



**Northeast Aquatic
Nuisance Species Panel**
Resource Digest – March 25, 2005
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Please send items and postings for the NEANS Panel Digest to Susan.Park@state.ma.us

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A. News From the Northeast

NEANS Panel May Meeting

The May 2005 NEANS Panel meeting will be held May 4-5, 2005, at the Urban Forestry Center (UFC) in Portsmouth, NH. For more information on the UFC, see http://www.nhdf.org/info_plan_bureau/fi&p_ufc.htm.

A group rate has been arranged at the Comfort Inn. To reserve a room, call (800) 552-8484 and ask for the "NEANS Panel" room block (deadline is April 15, 2005.) RSVP for the meeting to Michele L. Tremblay at mlt@naturesource.net.

NEANS Panel Workshop – Implementing Rapid Response to Aquatic Nuisance Species in the Northeast: Key Components of a Successful Program

In association with the May NEANS Panel meeting, the Policy and Legislation committee will be hosting a workshop focused on the implementation of rapid response plans. The workshop will be held on May 3, 2005, at the Urban Forestry Center in Portsmouth, NH. To RSVP and for more information, please contact Michele Tremblay at mlt@naturesource.net.

Sightings

Three new tunicate species appear in PEI waters

As Prince Edward Island (PEI) continues to deal with the effects of the clubbed tunicate *Styela clava*, three new tunicate species have now been confirmed in the province. The colonial tunicates *Botryllus schlosseri* (golden or star tunicate) and *Botrylloides violaceus* (red or orange sheath tunicate) and the solitary tunicate *Ciona intestinalis* have recently been found in PEI. All three are considered a threat to the aquaculture industry. For more information, see <http://pei.cbc.ca/regional/servlet/View?filename=pe-tunicate20050317> and

http://www.peicanada.com/paperpdfs/Fish%20Farming/2005/Fish022005_web.pdf

Other headlines from around the region

Ottarnic Pond (NH) attacks milfoil with much-needed funds

The NH Department of Environmental Services and the Town of Hudson Conservation Commission have each pledged about \$5,000 to manage a milfoil infestation in Ottarnic Pond. The funds will help pay for the first year of treatment. The Advocates of Ottarnic Pond group also hopes to create a monitoring and outreach program for aquatic invasive plants. See the full story at

<http://www.nashuatelegraph.com/apps/pbcs.dll/article?AID=/20050314/NEWS01/103140031/-1/news>

Maine lakes in danger from invasive species (Editorial)

Ken Bailey reports on the threat that Maine lakes and ponds face from invasive species. The editorial, which includes a dramatic photo of a lake infested with hydrilla, spotlights the many negative impacts of aquatic invaders. The story can be found at <http://waldo.villagesoup.com/Sports/Story.cfm?StoryID=31634>

Canada announces grants to fight aquatic invaders

Canada's Department of Fisheries and Oceans, as part of the Alien Species Strategy for Canada, has announced an investment of \$85 million over five years in the Environment Canada-led Invasive Alien Species Strategy, including \$10 million over five years invested in the Sea Lamprey Control Program. See the press release at http://www.dfo-mpo.gc.ca/media/infocus/2005/20050223/funding_3_e.htm

Salem Sound Coastwatch plans next marine invasive species workshops

In conjunction with the Massachusetts Office of Coastal Zone Management, Salem Sound Coastwatch has produced a number of marine invasive species identification cards and will train volunteers to use these cards to monitor and identify marine invaders on docks, rocky shorelines, and tidepools along Salem Sound. They are planning two training workshops this spring on May 14 and 22, 2005. For more information, visit <http://www.salemsound.org/>

B. Coming Soon to a Watershed Near You

Non-native oyster field trial approved for Chesapeake Bay

The Virginia Seafood Council has received approval to grow sterile, enclosed *Crassostrea ariakensis* in Chesapeake Bay. This is the fourth time that the group has been issued permits to grow *C. ariakensis*, an Asian oyster species that is thought to be more disease-resistant than the native *C. virginica*. However, there is still an intense debate over releasing the non-native species into Chesapeake Bay. More information can be found at http://www.timesdispatch.com/servlet/Satellite?pagename=RTD/MGArticle/RTD_BasicArticle&c=MGArticle&cid=1031781734673

Canadian PM Martin discusses invasive species at North American summit

During a summit meeting in Texas, the leaders of the three North American nations spent time discussing border security, including better policing of the movement of live organisms. Canadian Prime Minister Paul Martin issued a statement saying "in terms of quality of life, our three countries have a shared responsibility for the environment of this continent and the health of its people. Infectious diseases and invasive species don't carry passports."

<http://www.macleans.ca/topstories/politics/news/shownews.jsp?content=n032333A>

Could *Caulerpa*'s healing ability be a key to its control?

Scientists have discovered the mechanism by which *Caulerpa* species can rapidly heal wounds created when pieces of the algae are broken off. When the plant is wounded, a chemical called caulerpenin is converted into another chemical that creates an epoxy-like seal over the wound. Scientists know that lysine can stop the caulerpenin, but haven't yet figured out how lysine could be delivered to control an infestation. For more information, see <http://www.nature.com/news/2005/050321/full/050321-11.html>

While one invaders is controlled, another spreads in Monterey Bay

The project to eradicate the invasive kelp species *Undaria pinnatifida* in Monterey Bay and Elkhorn Slough appears to be having some success. The population has experienced a significant decline since management began in late 2002. However, a non-native species of reef-building tubeworm (*Ficopomatus enigmaticus*) has been continuing its spread in the same water body. For more information on these stories, see

<http://www.montereyherald.com/mld/montereyherald/news/local/11131895.htm>

<http://www.montereyherald.com/mld/montereyherald/news/11126289.htm>

C. Policy and Legislation

Ballast Water Management Act of 2005 introduced to Senate

Bill S.363 was introduced to the US Senate on February 10, 2005. S.363 is an amendment to the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to revise certain aquatic invasive species prevention requirements to: (1) apply them to certain US vessels and to certain foreign vessels that are en route to, or have departed from, a US port; and (2) establish ballast water and sediment management standards for vessels of the armed forces. To track this bill, go to <http://thomas.loc.gov/> and search for bill S363.

Great Lakes states consider their own regulations for NOBOB vessels

Frustrated with the weakness of federal regulations on ballast water management in the Great Lakes, Great Lakes states are considering joining forces to create stricter state laws to prevent the spread of invasive species via NOBOB vessels. For more information, see

<http://www.jsonline.com/news/state/mar05/310561.asp>

<http://www.woodtv.com/Global/story.asp?S=3076381&nav=0RceXTkw>

D. Reports, Publications, and Web-based Resources

Reports

Maine Sea Grant produces Maine's Marine Invasion fact sheet

Maine's Marine Invasion, developed by Maine Sea Grant in collaboration with the Maine Marine Invasive Species Working Group and with support from the Casco Bay Estuary Project, is a full-color, 6-page fact sheet on marine invasive species found in Maine. It includes information on marine species that have been introduced to Maine, the challenges these species pose, and the pathways by which they arrive and spread. A PDF version can be found at <http://www.seagrants.umaine.edu/documents/pdf/MMI05.pdf>

Gulf of Maine Primer details habitat types in region

The *Gulf of Maine Primer* is now available from the Gulf of Maine Council on the Marine Environment. The primer provides resource managers and other stakeholders with descriptions of the various marine habitats found along the Gulf of Maine, including information on invasive plant habitats and fouling communities. For more information and an online copy, see <http://www.gulfofmaine.org/habitatprimer/>

The Economic Impacts of Aquatic Invasive Species: A Review of the Literature

The EPA's National Center for Environmental Economics has released a report reviewing studies on the economic impact of aquatic invaders. The report can be found at <http://www.protectyourwaters.net/news/data/Econ%20Impact%20Lit%20Review.pdf>

Select publications from the scientific literature

Barnes, D.K.A. and P. Milner. 2005. Drifting plastic and its consequences for sessile organism dispersal in the Atlantic Ocean. *Marine Biology*. 146(4): 815 – 825.

Korniss, G. and T. Caraco. 2005. Spatial dynamics of invasion: the geometry of introduced species. *Journal of Theoretical Biology*. 233(1): 137-150.

Muirhead, J.R. and H.J. MacIsaac. 2005. Development of inland lakes as hubs in an invasion network. *Journal of Applied Ecology*. 42(1): 80-90.

Rehage, J.S., B.K. Barnett, and A. Sih. 2005. Behavioral responses to a novel predator and competitor of invasive mosquitofish and their non-invasive relatives (*Gambusia* sp.) *Behavioral Ecology and Sociobiology*. 57(3): 256 – 266.

The February 15, 2005, issue of *Ecological Economics* (Vol. 52, Issue 3) focuses on the integration of ecology and economics in bioinvasion control. The following is a list of authors, titles, and page numbers for the articles in this issue.

Shogren, J.F. and J. Tschirhart. Integrating ecology and economics to address bioinvasions. Pgs. 267-271.

Pimentel, D., R. Zuniga, and D. Morrison. Update on the environmental and economic costs associated with alien-invasive species in the United States. Pgs. 273-288.

Horan, R.D. and F. Lupi. Tradable risk permits to prevent future introductions of invasive alien species into the Great Lakes. Pgs. 289-304.

Margolis, M., J.F. Shogren, and C. Fischer. How trade politics affect invasive species control. Pgs. 305-313.

Perrings, C. Mitigation and adaptation strategies for the control of biological invasions. Pgs. 315-325.

Saphores, J-D.M. and J.F. Shogren. Managing exotic pests under uncertainty: optimal control actions and bioeconomic investigations. Pgs. 327-339.

Knowler, D. and E. Barbier. Importing exotic plants and the risk of invasion: are market-based instruments adequate? Pgs. 341-354.

Buhle, E.R., M. Margolis, and J.L. Ruesink. Bang for buck: cost-effective control of invasive species with different life histories. Pgs. 355-366.

Finnoff, D., J.F. Shogren, B. Leung, and D. Lodge. The importance of bioeconomic feedback in invasive species management. Pgs. 367-381.

Gutierrez, A.P. and U. Regev. The bioeconomics of tritrophic systems: applications to invasive species. Pgs. 383-396.

Finnoff, D. and J. Tschirhart. Identifying, preventing and controlling invasive plant species using their physiological traits. Pgs. 397-416.

E. Upcoming Conferences and Events

April 13, 2005 – Red Deer, Alberta, Canada

Invasive Plant Workshop “Working Together”

Sponsored by the Alberta Invasive Plants Council
http://www.invasiveplants.ab.ca/Media/AIPC_2005_Workshop.pdf

April 13, 2005 – Hadley, MA, US

Planning Invasive Plant Control on Large Parcels: A Workshop for Landowners

Sponsored by the Silvio O. Conte National Fish and Wildlife Refuge, U.S Fish and Wildlife Service. This is a hands-on workshop to help landowners strategically plan for the management of invasive plants. Additional workshops will be held on April 23 in Turners Fall, MA and on April 30 in Norwich, VT. Please register by March 30, 2005. The workshop brochure can be found at <http://northeast.fws.gov/invasive.pdf>

April 19-20, 2005 – Reno, NV, US

Invasive Species: Their Ecological Impacts and Alternatives for Control

This symposium is sponsored by the American Society for Testing and Materials (ASTM) International.

<http://www.astm.org/cgi-bin/SoftCart.exe/SYMPOSIA/index.html?L+mystore+ohgo8514+1103584440>

April 21-22, 2005 – Woods Hole, MA, US

International Invasive Sea Squirt Conference (IISCC)

A conference on the biology, biogeography, and ecology of invasive ascidians. Sponsored by WHOI Ocean Life Institute, NOAA Northeast Fisheries Science Center, MIT Sea Grant, WHOI Sea Grant, and the Northeast Aquatic Nuisance Species (NEANS) Panel. For more information, visit <http://www.whoi.edu/institutes/oli/activities/seasquirt.html>

May 3, 2005 – Portsmouth, NH, US

NEANS Panel Workshop – Implementing Rapid Response to Aquatic Nuisance Species in the Northeast: Key Components of a Successful Program

For more information, contact Michele L. Tremblay at mlt@naturesource.net.

May 4-5, 2005 – Portsmouth, NH, US

Northeast Aquatic Nuisance Species Panel Meeting

Details will be posted at <http://www.northeastans.org/meetings.htm>

May 5-6, 2005 – Florence, Italy

Biological Invasions in Inland Waters

Hosted by the University of Florence.

http://www.dbag.unifi.it/INWAT_FirstCircular.pdf

May 15-18, 2005 – St. Paul, MN, US

Are Your Natives Restless? Holistic Strategies for Conserving Freshwater Mollusks during Exotic Species Invasions

Hosted by the Freshwater Mollusk Conservation Society and the Upper Mississippi River Conservation Committee.

<http://ellipse.inhs.uiuc.edu/FMCS/symposium/>

May 25-27, 2006 – Monterey, CA, US

ANS Task Force May Meeting

July 12-14, 2005 – Portland, ME, US

River and Lake Restoration: Changing Landscapes

Hosted by the Universities Council on Water Resources and the National Institutes for Water Resources. One planned topic is the control and management of invasive species.
<http://ucowr.siu.edu/05CoP.pdf>

September 5-12, 2005 – Katowice, Poland

8th International Conference on the Ecology and Management of Alien Plant Invasions

http://www.emapi.us.edu.pl/invite_ok.php

September 16-17, 2005 – Framingham, MA, US

2nd New England Invasive Plant Summit

Convened by the Invasive Plant Atlas of New England (IPANE) and New England Invasive Plant Group (NIPGro) <http://invasives.eeb.uconn.edu/ipane/summit05/plantsummit05.htm>

Spring, 2006 – Florida, US

14th International Conference on Aquatic Invasive Species

The Technical Program Committee invites submission of 500 to 750-word abstracts of proposed presentations and posters relevant to the focus of the conference. Abstracts are due May 31, 2005.

<http://www.icaais.org/>

F. Other

Funding opportunities

National Research Initiative: Animal and Plant Biosecurity

The Animal and Plant Biosecurity program aims to establish investigator collaboration on animal and plant diseases and pests of high economic impact that are currently endemic in the U.S., or that are future threats due to accidental or intentional introduction through bioterrorism attacks. Final proposals are due June 15, 2005. For more information, see <http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1074>

Program of Research on the Economics of Invasive Species Management

USDA's Economic Research Service (ERS) Program of Research on the Economics of Invasive Species Management (PREISM) is seeking proposals that focus on applied economic research and/or decision support system development that has direct implications for USDA programs, policies, and decision making concerning invasive species. Proposals are due April 29, 2005. Visit

<http://www.ers.usda.gov/Briefing/InvasiveSpecies/> for details.

Native Plant Conservation Initiative

The National Fish and Wildlife Foundation, in partnership with the Plant Conservation Alliance, has announced a Request for Proposals for the 2005 Native Plant Conservation Initiative (NPCI). Grants will be provided to nonprofit organizations and agencies to promote the conservation of native plants. There is a strong preference for “on-the-ground” projects that involve local communities and citizen volunteers in the restoration of native plant communities. Pre-proposals are due August 15, 2005. For more information, see <http://www.nfwf.org/programs/npci.htm>