

UPCOMING
EVENTS

February 8th:

Lunch n' Learn -

Fish tracking by Under-
water Robot
12:30 pm

February 9th:

Ecological Evening -

'Great Places you
Probably Haven't Seen
in NJ' by Chris Jage of
the NJ Conservation
Foundation
7:00 - 8:00 pm

March 7th:

Ecological Evening -

'New Jersey's Vultures'
7:00 - 8:00 pm

March 14th:

Lunch n' Learn -

Frogs and Toads of the
Mullica River Basin
12:30 pm

March 24th:

Family Fun -

Build a Better Back-
yard: By Building a
Birdhouse
10:00 am - 12:00 pm

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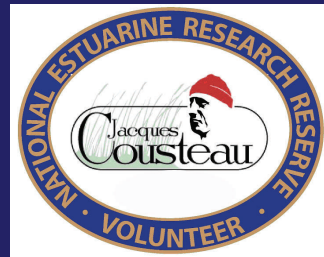
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Learn more about the
Reserve on our website:
<http://jcnerr.org/>

Archived Articles of JC
NEWS online

Jacques Cousteau Volunteer Newsletter

VOLUME 3 ISSUE 1



JANUARY 2012

JC NERR in January

Happy New Year!!

I hope everyone has had a wonderful start to 2012!

Here at JC NERR we are looking forward to another productive year! We have exciting news for the new year that has been in the works for a little while now - we are moving along in the process of purchasing an approximately 15 acre parcel of land near the Education Center and Great Bay Boulevard. There are a number of ideas on how to use this land, including using it as a 'teaching marsh' for educational programs, installing a boardwalk for marsh walks and working to remove invasive species (e.g. Phragmites, reed plant). We are excited to explore all the possibilities and look forward to this acquisition. This month we also ventured out

into the Reserve by visiting the Forsythe National Wildlife Refuge (one of our land management partners) for a winter birding tour with our education coordi-



nator Melanie. Everyone had a great day with lots of ducks (bufflehead, pintail, mergansers), herons, harriers and two bald

eagles seen by participants. Our Lunch n' Learn series this month proved very popular again with local boat builder Bob Fricke giving a talk on 'The Jersey Garvey' commonly referred to as the Baymen's boat. Bob's talk on these flat-bottomed boats and their history in NJ waterways garnered interest for a second talk the following week due to a high demand of interested people!

Lastly, Shore Bowl preparations continue here at the Education Center for the March 3rd regional high school academic bowl. I wanted to give a **big thank you** to our volunteers who have helped with these preparations; it is greatly appreciated as things get busier and busier closer to the date of the competition!



Reserve Current Events

A new year, a new technological advance for JC NERR! Thanks to Bob, our new GIS/Stewardship Coordinator we have now joined the ranks of Twitter. If you are a Twitter user please follow us @JCNERR. As I am just learning about how to use Twitter myself, users could also advise me if I said that last statement about following us correctly!

We also continue to have our Facebook page. You can find us and 'like us' by searching for - **Jacques Cousteau NERR**. We are hoping to link our Facebook and Twitter sites together in the near future so that you would see the same updates on both sites. Both sites are great avenues to see up-to-date events and information from JC NERR

and also other related environmental organizations with whom we are associated.

follow us on
twitter



Eel Research at RUMFS

This year RUMFS has kicked off a new component to an ongoing previous project. The Barnegat Bay Eel Project 2011 - 2012 focuses on the issue of habitat loss, particularly caused by dam blockages.

The American eel (*Anguilla rostrata*) is spawned in the Sargasso Sea. Juvenile eels use current cues and an excellent sense of smell to find their way into estuaries and upriver towards food. Dams impede juvenile eels from making it upstream to freshwater river habitats where they feed and mature into adults. The goal of this project is to restore the American eel to its upstream habitat by providing immediate passage using low-cost technology over three dam spillways: Tuckerton Creek, Tuckerton, NJ; Mill Creek, Manahawkin, NJ; and Kettle Creek, Brick, NJ.

This low cost technology is in the form of passage devices that were constructed out of PVC piping and

trawl mesh (material shown to be successful in the laboratory and other field studies). These passage devices are intended to provide an alternate route around the dam with increased structure so that eels do not have to climb a sheer wall face of a dam. 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 has taken place for re-deployment now in 2012. It is hoped that eels will be able to use these passage devices to get past dams and other blockages as successful implementation can result in a more efficient, low-cost, permanent method of returning this species of concern to their native habitats. In addition to these passage devices, researchers are also using eel collectors as part of their arsenal. These collectors are placed below a dam and used to

assess abundance of juvenile eels entering the estuary over time, as well as their growth and maturation over time. Eel collectors are made of untwisted polypropylene rope that gets fastened to a weighted shallow container. This untwisted rope is structured habitat and is attractive to small eels because it provides shelter and protection. More eel collectors were needed this season and this is where our volunteers came in. Nine volunteers helped untwist large sections of rope in order to build nine new collectors. This work required a lot amount of time and patience and definitely caused a lot of frustration too! But our volunteers powered through and helped us complete these in record time! A very big **THANK YOU** is in order for all those who helped. Your interest, enthusiasm and sense of humor greatly help further our research efforts.

RUMFS featured in Asbury Park Press Article

Rutgers University as well as Rutgers University Marine Field Station was featured this month in an Asbury Park Press article highlighting a mid-winter undergraduate marine invertebrates class that took place at RUMFS. The article also goes into more detail about how RUMFS will be

involved with the new DEP 'Barnegat Bay 10 Point Plan' and highlights more the research that will be taking place at RUMFS including work on fish, crabs and benthic invertebrate communities.

If you would like to read this article you can link to it at :

<http://www.app.com/article/20120114/NJNEWS/301140069/Researchers-returning-to-study-Barnegat-Bay>

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Build a Better Backyard: By Building a Bird House

- Kim Capone

Volunteer Coordinator



Top to Bottom -

1. Eels at Batsto Lake on the Mullica River. A few eels are attempting to climb up the dam face; most are congregated near the bottom.

2. A RUMFS technician sets up an eel passage device.

3. Juvenile eels are washed out of eel collectors into a sieve; now ready to be counted, staged and measured.

4. A dry eel collector is shown on a table.

Photos are courtesy of Dr. Ken Able of RUMFS