

Disney Comes To The Shore

by Dan McLaughlin, Research Coordinator

This summer, the Wetlands Institute hosted a select group of teachers for an intensive training as part of the Jersey Shore Terrapin Conservation Project, thanks to support from the Disney Worldwide Conservation Fund. The members of the 2012 teacher cohort — collectively known as the Disney Teachers — are Maggie Dugan (Upper Township Elementary School), Lynn Tyszka (Holly Heights Elementary School), Jane Krajewski (Quinton Township Elementary School), and Mary Lyons (Millville Senior High School).

With terrapin nesting season in full swing, the Disney Teachers worked alongside scientists and student researchers from the Coastal Conservation Research Program to learn more about the ecology, natural history, and conservation of diamondback terrapins, a species of special concern in New Jersey. The teachers participated in daily road patrols in search of female terrapins crossing local roads. During the course of the 38-mile drive along the salt marsh they helped terrapins across the road and recovered turtles that were killed by motor vehicles. The teachers also assisted our staff with “eggectomies” — a post-mortem procedure to remove undamaged eggs from females who were killed on local roads. By the end of the terrapin nesting season, Wetlands Institute staff and volunteers helped 351 terrapins cross the road safely. We also documented 502 female terrapin roadkills within our 38-mile transect.



Jane Krajewski, Maggie Dugan and Lynn Tyszka



Mary Lyons gets ready to help a terrapin across the road.

From those 502 roadkills, we removed 723 potentially viable eggs for incubation. At the time of this writing, 132 orphaned terrapins have hatched so far.

Another part of the teachers' weeklong training included a visit to the Stockton College Turtle Farm to see the facilities of our headstart program. John Rokita, an animal care specialist at Stockton, discussed his approach to captive care of hatchling terrapins that promote their growth from the size of a quarter to nearly 4" shell length in one year. (In the wild, it takes about three or four years to attain this body size.) Being larger increases the turtles' chances of survival and offsets the 400-600 adult females killed on our local roads each year.

The Disney teachers helped interns monitor nesting activity on the nature trail at the Wetlands Institute as well as a newly fenced section of road on Nummy Island, an uninhabited island between Stone Harbor and North Wildwood. Back at the Institute, they learned how to safely insert microchips into juveniles and adult terrapins so that we can identify them in the future.

In just one short week, these teachers engaged in every facet of the Terrapin Conservation Project at the Wetlands Institute. From these experiences, they are developing learning activities based on terrapin biology and conservation for their respective grades. These learning activities will be disseminated at several statewide conferences over the next year, including surveys and interviews of crabbers to determine avenues for conservation success.

“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:

May 15th to October 15th
Monday to Saturday, 9:30 a.m. to 4:30 p.m.
Sunday, 10 a.m. - 4 p.m.
Closed Sunday - Monday after October 15th

General Admission:

Members Free
Nonmembers \$8 Adults \$6 Children 3-12

Views From the Tower is the Wetlands Institute's quarterly newsletter and is a membership benefit.

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Stone Harbor, NJ 08247-1424
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www.wetlandsinstitute.org

Marsh Musings

by Dr. Lenore Tedesco

Greetings, friends and supporters of the Wetlands Institute. I hope you are enjoying the inaugural color edition of *Views from the Tower*. We wanted to bring news and information from the Wetlands Institute to you in a bold and dynamic fashion and believe this is a good start.

My first summer in Stone Harbor has been eventful! I am still learning a lot and enjoying the faster pace and busier environment. The Institute is abuzz with summer camps, education programs, and lots of visitors experiencing some new exhibits and programs. In fact, the number of visitors enjoying the institute is up almost 50% for the first six months of the year compared to last year. The new horseshoe crab exhibit is a hit and represents a great example of how we are linking our conservation programs to public education. On July 24th, we welcomed Dr. Ellen Prager to the Institute, where she spoke to a full house about some of the ocean's oddest creatures - and why they matter to us. Family Nights continue to be a popular attraction and offer live animal programs on Thursday evenings. We are wrapping up the summer research intern program and the interns presented the results of their research at the annual Coastal Conservation Research Program Symposium on July 28th. This was followed by a great thank you and retirement party for Dr. Roger Wood! See the article in this edition.

The biggest news of the summer, however, was the new dates of the 30th Anniversary Wings 'n Water Festival. This year, we held the festival in mid-July with a goal of renewing the festival, reaching a new demographic, and energizing the programs. We are very excited with the outcome. Some of the venues were not as well attended as we had hoped. I learned there is a post-July 4th lull on the island so perhaps the timing wasn't ideal. The increased number, content, and engagement level of the educational programs was right on target and a critical component of our mission that I believe really shined. The Miss Avalon Sunset Cruise provided an amazing evening with beautiful weather, interesting bird sightings, and great new friends. The biggest hit was the Benefit Auction Party held on Saturday evening. We had a record crowd, filled with new faces and returning long-time friends and supporters. We saw young people, folks in their prime and lots of wisdom under the tent. The food, catered by the Washington Inn, was fantastic and the vibe under the air conditioned tent energized, excited and in a party mood. The new and exciting auction items went fast with furious bidding and happily the auction sales broke records for the Institute. These programs and components were at the core of our mission and key to our fundraising success. It was a transition year and we are assessing and gathering information, opinions and suggestions. If you have ideas for how we can improve the 31st Annual WnW Festival, please send them my way. Look forward to a report of our assessment as we start planning for next summer's festival.

The Institute is busy with exciting programs, events, and exhibits. The transitions continue and we are making NO SMALL PLANS. We are only missing you. Come on by and see what all the excitement is about.



At *Wings 'n Water*, Lenore Tedesco presents Wil Hershberger with the 3rd place ribbon for wildlife photography. Wil also won a 1st prize in the Coastal and Scenic category.

AUTUMN HAPPENINGS

Preregistration is required for many events and may be made by calling the Institute at 609/368-1211. We're sorry, but refunds are not available for programs with prepaid registration. Unless otherwise noted, prices are listed per person with the discounted member price first, followed by the nonmember price. ☞ means kid-friendly!

☞ SALT MARSH SAFARIS

Starting in the Marsh View Hall, you'll see our award-winning film, *Secrets of the Salt Marsh*. Then head out along the salt marsh trails for a guided interpretive walk of the wetlands.
Weekdays: 10AM, Noon, 2PM through September 9
Weekends: 11AM and 1PM
Free with admission

☞ AQUARIUM FEEDINGS

Help us feed the fish and terrapins, or just watch them gobble down their food. We'll open up feeding time 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.)
Tuesdays, Thursdays at 3:15PM beginning Labor Day
Saturdays at 2:15PM beginning Labor Day
All ages
Free with admission

☞ SEASHELL SUNDAYS

Starting a shell collection? Want to know where shells come from? Can't figure out what that thing you found on the beach is? Bring it in, and we'll tell you all about seashells and how to collect them without harming the environment.
Sundays: 10:00 - 11:00 AM, through October 14
All ages
Free with admission

☞ CRABBING

Drop a line in the water and see what pinches it! We'll provide the bait and handlines, and teach you how to reel in blue crabs.
Sundays: 2:15 - 3:30 PM, through October 14
All ages
Free with admission

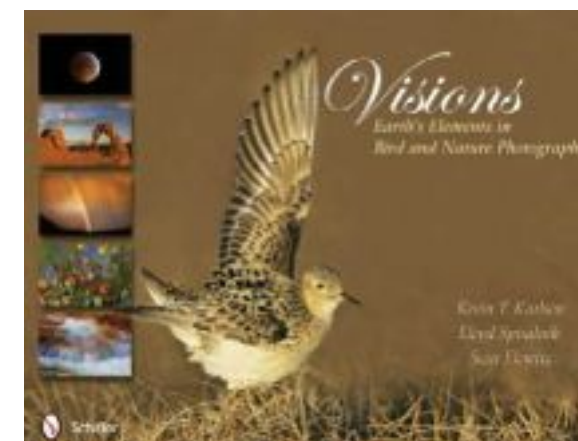
MIGRATORY DRAGONFLY SHORT COURSE

Join the Xerces Society for a special workshop on dragonflies. The first half of the day is indoors, then after lunch you'll go out on the marsh to study darners, gliders, and other species up close. See our website calendar for more details.
Saturday, September 15th
10 AM - 4:30 PM
Free
Reservations required; e-mail alexa@xerces.org



☞ MONARCH MADNESS

Come and see all the butterflies in our gardens and on our trail. The monarchs will be passing through on their way down to Mexico. Learn things you never knew about this beautiful insect, and the amazing journey they take every fall! Help scientists tag monarchs, get tips on gardening for butterflies, and face painting, games, and crafts will keep you and your kids entertained.
Saturday, October 6th
10 AM - 2 PM
Price: \$4 (\$7 nonmembers)



COVERED DISH DINNER: EARTH'S ELEMENTS IN BIRD AND NATURE PHOTOGRAPHY

Join Cape May Court House photographer Kevin Karlson for a photographic journey through earth, air, fire and water. Other photographers who worked on this project will also present their work. Please bring an entrée, salad or dessert to share with at least eight people.
Friday, November 2nd
6:00 PM
\$7/\$12, plus a covered dish
Reservations by November 1st

Please check our website calendar for schedule updates as we transition from summer to autumn programming!

RESEARCH & CONSERVATION

by Dr. Patrick Baker

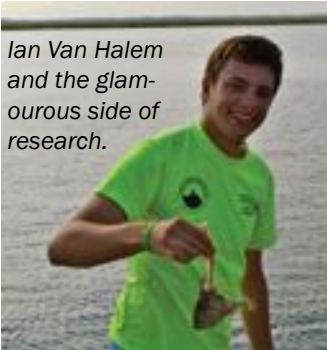
Hannah Pretz at Sara the Turtle Day in Sea Isle City.



The 2012 Coastal Conservation Research Program (CCRP) brought 11 students from across the country to the Wetlands Institute for an intensive 10-week summer internship. As part of this research experience, students develop and complete an independent research project under the direction of Institute scientists. On July 28, the CCRP interns presented their research in the 18th annual Coastal Conservation Research Symposium.

Shawn Bulifant and Ian van Halem, both from West Chester University, developed projects using Geographic Information Systems (GIS) software. Shawn compared aerial and satellite images for 1995, 2002, and 2007 to evaluate vegetation changes at the edge of the salt marsh with respect to climate change. Ian used GIS software to identify hotspots of road-killed terrapins. This research was facilitated by faculty mentors from West Chester University: Dr. Dorothy Ives-Dewey, Dr. Gary Coutu and Dr. Joan Welch.

Several projects examined environmental factors affecting the diversity and abundance of salt marsh organisms. Lauren Apakian (Temple University) quantified fish, crabs and terrapin populations in six salt pannes, varying in size and depth. Three projects focused on macroinvertebrates. This broad class of organisms is widely



Ian Van Halem and the glamorous side of research.

used as an indicator of environmental quality. Hannah Pretz (Stockton College) studied the diversity and abundance of Quahog Clams and Ribbed Mussels in the vicinity of the Institute's dock with respect to shading. Chelsea Fischer (Virginia Tech) examined the number of parasitic trematodes on Mud Snails from different localities in the salt marsh. Sarah-Anne Rohlfing used a Rapid Bioassessment Protocol based on macroinvertebrates to evaluate water quality in Crooked Creek, which flows through the urbanized areas of Cape May Court House and into the salt marsh.

Ecology and conservation of Diamondback Terrapins continues to be a focal area of the Research and Conservation program at the Wetlands Institute. Ashley Potter (Michigan State University) examined the effectiveness of a new barrier fence made of corrugated tubing that we installed on Nummy Island this summer. Alison Ball (The College of New Jersey) used the experimental plot adjacent to the Institute's parking lot to test nesting substrate preferences of diamondback terrapins. Alison Mooradian (Vassar College) provided a preliminary assessment of the Terrapin Head Start program. Two interns focused on the problem of hatching terrapins in storm drains, a newly recognized conservation challenge for diamondback terrapins. Jennifer Jankowiak (University of Binghamton) and Jessica Radich (Stockton College) explored the distribution of hatchlings among storm drains and the fates of the hatchlings that become trapped.



Jessica Radich meets the locals in Crooked Creek.

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EDUCATION

by Phil Broder

It's a rare occurrence to find me looking around, wild eyed, shouting, "Who's got a cell phone camera?" I'm just not the sort who constantly takes snapshots for Facebook or Twitter. But on July 5, this was a photo I just had to take. A trio of horseshoe crabs was pattering around near the dock as we were preparing for the morning kayak tour. And amidst the clutter of sea lettuce, slipper shells, mud and barnacles that cover most horseshoe crabs, I could see a circle with words on it.



The U.S. Fish and Wildlife Service's Cooperative Horseshoe Crab Tagging Program captures crabs every spring, clips tags (about the same size as the beach tag you buy every summer) to their shells, and releases them back to the Delaware Bay. Where do they go after that? It's up to you and I to figure that out. If you find a tagged crab, all you need to do is call the phone number on the tag, and report the tag's number and where and when you found it.

I'm not the first Wetlands Institute staffer to find one. In March, Terrie Campbell found just a tag — no horseshoe crab attached — while walking along Kimble's Beach. Fish and Wildlife told her that the tag had been affixed to a crab on that same beach, nine years ago. My find was more recent; the horseshoe crab had been tagged in May 2011. But like Terrie's, it was tagged at Kimble's Beach, which means it swam at least 35 miles around Cape May Point to get to Stone Harbor. That's quite a journey for an animal that's barely a foot long.

The Horseshoe Crab Conservation Initiative that we started in June is aimed at making the journey a bit easier for the smallest horseshoe crabs. We're taking horseshoe crab eggs from local beaches, raising them until they hatch, and then letting them grow through a handful of molts in aquarium tanks. In the wild, because of predators and extreme environmental conditions, only about one egg in a thousand will hatch and live long enough to begin feeding on its own. We're aiming to improve those odds.

Right now there are hundreds of tiny horseshoe crabs swimming around in our Limulus Lounge. A camera magnifies some of them, so that you can see them on a screen overhead. It's fascinating to watch the newly-hatched babies, as their rounded tails beat furiously to drive them through the water, and their veins are clearly visible through their transparent shells. Juvenile horseshoe crabs, only about three inches long, swim in another tank.

Horseshoe crabs don't begin eating until they've molted four times. Kirby Hoffman is already growing a supply of plankton so that we'll have food ready when the time comes.

The science of aquaculturing horseshoe crabs is almost entirely new, so we're learning as we go. If everything goes well, the crabs will stay with us through the winter, and then perhaps next spring or summer we'll begin releasing them. In the meantime, we'll keep our eyes open for adult horseshoe crabs wearing tags, so that we can keep adding to what we know about this ancient species.



Tiny horseshoe crabs seen through the Limulus Lounge camera

WINGS 'N WATER FESTIVAL

Thanks to everyone who came out to support the 30th Anniversary of the Wings 'n Water Festival. This was the first year we held the event in July with a goal of reaching a new demographic and reenergizing the event. We added lots of new activities, interactive educational programs, and several programs for adults.

By far the most successful event was the Saturday Benefit Auction party on July 14. The party, held under the big top tent, featured both a Live and Silent Auction and welcomed over 300 guests to enjoy an evening of cocktails and delicious food provided by The Washington Inn. The benefit auction is our largest fund-raiser of the year—and raised a record amount of funds for the Wetlands Institute!

Were you able to attend the Festival? We want to hear your feedback! As we bring the 2012 Festival to a close, we are already in the process of planning for 2013. Helpful feedback on your experience is truly appreciated and will help us to better plan our event for next year.

Please visit our facebook page (The Wetlands Institute) and click the Survey Monkey app in the toolbar. A short survey on the Wings 'n Water Festival will appear for you to complete.

And finally, a very special thanks goes out to our generous sponsors and supporters:

2012 Wings 'n Water Festival Sponsors

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The Princeton Bar & Grill
William Ris Galleries
Yacht Club of Stone Harbor



AROUND THE MARSH

End of the Wood Era

It's not uncommon to meet people — scientists, teachers, and average joes — who'll say something like, "Say hi to Dr. Wood. I was one of his students 25 years ago...." Roger's former students and interns are sprinkled throughout the education and scientific communities, from a sea turtle biologist in South Carolina to a school principal in New Jersey. After three decades with the Wetlands Institute and as a professor at Stockton College, Dr. Wood retired in mid-summer. The world's foremost expert on diamondback terrapins will now have more time to focus on his other loves, paleontology and opera.

Grottola Recognized as Citizen Conservationist

Joe Grottola was honored as the Institute's 2012 Citizen Conservationist for his two decades of work with diamondback terrapins. The Lower Cape Regional High School teacher pioneered methods for removing terrapins from storm drains, and monitors 107 drains in Wildwood Crest with his students. They have saved thousands of trapped hatchlings. Joe and his wife, Lisa Roselli, also do terrapin road patrols in Wildwood Crest and Lower Township.



Memorials

The Wetlands Institute gratefully acknowledges gifts made in loving memory of members and friends who loved our coastal environment.

In Memory of:

Robert T. Allen	Elaine Bencivengo
David J. Denick	C. Blair Ives
Roberta "Bobbie" Maguire Sonner	
Anna Ritter	Marjorie Zook

On The Roof, Online

With the installation of more solar panels, the Wetlands Institute is now getting as much of its power from the sun as possible. How well is the system working? Check <http://wetlandsinst.trinitysolar.info/> for the latest from our rooftop, including how much CO2, oil and trees we've saved.

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.

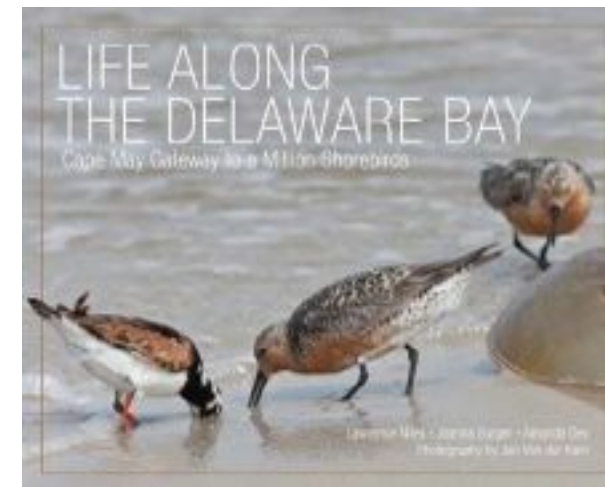


TIDEPOL SHOP

by Joyce Ferguson

The Tidepool Shop enjoyed a great summer and we look forward to seeing you during the remaining summer and this fall. Remember that we are always happy to process your special orders and appreciate any suggestions you may have for the Shop.

New books you might want to consider include: *Life along the Delaware Bay: Cape May, Gateway to a Million Shorebirds* by Lawrence Niles, Joanna Burger, and Amanda Day; and *Visions, Earth's Elements in Bird and Nature Photography* by Kevin T. Karlson, Lloyd Spitalnik, and Scott Elowitz.



We have a collection of garden handbooks from the Brooklyn Botanical Garden to help make your garden environmentally sound and beautiful.

New in our jewelry department are sterling silver horseshoe crab earrings and pins and pendants with movable tails.

In the clothing department you will find organic cotton hats and polo shirts with the new Wetlands Institute logo. The popular "Got Mud" T-shirts are organic cotton in chocolate brown with a blue crab. We are reordering upon request the microfleece jacket from last year and coming soon are new denim shirts and hooded sweatshirts.

SALE! 50% off all posters and prints throughout August and September!



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

Wetlands Institute's Annual

Sunset Soiree and Open House

NEW DATE! Saturday, August 25, 2012

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For tickets, please call the Institute at 609-368-1211.

