is where my dreams will take me. I genuinely don't think I would be following this dream if I didn't grow up out here on the East End of Long Island. With the hustle and bustle of summertime, it's easy to forget nature is the reason this area is such a desirable place to live.



South Fork
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