

Jacques Cousteau Volunteer

Newsletter

VOLUME 3, ISSUES 2-6

SPRING / EARLY SUMMER 2012



JACQUES COUSTEAU
NATIONAL ESTUARINE
RESEARCH RESERVE

UPCOMING EVENTS:

July 3rd:
Creature Feature -
Festival of Fishes
9:30 am - 11:00 am

July 10th:
Creature Feature -
Sneaky Seagrass Critters
9:30 am - 11:00 am

July 17th:
Creature Feature -
Tricky Turtles
9:30 am - 11:00 am

July 18th:
Build a Better Backyard
Series -
Backyard Wildlife Get-
away
1:00 - 2:00 pm

July 24th:
Creature Feature -
Super Sharks
9:30 am - 11:00 am

July 25th:
Summer Fun -
Animal Kingdom
2:00 pm - 3:00 pm

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JC NERR in the Spring and early Summer

Hello Volunteers! My sincere apologies for the hiatus in the monthly volunteer newsletter. It has been a very busy spring and beginning of summer here at JC NERR!

Spring has been filled with a number of exciting programs and events and also quite a lot of planning for events!

The beginning of this year was focused on planning for our March Shore Bowl competition, the high school academic competition that JC NERR hosts every year, which is sponsored by the Consortium for Ocean Leadership.

After Shore Bowl, planning began for our annual volunteer dinner, which was held in April, that honored our volunteers who gave more than gave ten or more

hours to the Reserve in 2011.

Our public programs have been in full swing and we are gearing up for another summer of Creature Feature and Summer Fun programs for the kids.



You may have noticed that this newsletter is fairly long compared to previous newsletters and you'll find in the following articles more in depth detail about what has been happening here at the Reserve over the past few months,

particularly our volunteer involvement with programs, education and research.

As we look ahead to summer, there are quite a few education programs that are in need of volunteer assistance, particularly our Creature Feature and Summer Fun programs. Creature Features are our K-5th grade programs where children learn about a different animal each week. Summer Fun programs are for all ages and stress interaction with the wonders of our local flora and fauna. **If you are interested in assisting with any of these programs please see the last page of the newsletter in the 'Summer Programs' section to see for which sessions need volunteers.**

Reserve Current Events

JC NERR is proud to announce that we have officially added land to our Reserve! In the beginning of this year we were moving along in the process of purchasing an approximately 15 acre parcel of land (see January 2012 volunteer newsletter). With the assistance and partnership of the Ocean County Natural Lands Trust, we have purchased this land and look forward to the next steps with regards to management of our newest acquisition.

The Tuckers Creek Pocket Marsh is 15.29 acres of wetlands and

marsh habitat that is adjacent to the JC NERR Education Center on Great Bay Blvd.

We plan on conducting an official 'opening' of this land to the public in order to celebrate this new addition to the Reserve. There has also been discussion of dedicating and naming the Pocket Marsh for oceanographer and Rutgers Institute of Marine and Coastal Sciences professor Fred Grassle.

One of the goals that we have for this land in the next couple of years is installing an educational



Aerial view of JC NERR's newest land acquisition - Tucker's Creek Pocket Marsh. Great Bay Blvd is in the forefront.

boardwalk trail that will loop through the property. Stay tuned for the date of the informal ceremony to welcome this land to the Reserve!

JC NERR hosts Mongolian Research Symposium

In addition to our coastal training and education programs, JC NERR was proud to host a research symposium in February this year. Below is a description from Rutgers' researcher Olaf Jensen who organized the event:

'The JCNERR was host to a Mongolian Ecological Research Symposium on Saturday, February 25th. The one-day symposium organized by Rutgers scientist, Dr. Olaf Jensen, featured presentations from 20 scientists from 13 different institutions and was attended by more than 50 people. Research topics spanned a range of habitats from lakes to forests and included studies of endangered birds, fish, and mammals. Climate warming in Northern Mongolia has been approximately three times more rapid than for the northern hemisphere as a whole. Consequently, several talks focused on the effects of

climate change on ecosystems and herding families in Northern Mongolia.



Participants of the Mongolian Research symposium on the front lawn of the JC NERR Education Center (Photo Courtesy of Olaf Jensen)

The talks were followed by a Mongolian New Year (Tsagaan Sar) celebration at the Rutgers University Marine Field Station.'

~ Olaf Jensen

I want to particularly stress that events like

these and our other programs and workshops would not be as successful as they are without the behind the scenes help of our dedicated volunteers. For our coastal training programs and workshops volunteers provide much needed assistance with setting up, serving and cleaning up food and dishes, which often requires an all day commitment. In cases such as the Mongolian research symposium and other coastal training workshops, we have had numerous guests in our dormitory here at the Education Center and volunteers provide assistance in making sure that the dormitory room laundry is sent out and the rooms are ready and set-up for our next guests. This assistance ensures that every detail is covered and that guests to the JC NERR Education Center get the best experience possible. Many thanks volunteers for all of your hard work!

Shore Bowl 2012



Shore Bowl, the regional high school academic competition sponsored by the Consortium for Ocean Leadership which tests marine science knowledge, was held at the Busch Campus Center at Rutgers University on March 3rd of this year. Our Education Coordinator, Melanie Reding, was in charge of coordinating and planning this JC NERR hosted event. Months of planning culminated in very successful day, but we were certainly not without glitches the day of the competition. Unfortunately one of the ten schools arrived without the correct number of players and thus could not compete. With one school out, the entire competition schedule had to be changed, but some quick thinking on Melanie's part put everything back on track with a new game schedule along with the school that could not compete in the official competition allowed to get experience in the practice room.

Competition throughout the day was intense and the last two schools standing were Stuyvesant High School (from New York City) and MAST (Marine Academy of Science and Technology from Highlands, NJ). Stuyvesant High School went though

the double elimination portion of the competition undefeated and met MAST in the Championship Round. This round was a very close one with the two teams almost tying each other, but MAST pulled through to gain a 6 point lead for the win. Due to the fact that the competition was 'double-elimination', this meant that even though MAST won, they still had to play another round. Stuyvesant was undefeated and thus had to lose twice in order to be eliminated from the competition. MAST pulled through to beat Stuyvesant again in an extra round, clinching the 1st place win.

So all in all a very close competition! For their 1st place win MAST got to spend a week in Baltimore MD, where the Nationals competition was held this year. Our Communications Coordinator, Andrea Spahn, was able to accompany the team to support them in the competition and chaperone their trip to Baltimore. For achieving second place, Stuyvesant High School was awarded a trip to JC NERR. The team was able to visit the Reserve in early

May and enjoy a trip on Stockton College's marine research vessel as well as clamming in local waters and a visit to the Cape May Zoo. They truly enjoyed their time here in south Jersey and hope to make an additional trip out to the Reserve in the fall.

Our volunteers were integral to the Shore Bowl competition as well as the months of planning beforehand. Volunteers helped register and greet teams, served as game officials (moderators, score runners, timekeepers, scorekeepers) and photographers at the competition as well as helped Melanie, Andrea and I, the Shore Bowl Steering Committee, organize, photocopy and compile (what seemed like an endless amount of!) question and answer packets and prizes. Without volunteers we simply would not be able to hold Shore Bowl. The competition day is a long and hectic one and we are truly grateful to our volunteers who give their time and effort to keep this competition running so we can continue to support marine sciences in education.



1st (above) and 2nd place (below) winners of the Shore Bowl competition - MAST and Stuyvesant High School of New York City



MAST and Stuyvesant High School going head to head in competition

Eel Research in the Barnegat Bay

This past spring RUMFS continued research on eels in the Barnegat Bay with the goal of implementing American Eel passages on existing dams. During the last field season, researchers at RUMFS found that no successful passage of eels took place. This was determined to be more of a design issue and reconstruction of devices took place for the 2012 field season. We had numerous volunteers who dedicated their time every week from the end of February until May to assist with deployment of eel collectors and counting of collected eels (sometimes in the order of the 1000's for one sampling event!) Following is a message from RUMFS technician and previous Volunteer Coordinator Jen Smith who led the field work component of the project:

'The Eel Project being conducted by RUMFS began again this January. It was the final year of this two year study funded by the Barnegat Bay Partnership. The purpose of this project was to provide immediate passage to the American eel (*Anguilla rostrata*) over existing dam structures in our watershed. The three study sites were Kettle Creek in Brick, Mill Creek in Manahawkin, and Tuckerton Creek in Tuckerton. The two components to the research involved building a passage device or "eel ladder" to aid eels attempting to get upstream over the dams and monitoring the number of eels ingressing into the estuary using eel collectors below the dams. This year 9 new eel collectors were constructed thanks to the help of many volunteers! This year, project goals were met with success - 260 eels passed over the passage device at Tuckerton Creek. In addition, a total of 25,054 glass eels

were caught in the eel collectors from all three sites!

Many many thanks to volunteers who helped aid in the construction of eel collectors and helped with field work - you were a big part of this year's success! Future goals regarding this eel project would be to refine the ladder design even more to optimize the number of eels using it and to work with collaborators such as the Tuckerton Seaport and U.S. Fish and Wildlife to make ladders more permanent structures on dams in the region and to use them as an education tool on conservation of native species' ~ Jen Smith

Thank you again to all of the volunteers who gave their time for this research. We were very excited to have volunteer involvement in the project and greatly appreciate your commitment!



1. Eel collector made out of untwisted polypropylene rope. Collectors were set below dams to monitor how many eels were coming into the estuary. 2. An eel passage device or 'eel ladder' at the dam in Tuckerton Creek. The passage device is the black and white tubing against the dam wall. 3. Eels collected from an eel collector. The inset picture is a close-up of a juvenile glass eel found in the collectors. Photos courtesy of Jen Smith and Ken Able.

RUMFS begins research for 10-point action plan in Barnegat Bay

As part of governor Chris Christie's 10 point-action plan for Barnegat Bay (<http://www.nj.gov/dep/barnegatbay/>), and in conjunction with other departments of Rutgers, The Rutgers University Marine Field Station began trawl and plankton net sampling in Barnegat Bay this past winter, and field work is now in full swing. Research is focused on fish and crab response to human alteration and urbanization in the bay.

Trawl sampling takes place at five locations in the Bay - Little Egg Harbor, Mill Creek, Waretown/Barnegat Light, Toms River and Brick. Trawling in the Barnegat Bay follows similar protocols to the Marine Field Station's bi-annual trawling in Great Bay and the Mullica river. Trawl samples are sorted,

and fish and crabs are enumerated and identified. Currently, trawl sampling for Barnegat Bay is taking place every two months.

In addition to trawl sampling, larval fish sampling is also being conducted as part of the action plan. This larval fish sampling closely parallels our weekly larval fish sampling (bridgetnetting) protocols at Little Sheepshead Creek, where a plankton net is used to collect larval fish coming into the estuary. RUMFS has added two locations in the Barnegat Bay in accordance with the action plan - Barnegat Light on Long Beach Island and Point Pleasant.

Since the initiation, volunteers have helped significantly with bridgetnetting for the

Barnegat Bay project. Sampling nights have been colloquially termed 'Ultimate Bridgenetting' due to the increased number of sampling sights as well as the driving back and forth between sites - all three sites are sampled on the same night! Currently, the field station is quite full with people, including new summer technicians and interns who have been working on all aspects of research. This increase in numbers has lessened the need for volunteers in the summer, but once mid-August arrives we will definitely need volunteer help with sampling again. If you are a bridgetnet veteran, more opportunities to come out and help will be here soon. If you new to this type of sampling and interested in helping, please let me know!

Volunteer Dinner

JC NERR held its annual volunteer dinner on April 12th to recognize and honor our volunteers who gave 10 or more hours of service to the Reserve in 2011. This year's dinner was again held at the Historic Smithville Inn.

The night was very enjoyable accompanied by a lovely four course dinner, with the main focus of the event being the Volunteer Awards distinguishing our dedicated and hard-working volunteers. We started the awards portion of the evening with something a little different - Volunteer Trivia! When they arrived, volunteers were given a keypad polling device to answer trivia questions about themselves and fellow volunteers that were presented in a slideshow. The slideshow showcased research projects and education programs that volunteers were involved with, with the intention of having everyone get to know one another a little bit better, to get a chance to see what kind of projects are currently going on and hopefully have a bit of a laugh while they're at it! All in all, it was a fun and entertaining experience for the staff, volunteers and guests.

Our Volunteer Awards for 2011 were a little different as well. JC NERR was proud to award two **Volunteer of the Year Awards to Joan Kupchynsky and Tom Siciliano.**

Joan has been a volunteer with JC NERR since 2009. As a Life on the Edge (JC NERR's interpretive exhibit at

the Tuckerton Seaport) volunteer educator, Joan has provided an invaluable service by revealing the wonders of our estuary to broad audiences of all ages, from elementary school children to senior citizens, inspiring them to protect our fragile estuarine areas. Joan has demonstrated a commitment and excitement for estuarine education by completing the Volunteer Master Naturalist Certification given by the Stockton College and Forsythe National Wildlife Refuge. In addition to consistent service as a volunteer educator Joan has also given her time to help with JC NERR education programs as well as the Rutgers Marine Field Station's Open House.

Tom has been a volunteer with JC NERR since 2008 and has provided consistent and valuable service to the Rutgers University Marine Field Station (RUMFS), particularly in regards to the larval fish sampling program (bridgenetting), the black sea bass reproduction project and the Barnegat Bay Eel Project. Not only does Tom learn from his opportunities at RUMFS; he teaches as well. Tom has taught new volunteers and students working on the black sea bass reproduction project to fish if they didn't have any experience, and because of this initiative and willingness he was involved as one of the lead volunteers for the Barnegat Bay eel project. Tom has also organized talks with Rutgers staff for his fishing club, bridging the gap between researchers and fishermen. Recently, Tom has gotten increasingly involved with driving re-

searchers and their crew to sampling sites which significantly helps technicians and staff at RUMFS with the logistics of field sampling. Overall Tom helps wherever he can and is willing to participate in research and education for RUMFS and JC NERR.

Congratulations to Joan and Tom!

All of us at JC NERR are truly grateful for your service and can't thank you enough for your dedication to the Reserve.

The time that our volunteers give is something that we talk about with pride and as such a correction to volunteer hours was recently brought to my attention. In the transition between volunteer coordinators (Jen Smith and myself) in May 2011, we had hours that were lost in transition. Hours that Betty Leshner put in, in March 2011, did not get recorded into our database. At the Volunteer Dinner we originally announced Betty's hours as 143. With the correction, **Betty Leshner's** volunteer time for 2011 came to **252 hours!** With that, our total volunteer time in 2011 went from 1910.75 hours to **2019.75 hours!**

Jen and I sincerely apologize to Betty and all of our volunteers for the oversight. Honoring our volunteers for 2011 would not have been complete without letting all of you know of these changes. All of us here at JC NERR could not have been happier to host such admirable guests at the Volunteer Dinner and we look forward to next year's festivities!



Volunteers of the Year for 2011 - Tom Siciliano (above) and Joan Kupchynsky (below) with Mike De Luca (Reserve Manager) and Kim Capone (Volunteer Coordinator). Photos courtesy of Andrea Spahn

Terrapin Monitoring on Great Bay Boulevard

If you have been driving down Great Bay Boulevard in Tuckerton this spring and summer



Terrapin on Great Bay Blvd, Tuckerton, NJ. (Photo Courtesy of Ben Wurst)

you may have noticed some increased action on the road (albeit probably slow action!) in the form of terrapins crossing the road. Every year the Northern Diamond-back Terrapin (*Malaclemys terrapin*) uses the estuarine wetlands surrounding Great Bay Blvd. as nesting habitat. Terrapins, the vast majority being egg-laden adult females, cross the road looking for suitable nesting areas and are very susceptible to getting hit by high speed traffic from recreationalists using the road for fishing, boating and sight-

seeing.

Ben Wurst, who is the Habitat Program Manager at the Conserve Wildlife Foundation of NJ, has been organizing research and monitoring of terrapins on Great Bay Blvd. in order to help prevent current and future road kills as well as have long-term data as to movement and nesting patterns of terrapins in the area.

In 2010, Ben, with the help of numerous volunteers, installed barrier fencing along the side of the road to help prevent terrapins from crossing the road. This year he has refined the fence design and installed more.

Unfortunately the fence and signs on the road have been damaged by vandalism, but this has not deterred Ben from plugging away and continuing to replace them so that the public can be aware of terrapins and their native habitat.

Ben also has a dedicated group of volunteers who are 'Terrapin Stewards'. Terrapin Stewards patrol Great Bay Blvd in order to record terrapin sightings, help animals cross the road, collect injured animals and educate the public about terrapins. May through August is the time when terrapin movement and nesting occurs and this is when Terrapin Stewards are needed the most. This is also a volunteer opportunity where volunteers are most needed on the weekends when road traffic is the heaviest. If you are interested in becoming a Terrapin Steward please let me know! And if you are driving on Great Bay Blvd. always keep your eyes open for crossing terrapins!



Sign notifying motorists of crossing terrapins on Great Bay Blvd, Tuckerton, NJ. (Photo Courtesy of Ben Wurst)

Looking Ahead - JC NERR Summer Programs

We are busy here at JC NERR getting ready for another summer filled with education programs and festivals!

Our popular 'Creature Feature' program for children entering 1st -5th grade has already filled up with a growing waiting list. We are excited for the increased enthusiasm from our community and we are considering adding an additional 'Creature Feature' session next summer. With this increased interest, also comes the possibility of increased volunteer involvement. We have considered the possibility of having interested and experienced volunteers take on more of a leadership role with the Creature Feature programs. If anyone has any ideas regarding volunteer involvement with the instruction of these education programs, please contact me so we can chat about opportunities.

We do still need volunteers to assist with our **Creature Feature** and our other programs (including **Summer Fun** and our **Special Opportunities**) this coming summer. Below is a list of the programs that are in need of enthusiastic volunteers!

Creature Features: 9:00 - 11:30 am

July 3rd - Festival of Fishes (we still need 1 volunteer)

July 17th - Tricky Turtles (we still need 1 volunteer)

July 31st - Magnificent Marine Mammals (we still need 1 volunteer)

August 7th - Clever Crabs (we need 2 volunteers)

Summer Fun Programs -

August 15th - Butterfly Bonanza. (we need 2-3 volunteers), 12:30 pm - 3:30 pm

August 17th - Critter Catch. (we need 1-2 more volunteers, this one will be getting wet seining!), 9:30 - 11:30 am

Special Opportunities -

July 18th - Build a Better Backyard Series: Backyard Wildlife Getaway. (we need 2 volunteers), 12:30 - 2:30 pm

If anyone would like volunteer for these programs or is interested in other opportunities here at the JC NERR Education Center and at offsite festivals this summer, please contact me as soon as possible.

Happy Summer!

~ Kim Capone

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