



# BAYWATCH

Volume 11 Issue 2

JUNE 2008

CITIZENS FOR THE PROTECTION OF WAQUOIT BAY CPWB

*As members of CPWB you have received the Waquoit Bay National Estuarine Research Reserve 2008 Schedule of Events*

*Celebrating 20 Years of Supporting Coastal Communities through Research, Education, and Stewardship*

Events started in April and will go through the month of October. The staff at WBNERR has put together an amazing number of programs to learn more of the natural area surrounding us. Naturalists who previously gave programs at the estuary are returning to participate as guides and educators.

Two ways you can show support is by attending *CPWB Annual Meeting* and *Bounty of the Bay*, details in this newsletter.

## CPWB ANNUAL MEETING

**FRIDAY, JUNE 27<sup>TH</sup> at 5:30pm**

*Please join the CPWB Steering Committee for wine and cheese. The meeting will be held in the boathouse. Join us for this casual meeting to meet other members of CPWB.*

## Horseshoe Crabs

*By Maureen Jankauskas*

How many of us have walked the beach and found the shell of a horseshoe crab, always it amazes me it's simple rounded form and long tale. They haven't changed in 250 million years, predating dinosaurs. Horseshoe crabs live on the East coast of the United States in the Atlantic Ocean from Maine to Florida.

Last summer I discovered that researchers at the Woods Hole Oceanographic Institute found that the sapphire-blue blood of horseshoe crabs contain a chemical called Limulus Amebocyte Lysate (LAL), which clots in the presence of endotoxin, bacterial substances that can cause fevers and even be fatal to

humans. Lysate, an extract from horseshoe crab blood is being used in diagnosing spinal meningitis. LAL is now used by microbiologists, pharmaceutical and medical device manufacturers to test for the presence of endotoxins. The horseshoe crabs shell is a source of chitin, used to speed healing. We hear lately of new drugs being found in things that have surrounded us for years. Science has changed with the discovery of DNA. Now when I see that horseshoe shell my mind is excited about the precious blood they provide.

Development of coastal habitat has increasingly become an important issue for horseshoe crabs. This Spring WBNERR used random samplings to count horseshoe crabs at South Cape Beach. This data is being collected across coastal New England to determine the status of the species. Horseshoe crabs are used as bait by fishermen, birds eat their eggs for food and is used as fertilizer.

One female horseshoe crab can lay 4,000 eggs in the sand during April, May and June. The male crabs fertilize the eggs, then in about two weeks baby horseshoe crabs hatch. They eat algae on the ocean floor, dead fish and sea worms. Our eroding sandy beaches are eliminating the habitats essential to spawning horseshoe crab populations. Locally the Division of Wildlife Marine Fisheries works with Conservation Commissions to see that sand placed on beaches are free of dirt that would effect horseshoe crabs.

As you enjoy your next walk on the beach and you find a horseshoe crab; know they live up to 40 years and they use that long tail to dig in the sand. Turn over the horseshoecrab if it gets overturned in a wave. They are playing a large role in new discoveries to fight disease and toxins. Come to WBNERR on July 23<sup>rd</sup> for a program "Are horseshoe crabs disappearing?"

## Science at the Shore

By Nancy Church

This summer, take the opportunity to learn first hand, not only what research and monitoring efforts are taking place within the Reserve, but how exactly our researchers go about conducting their research. Get an insider's look at how WBNERR staff gather information about the bay systems and the impacts of human activities. Three programs in July will give folks a chance to peek into the work day of Reserve staff to discover the tools, methods and types of data that is being collected, as well as what the information might mean for the future of our coastal waters.

*During the July 16 program, **Osprey Watching and Other Avian Tales***, participants will view birds up close through binoculars and spotting scopes to learn about life cycles, predators and other threats to rare and common species that are monitored throughout the Reserve. Once again a team of volunteers and staff will be out patrolling the beaches to protect endangered shorebirds such as terns and piping plovers and monitoring approximately 30 osprey nests around the Bay. This too is part of a larger effort supported by state and federal agencies and private non-profits like Mass Audubon to obtain accurate population data, which will enhance future management efforts. Join Endangered Shorebird Manager Leah Finity and discover how successful our own efforts have been.

*During the July 23 program, **Are Horse shoe crabs disappearing?*** WBNERR staff will highlight our 2008 horseshoe crab surveys taken place at South Cape Beach in May and June. Using a random sampling method, crabs are counted as they come ashore for the purpose of spawning during the full and new moon high tides. Staff and volunteers count individuals and groups of crabs while noting the sex of each animal counted. This survey, part of a larger effort taking place across coastal New England, attempts to determine the population status of this species which has been declining in some areas. Participants learn about the natural history of these unique animals, possible reasons for population decline and their biomedical and commercial value for humans, while practicing the sampling method.

*During the July 30 program, **What's in the Water and How Do We Know?*** What really *is* in the water? How do humans impact the water in the bay? Which

organisms are most affected and how? Join Research Assistant Liz Bonk as she clues you in to the workings of automatic data loggers in the bay that remotely collect water quality measurements every 15 minutes and guides you through using some of the more basic sampling equipment. Throughout the year, water samples are collected around the bay and surrounding bodies of water in an attempt to monitor the condition and health of the ecosystem.

By collecting temperature, salinity, pH, dissolved oxygen, turbidity, depth and chlorophyll data we add pieces of information to the puzzle. In this program, people have an opportunity to learn what is being measured, how samples are analyzed and what we know at this point. Bring questions of your own and be prepared to use sampling equipment.

**Wednesdays 9:00 AM to 11:00 AM – Meet at Reserve Visitor Center**

July 16 Osprey Watching and Other Avian Tales

July 23 Horseshoe Crab Surveys

July 30 What's in the Water and How Do We Know?

## PHOTO CONTEST

**We hope you read the newsrelease announcing CPWB's support for a photo contest to capture the summer at the Reserve.**

**Waquoit** - Waquoit Bay Research Reserve announces a photography contest for local photographers as part of the Reserve's year-long 20th anniversary celebration. The Reserve is very excited to engage photographers to help inspire visitors and residents alike with the beauty around us. Pictures can be stronger than words when it comes to telling the Reserve's story.

Photos can be entered in the following three categories: Nature-Land and Sea, Flora and Fauna, and People-Working and Playing. To capture the essence of the Reserve, photos must be taken on one of the Reserve properties including, Waquoit Bay, Reserve Headquarters on Route 28, South Cape Beach, the Quashnet River or one of the other properties. Maps of all Reserve lands are located at the Visitor Center on Route 28 or on the Reserve's website, [www.waquoitbayreserve.org](http://www.waquoitbayreserve.org).

and surrounding watershed, as well as local wildlife species, to better understand estuarine

All photos (prints only) should be submitted to the Reserve Visitor Center/headquarters on Route 28 in Waquoit by July 15, 2008 and be 8x10 with matting no larger than 11x14 ready to frame. Photos should not be manipulated or altered digitally.

Winners will be recognized at, and given complimentary tickets to the Bounty of the Bay Seafood Tasting and Benefit Auction on August 16, 2008. Winning photos will also be displayed at the Reserve and featured in a 2009 Waquoit Bay Reserve calendar.

The contest is co-sponsored by the Citizens for the Protection of Waquoit Bay and the Upper Cape Cod Camera Club. For further information, contact Laurie Tompkins, [laurie.tompkins@state.ma.us](mailto:laurie.tompkins@state.ma.us), 508-457-0495 x108.

## **An Invitation:**

### **Bounty of the Bay Seafood Tasting and Benefit Auction**

**Saturday, August 16, 2008**

**2:00 – 4:00 PM – Seafood Tasting & Silent Auction**

**4:00 PM – Live Auction**

The Citizens for the Protection of Waquoit Bay and the Waquoit Bay National Estuarine Research Reserve would like to personally invite you, along with your friends and family to join us for an afternoon overlooking beautiful Waquoit Bay.

As the Waquoit Bay Reserve celebrates 20 years of supporting coastal communities through education, research and stewardship, we would like to share our success with the whole community. It is our hope this event will bring added recognition to the efforts of the Reserve and the friends group, the Citizens for the Protection of Waquoit Bay.

There are two ways to offer your support:

1. Attend the *Bounty of the Bay* Event, purchase your individual tickets or get your friends together and purchase a special “reserved-seating” table of ten overlooking the bay. Tickets are a \$20.00 donation and children’s tickets can be purchased for \$5.00 and include pizza and a craft corner.
2. Are you a local business owner? Are you an artist or craftsperson? Do you have extra tickets to the Red Sox? Please consider donating to our auction.

***This is just a sampling of the programs your generosity and we will continue to support:***

- Annual poster contest in local grade schools to develop awareness the of importance of estuaries
- Summer Science School for students entering grades 2-9 each July and August
- Earth Day Coffee House
- Evenings on the Bluff a series of educational entertainment each July for families
- Watershed Block Party

By supporting this year’s Bounty of the Bay Seafood Tasting and Benefit Auction event, you will help us in our fundraising efforts to support the research, education, and stewardship programs at the Waquoit Bay Reserve. Along with the seafood tasting, we are also planning a silent and live auction to help raise funds for the Reserve. The Reserve’s goal is to provide long-term protection to the habitat and resources of estuarine ecosystems, and to promote stewardship and estuarine awareness through outreach activities.

Please support our efforts by calling **Toni Grady at 508-548-9457** or email Toni at [toniatcape@aim.com](mailto:toniatcape@aim.com) to reserve your tickets or your donation today!

***Please share this invitation with your friends and neighbors.***

## Scholarship Donation Received

A generous gift of \$400 was given to support scholarships for the summer programs. CPWB's Steering Committee thanks the anonymous donor. It is these gifts that support our main objective of education.

## Exploring Our Estuaries Subject for 2008 Poster Contest

By Jamie McLaren

This year's annual CPWB estuary presentations and poster contest were a great success. Approximately 200 third grade students from East Falmouth Elementary and Quashnet School in Mashpee were given the opportunity to learn about estuaries through lessons taught by AmeriCorps Cape Cod member and WBNERR intern, Jaime McLaren.

The lessons included an introduction to estuaries, the creatures and plants that live there, the importance of estuaries for animal and human use, as well as the need to protect such a fragile habitat. Along with learning about estuaries, students were able to view a variety of estuary creatures, including hermit crabs, periwinkle snails, clam worms, slipper snails, spider crabs, and mummichog minnows. At the end of each presentation students were asked to think of ways in which they could help protect their local estuaries. Students came up with great conservation solutions, encouraging each other to refrain from littering, conserve energy, not to over-fish, and to overall be respectful of their environment.

The culmination of the estuary presentations was to create colorful posters depicting the theme, "Creatures of the Estuary." Each student participating in the poster contest this year will receive a small estuary related prize, while two winners from each class will receive additional prizes.

## Third Grade - winners

### East Falmouth

Mrs. Skehill  
Quinn VanTol  
Dejah Pina

Mrs. Scholes  
Isabel Davern  
Marisa McHugh

### Mashpee

Mrs. Arsenault  
Hannah Howes  
Carolyn Harris

Mrs. Marshall  
Mathew Baron  
Abigail Perry

Mrs. Nelson  
Molly Kelleher  
Gailin Kaski

Mrs. Schreiner  
Payne Sangan  
Austin Gray

Mrs. Stickley  
Alison Kondracki  
Erin Sousa

Mrs. Guiggio  
Maddie Nasut  
Kayley Belgstrom

## CALENDAR

*Washburn Island Clean-up Saturday, June 21st with a raindate June 22<sup>nd</sup>. Call Jane Abbott for more details at 508-540-1948*

CPWB Annual Meeting Friday, June 27<sup>th</sup> at 5:30pm  
*Social event for members - wine and cheese*

Annual Reserve Cup Regatta Wednesday, July 23rd

WBNERR Block Party Tuesday, August 5th  
An afternoon on the bluff

Taste of the Bay Gala August 16<sup>th</sup>  
Social, fundraiser and silent auction

Check out [www.waquoitbayreserve.org](http://www.waquoitbayreserve.org) for updates on programs Celebrating 20 Years.

## Volunteers needed to support:

### Annual Reserve Cup Regatta Wednesday, July 23rd

- Greet the sailors registering in the morning at the Waquoit Yacht Club
  - End of the sailing day barbecue and awards
- Call Don Lunn, 508-540-4893

### WBNERR Block Party Tuesday, August 5<sup>th</sup>

- Could you help serve ice cream or watermelon? Assist with children's arts and craft table.
- Call Laurie Tompkins, 508-457-0495 x108

### Taste of the Bay Gala August 16<sup>th</sup>

- Donations for auction. Do you have Red Sox or Patriots tickets to donate for a game you may not be able to attend.
- Call Toni Grady, 508-548-9457, Maureen Jankauskas, 508-477-9463
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## Membership CPWB

Our membership year runs from July 1<sup>st</sup> through June 30<sup>th</sup>. Please check to see if your membership is current. CPWB dues notice is included to assist members.

Your \$10.00 membership fee supports educational programs. Is your neighbor a member? We are working to grow our membership, the CPWB brochure with application is available at WBNERR.

CPWB thanks the members who give additional contributions. CPWB is a non-profit organization concerned with the health of the area's waters. CPWB serves as the Friends Group for the Waquoit Bay National Estuarine Research Reserve, supporting their educational programs and seminars. We are committed to providing critical support through our membership base to support WBNERR.

**Please mark your calendar to attend the CPWB Steering Committee meeting.**

Meetings are held every other month on the first Monday at 7:00pm at the reserve.

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*RENEW MY MEMBERSHIP:* (Please make checks payable to CPWB, P.O. Box 3021, Waquoit, MA 02536)

\$ 10.00 Membership       \$ \_\_\_\_\_ Contribution

Names: \_\_\_\_\_

Address: \_\_\_\_\_

Summer Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email Address \_\_\_\_\_

# **BAYWATCH**

**CITIZENS FOR THE PROTECTION OF WAQUOIT BAY CPWB**

**JUNE 2008 NEWSLETTER**

**CPWB Annual Meeting**

**Horseshoe Crabs**

**Science at the Shore Exploring Our Estuaries**

**CPWB Volunteer**

**An Invitation**

**Poster Contest Winners**

**Citizens for the Protection of Waquoit Bay CPWB  
P.O. BOX 3021  
WAQUOIT, MA 02536**

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