



## *International Symposium on the Science and Conservation of Horseshoe Crabs*

Dowling College, Oakdale, Long Island, NY  
11-14 June 2007

<http://www.horseshoecrab.org/isschc/>

The four living species of horseshoe crabs face a set of common and growing threats to their survival, including erosion and/or man-made alteration of essential spawning habitat, coastal pollution, and overfishing. Horseshoe crabs are "living fossils," with a 200 million year evolutionary history. Their blood provides a chemical, known as *Limulus* amoebocyte lysate (LAL) or *Tachypleus* amoebocyte lysate (TAL), that clots in the presence of minute quantities of bacteria; the LAL test is the state-of-the-art methodology to insure that pharmaceuticals and surgical implants are free of contamination. Horseshoe crabs are integral to coastal marine ecosystems and economies.

The International Symposium on the Science and Conservation of Horseshoe Crabs will bring together an international group of researchers, managers, and conservationists for the first time to

- 1) share knowledge, present recent research results, and identify conservation challenges,
- 2) formulate plans for an international conservation program engaging scientists and managers from the U.S. and other nations, and
- 3) document symposium products in a published proceedings.

**PROGRAM SESSIONS:** A series of presentations by international participants have been organized under the following themes

- 1) Current Status and Assessment
- 2) Biology, Ecology, and Multi-species Interactions
- 3) Culture and Captive Breeding
- 4) Habitat Requirement, Threats, and Conservation
- 5) Biomedical Applications
- 6) Traditional Uses
- 7) Conservation and Management
- 8) Public Awareness and Community-based Conservation

**CALL FOR POSTERS:** You are invited to submit abstracts for contributed posters. Instructions for preparation of abstracts are on the following page or can be found by visiting the symposium web page <http://www.horseshoecrab.org/isschc/> or can be requested from Dr. Martin Schreiberman, Poster Session Chairman ([MartinS@brooklyn.cuny.edu](mailto:MartinS@brooklyn.cuny.edu)).  
Deadline for abstract submission is 23 February 2007.

**TO REGISTER AND FOR ADDITIONAL INFORMATION:** Visit the symposium's web site at <http://www.horseshoecrab.org/isschc/>

A SPECIAL THANKS TO OUR SPONSORS





## *International Symposium on the Science and Conservation of Horseshoe Crabs*

Dowling College, Oakdale, Long Island, NY  
11-14 June 2007

<http://www.horseshoecrab.org/isschc/>

### Call for Contributed Posters Instructions for Preparation of Abstracts

Deadline for Abstract Submission is February 23, 2007

1. Provide contact information for corresponding author.
2. Titles are limited to 25 words.
3. The name of the author presenting the poster should be capitalized.
4. The body of the abstract is limited to 250 words. Use *italics* for Latin names.
5. The official language of the meeting is English. We encourage the submission of abstracts from International authors, but these will be edited for clarity, if necessary.
6. **Abstracts must be sent as a MS-Word or RTF attachment to Dr. Martin Schreiber, Poster Session Chairman ([MartinS@brooklyn.cuny.edu](mailto:MartinS@brooklyn.cuny.edu)).**
7. Abstracts must be received by February 23, 2007, and notification of abstract acceptance will be sent by March 16, 2007. Poster presenters must register for the symposium. See <http://www.horseshoecrab.org/isschc/> for registration information.
8. Please follow the style guidelines in the sample abstract below:

#### EXAMPLE ABSTRACT

---

Author Contact Information: Dr. Mark L. Botton  
Fordham University  
113 West 60<sup>th</sup> Street  
New York, NY 10023 USA  
(212) 636-6327  
[botton@fordham.edu](mailto:botton@fordham.edu)

Title (25 words or less): Impacts of an Intensive Fishery on the Reproductive Biology of Horseshoe Crabs in the Delaware Bay Area

Authors' Names and Affiliations (Presenter in CAPS): M. L. BOTTON (Fordham Univ., New York, NY, USA) and R. E. Loveland (Rutgers Univ., New Brunswick, NJ, USA)

Body of Abstract (250 words or less): Since the mid-1990's, horseshoe crabs (*Limulus polyphemus*) have been the basis of significant commercial fisheries for bait (eels and whelks) and biomedical use (extraction of blood for *Limulus* amoebocyte lysate). We compared the sex ratio, size structure, and condition index of the horseshoe crab population in Delaware Bay, New Jersey before and after the expansion of the fishery in the mid-1990's to evaluate some possible impacts of the fishery on reproductive biology. Both sexes have experienced population declines, but females have declined more rapidly than males. Consequently, the sex ratio in the spawning population in Delaware Bay has become more skewed towards males, which is consistent with the preferential harvesting of females for the eel bait fishery. We did not observe significant changes in the size structure of the population, despite the reported preference of the bait and biomedical industries for larger animals. Similarly, we saw no temporal shift in the carapace condition index, suggesting that fishing was not selective for "younger" individuals within the population. We recommend continued monitoring of the carapace condition index as a means of detecting new recruits into the adult population.