

# Marsh Musings

by Dr. Lenore Tedesco

Happy summer, friends and supporters of the Wetlands Institute.

With the warmer weather of spring came the arrival of many of our friends – friends with feathers, our prehistoric friends, and our two-legged friends. It's the start of the busy season in Cape May County, and it is indeed a spectacle to be witnessed. Being that it was my first spring migration here, it's pretty fascinating. Our boisterous friends the Willets arrived right on cue and set up their nesting territories in the marsh. We enjoyed a wonderful Covered Dish Dinner on April 27<sup>th</sup> from our colleague at The Nature Conservancy, Joe Smith. He told us all about the amazing journey they make to the marshes of South America and the great work TNC is doing. I was out in the field with them at the end of May to see firsthand how their capture and banding program works. Close on the heels of the Willets came the school groups and the start of the SEAS (Science Education at Sea) programs for school-age youth. They are as boisterous as the Willets but aren't restricted to the marsh!

Of course the spring migration also heralded the arrival of the World Series of Birding. I joined the Marshketeers for the annual marathon birding event. A big thanks to my fellow teammates, Anne Galli and team captain and chief scout, Michael Flemming. Our two drivers, Dennis Kays and Lois Hamilton, did a great job of keeping us safe and getting us all over Cape May County in the Marshketeer Mobile provided by Burke Motor Group. Thanks to everyone that sponsored us and look for us again next year. Highlights of the day are provided later in the newsletter.



Volunteers count horseshoe crabs on a Delaware Bay beach in May.

The horseshoe crabs arrived dutifully along the beaches of Delaware Bay and throughout the back bays, and began their annual spawning ritual. The early indications are that they arrived a few weeks early this year. The Wetlands Institute staff and volunteers continued to survey two kilometers of beach near Villas and reported spawning numbers to the Delaware Sea Grant project that is tracking horseshoe crab spawning at 25 beaches in Delaware Bay (more info on the project can be found on our website at [www.wetlandsinstitute.org/conservation/horseshoe-crab-conservation/delaware-bay-horseshoe-crab-census/](http://www.wetlandsinstitute.org/conservation/horseshoe-crab-conservation/delaware-bay-horseshoe-crab-census/)). We are hopeful that their numbers are on the increase but will have to wait and see. The arrival of the horseshoe crabs – as you all know – marks the arrival of the shorebirds that are arriving back in Cape May for the summer, or for a refueling stopover on their incredible journeys to nesting grounds in the high Arctic. Unfortunately, horseshoe crab numbers remain at relatively low numbers in comparison to historic levels. To help address the problem in a unique way, the Wetlands Institute is partnering

with several research and education groups in southern New Jersey in a new project. The Horseshoe Crab Enhancement Initiative is a partnership project supporting the stewardship and restoration of horseshoe crab populations in New Jersey. Our approach is to apply modern aquaculture techniques to restore an ancient animal. Rutgers University scientists are developing the initiative to culture horseshoe crabs, *Limulus polyphemus*, to improve the Delaware Bay stock and thus the Delaware Estuary ecosystem. In collaboration with partner organizations, the project seeks to raise public awareness on policy issues associated with the horseshoe crab population and to engage students and the public in stewardship of this valuable resource. Beginning in a few weeks, staff from the Wetlands Institute, along with project partners, will collect fertilized horseshoe crab eggs from marginal spawning beaches and rear juvenile horseshoe crabs. The larval and juvenile crabs will be grown until they begin to feed and then released along area beaches. Estimates are that for every 3000 fertilized horseshoe crab eggs only three juvenile crabs make it to the stage where they begin to feed! Then they have 7-9 years of survival before they return to the spawning beaches to continue the cycle. The program hopes that by stewarding the horseshoe crabs through this period of intense predation and environmental uncertainty, we can help increase horseshoe crab stocks in Delaware Bay. The egg cultures and juvenile horseshoe crabs will be on display in Terrapin Station... which clearly needs a new name now! Our aquarist is working on the crab rearing stations and the Education staff is busy with new information on horseshoe crabs. So be sure and come by to see the new exhibit and get horseshoe crab crazy with us!

There is so much more to tell you all about. As you can see, there is a lot happening at the Institute. As always, we'd love to see you, hear from you, and have you join in the fun. Our Institute is made better by your participation. So come on out and join in the fun and help us achieve the greatness that the Wetlands Institute is becoming. Make no small plans for the Wetlands Institute!

## Horseshoe Crab Enhancement Initiative Partners

Rutgers University Institute of Marine & Coastal Sciences  
Aquaculture Innovation Center  
Haskin Shellfish Research Laboratory  
Cape Shore Laboratory  
Rutgers Cooperative Extension of Cape May County  
Cape May County Vocational-Technical School  
Lower Cape May Regional High School  
The Wetlands Institute  
The Nature Center of Cape May  
New Jersey Audubon Society  
The Nature Conservancy  
Stockton College  
New Jersey Sea Grant Consortium