



ERDG NEWSLETTER

Winter 2008

Happy Holiday's to all our members and supporters. We hope this newsletter finds you well.

It's been a good year for the North American horseshoe crab population and our efforts to protect them. However, we could use your help. As you can imagine, in these difficult economic times, funding for our many programs has become hard to secure.

We could use your help now more than ever. Our ability to protect the world's four horseshoe crab species is dependant upon a global community of individuals who value the work we do and are willing to contribute to our continued success. Please take a look at our holiday suggestions at the end of this newsletter.

In August 2008 the Atlantic States Marine Fisheries Commission (ASMFC), the lead organization behind the management of the American horseshoe crab population, approved Horseshoe Crab Addendum V, Interstate Fishery Management Plan, which essentially extends the provision laid down in Addendum IV. Like previous addenda, its intent is to promote the recovery of the horseshoe crab population, balance the concerns surrounding the declining shorebird population, most notably a subspecies of Red knot *Calidris canutus rufa*, while at the same time allow a limited commercial harvest of horseshoe crabs used as bait in the conch and eel fisheries. Presently, the LAL industry remains outside of the provisions set forth in Addendum V.

Despite a 70 percent reduction in the number of horseshoe crabs harvested for bait since 1998, the Red knot subspecies *Calidris canutus rufa* shows no sign of recovery. The population has declined 75% from 1985-2007 an additional 15% in the past year (2007-2008). The Red knot is one of many shorebird species that feed upon the fat rich horseshoe crab eggs during a migratory journey that takes them from wintering grounds in Chile to breeding grounds in the Arctic. The Delaware Bay, with its abundance of horseshoe crabs, is a major refueling stop for these long distant migrants.

Recent surveys of the horseshoe crab population show an increase in horseshoe crab abundance in the Delaware Bay. Trawl surveys show an increase in both immature and mature males and females and beach surveys of spawning crabs around the Delaware Bay indicate stable female and increased male spawning activity. To address harvesting concerns in the Delaware Bay and increased harvesting activity in states North and South of the bay, time and location restraints, in addition to male/ female harvesting ratios have been put in place. These include a male-only harvest in New Jersey and Delaware and restrictions on Virginia's ability to harvest in federal waters. As with all ASMFC plans, individual states can adopt more conservative management practices. In the case of New Jersey, a full moratorium on the harvest of horseshoe crabs has been in place since 2006.

However, a balanced conservation strategy will require more than harvest management.

The future survival of the world's four horseshoe crab species will ultimately depend upon the preservation of spawning habitat and overcoming public indifference to a remarkable species that has inhabited the earth for over 445 million years. This is a challenging prospect in light of the ever-increasing human density along the same beaches horseshoe crabs rely on for propagation.

Building on the belief that conservation is an informed individual's responsibility, which establishes the foundation for community-based conservation, ERDG created *The Horseshoe Crab Conservation Network*[™]. The network is a multifaceted, cross-cultural suite of initiatives designed to inform and engage the broadest coalition of individuals, communities, organizations, and scientists in the conservation of the world's four horseshoe crab species.

Although the horseshoe crab population in the United States shows signs of recovery, the same can not be said for the world's three other species, which are in various states of decline. Many inhabit places where human considerations often overshadow environmental concerns. Some, particularly in Southeast Asia and India are coming under increased pressure as opportunistic harvesters discover their catch is worth more to the biomedical industry than for human consumption or bait. This trend will expand proportionately to demand. In the recently published book "Sustaining Life, How Human Health Depends on Biodiversity" editors Eric Chivian and Aaron Bernstein, include the horseshoe crab as one of many species of concern.

Although it is easy for people to take sides in any conservation issue, it is far more effective and productive if all sides can work together to find ways to solve a problem. It requires more time, effort, and innovation, but in the end it helps build a cooperative community of problem-solvers who will readily accept the solutions they themselves have had a hand in creating. Building community is what we do, and it has been a busy year for ERDG. I would like to share with you some of the highlights.

- We've moved our office into a historic home built when George Washington was this nation's first president (1790). It is in a little town called Little Creek, Delaware, adjacent to a wildlife reserve and surrounded by the world's most productive horseshoe crab spawning beaches. Our new mailing address is: 190 Main Street/ Little Creek, Dover, DE. 19901.
- The annual Delaware Bay horseshoe crab spawning survey continues to draw a crowd. This year as in years past, our survey teams were joined by visitors from all over the country and students from various schools in the mid-Atlantic region. We welcome your participation in this annual event, so if you plan to be in the area this May and June, please give us a call. The survey dates and times will be posted on our website.
- Those of you who haven't been to our website in awhile, please stop by and see the changes we've made to the "News" section. The new format not only will let

us post horseshoe crab related news from around the world, but also present it in a user-friendly manner, complete with a search function. The “ERDG in the News” area will not only provide you with a quick glimpse of what we have been doing, but also allow us to share time sensitive information. I hope you like it. This coming year the extensive bibliography on horseshoe crab research in the “Research” area of our website, will be coupled with complete papers, providing not only a powerful research tool, but also a platform for classroom learning not previously available.

- For those of you who may be interested in hosting the second International Symposium on the Science and Conservation of the Horseshoe Crab, we archived the information on last year’s symposium, the first, to assist you. You can find it in the “News” area of our website.
- The selected student artwork from this year Young Voices, Horseshoe Crabs in the Arts program has also been posted. We received over 600 entries from across the United States, Mexico and Japan, and only 33 were chosen. The traveling art show has just completed its US venues and will now go to Mexico City, then off to Nagasaki Prefecture, Japan. Next year, in addition to Mexico and Japan, we hope to receive entries from Singapore and Taiwan. If you have a pre-K-12 student in your family, please encourage them to enter either individually or through their school. Application forms in English, Chinese, Japanese and Spanish can be found on our website. This years body of artwork, like years past, will be printed in a hardbound book and is available on our website via the “Company Store” where you will also find other items that would make wonderful holiday gifts.
- Last year ERDG Inc. in partnership with Anew Inc. conducted the Delaware Bay’s first ecotour comprised of international scientists focused on horseshoe crab conservation. The 22-member group from Japan, Hong Kong, Taiwan, Malaysia, India, Mexico, Denmark, Canada and the United States, spent two days observing the bays annual spawning ritual. In some cases they saw more horseshoe crabs in one location than they had ever observed anywhere else in the world. Building on the success of this trip, ERDG Inc. in partnership with Anew Inc. and sponsored by the Delaware Tourism Office, produced a short ecotourism DVD called “*Delaware A Natural Adventure.*” The DVD, which was produced in Japanese for the Japanese ecotourism market is currently circulating Japan.
- Last year ERDG was asked to join the design and development team assembled by the Delaware Department of Natural Resources and Environmental Control (DNREC) for the purpose of developing the states first horseshoe crab/ shorebird interpretive center. The DuPont Nature Center as it came to be called, is situated at the mouth of the Missipilion River. There is not currently a better location to see both the spawning horseshoe crabs and migrating shorebirds anywhere in the bay. This year, as a result of ERDG’s international reputation and relationship with the Saikai Pearl Sea Resort and Aquarium, in Sasebo City, Kyushu, Japan, as well as its membership in the “Japanese Horseshoe Crab Conservation Association,” ERDG has been given a unique opportunity to assist in the development of an exhibit about the American horseshoe crab, to be included in the aquariums 2008 expansion. The Saikai Pearl Sea Resort and Aquarium

receives over one million visitors annually from around the world and is situated on the nationally protected Kujukushima Islands, an area larger than the Delaware Bay and home to a viable population of the Japanese horseshoe crab.

- This past year ERDG was honored to contribute to the production of a remarkable short documentary called “*Witness to Hiroshima*” directed by Kathy Sloane. In the 15-minute film, Japanese citizen Keiji Tsuchiya uses his 12 powerful watercolors to tell the story of his experiences in Hiroshima as a 17-year-old soldier immediately following the dropping of the atomic bomb, and shares how he ultimately directed his life towards purpose and healing. ERDG working with Director Kathy Sloan, providing both consultation on the natural history of the Japanese horseshoe crab (kabutogani), as well as the photographic images of kabutogani used in this poignant documentary.
- Our community-based horseshoe crab sanctuary program, which began in 1999, continues to expand. We now have six community based Delaware sanctuaries, protecting 15 miles of the most productive horseshoe crab spawning beaches in the world. Several New Jersey communities have expressed interest in joining and we have received requests for information about this program from communities up and down the Atlantic coast. If you think your community may be interested in this program, let us know and we will send you a DVD that highlights the benefits of the program. You can also learn about the program on our website.
- The “Crab Sightings” area of our website now encompasses the spawning range of the world’s four horseshoe crab species. If you know of additional sites, please let us know.
- We are planning to create a visual record of the spawning beaches that we have listed in our “Crab Sightings” section, with links to historical photos that show changes in habitat. We are particularly interested in images from our Mexican and Asian partners. Digital images would be greatly appreciated, but we are happy to scan your photos and then return them to you. If you have any old photographs, we'd love to borrow them.

Things we could use: If you or someone you know would like to donate (tax deductible) a used dissecting microscope, a small boat, a boat motor, and a V-8 powered vehicle that can be used for towing, please contact us.

Once again, we could use your help: Please take a moment this holiday season to visit our website and make a donation, become a member or order a gift from our “Company Store”; they are all tax deductible. For those of you who are already members, please save us the postage to remind you of your dues and mail in your membership renewal fee for this past year and/ or the coming year. Your contribution will go directly into our programs, and will make a huge difference in the global impact of our policies and programs. It is one of the easiest ways to help overcome the tide of indifference that often hinders the conservation of this remarkable species. Your generosity is greatly appreciated.

Glenn Gauvry

President, ERDG a 501c(3) non-profit organization dedicated to the conservation of the world's four horseshoe crab species