We are very pleased to offer you the next installment of the NEANS Panel Digest. This digest is usually written in monthly installments, however due to its author being in antipodes for two weeks, the digest is late for this month. Apologies! Please rest assured that we are now back on track. The next issue of the digest will be released in first week of December.

Please send items and postings for the NEANS Panel Digest to ans@ecologyaction.ca.

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A. News
Doing the Bioinvader Balancing Act
Over the last three years, a network of volunteers in New York State has recorded hundreds of ecological interactions between two invasive plants, purple loosestrife and Phragmites, and other native plants and animals. The volunteers observed insects, birds, butterflies, mammals, and even the endangered black rail and short eared owl using these invaders as habitat and food. Tanessa Hartwig of Husonia Ltd. hopes their work will help managers decide whether eradication is the best option for managing invasive species. For more information, check out pages 13-15 of the Summer 2003 edition of the Volunteer Monitor at http://www.epa.gov/owow/monitoring/volunteer/summer03/volmon15no2.pdf

Webcrawler Creeps Up on Invasive Weeds
This December, Dr. Ronald Stinner of North Carolina State University, along with the U.S. Animal and Plant Health Inspection Service (APHIS), will be launching a computer program that will search for invasive plants for sale on the worldwide web. It is hoped that the new technology, called Agricultural Internet Monitoring System (AIMS), will help prevent the import and sale of invasive species by operations that have, until now, avoided detection by agricultural inspectors. For more information, visit http://www.the-scientist.com/homepage.htm.

Mixed Messages on Non-Native Species
Policies on fishing non-native species are endangering Maine’s native species and sending mixed messages to those who introduce non-native fish such as pike, according to Bob Mallard of Kennebec River Outfitters. In some lakes in Maine, non-native fish are regulated as game fish, while in other—sometimes connected—water bodies, these fish are considered pests to be eradicated. A consistent fisheries policy, as well as policies on how the Maine
Department of Interior Fish and Wildlife controls non-native fish, would serve to protect Maine’s lakes and send a clear message about the introduction of non-native species. For more information, visit http://www.centralmaine.com/sports/stories/030827bob_mall.shtml.

What to do With Too Much Codium
In the past summer, there have been massive Codium die-offs in waters off of Cape Cod, Massachusetts. Such events are not unheard of in the seaweed world, but, according to Dr. Annelise Chapman of Dalhousie University, die-offs may indicate that populations in the region have not stabilized, as was previously thought. The amounts of Codium washing up were so extensive that beaches were piled with stinking masses of the stuff and landfills were turning away the "dead man’s fingers." Alternate means of disposal suggested by Dr. Chapman include wide-scale composting (apparently Codium makes a good fertilizer and weed suppresser) or paper making. Dr. Chapman urged caution in disposing of the weed, since Codium has been observed to live for three months in water-saturated air. Dumping Codium at sea was strongly discouraged, since Codium could float to new areas and even microscopic pieces of the plant can take hold.

Mute Swans Given a Voice
On September 9, 2003, US Court District Judge Emmet Sullivan ruled that the Maryland Department of the Interior will have to perform more research and consult the public before being permitted to kill non-native mute swans. In his ruling, Judge Sullivan stated that the Fund for Animals, who opposed a permit issued on August 11th allowing the Maryland Department of Natural Resources to kill 525 mute swans, had made the case that the Department would create ‘irreparable harm’ to the swans and the aesthetic enjoyment of Maryland citizens by carrying out the kill. Judge Sullivan also found that the Fund for Animals had grounds under the National Environmental Policy Act and the Migratory Bird Treaty Act. The killing of 525 swans was part of Maryland’s plan to reduce the non-native species from 3600 to 500 swans over the next few years. The swans consume large amounts of bay grasses and displace native species. For more information, see the judge’s ruling at http://www.dcd.uscourts.gov/03-1710.pdf.

Censorship or Science?
Philosopher Mark Sagoff believes his work is being censored. According to the senior scholar at the University of Maryland, his thesis arguing that non-native species are not as bad as they are commonly portrayed has been rejected by a journal, not because of its scientific value, but because his arguments are contrary to accepted views on the subject. Sagoff also asserts that scientists do not acknowledge non-scientific motives for their attack on invasive species, such as aesthetic and cultural values. The discourse, including a counter-argument from Daniel Simberloff can be found at the Times Higher Education Supplement at http://www.thes.co.uk/search/story.aspx?story_id=548715 and http://www.thes.co.uk/search/story.aspx?story_id=2004591.

The Beetle That Ate Toronto
The Asian longhorn beetle was discovered in Toronto in late September. The beetle, which is already present in New York and Chicago, is notorious for damaging and killing trees. The Canadian Food Inspection Agency is currently looking to see how far the beetle has spread. For more information, visit http://www.towncrieronline.ca/main/main.php?direction=viewstory&storyid=2694.
**Snakeheads Strike AGAIN!**
The infamous Snakehead fish reared its head in Rock River, Wisconsin this fall. The fish was spotted in a survey on September 4th. Unfortunately, the fish was misidentified and released – it was only when photographs of the released fish were scrutinized that the Snakehead was identified. It is hoped that the fish, a native of Southeast Asia, will not survive cold winters in the state. However, survival might be possible in the vicinity of power plants located on the river. Visit [http://www.jsonline.com/news/state/sep03/172053.asp](http://www.jsonline.com/news/state/sep03/172053.asp) for further information.

**$1.5 Million to Fight Agricultural Pests**

**Is the Asian Oyster Welcome in the Chesapeake?**
On October 14th, the Subcommittee on Fisheries, Conservation, Wildlife and Oceans of the U.S. House Committee on Science held a hearing on issues relating to the introduction of the Asian oyster (*Crassostrea ariakensis*) to Chesapeake Bay. Scientists, policy makers, industry representatives, and NGOs were asked to attend the public hearings, which were also intended for discussion of the National Research Council’s report, entitled: "Non-native Oysters in the Chesapeake Bay." For more information please contact the Office of Communications, Committee on Resources, 202-226-9019.

**The Worm Has Turned (Two Wormy Tales)**
1. The legend of the benefits of worms to the soil is due for some revision, according to recent studies of the impact of non-native worms on forest soils and native species like salamanders. The worms consume nutrients in decaying leaves and detritus at an accelerated rate, which could lead to changes in nutrients available to native trees, reduce habitat for insects, and encourage the growth of fast-growing non-native plants like garlic mustard. For more information, visit [http://www.sunspot.net/news/sns-othernews-killerworms.0,6733255.story?coll=ba](http://www.sunspot.net/news/sns-othernews-killerworms.0,6733255.story?coll=ba)
2. There was also a story about the use of “nuclear worms” by the bait industry. It is feared that the worms or organism hitching a ride with them will have serious ecological consequences. The story can be found at [http://www.usatoday.com/news/nation/2002-08-19-worm_x.htm](http://www.usatoday.com/news/nation/2002-08-19-worm_x.htm)

**Swallowwort Strangling Ontario Plants**
Ontario has been invaded by dog-strangling vine (*Vincetoxicum nigrum*), also known as Swallowwort. The plant is a native of southern Russia and has been present in North America for one hundred years, but it has recently become much more abundant, choking out native marshes and woodlands. Biologists are hoping that biological control by a Russian beetle will help keep the vine in check. The story can be found at [http://www.cbc.ca/stories/2003/09/24/swallow_wort030924](http://www.cbc.ca/stories/2003/09/24/swallow_wort030924).
B. Laws and Regulations

Ballast Water not Regulated Under US EPA
The US government announced on September 2, that ballast water will not be regulated under the Environmental Protection Act (EPA). Fifteen environmental, fishing, and tribal groups, including the Ocean Conservancy, had asked that ballast water be regulated like other pollutants, such as oil and chemicals. The groups pushing for the change were unsatisfied with the strength of the existing monitoring and enforcement measures, and had asked for the change so that ballasted ships would be treated as “point sources” of pollution under the Clean Waters Act. The EPA decided that, since ballast water and vessel traffic are already under the purview of the US Coast Guard, it would be inefficient for the EPA to regulate ballast water. The groups asking for the change remain unsatisfied with the fines and enforcement by US Coast Guard and may sue to get the EPA to reconsider its decision.

http://www.thehollandsentinel.net/stories/090303/new_090903006.shtml
http://www.oceanconservancy.org/dynamic/issues/threats/species/species.htm

Canadian Shipping Act Reform Public Consultations
Public sessions were held this fall to consult citizens and interested groups about proposed changes in the Canadian Shipping Act. The changes include regulating ballast water entering the Great Lakes. So far, voices from the East and West coasts of Canada have spoken in favor of national ballast water regulations, in addition to regulating ballast water for the Great Lakes. For further details, visit http://www.cmac-ccmc.gc.ca/En/onlinemenu.htm

C. Reports, Publications, and Web-based Resources

Invasive Plants get the Chomp
Contravening theories that invasive species thrive in novel environments because they are less susceptible to predation, Anurag Agrawal and Peter Kotanen showed that invasive plants are equally or more susceptible to predation as native species of the same genus.


Crazy Ants Trigger Invasion Meltdown on Christmas Island
Invasive yellow crazy ants (Anoplolepis gracilipes) kill off red land crabs in the tropical forests of Christmas Island. As a result, plant seedlings in the forest are released from predation by the crabs and more detritus builds up on the forest floor. Crazy ants also facilitate the growth of populations of honeydew-secreting insects in the forest canopy, resulting in an increase in leaf moulds that feed on honeydew. The enhanced growth of the moulds causes die-offs of canopy trees. Thus, seventy years after their introduction, the recent population explosion of the yellow crazy ants demonstrates that invasive species can have disastrous effects on ecosystems after remaining relatively dormant for decades and that the meltdown model of invasive species impacts does occur in nature.


Are More Diverse Systems Resistant to Invasion?
Experimental plots were used to test the hypothesis that ecosystems with higher diversity of species are less likely to be invaded by other species. Using native species, scientists showed that more diverse systems were less likely to have new species become established and had lower individuals settle in them.

Grassroots Uprising of the Spotted Knapweed
A study published in *Science* and profiled in the “Perspective” section of the same magazine shows that the invasive European spotted Knapweed (*Centaurea maculosa*), a weed which takes over pastures in North America, exudes a chemical from its roots that inhibits the growth of native species. The study demonstrated the mechanism by which a chemical exuded by the invader sets off a chain reaction in the roots of competitors, triggering their death.

Shocker: Gobies Get Gusher Treatment
In a letter written in response to *Science*’s summary of the electrical containment of Gobies in the Chicago (Stokstad, E. 2003. INVASIVE SPECIES: Can Well-Timed Jolts Keep Out Unwanted Exotic Fish? *Science*. 301: 157-159.), Jan Jeffrey Hoover recommends the use of hydraulic barriers (essentially artificial waterfalls) to contain species such as the round Goby. Her research has shown that some fish can be contained by increasing the hydraulic pressure in waterways. Such barriers could make cost-effective barriers to the spread of nuisance fishes.

A *Phragmites* by Any Other Name …
Controversy about the genetic composition of populations of *Phragmites australis* has been resolved by a genetic study carried out by Kristin Saltonstall. This species of plant has been a present in low numbers in the marshes of North America for thousands of years. However, in recent times, the plant has been taking over marshes on the Atlantic Coast and the Midwestern and Pacific Northwestern United States. Genetic analysis has shown that this new subtype of *Phragmites* is in fact an aggressive strain that was introduced approximately 150 years ago. If you want to know how to distinguish the two *Phragmites* haplotypes, check out the *Phragmites* Diagnostic Service at: http://www.invasiveplants.net. In order to review scientific debate about the ecological, hydrological, and biochemical effects of *Phragmites*, the journal *Estuaries* has devoted an entire volume to the subject. Please see *Estuaries*. Dedicated Issue: *Phragmites australis*: A Sheep in Wolf’s Clothing? April 2003, Vol. 26, 2B.

Seafood, Snakes, and Sanctuaries – *Conservation Biology*, October 2003
A study in October’s *Conservation Biology* demonstrates that trade in live seafood, such as mussels and clams, is a potential vector for invasive species. Researchers looked at 37 species that are commonly for sale in the western U.S. and found that a significant proportion of them have either already become established in the northeastern Pacific or have a high probability of doing so in the future. The researchers warn that trade in non-native seafood should be better regulated to limit the spread of invasive species, and call for monitoring and rapid response plans for invasive species. This issue of *Conservation Biology* also includes articles on the efficacy of creating parks to prevent introductions and conserve tracts of native fauna and an article on the impacts of the brown tree snake on native bird species on the island of Guam. Please see *Conservation Biology*. October 2003. Volume 17, Issue 5.
Abstracts of the 2003 Natural Areas Conference Available Online
A list of abstracts from the 2003 Natural Areas Conference is now available online. The conference included in-depth sessions on invasive species, with sessions on impacts, policies, education, and control techniques. The document can be found at http://64.92.126.53/03conference/abstract.htm.

State of the Invasion: GAO Report on Invasives
On September 5th, the U.S. General Accounting Office issued Invasive Species: State and Other Nonfederal Perspectives on Challenges to Managing the Problem. The report, which contains results of a survey of state agencies on invasive species issues, identifies key gaps in U.S. policies on invasive species. Such gaps include a lack of legal requirements to control invasive species, the need for national regulation of ballast water, and (of course!) the need for funding. The report can be read at http://www.gao.gov/cgi-bin/getrpt?GAO-03-1089R.

Losing Nemo: New Study on Aquarium Trade
The United Nations Environmental Program (UNEP) has released a report on the global trade in aquarium fish, corals, and invertebrates entitled “From Ocean to Aquaria: The global trade in marine ornamental species.” The report details the number of species traded for the aquarium industry, briefly lists some examples of species thought to have been introduced through the aquarium trade, and gives recommendations to make the industry more sustainable. A copy of the report can be found at http://www.unep-wcmc.org/resources/publications/WCMC_Aquarium.pdf.

Two New Reference Books on Plants and Mammals
   This is a reference to 450 major invasive plant species, compiled by E. Weber. More information can be found at: http://www.cabi-publishing.org/bookshop/book_detail.asp?isbn=0851996957
   The book discusses a wide range of mammals that have been introduced by humans and the adverse consequences to the area in which they were introduced. More information can be found at: http://www.cabi-publishing.org/bookshop/book_detail.asp?isbn=0851997368

Which Weed is Which?
Need to know if the plant you are buying has weed-ish tendencies? Well, the Global Compendium of Weeds can help you find out. The database, created by a collaboration between the Department of Agriculture of Western Australia (AgWest) and the USGS Hawaiian Ecosystems at Risk project (HEAR), contains information on 22,000 plant species and will search 300 references to see if your plant is one of the weedy ones. The website, which is an electronic version of Rod Randall’s 2002 book of the same name, can be found at: http://www.hear.org/gcw/

Get on the Weedwagon – New Compendium Listserve
A new service began this September that will send you a weekly newsletter, summarizing postings to various invasive listerves. The service provides a weekly summary of postings on the Aliens-L, Enviroweeds, MA-EPPC, FLEPPC, FICMNEW, APWGList and Weedmanager.net listerves. To subscribe, send a message to: newsletter@weedmanager.net and write “subscribe” in the body of the e-mail.
Snakehead Superstar: The Frankenfish Movie
Following right on the heels of the snakefish book, “Snakehead: A Fish Out of Water,” is new cable TV movie on the infamous invader. The movie is very loosely based on actual events and was filmed in British Columbia. For more information, see http://washingtontimes.com/metro/20030808-104404-8868r.htm

D. Upcoming Conferences and Events
Ecological Monitoring and Assessment Network (EMAN) Science Meeting
The 9th National EMAN Science Meeting will be held in Halifax, Nova Scotia on November 24-29, 2003. The meeting is entitled: “Delivering Ecological Science to Society: influencing and informing governance, policy, adaptation and decision-making.” EMAN is a partnership of government, academic institutions, aboriginal groups, industry, environmental non-government organizations, volunteer community groups, schools and other groups/individuals involved in ecological monitoring. For more information, see: http://www.eman-rese.ca/eman/reports/meetings/national2003/

November 30 – December 3, 2003, Halifax, Nova Scotia
57th Annual Meeting of the Canadian Weed Science Society
The Canadian Weed Science Society will convene its annual meeting at the Westin Hotel in Halifax, Nova Scotia. Topics to be discussed include weed control, meeting the demand for environmentally-friendly products, and a special session on invasive weeds in Canada. For more information, see: http://www.cwss-scm.ca/coming_events.htm

December 4 – 5, 2003, Miami, Florida
CEC Roundtable: An Unwelcomed Dimension of Trade: The impact of alien invasive species in North America
NAFTA’s Commission for Environmental Co-operation (CEC) will be convening a round table on the subject of invasive species and trade. The event prefaces the Regular Session of the CEC’s Joint Public Advisory Committee. For more information: http://www.cec.org/calendar/details/index.cfm?varlan=english&ID=1847

December 7, 2003, Storrs, Connecticut
Public Lecture by Les Mehrhoff: “Invasive Species: What's All the Fuss?”
Les Mehrhoff of the University of Connecticut will be giving a talk entitled "Invasive Species: What's All the Fuss?” at 3 p.m. on December 7th. "Stinking Willie" (tansy ragwort) is scheduled to make an appearance. The talk is sponsored by the Connecticut State Museum of Natural History, and will include discussion of the IPANE project. Location: Biological Sciences and Physics Building, Room 130, 91 North Eagleville Road, Storrs, CT. Admission is free. Call (860) 486-5690. For more information: http://www.mnh.uconn.edu/list.htm

December 11 – 12, 2003, Derby, Connecticut
NEANS Panel Meeting – Fall 2003
The fall meeting of the Northeast Aquatic Nuisance Species Panel will be held at the Kellogg Environmental Centre in Derby, Connecticut. Items on the agenda include an expert panel on the invasive seaweed Codium and a session on ANS Research Priorities in the Northeast. For more information, please contact Michele Tremblay at 603.796.2615 or info@northeast.org or visit http://www.northeastans.org.
Deadline for proposals for paper submission: December 15, 2003, Dijon, France
XIIIth International Conference on Weed Biology – August 31 – September 2, 2004
The XIIIth International Conference on Weed Biology will be held Aug 31 - September 2, 2004 in Dijon, France. Proposals for paper and poster presentations are due December 15, 2003. Information on the conference can be found at http://www.dijon.inra.fr/malherbo/AccueilF1.htm.

Deadline for abstract submission: December 31, 2003, Ennis, Ireland
13th International Conference on Aquatic Invasive Species - September 19 – 23, 2004
The 2004 International Conference on Aquatic Invasive Species will be hosted by Institute of Technology, Sligo, in Ennis, County Clare, Ireland. The conference will cover subjects ranging from policy to invasion ecology to education. For more information, visit http://www.aquatic-invasive-species-conference.org/.

January 5 – 8, 2004, Cambridge, Massachusetts
58th Meeting of the Northeastern Weed Science Society
Northeastern Weed Science Society will hold its 58th meeting in Cambridge Massachusetts. Agenda items aren't posted yet, but you can sign up at http://www.newss.org/calendar.php?do=event&id=31&VESESSID=f90528428101b0ba2b2c0f2e10899d09&cache=1069178879.

January 13 – 16, 2004, Annapolis, Maryland
15th USDA Interagency Research Forum on Gypsy Moth and Other Invasive Species
This year's annual interagency meeting will include discussion of other bioinvaders like the Asian longhorn beetle and the emerald ash borer. For more information, see http://www.fs.fed.us/ne/morgantown/4557/forum2004/

Deadline for abstract submission: January 16, 2004, St. John's, Newfoundland
Coastal Zone Canada 2004 Meeting – June 27 – 30, 2004
The theme of this year's meeting is “All Within One Ocean: Co-operation in Sustainable Coastal and Ocean Management”. Sub-themes include Challenges, Strategies, Tools, and Managing Shared Waters. The meeting will be held in St. John’s, Newfoundland. For more information, see http://www.czca-azcc.org/index2.htm

5th Annual Meeting of the Northeast Aquatic Pant Management Society
The meeting will be held at the Gideon Putnam Hotel, Saratoga Springs, NY. Topics for this year's meeting include the control of invasive species, algal toxins, assessment and mapping, impacts and case studies. For more information, see http://home.nycap.rr.com/bloomfield/.

55th Annual Meeting of the American Institute of Biological Sciences (AIBS) - “Invasive Species: The Search for Solutions”
This year's meeting of AIBS will focus on invasive species. Topics will range from ecology to policy to public health to economic issues. Some great speakers, including David Simberloff and David Lodge, are scheduled to give plenary talks. For more information, see http://www.aibs.org/annual-meeting-2004/.

17th Annual National Conference Enhancing the States’ Lake Management Programs: Monitoring Lakes and Reservoirs

The 17th annual conference to improve lake management will be held at the Congress Plaza Hotel in Chicago. No details yet on the agenda, but contact Bob Kirschner, Chicago Botanic Garden, bkirschn@chicagobotanic.org for more information. The meeting announcement is posted at http://www.nalms.org/news/events.htm.

May 3 – 7, 2004, Fort Lauderdale, Florida

Aquatic Weed Control, Short Course 2004

This workshop will include sessions on plant identification, pesticide use, and weed control techniques. For more information, see http://conference.ifas.ufl.edu/aw/.

June 19 – 25, 2004, Durban, South Africa

4th International Weed Science Congress

The congress will be hosted by the Southern African Weed Science Society, in association with International Weed Science Society. To look at the exhaustive list of subjects to be covered, see http://www.olemiss.edu/orgs/iws/4intlweedcong.htm.

E. Other

A Buck for Your Thoughts?

Gene Buck of the Congressional Research Service is looking for commentators on a six page report entitled “Ballast Water Management to Combat Invasive Species.” For more information or to comment on this document, please contact gbuck@crs.loc.gov.