



SUMMER 2022 NEWSLETTER



Forest of the Clouds
By Deia Colosi

ABOUT THE ARTIST: Deia has been involved in art classes from a very young age and she enjoys drawing and painting. Art is her favorite subject; she also loves books, music and science.

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A Message From the Program Coordinator

As we gathered around the campfire, cooking dishes from our vegetable harvest, students shared their favorite parts of the summer. We spent some time looking for snakes, observing the newly released quail and we roasted marshmallows. It was bittersweet for all as school started the next day, but it was a nice way to wrap up the season.

The hot, drought-driven summer months brought some surprises for our garden. Some crops had a difficult time getting established, we had sky-high sunflowers with no flowers on them at first, and a lot things got eaten. I actually placed a trail camera in the garden to see who our culprits were- two bunnies, squirrels, chipmunks and a raccoon were among the bunch. The animals likely needed hydration and tomatoes hold a high water content. They feasted on our snap pea seeds and chowed down our corn. Although there was more wildlife pressure than we've seen in previous years, everyone needs to eat and we rolled with it. August brought major success with zucchini, cucumbers, kale, watermelon, cherry tomatoes and soon we'll have pumpkins ready to be picked.

We tagged horseshoe crabs, helped search the beach for nesting diamondback terrapins, grew Eastern oysters and hard-shelled clams in Stony Brook Harbor, continued our collaboration with gardening at Sweetbriar, participated in summer festivals, did multiple invasive species pulls at Frank Melville park, and held our second annual "Marine Science Week".

As always, we kept busy and enjoyed being outside.

Our enrollment of student volunteers increased this year and it has been wonderful to see friendships become established- that is what it's all about.

You've all stepped up at each and every project despite your many other commitments and it is always appreciated. Thank you for all of your hard work and effort and I wish you all another successful and rewarding school year.

I look forward to seeing you at our upcoming projects!

Enjoy the sunshine,

Kayla



Stony Brook Harbor Sunset
By Kayla Serina

Alumni Corner Congratulations to Our 2022 Graduates!!



Ashley Liu (*left*)
Cornell University
Major: Biomedical Engineering



Kai Wingert (*right*)
Stony Brook University
**Major: Child Life Specialist or
Biology**



Hailey Matthews (*left*)
North Carolina State University
**Major: Marine Biology- concentration
in Biological Oceanography**
Minor: Biology



Brandon Wingert (*right*)
**SUNY College of Environmental
Science and Forestry (ESF)**
Major: Wildlife Science

Alumni Corner Congratulations to Our 2022 Graduates!!

Kiera Kalinsky *(right)*
Coastal Carolina University
Major: Biology



Asher Gordon *(left)*
Skidmore College
Major: Computer Science or
Environmental Science

Praying Mantis Eggs are Small, Volunteering is Big

By Kai Tvelia

It was April and I was on the hunt!

I stalked them like my life depended on it. I didn't have a gun or arrow or any weapon with me for that matter but we were still like predators in search of prey that day in the field. And the prey didn't make it easy either because their nests are very well camouflaged in the brown grasses.

This was my first year volunteering with Avalon Nature Initiative. One of my first events was volunteering for the annual praying mantis egg case collection. Our job was to collect them from the ground and plant stalks to save them from being chopped up by lawn mowers, and my group found about 70 and our entire crew ended up finding hundreds of them! We got them safely out of the field before they mowed.

Why am I talking about praying mantis eggs in an article about volunteering? Well, I like it because praying mantis eggs are pretty small, but finding and saving them, well the ones that weren't invasive species, makes a pretty big difference in their lives and also in the ecosystem around Avalon Nature Preserve. All creatures play a role in the food chain and in the whole ecosystem. It is important to preserve all living creatures and keep nature in balance.

Little things make a big difference. We have all heard that phrase. But it's true. If all teens did just some little things to volunteer, it really would make a big difference. Here is why.

First, volunteering involves a lot of teamwork and making friends. I volunteered for Sue's Seedlings this summer, and I had a lot of fun with the kids who were campers and with other counselors! I also made friends when building bat houses and hunting for praying mantis egg sacs. If you volunteer with Avalon, you will definitely make a lot of new friends who you have a lot in common with because they love nature like you do.

Second, you learn a lot. I have learned a lot of things. In the winter I learned how to build bat houses which protects them from predators so they can eat more of those annoying mosquitos we all hate. In the spring I learned how to spot praying mantis egg sacs and how to identify which ones were invasive species. During my weeks as a camp counselor with Sue's Seedlings I learned how to cook bread over an open fire, how to build handmade toy boats and how to keep a bunch of children focused which was not easy! I don't have to tell you it is important to always keep learning new things.

Third, you are helping the natural world which is important because you can learn things like how to help lower the numbers of invasive species, and to help endangered and threatened species. At Avalon you also learn about sustainability, like composting and growing your own food. We have to balance our love of technology with our love of nature.

Finally, it is important for teens to volunteer because we can do the little every day kinds of things. If we all pitch in do what we can, that leaves more time for the adults at any volunteer organization (not just Avalon), to focus on prevention and bigger picture things. Most volunteer organizations don't have a ton of people on their staff so they really need all the help they can get.

That is where teens like us come in.

Whatever you do at Avalon Nature Initiative, if it is hunting for tiny eggs in a big field or helping little kids at their summer camp or anything in between, you should know that no matter how small your participation may seem it honestly does make a really big difference.

Project Spotlight: Kindness Gardens

We Have a Farm!

It was especially hot for a spring afternoon in May last year when volunteers met Stony Brook Rotary Club board members to plant 16 native plugs into a newly established garden. This was to be called a "Kindness Garden" which was created to honor the life of Catherine Violet Hubbard, a victim of the Sandy Hook tragedy in 2012. Catherine was only 6 years old and she wished to be an animal caretaker one day. She loved all creatures big and small, and showed compassion to each and every critter she encountered. She had an affection for butterflies and would wait in her backyard patiently to carefully hold one. Before letting it go, she would whisper, "tell your friends I am kind". Catherine believed that if the butterflies knew she was their friend, they would return with their butterfly friends. When the Rotary Club was approached us with a request to take on this project, it was a no brainer. We were honored to join a collaborative effort to install a pollinator garden on Sand Street along Stony Brook Harbor.

After the Catherine Violet Hubbard Foundation installed a 12,000 square foot pollinator garden at their sanctuary, they wanted to do more. The Kindness Gardens initiative was established in 2021 as a partnership between the Catherine Violet Hubbard Sanctuary and the Manhasset Rotary Club. The foundation wanted to share their pollinator gardens with others who wanted to make a tangible difference for the creatures around them. The overall goal of these gardens is to create habitat which serves as a safe space for these fragile creatures to call home.

That is where the Nature Initiative group comes in...

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Since 2020, we've been taking steps towards developing an agricultural property into a regenerative farm. We started with egg laying chickens, then ducks and later that year, we grew fresh cut flowers to make bouquets. It was a start, a beginning to a new concept and a vision for the preserve.

Fast forward to this year, we now have an Agricultural Operations Manager transforming Birdsfoot Farm to a sanctuary for plants, wildlife and people alike. In addition to chickens and ducks, we have goats, sheep, turkeys and a farm puppy!

Regenerative farming focuses on the interconnectedness between natural ecosystems and conservation agriculture. It is a holistic approach that doesn't depend on industrial practices.

Some of the methods Birdsfoot is using include the following: having animals on pasture, rotational grazing, using "living barns" among forest habitats, low-till farming and the use of cover crops. These practices allow animals to follow their natural behavior patterns, provides animals with enrichment, play, and a healthy diet, sequesters nutrients in the soil, aerates the soil, captures carbon, and prevents soil compaction and erosion.

Organic vegetables, fresh eggs, honey, pasture raised broiler chickens and fresh cut flower bouquets are available to the public every Saturday at the farmstand. My favorite part about this is having access to nutrient rich foods that I know have been well managed on pasture.

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Project Spotlight (cont'd.)

We noticed shortly after planting the Kindness Garden that the small sign staked into the ground must've got swept away in a storm. This area along Stony Brook Harbor is susceptible to flooding as the tide rises. Luckily the plants we put there are tolerant of high moisture and salt content.

Upon discussion with the Rotary members, we wanted to create a larger exterior graphic that would illustrate the importance of the Kindness Garden. It deserved a greater presence as people regularly stroll through the area.

After 3 planning sessions, Nature Initiative volunteers put together their thoughts and creative sketches for the design process. We had multiple presenters so that we were able to learn more about the information we were highlighting. We had two entomologists from Cornell Cooperative Extension speak to our group about common butterfly and moth species in our area, how to plant for caterpillars and which plants attracted certain species. Also, Bill O'Hern, a beekeeper from O'Honey Bee Farm joined us with a hands-on demonstration of a hive, allowing us to view honey bees through a glass window. We learned that these bees only make about half a teaspoon of honey in their lifetime, the importance of their roles, the queen, and how far they need to travel to keep their colony alive and well nourished.

Now we are in the process with a graphic designer, and their team is bringing our students' vision to life! I can't wait to share the finished product with you all and it has been a great opportunity to work on a project for such an incredible cause.

We Have a Farm (cont'd.)

Knowing where your food comes from is important, and growing your own food or purchasing fresh grown veggies from a farm is as natural as it comes! Feel free to visit us and see the farm!!

BIRDSFOOT FARMSTAND: Every Saturday from 9:00 AM-2:00 PM

Learn more here:

<https://avalonnaturepreserve.org/birdsfoot-farm/>





Fiona has been painting for about 6 years and she is passionate about art, sewing, history and nature!

Landscapes and portraits are her favorite subjects to paint, with watercolor and acrylic as her favorite mediums.

Watercolor Paintings – White Mountains, New Hampshire By Fiona Reichers



Why Are We Seeing More Sharks in Our Waters? By Kayla Serina

Like many others, I've spent some of my days at the ocean this summer. My favorite activity is jumping over the waves and as a kid, it was boogie boarding. As I stepped back inside on a summer evening, I saw it all over the media: "Long Island Lifeguard Attacked by Shark" or "Beach is on Dangerous Marine Life Alert". These headlines continue to depict sharks as killing machines or ruthless monsters waiting to attack. My friends and family have asked me the very question this article is titled, but let's rephrase it: Why are we seeing sharks *more often* in our waters?

Sharks have long life histories and their evolution dates back to over 400 million years ago. So, sharks have been inhabiting our waters long before we arrived, which we know. They are not suddenly appearing out of nowhere but rather we are noticing them more. How can we not with all of their media appearances?

Back in July, I watched the Community Science LI series hosted by Seatuck Environmental Association. The webinar on sharks welcomed a panel of experts from our local area. This discussion highlighted the scientific research taking place, community science initiatives, and environmental management decision making. It was an opportunity to learn about and understand sharks for the vulnerable creatures that they really are and the critical role they play in the marine ecosystem.

Sharks are apex predators, meaning they are at the top of the food chain with little to no natural predators. They control the surrounding ecosystem and keep everything in balance from the top-down. Smaller predators are kept in check as their population sizes will not get too large or too small.

Here are some numbers: In the New York Bight alone (extending from Cape May, NJ to Montauk Point), we have more than 30 species of sharks, skates and rays. Approximately 72% of the species in our waters are listed on the IUCN Red List of Threatened Species (Dr. Merry Camhi, WCS). Luckily the United States has some of the best fisheries management in the world, so those numbers might be reflective of properly identified species.

There is an increased level of scientific research and education initiatives surrounding sharks, and people are inspired to protect them. Satellite and acoustic tagging have been performed to answer questions about movement patterns, habitat type, seasonal distribution and more.

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Upcoming Projects:

- Common Nighthawk Watch: 9/16 AND 9/23 from 5:30-7:00 PM @ Frank Melville Park
- Autumn Equinox Festival: 9/17 from 10:30 AM-3:30 PM at CEED
- Native Habitat Garden: 9/24 from 10:00 AM-12:00 PM at Sweetbriar
- Setauket Harbor Day: 10/1 from 11:00 AM-3:00 PM on Shore Rd in E Setauket
- Beach Cleanup: 10/2 from 10:00 AM-12:00 PM at West Meadow



Why Are There More Sharks (cont'd.)

If you live on the south shore of Long Island, the Great South Bay has been identified as a nursery ground for sand tiger sharks while evidence suggests the New York Bight is a nursery for white sharks. More juvenile sharks have been tagged and observed in our waters than adults of both species.

Now that we have more information, there are several reasons why we are seeing sharks more often in our waters and maybe even a greater number of individuals. Increasing water temperatures are bringing in tropical species such as spinner sharks and blacktip reef sharks. More prevalent food sources also contribute to these sightings. In 2020, the Atlantic States Marine Fisheries Commission adopted a new management approach for the Atlantic menhaden, otherwise known as bunker. Catch limits are set based on the needs of other species in the surrounding ecosystem. These bait fish have increased in large numbers attracting more sharks, whales, dolphins, seals, large fish and other species that depend on them. Finally, we have more advanced technology such as drones at our fingertips. With a quick flyover, we can view these amazing videos of sharks and share them across social media at rapid speed.

Overall, there are several reasons for increased sightings of not only sharks but also marine mammals. Sharks are incredibly complex, long-lived animals with electromagnetic sensory systems and they can circumnavigate the globe. As Frank Quevedo from the South Fork Natural History Museum says, "we've had shark interactions, not shark attacks". We should still be mindful and careful of our actions at the beach, but remember, we are in their habitat.



Smooth Dogfish (Mustelus canis), Great South Bay

The shark was returned safely to the water following the catch

Photo taken by Kayla Serina



Boat Build 2021-2022

Wood Duck 12' Kayak

Volunteers dedicated 8 months to this large-scale building project throughout the course of the school year.

Congratulations to a job well done!









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