



## Northeast Aquatic Nuisance Species Panel

Resource Digest – March 31, 2003  
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Please send items and postings for the NEANS Panel Digest to [info@northeastans.org](mailto:info@northeastans.org).

***The next meeting of the NEANS Panel will be held on May 21<sup>st</sup> and 22<sup>nd</sup> in Bar Harbor, Maine. A workshop on ANS Rapid Response will be held on May 20<sup>th</sup> in conjunction with the Panel meeting. Further information will be posted at <http://www.northeastans.org> as soon as arrangements are finalized.***

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#### A. News

##### **Oyster Disease Found in Prince Edward Island is More Benign SSO Parasite**

The last issue of the *NEANS Resource Digest* reported that the serious oyster parasite MSX was believed to have been found in four sites in eastern Canada, two in Cape Breton (Nova Scotia), and two in Prince Edward Island (PEI). Because as the disease has caused high mortalities in oysters along the Eastern Seaboard, it is thought to have been brought to the area in the ballast water of ships traveling from infected US ports. What was thought to have been MSX in the PEI oysters has turned out to be a closely-related parasite known as SSO, or “seaside organism.” Like MSX, seaside organism attacks the oyster tissue but poses no health risk to humans. SSO is still a threat to local oyster stocks. However, mortalities connected with SSO are usually less than the high levels reported with MSX. MSX infection has been found in Cape Breton and has decimated oyster farms in the Bras D’or Lake. Consequently, the disease remains a serious threat to the oyster farming industry in Atlantic Canada. Government departments have responded by performing more tests of oyster stocks than in the past and halting transfers of shellfish around the region. Increased monitoring and protection of areas where oysters are grown will be needed to prevent further infection of oyster stocks.

##### **Invasive Species from the Northeast also “Coordinating” in Oregon**

Many are familiar with two native species from the Northeast that have been introduced to freshwater ecosystems in Oregon: the bullfrog and the bluegill sunfish. Scientists at the USGS Forest and Rangeland Ecosystem Science Center in Corvallis, Oregon spent three years examining the relationship among these introduced species in Oregon’s Willamette Valley and the effect that they are having on native frogs in the area. The two species have co-evolved here in the Northeast and the scientists have found that the sunfish and other non-native fish are enhancing the

bullfrog invasion by eating dragonfly nymphs that would normally prey on the bullfrog larvae. The scientists believe that this relationship is critical to the survival of invading bullfrog populations in the Northwest.

Bullfrogs are large and will eat nearly any smaller animal including frogs, fish, mice, bats, and birds. A bullfrog invasion can affect a wide range of native fauna. There is particular concern for already-declining populations of native frogs. Both bullfrogs and the invasive fish species that find bullfrogs unpalatable prey upon native frogs. So far, efforts to eliminate the bullfrogs have been unsuccessful but this new work suggests that focusing efforts on removing the non-native fish is likely to also reduce the bullfrog populations.

Results of this study appear in the April issue of the scientific journal, *Ecology Letters*. The abstract is accessible on-line at <http://www.blackwell-synergy.com/servlet/useragent?func=synergy&synergyAction=showTOC&journalCode=ele&volume=6&issue=4&year=2003&part=null>.

### **New Toll-Free Number and Website to Report Invasive Species Sightings in Gulf of St. Lawrence**

The Department of Fisheries and Oceans (Canada) has developed a new website describing invasive species in the Gulf of St. Lawrence Region (northern Nova Scotia and New Brunswick, PEI, and Southern Quebec). They are encouraging residents to report their sightings by calling 866.759.6600 or visiting <http://www.glf.dfo-mpo.gc.ca/sci-sci/inva-enva/index-e.html> (English) or <http://www.glf.dfo-mpo.gc.ca/sci-sci/inva-enva/index-f.html> (French).

### **B. Articles and Reports**

Brown, R. and R. Peet. 2003. **Diversity and Invasibility of Southern Appalachian Plant Communities**. *Ecology*, 84(1): 32-39.

This study has shown that areas subject to frequent flooding show a higher number of invasive exotic plants than upland regions outside of floodplains. Brown and Peet demonstrate that nutrient rich riverbanks and other frequently flooded areas are easier for both native and invasive plants to colonize. The authors found that riparian areas had roughly 40 times greater mean exotic species per plot than upland areas.

Environmental Law Institute 2003. **Halting the Invasion: State Tools for Invasive Species Management**.

This report analyzes the current legal tools available at the state level in the U.S. to combat invasive species. The report identifies state tools to effectively prevent and manage invasive species as well as enforce and implement existing laws. It also offers three examples of model state programs and provides specific recommendations on improvements that states could make. The report includes a CD-ROM that has detailed information on each states' laws and regulations on invasive species. For more information, visit ELI's website at <http://www2.eli.org/research/invasives/index.cfm>.

Mitchell, C.E. and A.G. Power. 2003. **Release of Invasive Plants from Fungal and Viral Pathogens**. *Nature*, 421: 625-627 and

Torchin, M.E. et al. 2003. **Introduced Species and their Missing Parasites**. *Nature*, 421:628-630.

These two articles in the February 6, 2003 edition of the journal *Nature* detail new research on why so many invasive species become nuisance species and reach sizes or densities that are unseen in their native regions. In both studies, much lower incidence of disease and parasitism are seen in invasive species than in native populations.

### **C. Regulations**

#### **NAISA Reintroduction**

The National Aquatic Invasive Species Act (NAISA) has been reintroduced in both the U.S. Senate and Congress. Currently, NAISA is being reviewed by the many sub-committees who have jurisdiction over some aspect of the legislation. The Act will require all new ships to have ballast water treatment capability and would require all vessels to employ identified best management practices. It will also increase funding for initiatives including state management plans, ecological monitoring, and rapid response planning. To find out about the status of the bill, or read to summaries or the text, visit <http://www.nemw.org/biopollute.htm>

#### **Aquatic Invasive Species Research Act Passes Subcommittee**

A companion piece to NAISA, the Aquatic Invasive Species Research Act (AISRA), was also by the House Science Subcommittee on Environment, Technology, and Standards. The legislation authorizes \$180 million to further research on aquatic invaders. AISRA will establish an extensive research program to assist policy makers in making decisions on the best methods to prevent invasive species in entering U.S. waters. The major provisions of the legislation are:

- An ecological and pathway research program to be run by NOAA, USGS, and the Smithsonian Environmental Research Center;
- A development, demonstration, and verification program run by the EPA to develop environmentally sound technologies to control and eradicate invasive species;
- A research program to support the Coast Guard's efforts to reduce the threat of introductions through ballast water;

- A grant program within the National Science Foundation to support academic research in systematics and taxonomy; and
- Increased funding to for research on aquatic invaders.

#### **D. Upcoming Conferences and Events**

April 22, 2003 Halifax, Nova Scotia

##### **“Exotics – What’s Wrong With One More Species Out There?”**

This will be a talk by Andrew Hebda, Curator of Zoology at the Nova Scotia Museum of Natural History. It will be held in conjunction with the Nova Scotia Nature Trust annual AGM, at the Halifax Campus of the Nova Scotia Community College at 7:00 PM.

April 23-25, 2003 Chicago, Illinois

##### **16th Annual National Conference: Enhancing the States’ Lake Management Programs, Developing & Implementing TMDLs for Lakes and Reservoirs**

For more information, contact Bob Kirschner, telephone: 847.835.6837, fax: 847.835.1635, and email at [bkirschn@chicagobotanic.org](mailto:bkirschn@chicagobotanic.org).

May 20-21, 2002 Bar Harbor, Maine

##### **ANS Rapid Response Planning Workshop**

This workshop is being hosted by the NEANS Panel in conjunction with the regular Panel meeting in Bar Harbor held from May 21-22. The workshop will be the first step in developing a model rapid response plan for the region. The intended product are:

- a set of recommendations to the ANS Task Force regarding their potential role in assisting states and regions with rapid response planning;
- an outline of the roles of regional entities upon the detection of a new invader (i.e. notification and reporting networks, lists of taxonomic and control experts, etc); and
- a framework and strategy for developing state rapid response plans.

For more information, contact Jay Baker at the Massachusetts Office of Coastal Zone Management, [jason.baker@state.ma.us](mailto:jason.baker@state.ma.us).

June 9-12, 2003 Windsor, Ontario

##### **12<sup>th</sup> International Conference on Aquatic Invasive Species.**

This annual four-day conference is widely considered the most comprehensive international forum for the review of accumulated scientific knowledge on the impacts of aquatic invasive species, presentation of the most recent field research, technologies for control and mitigation, discussion of policy to prevent new introductions, and approaches to effective public education and outreach initiatives. Visit [www.aquatic-invasive-species-conference.org](http://www.aquatic-invasive-species-conference.org) for further information.

September 19-20, 2003 Framingham, Massachusetts

##### **New England Invasive Plant Summit**

The conference will highlight research on the biology and management of invasive plant species. In addition, national & regional perspectives will be offered on the following topics: identifying research needs, risk assessment, inventory, early detection/rapid response, biological control, restoration, and green industry involvement. Once planning is complete, a full agenda and registration information

Will be posted on the Invasive Plant Atlas of New England website at <http://invasives.eeb.uconn.edu/ipane>.