

SOMETHING OLD, SOMETHING NEW

by Dr. Lenore Tedesco, Executive Director

A Remarkable Pattern That Enriches Us All

For those of us that are year-round residents of Cape May County, summertime is a wonderful time to greet all of our returning friends, meet new friends, and enjoy the busy season that seems so distant during the quiet months. It's also a time when we launch new projects and programs - and also rekindled some old and longstanding friendships.

The spring season started with a flurry of activity with the arrival of this year's undergraduate intern team. For more than 20 years, our research and education interns arrive just behind the first wave of migratory shorebirds and horseshoe crabs, and luckily ahead of the nesting terrapins. They are accompanied by all of our wonderful returning docents and volunteers that also arrive with the mid-spring migrants. All of these people are so critical to what we do and help us to meet our mission, advance our conservation goals, steward our natural resources and help educate all of our visitors about the importance of our coastal and wetland ecosystems.

Like clockwork for millennia, horseshoe crabs arrived on the shores of Delaware Bay to spawn in late April and stayed through mid-July. Our conservation team was there - also like clockwork - conducting censuses of their populations. New this year, we participated in a horseshoe crab tagging and resighting program so that next year we will be on the lookout for returning spawning crabs. Our teams also worked to reTURN the Favor and with other teams rescued more than 30,000 stranded horseshoe crabs so that they too can return next year.

Our 10 interns have been incredibly busy this year. Education interns set up a new turtle basking station to keep all of our turtles healthy by getting them out in natural light. They also developed new interactive activity guides for the exhibits at the Institute and the Salt Marsh Trail and launched a new evening program, Horseshoe Crabmania Thursday, focused on current horseshoe crab research and conservation happening



at the Institute. New educational signage is being designed by them for the new elevated walkway. They also resurrected and refurbished the Bev Henry Rubbing Trail that had fallen into disrepair following Sandy and the dock and walkway construction. It should be back and better than ever in a few weeks. The research and conservation interns had an amazingly productive season. They managed the terrapin conservation program and the horseshoe crab conservation program, while also conducting independent research

projects that added new baseline data for avian research programs.

Female diamondback terrapins emerged from the marsh on May 28th to start this year's nesting season. The longevity of this program provides amazing opportunities to meet old friends. Our diamondback terrapin research and conservation program marks terrapins with a uniquely numbered microchip similar to those used on cats and dogs. Volunteers and interns patrol the Institute property on the lookout for nesting terrapins. When terrapins are recaptured after nesting, we can check them for tags and get reacquainted. This year, we met a terrapin that has nested here since 1998. She is at least 23 years old and has come to visit



at least 13 times. This summer, we also recaptured 6 nesting terrapins that were headstarted by this program. How amazing is that? These hatchlings are from eggs that were rescued after their mother was killed on an area roadway. The eggs were removed, incubated and hatched at the Institute. They were raised at Stockton College and returned to the Institute the following spring, microchipped and released as part of the adoption programs. They disappear into the marsh for seven or eight years until they mature and return to nest. This year's headstart recaptures are part of the class of 1997, 2000, 2002, and 2003. It's always wonderful to see these youngsters grow up and return to the Institute and start a new generation.

Another wonderful group that we know and are so pleased to see again is the parents that participated in Institute summer programs when they were kids - returning to the Institute with their kids - ready for their experiences in summer nature programs. We are also delighted to see the proud grandparents returning with the next batch of grandchildren excited to be here or to be coming back for another summer.

It really is a remarkable cycle that is perhaps most notable to those of us that winter here. It's easier to notice the rhythm of the patterns when standing still and observing. It's also remarkable that in light of all the changes over the years, there are some constants. Another constant - is you - all of you that enrich our programs and support our work. Your support helps to fund the research and conservation programs, it enables us to purchase the supplies for the terrapin program, it supports the undergraduate interns, it helps keep costs of admission affordable for our visitors, and helps us continue to provide quality summer nature programs for area youth so that they too can come back years from now with the next generation.



"To promote appreciation, understanding and stewardship of wetlands and coastal ecosystems through our programs in research, education, and conservation."

*Founded in 1969 by Herbert Mills,
Executive Director of the
World Wildlife Fund*

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Hours:

September 2 - October 12 - Open daily

9:30 – 4:30 - Monday - Sunday

**October 13 - May 1 - Open Friday, Saturday
& Sunday 9:30 to 4:30**

Closed Monday through Thursday

Check our website for Holiday Hours

General Admission:

Members: *Free*

Non-members: *\$8 Adults, \$6 Children 3-12*

Views From the Tower is the quarterly newsletter of The Wetlands Institute and can also be found on our website.

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Stone Harbor, NJ 08247
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wetlandsinstitute.org



MARSH MUSINGS

by Dr. Lenore Tedesco, Executive Director



The summer has been screaming by at a remarkable pace. The Institute has been filled with the laughter and excitement of visitors and summer nature program participants, the gardens are ablaze in color, the nest boxes full of hungry baby birds, and the mud flats and marsh teeming with life. It's a glorious time to be at the Institute to witness another season at the shore.

It's been a busy summer. The summer intern program is wrapping up and we have had a remarkable program. The energy, commitment and spark that the 10 interns brought to the Institute was impressive and they have all contributed to the growth and development in many ways. Their accomplishments are highlighted in articles in the newsletter.



Our docents, junior volunteers, and adult volunteers provide so much to the Institute and are such an important aspect of all that we do. From leading salt marsh tours or beach and dune hikes, to doing programs at the teaching tank, helping to maintain the aquarium, working with the turtle basking station, helping on terrapin road patrols, patrolling the Institute property for nesting terrapins, being field assistants at the Bird Sanctuary, helping to plant marsh grass, working as admissions greeters, or helping with special events – especially the Wings 'N Water auction, we couldn't deliver the quality programs and conservation programs that we do – without you. All of us at the Institute say thank you!



The Wings 'n Water Benefit Auction was August 2nd and we had a wonderful event. Thanks to everyone that attended and bid generously in support of our programs. The business community in Cape May County was incredible and, along with friends and supporters, donated more than 300 items to the auction. The Washington Inn catered the event and provided a wonderful spread that was enjoyed by all. New this year, we featured a raw bar donated by Atlantic Capes Fisheries. Thanks to all our corporate sponsors for helping to make this year's event memorable.

Finally, as we look ahead to the promise of the beautiful weather of fall and the onset of the south bound migration, we will be very busy with several new projects and programs. Our Education and Research and Conservation Departments have been awarded several new grants that will diversify our programs significantly. Look for more information and updates this fall as we start an international wetland education exchange program, begin a large restoration project for beach nesting and migratory shorebirds at Stone Harbor Point, and work to monitor habitat creation for black skimmers in our local marshes. All of these projects are in collaboration with numerous partners that make our efforts rigorous, enjoyable, sustainable, and empowering.

We are doing so many new things, while we continue to do the things we are known for. Your support and contributions have help launch these programs and are critical to helping us sustain and enhance them. Each week, I meet with new members and new donors that are excited to join with us to make a difference. If you would like to join with us – please let me know. I would love to show you around and explore ways for you to be part of our winning team. We are **making no small plans** and we want you to be a part of it.

AUTUMN HAPPENINGS

It is autumn in the marsh and The Wetlands Institute is open 7 days a week from September 2 - October 12, 2014! Unless otherwise stated, all activities occur onsite at The Wetlands Institute. Questions? Please call The Wetlands Institute at 609-368-1211.

SALT MARSH SAFARI

Starting in Marsh View Hall, watch our award-winning film, *Secrets of the Salt Marsh*. Then join us for a guided interpretive walk through the wetlands! Together we will travel along the new elevated walkway, down the salt marsh trail and out onto the dock overlooking Scotch Bonnet Creek. To fully experience the marsh, make sure to wear shoes that can get wet and muddy

Daily: 11:00am and 2:00pm

Free with admission

CREATURE FEATURE AND CRAFT

We will highlight a different live animal or group of animals each day! Get up close with turtles, fish, crabs, sea stars and urchins, mollusks, horseshoe crabs and the animals of *Finding Nemo*. After the presentation, create a take-home craft related to that day's Creature Feature!

Monday and Friday: 12:30pm

Free with admission

CATCH 'O THE DAY

Get your feet wet (or wear waders!) as you discover what swims in the back bays. Help us drag a seine net through the water to find crabs, shrimp, fish and more. Activity recommended for ages 8 and up. Younger children are welcome to attend and can assist in removing creatures from the net! **This activity is tide dependent and may not occur during low tide.**

Wednesday: 12:30pm

Free with admission

AQUARIUM FEEDING

Help us feed the fish and crabs, or just watch them gobble down their food. We will open up feeding three times each week so you can see the turtles chasing minnows and the horseshoe crab gobbling shrimp. **Not all animals are fed every day.**

Tuesday, Thursday, and Saturday: 12:30pm

Free with admission

SEASHELL SUNDAYS

Starting a shell collection? Want to know where shells come from? Can't figure out what you found on the beach? Bring it in and we will tell you all about seashells, how to collect them without harming the environment and feature an assortment of live mollusks and cool artifacts.

Sunday: 12:30pm.

Free with admission

Winter hours start October 13, 2014! Starting then, The Wetlands Institute will be open Friday, Saturday and Sunday. Please check our website calendar for programming updates as we transition from autumn to winter hours!

wetlandsinstitute.org/events/calendar

Find us on



FALL Migration — FESTIVAL —

THE WETLANDS INSTITUTE • NEW JERSEY

Saturday and Sunday, Sept. 20-21 from 9:30 – 4:30

The sheer abundance and diversity of species migrating through the Cape May Peninsula is an amazing sight to see and makes this area among the top birding destinations, not only in North America, but the world. At The Wetlands Institute, fall is an especially good time to experience the changing of seasons and the spectacle of migration as raptors, warblers, waterfowl, and butterflies travel through the area. Come join us as we celebrate this incredible time of year!

- Live Butterfly Presentations and Tagging
- Guided Nature Walks Focusing on Birds, Butterflies, Dragonflies, and Bees
- Guided Back-Bay Boat and Kayak Tours
- Fish, Sea Turtle, Butterfly and Bird Crafts, Migration Themed Games and Activities
- Special Autumn Terrapin Release
- Live Animal Presentations by Community Partners
- And more!

For more details, visit:

wetlandsinstitute.org/events/fall-migration-festival

Two-Day Ticket Price:

Non-Member: \$15 Adult, \$10 Child

Member: \$13 Adult, \$8 Child

One-Day Ticket Price:

Non-Member: \$10 Adult, \$8 Child, \$30 Family Pack of 4

Member: \$8 Adult, \$6 Child, \$25 Family Pack of 4



Diamondback Terrapin Conservation Project

"I haven't seen many terrapins this year."
"There are terrapins all over the place."

These are examples of the comments we hear during the course of the terrapin nesting season, which typically lasts from late May through mid-July. Both observations are correct – and our daily patrols of the local roads and our property help give us insight into the patterns so that we may continue to adjust our approach to terrapin conservation.

From 55 consecutive days of traveling the well-worn path of our road patrol route, we can tell you that the terrapins were both sparse and abundant this season, depending on the day, time of day, and road of travel. Our terrapin team, comprised of staff, interns, volunteers and community friends, tallied 741 terrapin encounters along our local coastal roads during the 2014 nesting season. Of these, over 200 were live animals helped out of harm's way, 42 were injured females that were either rehabilitated or euthanized, and 492 were killed by vehicles. Believe it or not, these results fall just around the average for our 24 year history of road patrols. The good news is we recovered 751 eggs from roadkilled terrapins and the baby terrapins are beginning to hatch.

On our property, we tracked terrapin nesting activity by conducting 5 patrols per day, starting in late May. We had assistance from a small group of volunteers who helped keep a look out for nesting terrapins, and of course visitors, school groups, and summer nature programs that were fortunate to spot nesting terrapins during their tours. Some days there were not enough of us to keep pace with the terrapins. This year we captured terrapins nesting on our property over 150 times. These included 99 females previously marked with microchips for identification (6 of which were released as headstarters after being incubated and reared in our program several years ago) and 58 new (to us) nesting females that we microchipped. We also protected 72 nests from predators with exclosures, which are mapped and accompanied by facts about the female who made the nest. Be sure to check them out the next time you visit!

Coastal Conservation Research Program

The Coastal Conservation Research Program interns have been busy conducting research by car, by kayak, by boat, and by foot since they arrived in late May. CCRP interns quickly got engaged in new and ongoing projects that explore and address conservation issues related to diamondback terrapin, horseshoe crab, and fish populations. Throughout the summer the interns learned important field skills such as how to extract one's leg from the grasp of marsh mud, how to ward off biting flies with a kayak paddle in hand, and how to navigate summer traffic in south Jersey.

They also selected topics for individual research projects which they conducted throughout of the program. **Kelly Pittenger** (Colgate University) explored and mapped stranding hazards for horseshoe crabs along the Delaware Bay beaches.

Mollie Nugent (SUNY College of Environmental Science and Forestry) surveyed Institute property to document location, characteristics, and fate of nesting birds.

Mary Jo Monk (University of North Florida) placed wildlife cameras around the Institute's property to monitor diurnal and nocturnal behavior of terrapins and nest predators.

Katie Goplerud (University of Wisconsin, Steven's Point) navigated local creeks to count heads of terrapins, a method for rapid population assessment, to determine when and where they occur in greater number.

Jillena Yeager (The Richard Stockton College of New Jersey) continued to explore the relationship between female terrapin body size and development of follicles and eggs to better understand the reproductive potential of females of varying body size.

They each presented the final results of their endeavors during the 2014 Intern Symposium, on August 4 at The Wetlands Institute.



2014 Coastal Conservation Research Program Interns
(from left): Katie Goplerud, Mary Jo Monk, Mollie Nugent, Kelly Pittenger, Jillena Yeager.



2014 Environmental Education Interns (from left)
Rachel Landman, Gabrielle Hubbard, Alison Swan,
and Celina Daddario

As Environmental Education Interns, Celina Daddario, Gabrielle Hubbard, Rachel Landman and Alison Swan were responsible for leading all public programs including Salt Marsh Safaris, Creature Features, Catch 'o the Day, Aquarium Feedings, Totally Turtle Tuesday, Horseshoe Crabmania Thursday, Crabbing at the Dock and Hooked on Fishing, just to name a few! In addition to leading these programs, they were asked to develop and implement an education project of their choosing that was personally and/or institutionally beneficial. The development of these individual projects assisted them in honing skill sets that are essential to creating fundamentally successful programs or initiatives within the field of environmental education.

The Environmental Education Interns presented their completed projects at this year's Intern Symposium on August 4, 2014. This was a truly fantastic summer and their commitment and dedication to leading quality education programs has been a wonderful asset to The Wetlands Institute!

Below is a brief summary of their projects:

Salt Marsh Explorers, Ages 6-9: Expanding the Interactive Nature of Guided Programs and Self-Exploration at The Wetlands Institute
Celina Daddario, Albright College

The Wetlands Institute offers a variety of interactive, informative and self-guided programs and activities. For my project, I am creating a learning tool intended to focus the various learning styles of children aged 6-9 during guided programs and self-exploration activities at The Wetlands Institute. The packet provides children with specific information and facts to listen for during presentations, topics to study in the exhibits, fun salt marsh inspired games, restoration of the Bev Henry rubbing post activity and suggestions for take home activities that give parents/guardians a resource guide to further educate their child on the salt marsh.

Putting the Pieces Together: Creating Interactive Activities for Terrapin Station and Local Classrooms Related to the Northern Diamondback Terrapin, (*Malaclemys terrapin terrapin*) and the Atlantic Horseshoe Crab (*Limulus polyphemus*)
Gabrielle Hubbard, Coastal Carolina University

For my project, I created 2D replica jigsaw puzzles that consist of the natural living environment for the Northern Diamondback Terrapin, and the anatomy of the Atlantic Horseshoe Crab. These family-friendly activities will be placed inside Terrapin Station and each puzzle contains information as to what the features on the puzzle represent and how it is beneficial to that particular animal and its environment. I converted each activity into a comprehensive lesson plan for use in 4th – 6th grade classrooms, with optional extension activities that can be used to tailor the base activity to lower and/or higher grade levels.

Salt Marsh Ambassadors, Ages 10-13: Expanding the Interactive Nature of Guided Programs and Self-Exploration at The Wetlands Institute.
Rachel Landman, Hamilton College.

The Wetlands Institute offers a variety of interactive, informative and self-guided programs and activities intended to educate visitors about all aspects of the salt marsh. Through my project, I am creating an activity guide book focused on engaging visitors aged 10-13. The activity guide book will contain a series of activities including but not limited to: a crossword puzzle, an aquarium feeding survey, and a template to write a persuasive letter about the importance of the salt marsh. The final activity in the packet is a conservation pledge that the kids sign and take home, empowering them to be ambassadors of what they have learned and serving as a reminder of their visit to The Wetlands Institute.

Focusing on Community Connections: Creating an Interactive Salt Marsh Food Web Display and Enhancing Educational Exhibits at the Bayside Center in Ocean City, New Jersey
Alison Swan, University of South Carolina

Community connections refer to not only the interpersonal relationships in human communities, but also predator-prey relationships in animal communities. By creating an interactive salt marsh food web display, I will increase the interactive nature of the aquarium when Aquarium Feeding Programs are not scheduled and allow the public to experience the predator-prey relationships of the ecosystem. My project will also focus on revamping three educational exhibits the Bayside Center including the interactive salt marsh food web display, a Terrapin Learning Station, and an exhibit on marine debris in our oceans. These efforts will tie the communities of Ocean City and Stone Harbor together and strengthen interpersonal relationships.





Our Annual Wings 'n Water Benefit Auction was a resounding success thanks to our sponsors, donors, Board of Trustees, volunteers, interns, and staff! The auction featured over 300 silent auction items and 30 live auction packages!

We would like to extend our most heartfelt thanks to all who attended and participated in our biggest fund-raising event of the year.

Special thanks to our Sponsors:

Institutional Sponsors:

- PSEG Services Corporation
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*Thank you to our 2014 Summer Interns for all their help with the auction!
(from left): Katie Goplerud, Jilena Yeager, Mollie Nugent, Celina Daddario,
Alison Swan, Rachel Landman, Gabrielle Hubbard, Leanne Tucker
(Marketing Intern), Mary Jo Monk, and Kelly Pittenger.*

AROUND THE MARSH

Find us on



Crabulous Crab Day

Crab cakes, crabbing, crab races, crab treats - it was all about the little crustacean on July 18! The weather was fantastic and everyone, including 260 visitors and our Education and Marketing Interns, had a Crabulously good time!



Donations in Memory of:

- John DeVries
- John Ohls
- Agnes Robinson

Earth Share New Jersey

Earth Share New Jersey is a workplace giving campaign, similar to the United Way, where employees choose to have donations deducted from their pay checks. Each member's organization works to conserve the natural environment in New Jersey. Whether you're an employee or a CEO, please explore a campaign in your workplace. Call Earth Share's Paula Aldarelli at 609-989-1160 or e-mail paldarelli@earthsharenj.org.



TIDEPOOL SHOP

by Joyce Ferguson

What an amazing summer season we have had in the Tidepool Shop!

Thank you to all of the members and visitors who have given us such rave reviews and supported The Wetlands Institute through purchases in the Shop!

We are looking forward to a fabulous fall season with new clothing inventory including microfleece jackets, sweatshirts and vests. Nature art tiles from locally-owned Rowe House Tile are in stock. Migratory birds and butterflies will be featured in books, jewelry and on magnets on our butterfly tree.



New this year is a selection of boxed holiday cards on recycled acid-free paper. Don't miss our sale corner for special buys!

In support of the Stone Harbor Museum and Centennial, we have post cards and the book, Summer Place, by Captain Donald Cramer.

The Tidepool Shop is happy to support the "Your Cents, Makes Sense" initiative, with proceeds going

to avian conservation.

Hope you will migrate through the wetlands and we'll see you soon!

Looking for a Way to Share Your Talents?

The Wetlands Institute is always looking for new volunteers to help us achieve our mission of promoting the appreciation, understanding and stewardship of wetlands and coastal ecosystems through our programs in research, education and conservation. Please consider joining us for special one-day volunteer opportunities or on a more routine basis throughout the coming months! For more information on our volunteer opportunities, please visit our website at: wetlandsinstitute.org/about-us/help-us-grow/volunteer/





1075 Stone Harbor Blvd.
Stone Harbor, NJ 08247-1424

or Current resident



A not-for-profit education and research organization studying, preserving and protecting wetlands and coastal ecosystems

2014 CITIZEN CONSERVATION AWARD

The 2014 Citizen Conservation Award deservedly goes to a couple who has gone beyond the call of volunteer duty at The Wetlands Institute.

Since 2007, Steve and Susan Ahern have volunteered their time in just about every department here at the Institute - front desk and reception, the aquarium and animal care, special events, and, of course, their tireless efforts for terrapin conservation.

Between 2012-2014 alone, this duo has donated over 1,000 documented hours of their time to helping The Institute's cause.

For the past three years Steve and Susan have helped spearhead our Turtle Fest event used to raise funds for our Diamondback Terrapin Conservation program and to kick spring into gear here at the Institute.

Through the Sea Isle Terrapin Rescue organization they founded, Steve and Susan have rescued over 1,400 terrapins from local storm drains, saved countless terrapins from roadway injuries by installing barrier fencing and helping terrapins out of harms way, and have released hundreds of headstarted terrapins back to the marsh. They also host terrapin headstarter releases for the community of Sea Isle each summer.

The detailed records they've maintained from their storm drain rescue efforts is utilized to help our Research and Conservation

department understand terrapin hatchling movement patterns. Their data have led to new understandings of hatchling movement.

Aside from impactful citizen science, Steve and Susan aid our in-house Diamondback Terrapin Conservation Program research efforts and are active members of our road patrol team. They endure the 6:00am departures and a 2.5 hour drive in summer traffic to rescue terrapins or document terrapin road kills. Road patrols are no easy task for anyone.

Additionally Steve Ahern, ran in the New York City Marathon on Sunday, November 7, 2010. Steve's "Race for Research" raised over \$1,500 for The Wetlands Institute in just over two weeks.

It is with great pleasure that we presented the 2014 Citizen Conservation Award to Steve and Susan Ahern. We deeply appreciate the work that they do to help our Research and Conservation Department and the efforts of The Wetlands Institute as a whole.

