AVALON TURE INTIATIVE Teens rooted in community action

AUTUMN/WINTER 2023 NEWSLETTER



Night of Bats by Deia Colosi

	What's Inside:		
Night of Bats	Cover	Alumni Spotlight	5-8
A Message from the Program Coordinator	2	Project Highlight	9
The Owl and I	3	A Moment in Nature- Encounter with a Native Praying Mantis	10-11
A Year in Review 2023	4	, 0	11 10
About the Artist	4	Photos of What We've Been Up To	11-13

A Message from the Program Coordinator

As I step outside the barn, there is a transitional shift here at the preserve. Often when people visit in the cooler months, they mention that they've only seen the meadows in the summer with blazes of yellow flowers and didn't realize how different it looks here in the winter. There is a time and a place for everything in nature, including dormancy and rest.

Speaking of entering the winter, we've been participating in species studies for important migratory wildlife such as sea turtles. In late fall, when our waters dip below 50°F, sea turtles can become hypothermic or "cold stunned". After prolonged exposure, these cold-blooded animals cannot self-regulate their temperature and they get washed up on the beach at high tide. Their heart rates can even decrease to 2-3 beats per minute and they appear lifeless. Thankfully, our volunteers are receiving training to respond to a stranded turtle if we encounter one and although it's chilly, it is a nice quiet time to take a walk on the beach.

While sea turtles are migrating to warmer waters, other animals visit us in the winter such as various species of seals. Harbor seals and grey seals are commonly seen hauling out on sand bars and rock pilings. One hot spot we typically visit is Cupsogue Beach in Westhampton- although it is a further drive, it is worth it and makes a fun family activity!

We've been out and about this season once we overcame some hurdles with challenging rainy months. We collected biological, physical and chemical data on the Nissequogue River, distributed oysters and clams, made burlap tortillas for eelgrass restoration, visited our mini pumpkin patch in the garden "Arcadia", enjoyed a couple of campfires (even when our pizzas totally flopped), spent some time on the farm visiting the sheep and goats, made seed bombs and did an owl prowl.

As I prepare to go on maternity leave, I am so grateful for everything we accomplished this year. I continue to be inspired by each and every one of you and I'm always learning something new! Thank you to our students and parents for making our program an ongoing success!

This newsletter is all about OWLS! Give it a read, listen to the calls and enjoy discovering more!

Have a wonderful holiday season and a healthy and happy new year! We'll be back and better than ever as we resume with more exciting projects and creating memories in the spring! In the meantime, I'll be posting seal walks and other opportunities if you and your families would like to stay connected to the outdoors!

Enjoy the sunshine,

Kayla

The Owl and I By Deia Colosi

At night, things just look different. I muse, walking through the shadowy forest. The moon is bright, giving everything a strangely ethereal feeling of light in the shadows. The forest is quiet, with only the occasional whisper of wind through the trees to interrupt the silence.

Suddenly, the moon seems to fade away. I look up, and there on a branch, blocking out the moonlight, is a pure white owl, seeming to almost give off a light of its own. We stand there, the owl and I, eyes locked. Up in the tree, the owl spreads a wing, almost inviting me to come along.

I look at them again, and nod, as we reach a silent agreement.

The owl takes flight then, coasting through the night sky in complete silence, only its light color and glowing feathers giving away its presence. I follow after them, silence cloaking both of us.

At some point, we veer off the path. I don't know when. At this moment, time is irrelevant. Every second exists in parallel with all the others. I follow the owl, and they soar ahead of me, showing the way.

At the top of a hill, the owl starts circling over one spot. When I catch up with them, I look back and realize that we are certainly lost...or I am. The owl knows the forest like they know every feather of their impeccable wings. They would never get lost here.

Where the owl was circling, I find a clearing. The owl alights on the branch of a tree, and I sit down on the ground, my back against a tree at the opposite edge of the clearing so I can look at the owl.

For a long time we sit there in silence. Then, I see a shape flying towards us. With a barely perceptible rustle of feathers, it lands. It's another owl, this one brown. They also give off a glow, just like the pure white one who led me here. another joins us...and Soon. owl another...and another. A whole host of owls flock in, landing in the trees one after another and lighting up the clearing with their glow. I stand up, hesitantly, and walk to the center of the circle. I turn around and take in the owls, all glowing in their own unique color. Feathers ruffle around the clearing, breaking the silence that had overtaken the forest before.

I blink, and when my eyes open again, there is a storm of iridescent feathers all around me. I spin around, trying to find the owls, but all I can see in every direction is feathers. I close my eyes...

...and when I open them, I'm staring at the ceiling of my bedroom.

I take a moment to breathe. I don't remember falling asleep, but then again, I don't remember waking up either. It seems like I just closed my eyes, and then I was here.

A faint glow catches my eye. I look down, and there, lying on top of the sheets, lit up by a glow coming from inside it, is a single, iridescent, blindingly white feather.

A Year in Review 2023: Our Impact

We had a total of 98 projects: 67 volunteer events and 31 longterm project meetings (boat building, shellfish restoration, marine science week)

Had a range of 35-50 students who attended our programs each season

Program registration increased by 15% (from 2022)

245 project hours offered

About the Artist Deia Colosi

Deia is a Nature Initiative participant and a helper for Miss Sue's Seedlings and has been involved in Avalon's programs for many years. She has been taking art classes since she was 2-3 years old has been interested in writing since she started telling stories. Some of Deia's favorite creative pieces are The Lord Of The Rings, Harry Potter, and any book from Terry Pratchett's Discworld books.

Deia created the cover piece titled "Night of Bats" using multi-platform drawing applications!



Alumni Spotlight

Ever wonder what happens after students graduate out of our programs? We connected with some of our alumni from Avalon's youth programs to see where they are now! Meet them below!



Major/Area of Study: Human Development with a concentration in special education and a minor in French

How did our programs at Avalon inspire you?

I am currently the operations manager for sustainability on campus. I run the campus composting and gardening program all year round, but I also host weatherization events, tree tapping events, and multiple sustainability related programs. I also work for the gardening clubs at multiple school districts in Albany area. I only found my love of the outdoors through Avalon. It was the first time I worked in a garden. Coming into college with that love of nature made me seek out these jobs and activities. I realized I love teaching others about nature topics. It also inspired me because being outdoors and being able to identify different plants and animals to others made me feel extremely cool and want to pursue it more.

Olivia Dirla

Participated in the Nature Initiative Program in 2021 Completed 54 volunteer hours in less than a year!

Olivia is currently a junior at the University at Albany

Favorite experiences, stories, or Avalon memories: I was volunteering years ago and one of my fellow volunteers heard a bird call from quite far in the preserve and immediately identified it. I think in that moment I thought, wow, I've got to get to this kid's level.

Favorite hobby: Still gardening, I get to make money and do what I love.



Olivia working with students on tapping maple trees at the University at Albany

Olivia Dirla (cont'd.)



Olivia played an integral role in the Kindness Garden project while she was in Nature Initiative. She was so inspired by the garden that she was able to get her university to plant a Kindness Garden of their own on campus which she oversees!

Advice you would give to a high school student:

Find something that relaxes you. In college many of your friends will be stressed beyond belief, but if you have found something that makes you feel at peace inside everyone will wonder how you are so put together. Even if it's something unconventional, to some people being busy IS relaxing.

Career goals/future plans: I am going to graduate school for my masters In teaching. I am thinking about teaching in France for a little while for the experience of it all. While likely my job in sustainability will end in college, I do want to make it part of every classroom I teach and will continue to be a hobby.



Weighing compost, University at Albany



Major/Area of Study: Environmental Policy and Law and a minor in Asian and Asian American Studies

How did our programs at Avalon inspire you?

My time in Avalon has helped foster my love and appreciation for the environment and has provided me with the tools I need to be an environmental leader. I am excited to see where the skills I've developed by being a part of Avalon will take me in the future!

Favorite experiences, stories, or Avalon memories

One of the best experiences of my life was getting to go to Yellowstone National Park through Avalon's Yellowstone Immersion program! The park was absolutely breathtaking and I'm beyond grateful that I had the opportunity to go!

Caitlin Tucker

Completed the Outdoor Leadership and Environmental Program in 2017 (now called Natural Connections), completed the Western Exploration for Young Environmental Stewards Program (now called Yellowstone Immersion) in 2018 and participated in S.T.A.T.E. from 2017-2020 (now Nature Initiative).

Worked at Avalon as a Part-Time Seasonal Program Assistant during the summer of 2021

Caitlin is in her senior year at Binghamton University.



Natural Connections Program, 2017

Caitlin Tucker (cont'd.)

Favorite hobby: Hiking and enjoying the outdoors



Yellowstone Immersion Program, 2018

Advice you would give to a high school student:

Try new things! I never would have been involved in some of my favorite parts of my life if I had always just stuck to what I knew. Putting yourself out there and entering unknown territories can seem scary at first, but it will truly enrich your life!

Career goals/future plans: I am really interested in resource management and renewable energy, so I hope to be involved in those fields when I graduate. Once I have a few years of experience under my belt, I plan on obtaining a master's degree!



Caitlin in her research immersion program at Binghamton University

"UAV-Based Monitoring to Track Deer Overpopulation in Upstate New York"

Project Highlight: Owl Prowl!

It was a chilling, mid-20 degree evening as we explored the trails of Avalon, well-lit by an almost full moon. This was a magical opportunity to hear our native owls calling in the night!

Before we got outside, Ranger Eric did a presentation for us in the barn. Eric Powers is the Site Coordinator at the Center of Environmental Education & Discovery (CEED) located on over 60 acres of open space and forested nature preserve in Brookhaven. Eric has extensive experience as a wildlife biologist and has been interested in environmental conservation and animals from a very young age. He has led numerous educational programs across the country, including teaching about wolves in Yellowstone.

Eric discussed the difference between the major birds of prey groups and called on our students to answer what features or adaptations a bird needs to be classified as a raptor. Sharp talons, curved beaks, keen vision, and carnivorous diets were among the answers as we dove into more detail. Eric brought skulls, talons (with specialized gloves to illustrate how sharp they were!), owl pellets and feathers. It was a great introductory lesson and then we identified pictures of common Long Island species. We listened to each owl's calls and then our toolkit was prepared to head outside!

We grabbed our hats, gloves and handwarmers to go on our hike. One skill we wanted to focus on was practicing using night vision in low light without depending on headlamps or flashlights. Although the moon guided our way, we still participated in some fun activities such as the "disappearing head" to understand illusions and learned more about how wildlife adapts to seeing in the darkness. Owls have a much greater ratio of rods to cones which make them exceptional nocturnal hunters.

As we stood quietly at the meadows edge, you could feel the emptiness of the night, just us and the woods. We paused and Eric made a few attempts to call screech owls. His amazing talent led to a male screech owl calling back, its shrill echoing in the cold air. Owls are swift in flight and the comb-like serrations on leading edge of their wing feathers makes them completely silent fliers. The male owl called back repeatedly, getting louder as he got nearer. We saw a silhouette right behind our group as the alerted owl swooped past our heads! He landed in a tree on the west side of the meadow, the whistles faded and then became more amplified as the owl moved far and near.

After a little while, we moved on so that the owl wouldn't get too irritated as he was guarding his territory. We walked through the woods on the windy, sloped blue trail. Eric then tried to communicate with great horned owls, our largest owl species on Long Island- no reply. We moved on and kept walking until we came back out along the perimeter of the East farm preserve. On our way to the cedar circle, we heard a conversation between a male and female great horned owl. This is courting, when the male attempts to make calls to mate with a female. The owl activity was like a concert between the two, harmoniously calling to one another. The male has a higher pitched call while the female has a lower pitched returning call.

... Continued on page 11



Great-horned owl (right) taken by Fish Guy Photos, 2021

A Moment in Nature: Encounter with a Native Praying Mantis By Kayla Serina

Last spring, the number of praying mantis egg cases in the meadows at Avalon seemed to be declining. In previous years, our students typically collected close to 200 egg cases and this time, we were still under 100 after combing through the area multiple times. There was one trend that Miss Sue and I observed: some of the reeds had two different types of egg cases on them and were doubled up. This sparked our curiosity and the questions we had started our own science experiment. "What are the two species of praying mantis that laid these different egg cases?" "Does one species egg case hatch earlier than the other egg case on the reed?". We knew for sure that the sphere shaped one (tannish brown with a slight shine that looks like a toasted marshmallow) belonged to the Chinese praying mantis, a voracious eater that preys on both beneficial and non-beneficial insects. The other egg case however was an elongated rectangular shape with folds running horizontally which almost looks like rungs on a ladder. We had our guesses, but we were not 100% sure so we consulted with an entomologist at Cornell Cooperative Extension.



We so badly hoped that this egg case belonged to the Carolina mantis, the only native praying mantis species to the East coast. While the egg cases looked strikingly similar, there was enough variation that the two entomologists we spoke to agreed the egg case belonged to the narrow winged mantis, native to Asia and has been long introduced to eastern North America. It was suggested if we had time to put the two egg cases in separate enclosures to further study the two species we had. Sue and I picked up a couple of critter tanks and carefully suspended each reed with an egg case in the same orientation it was found in the meadow.

Fast forward to mid-June, our Chinese mantid egg case began hatching. Three weeks later in early July, the narrow winged mantis egg case followed. This further supported that if the Chinese mantis hatches before other mantis species, the egg case on the same reed will become its first source of nutrition.

We released the Chinese praying mantis hatchlings and kept one narrow winged mantis in the critter tank. It was a female, defined by the number of abdominal segments.

Other body characteristics upheld the species type we had. She made it until the early winter months and even laid her own ootheca (another word for an egg case with an outer covering). Female praying mantises will lay an egg case regardless if it has been fertilized. Most praying mantis species die off after the winter climate becomes too harsh for survival.



This year, we did not keep any mantises to hatch; after the meadows were moved, we simply released the egg cases we collected back into the field. We did place egg cases in different fields according to our two species types to give them a better chance of survival.

Around Halloween, I noticed new egg cases on the reeds again and with varying species in the same area. I thought back to how the entomologists said they haven't had many reports of Carolina mantis yet. Later that month, I walked to the upper pond to collect some cardinal flower seeds for our seed bombs. After I took a clipping, I pulled my hand out- low and behold, a praying mantis was on my hand!Continued on page 11

A Moment in Nature (cont'd.)

It almost had an iridescence to it with a purple color on its wings. After counting its body segments and observing a very swollen abdomen, I determined this mantis was a female. She had spotted patterns on her raptorial (front) legs and thorax as well with a triangular shaped head (as opposed to it being more square shaped in invasive species).



When I tried to place her back near the cardinal flower, she kept crawling back onto my jacket and seemed very content with keeping me company. I stood there near the edge of the pond and just held her on my hand for a while. Later that evening I followed up and consulted with the same team of entomologists and to my surprise, I had seen a Carolina mantis! It felt like a gift and now that our temperatures are staying warmer for a greater length of time, there have been more sightings in our area. This was great news that we actually have a native mantis species at Avalon, hopefully we'll see hatchlings in the spring!



Project Spotlight (cont'd.)

Eric led some additional activities where we needed to rely on our other senses when evesight is lost. My favorite one was when each got an index card and a crayon- we had to draw a house with a chimney on one side of the card, write our name and our favorite animal on the reverse side. We also wrote down what color crayon we thought we had. When we returned inside following our walk, we were surprised at our results! It was a fun evening for an owl prowl and we had plenty of laughs and hot chocolate!

Special thanks to Ranger Eric and our friends at CEED!



Students gather around in the cedar circle with Ranger Eric to observe glowing minerals

What do our local owls sound like? Click below to listen to their calls!

- Great Horned Owl
- Snowy Owl
- Eastern Screech Owl (Saw Whet Owl
- (uncommon on LI)
-))) Barn Owl
- Long Eared Owl
- Short Eared Owl



















Follow Us!







https://www.facebook.com/Avalon-Nature-Initiative

https://www.instagram.com/avalonnatureinitiative/

https://avalonnaturepreserve.org/youthprograms/nature-initiative/

Copyright © 2023 Avalon Nature Preserve, All rights reserved.

Our mailing address is: 200 Harbor Road Stony Brook, NY 11790