



NOR' EASTER

A Newsletter of the Northeast Aquatic Plant Management Society

www.neapms.net

Vol. 9, No. 1 - Spring, 2010

NEAPMS members and friends,

In January, many of us met at the Gideon Putnam Resort in Saratoga Springs, NY for NEAPMS' 11th annual meeting and conference. This year's annual event brought together over 137 individuals working in the field of aquatic plant management. Based on attendee feedback, the event received high praise for its technical program and related events, and new format—an earlier start for technical presentations on day one allowing for a shortened last day and easier return travel. The successful meeting and conference reflects the efforts and contributions of many: our presenters, moderators and generous sponsors; program coordinator, Marc Bellaud; local arrangements coordinator, Glenn Sullivan; AV tech extraordinaire, Paul Lord; registration gurus, Amy Smagula and Jim Sutherland; the silent auction crew, John McPhedran and Tim Hunt, and generous auction contributors; banquet game show wiz, Ken Wagner; the BOD; and others. Thank you all for your help in making NEAPMS' annual meeting and conference this year such a success.

While 2010 marks NEAPMS' 11th anniversary, for our parent organization, the Aquatic Plant Management Society, Inc., 2010 marks its 50th anniversary. APMS “strives to promote environmental stewardship through operations, research, education and outreach related to integrated management of vegetation in aquatic systems.” The organization has grown to include 315 members and seven regional chapters including ours. APMS' 50th Anniversary Meeting will occur in Bonita Springs, FL, July 11-14, 2010. Information on the upcoming anniversary meeting and the organization are available at www.apms.org

In this issue of *Nor'Easter*, look for updates on NPDES permitting, on NEAPMS scholarship recipients and from our state liaisons, and news of our upcoming 12th annual meeting and conference in New Castle, NH. On January 18-20, 2011, we'll meet at the Wentworth by the Sea, Marriott Hotel of the Year, for our annual meeting and conference. New Castle, NH is easily accessed by I-95, and Manchester, NH or Boston, MA airports. Mark your calendars and look for a Call for Papers this fall, and specific meeting details in the fall issue of *Nor'Easter* and on our website, www.neapms.net

Here in Vermont, a mild winter—some of you may have seen some impressive snowstorms this winter but they were noticeably absent in my neck of the woods—combined with spring's early appearance have led to some of the earliest ice outs on record. On April 5, my staff and I wrestled into drysuits and started searching for and manually removing variable-leaved watermilfoil from one of Vermont's two confirmed populations. While the ice had been absent just shy of a week and water temperatures were only 9 degrees C, variable-leaved watermilfoil, with only the aquatic moss *Fontinalis* sp. for company, was green, growing and very visible. If I had hoped for a tad more of winter and a longer reprieve from the Northeast's hectic, fast-paced aquatic plant growing season, it appears I'm out of luck.

Enjoy this issue of *Nor'Easter* and here's to the season!

SCENES FROM OUR 2010 MEETING....more on Pages 8-9



NORTHEAST AQUATIC PLANT MANAGEMENT SOCIETY

The Purpose of the Society shall be to assist in the management of aquatic vegetation, to provide for the scientific and educational advancement of the members, to encourage scientific research in all facets of aquatic plant management, to promote an exchange of information among members, and to extend and develop public understanding in the discipline.

Mission Statement , adopted April 20, 1999

OFFICERS

President	Ann Bove... (802) 241-3782 ann.bove@state.vt.us
Vice President/ President Elect	John McPhedran... (207) 287-6110 john.mcphedran@maine.gov
Treasurer	James Sutherland... (508) 325-5220 jwsinack@comcast.net
Secretary	Amy Smagula... (603) 271-2248 Amy.Smagula@des.nh.gov
Editor	Glenn Sullivan... (908) 850-0303 glenn@alliedbiological.com
Past President	Bob Johnson ... (607) 257-2064 rlj5@cornell.edu
Directors	Ron Lemin ... (207) 944-6160 ronald.lemin@cpsagu.com
	Scott Kishbaugh... (518) 402-8282 sakishba@gw.dec.state.ny.us
	Marc Bellaud ... (508) 865-1000 mbellaud@aquaticcontroltech.com
	Bin Zhu... (860) 768-4367 zhu@hartford.edu
	Nancy Murray... (860) 424-3589 nancy.murray@ct.gov
	Mike Fleming... (717) 994-3429 michael.fleming@us.nufarm.com

COMMITTEES

Membership	Glenn Sullivan, Jim Sutherland, Amy Smagula
Editorial	Glenn Sullivan, Bob Johnson, Ann Bove, Bin Zhu
Program	Bob Johnson, Marc Bellaud, Scott Kishbaugh, Amy Smagula
Nominating	Ann Bove, Bob Johnson
By-laws	James Sutherland, Larry Eichler, Amy Smagula
Internal Audit & Budget	Scott Kishbaugh, Larry Eichler
Local Arrangements	Glenn Sullivan, Ann Bove, John McPhedran, Amy Smagula
Governmental Affairs	Scott Kishbaugh, Glenn Sullivan, Greg Bugbee, Nancy Murray
Scholarship	Amy Smagula, Ken Wagner, Larry Eichler, Paul Lord, Barre Hellquist, Bin Zhu
Website	Marc Bellaud, Nancy Murray, Glenn Sullivan, Amy Smagula
Webmaster	KISS Computing
Awards	Charles Gilbert, Gerry Smith, Bob Johnson

Please contact a Board member if you would like to join a standing committee!

Advertisement in *Nor'Easter* does not constitute endorsement by NEAPMS. Information provided in this newsletter is not to be interpreted as instruction or regulation. Contents of *Nor'Easter* may not reflect the views of NEAPMS.

SCHOLARSHIP UPDATES

Kimberly Lellis-Dibble

University of Rhode Island, Department of Natural Resources Science, April 13, 2010

“Effects of plant invasions on trophic transfer, nekton fitness, and aquatic ecosystem function in the NE”

Research Update:

Over the past six months, I have spent the majority of my time in the laboratory processing samples from last season. After processing the macrophyte, macroalgae, benthic microalgae, suspended particulate matter, and *Fundulus heteroclitus* samples from the Drakes Island restoration site (Wells, Maine), I weighed the material into tins and evaluated carbon and nitrogen stable isotopes ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) using an Isotope Ratio Mass Spectrometer at the Environmental Protection Agency laboratory in Narragansett, Rhode Island. I am currently using these data to evaluate food web dynamics within the Drakes Island reference and restoring marsh systems. I also removed the lipids from *Fundulus* liver and white muscle tissue from my September sampling event and now have an idea of the relative health of *Fundulus* populations from the 2009 sampling season. I am also in the process of determining *Fundulus* growth rate via the analysis of otolith microstructure. These data will be augmented with additional data from seven other sites that will be collected this summer (2010) and next summer (2011) to determine whether *Phragmites australis* affects overall ecosystem function in invaded wetlands in the Northeast.

Jeremy Farrell

Darrin Freshwater Institute
Rensselaer Polytechnic Institute

“Expanding Hydroacoustic Technologies to Accurately Identify and Map Eurasian Watermilfoil and other Aquatic Plant Assemblages”

Research Update:

My project of identification of Eurasian watermilfoil with hydroacoustics is moving forward with mixed success. It has proven very successful in Lake George (oligotrophic) however it has not worked as well in Lake Hortonia (mesotrophic) or Saratoga Lake (eutrophic) with overestimation problems due to the mis-identification of dense native plant communities as Eurasian watermilfoil. Successes and failures were reported in a poster presented at this year's NEAPMS meeting in Saratoga. This year I intend to gather more data and reanalyze the data from last years transects in an attempt to find a better acoustic signature for Eurasian watermilfoil and generate an algorithm to define other plant group types. I will submit an abstract to do an oral presentation at the 2011 NEAPMS meeting.



*President Ann Bove
working in a Vermont
Lake.*

MAINE

John McPhedran, Maine DEP

New happenings

Current legislation

A bill was introduced with the objective of strengthening Maine’s invasive aquatic plant prevention effort. The bill sponsor cited 2008 and 2009 infestations of Eurasian water milfoil and hydrilla, respectively, in two large Maine lakes in advocating for ramped-up prevention. The original bill was amended to a Resolve and voted to pass by the Inland Fisheries and Wildlife Committee in March 2010 (original language and amendment at <http://www.mainelegislature.org/LawMakerWeb/summary.asp?ID=280034961>).

The Resolve directs Maine Department of Environmental Protection (DEP) and Department of Inland Fisheries and Wildlife (DIFW) to:

- review all lakes infested with invasive aquatic plants for the potential spread risk from those waters
- work cooperatively to increase the effectiveness of educational and outreach efforts regarding aquatic invasive plant species, and
- facilitate continued work of an aquatic invasive plant species working group that was established by the Resolve sponsor.

In addition, the Resolve directs DEP to collect data on the types and extent of surface water extraction and determine what type of outreach to these water users is needed to prevent the introduction or spread of an aquatic invasive plant species through the surface water extraction process. DEP and DIFW are to report back to their respective legislative oversight committee in January 2011.

Fishing tournament permit requirements

Maine’s DIFW will make the following changes to the fishing tournament process in 2010.

1. Enforcement of current regulations will be strengthened and penalties enacted
2. Two inspectors for boats, motors, trailers, live wells, etc must be provided at each tournament launch site for boats entering and leaving a lake
3. Working live well intake screens will be mandatory for participation in tournament
4. Inspection report forms will be submitted to DIFW and then forwarded to DEP for inclusion in DEP’s Courtesy Boat Inspection Program database.

Maine Milfoil Initiative

The Maine Milfoil Initiative (MMI) was established by a consortium of local, regional, and statewide lake groups and academia concerned about the growing threat of invasive aquatic plants in Maine. Focusing on variable leaf water milfoil, Maine’s most abundant invasive aquatic plant, MMI will strive to address the existing infestations through a targeted program of 1) prevention, 2) research and development, and 3) management, mitigation, and eradication through “best practices.”

This three-year project will result in the development of a guidance document on best practices that will be disseminated statewide and beyond to enable other infested lakes to develop action plans for preventing,
continued on next page



Reward® herbicide controls more types of aquatic weeds, floating and submersed, than any other product available. It also works the fastest, so you can restore ecological balance quicker. And best of all, Reward offers a highly favorable environmental profile. All making Reward the “no wait, no worry” choice.

Contact John DeMonte at 724-713-7557 or john.demonte@syngenta.com to learn more.

www.syngentavm.com

©2010 Syngenta Crop Protection, Inc., 410 Swing Road, Greensboro, NC 27409. Important: Always read and follow label instructions before buying or using this product. The instructions contain important conditions of sale, including limitations of remedy and warranty. Reward® and the Syngenta logo are registered trademarks of a Syngenta Group Company.



syngenta

MAINE. *continued*

mitigating, and eradicating milfoil in Maine's lakes. The Maine Milfoil Initiative brings together volunteers, citizen lake landowners, fishermen, boaters, campers, state, local, and federal legislators and leaders in a unified effort to attack this environmental threat to Maine's lakes.

Members of the consortium that established MMI include Saint Joseph's College of Maine, Lakes Environmental Association, Maine Congress of Lake Associations, Maine Volunteer Lake Monitoring Program and the Little Sebago Lake Association. Maine Department of Environmental Protection and U.S. Fish and Wildlife Service are advisory partners.

Funding for MMI (\$500,000) came in late October through the Interior and Related Agencies bill passed by Congress; USFWS will administer the funds. For more information contact Jackey Bailey at milfoil@sjcme.edu.

Seaplanes Included as Dedicated Funds Source

Seaplanes now join motorized watercraft on inland waters in their requirement to purchase and affix an annual Lake and River Protection sticker whether or not the seaplane is registered in Maine. The sticker costs \$20.00 per year and must be affixed to the outside edge of seaplane pontoons. Funds generated from Lake and River Protection stickers support invasive species work conducted by both Maine DEP and DIFW.

Milfoil Summit 2010

The 11th Annual Milfoil Summit was hosted by Lakes Environmental Association in late February. The Summit annually attracts between 125 and 150 people working on invasive aquatic plant prevention and control efforts in Maine fresh waters. See <http://mainelakes.org/documents/2010%20Summit%20Agenda%20and%20Fact%20Sheets.pdf> for a Summit information packet, including updates from Maine DEP.

Maine DEP Program briefs

Status of infestations

No new infestations were discovered since the fall 2009 newsletter. DEP staff will be on lakes earlier than usual this Spring to monitor regrowth of infestations.

Boat inspections for 2009

Volunteer and paid inspectors tallied a record number of boat and equipment inspections in 2009. While data are still being analyzed, it's clear that the total number of inspections for 2009 will exceed 55,000. Preliminary results of the inspections are in the above-mentioned Milfoil Summit packet at <http://mainelakes.org/documents/2010%20Summit%20Agenda%20and%20Fact%20Sheets.pdf>.

Grant Funding for 2010

Funds available for DEP's cost share grant program will remain at \$70,000 for plant removal efforts but will increase to \$95,000 for local prevention programs in an effort to satisfy unmet demand in 2009.

NPDES Permitting Requirement

Maine's Waste Discharge Licensing Program and Maine DEP's current General Permit for application of herbicides to control invasive aquatic plants, developed pursuant to State requirements described below (see Note), are protective of non-target organisms and resources, and meet or exceed NPDES standards. The existing General Permit is strictly a Maine Waste Discharge License at this time. When the General Permit is modified to meet the 2011 deadline for compliance with NPDES, no substantive changes will be necessary to ensure compliance with both NPDES requirements and Maine law.

Note: Maine Rule Chapter 514, Regulations Concerning the use of Aquatic Pesticides, became effective in 1981. Chapter 514 states, "A permit for aquatic pesticide use will be issued only if the applicant can demonstrate a significant need to control the target species and that pesticide control offers the only reasonable and effective means to achieve control of the target species." Further, "A permit for aquatic pesticide use will be issued only if the applicant provides adequate protection for non-target species".

More information

Please check DEP's website <http://www.maine.gov/dep/blwq/topic/invasives/index.htm> or email milfoil@maine.gov.

MASSACHUSETTS

Marc Bellaud, Aquatic Control Technology, Inc.

The first confirmed zebra mussel infestation in Massachusetts at Laurel Lake in the Berkshires during the summer of 2009 continues to dominate the State's Aquatic Invasive Species (AIS) news. Rapid response planning and surveillance efforts were implemented immediately. The Governor's Zebra Mussel Task Force has released its final recommendations: http://www.mass.gov/Eoeea/docs/eea/water/Zebra_Mussel_Task_Force_Recommendations.pdf

In addition, the Zebra Mussel Phase I assessment is now complete and available at: http://www.mass.gov/dcr/watersupply/lakepond/downloads/zebra_mussel_phase1_assessment.pdf

One positive development from the discovery of zebra mussels in Massachusetts has been the increased awareness of AIS issues. "An Act Protecting Lakes and Ponds" is pending, which will finally make it illegal in Massachusetts to transport any AIS or try to launch an infected boat at any water body (plant or animal). This will include significant fines and equipment confiscation for offenders. It is estimated that this legislation will pass and be in effect at the end of the 2010 boating season. In addition, the Department of Conservation and Recreation (DCR) was able to hire several new paid boat ramp monitors and they are reporting a significant increase in volunteer monitoring. Also planned for 2010, DCR will continue their weed watcher training program and they have several ongoing in-lake management projects.

Invasive aquatic plant infestations continue to plague lakes and ponds statewide. Eurasian watermilfoil and variable watermilfoil continue to be the most problematic submersed species, followed by curlyleaf pondweed, fanwort and spiny naiad. Water chestnut, purple loosestrife and phragmites are the most widespread emergent species, with Japanese knotweed spreading along river and highway corridors. Management efforts continue at hundreds of lakes and ponds throughout the Commonwealth, despite the limited availability of State or Federal funding assistance.

There continues to be heightened concern over the spread of hydrilla into Massachusetts water bodies. Currently, there are five known infestations. Hydrilla was first discovered at Long Pond in 2001, which is a 50-acre water body found on Cape Cod.

Fortunately, the Town of Barnstable, with assistance from DCR, has continued an aggressive hydrilla management program at Long Pond annually since its discovery, which has prevented the spread of hydrilla to other nearby water bodies. DCR initiated a similar management program at Hobomock Pond in Pembroke in 2009, after hydrilla was discovered at this 15-acre pond in the fall of 2008. Continued monitoring and management efforts are also planned for the other known hydrilla infestations at small ponds located in Duxbury, Mansfield and Weston.

Once again, special thanks go out to Tom Flannery from the DCR Lakes and Ponds Program for the information provided above. Please visit the DCR Lakes and Ponds Program website for additional information and updates on AIS issues in Massachusetts: www.mass.gov/lakesandponds.

TIMBERLAND DIVISION
CPS

We distribute a full line of aquatic products to enhance your water body and meet your customer needs.

Bo Burns
National Aquatic Market Development Specialist
Raleigh, NC
Mobile 919-605-8016
E-mail: bo.burns@cpsagu.com

Ron Lemin
IVM-Aquatic Territory Manager
Bangor, ME
(mobile) 207-944-6160
Email: ronald.lemin@cpsagu.com

Jerry Lewis
IVM- Aquatic Territory Manager
Lancaster, PA
(mobile) 804-314-5573
Email: jerry.lewis@cpsagu.com

Full Aquatic Manufacture Product Support
Applied Biochemist, BASF, Becker Underwood, Biosafe Systems, Brewer International, DOW, LPI, Monsanto, Nufarm, Sepro, Syngenta, and UPI

NEW YORK

Scott Kishbaugh, New York State Department of Environmental Conservation

The budget crisis and the state response to the federal NPDES requirements for pesticides permits have been battling it out for top honors in the invasive species world in New York. But these aren't the only newsworthy items in recent months.

After many years of work from the New York Invasive Species Council and State Office of Invasive Species Coordination, a final report on "A Regulatory System for Non-Native Species" was issued in the spring, highlighted by a ranking of the invasiveness of non-native species using a standardized scoring system and input from botanists and resource managers from throughout the state. In perhaps the least surprising news of the year, *Myriophyllum spicatum* came out on "top" as the most invasive of the approximately 30 aquatic or near aquatic plants evaluated. These rankings constitute the first step in a process for assigning a regulatory category for each of the invasive species in the state, ranging from "prohibited" to "unregulated". Once the public review has been completed, the report will be provided to the Governor and State Legislature to continue the process of codifying the regulations.


The Invasive Species Council is also contemplating a bill to prohibit the spread of aquatic invasive species on boats. The proposed bill would amend the state Environmental Conservation Law to address launching a boat with visible plants or animals attached to

the boat, motor, or trailer, subjecting a violator to a progressive series of warnings and fines.

A consortium has formed to develop an on-line, GIS-based, invasive species mapping tool, *iMapInvasives*. The initial consortium is comprised of five partners: the natural heritage program of the state of Florida (Florida Natural Areas Inventory (FNAI), the New York Natural Heritage Program (NYNHP), The Nature Conservancy in Oregon, and the Global Invasive Species Team of The Nature Conservancy (TNC-GIST), and NatureServe. Within New York state, individuals and organizations are provided training to document invasive species findings and locations, through the eight regional Partnerships for Regional Invasive Species Management (PRISMs). It is anticipated that this will greatly

expand the statewide invasive species inventories and provide a network for invasive species surveillance, education, and management.

The state budget crisis will clearly have an impact on invasive species work in the state, although the extent to which furloughs, layoffs, and reduced programmatic activities affect this work remains uncertain. The two most significant funding sources for on-the-ground invasive species management—the state Invasive Species Eradication Grants program and the line or member item (aka pork barrel) allocations for individual aquatic plant control projects—will either be suspended, delayed, or significantly curtailed, and the discretionary time or money provided by state agencies or local municipalities to combat invasive species will no doubt be tightly scrutinized. *continued on Page 10*



**Pond, Lake and Wetland Restoration
Plankton and Macro-invertebrate Assessment
Alum and Aeration Systems
Invasive Plant Mapping and Control**

Allied Biological
An industry leader in providing lake management consulting and wetland restoration solutions.

800-245-2932 • alliedbiological.com
HACKETTSTOWN, NJ • MILFORD, NY

N E A P M S
11TH ANNUAL MEETING
AT THE GIDEON PUTNAM



Gerry Smith receives Honorary Membership



Enjoying "Attitude Adjustment Hour"



"They get a plaque, all I get is flowers!"



Aquatic Plant Scientist of the Year Chuck Boylen



NEAPMS Member of the Year Greg Bugbee

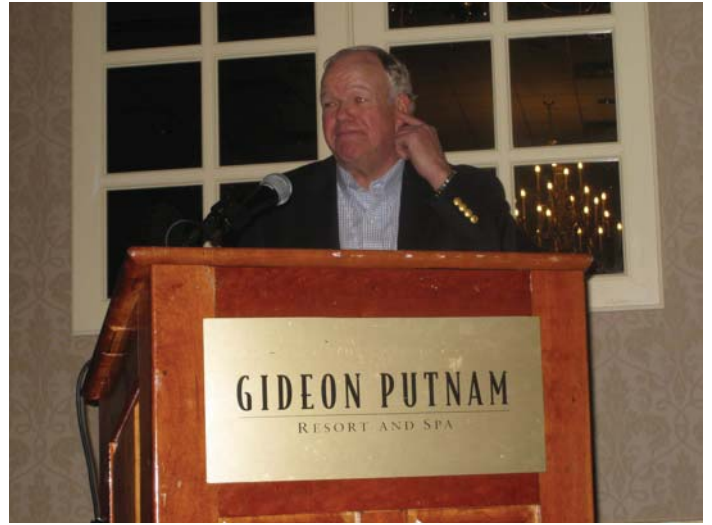


Paul Lord and Marc Bellaud get wired up

N E A P M S
11TH ANNUAL MEETING
AT THE GIDEON PUTNAM



NEAPMS Co-founder Charles Gilbert charms Amy Smagula



"Marc sprayed me right here. He can kiss that raise goodbye!"



Outgoing President Bob Johnson



The hospitality crew



"I really don't think I want to answer that."



Raffle sponsor JoAnn Dunlap of Cygnet Enterprises.



Sarah models new applicator headgear

NEW YORK *continued*

Finally, like their brethren in other northeastern states, the NYSDEC has been working to address the 6th Circuit ruling that a NPDES permit will be required for future pesticide applications. And like many other states, New York has an existing pesticides permitting program that addresses many of the concerns raised in the court decision. Whether the existing program can claim “equivalency” depends on whether the notification, monitoring, IPM, and reporting procedures, and the thresholds triggering these components of the existing program will satisfy the requirements of both the NPDES permit requirements and the court decision.

NEW JERSEY

Glenn Sullivan, Allied Biological Inc.

The NJ Department of Environmental Protection (NJDEP) has been hard at work formulating the new policies and procedures to meet National Pollution Discharge Elimination Permit (NPDES) requirements for next year’s aquatic pesticide applications. The state’s hope is that the NPDES permit (actually a “SPDES” permit in NJ) piggy backs the current Aquatic Pesticide Permit. The current pesticide permit process includes some water quality monitoring requirements, comments on IPM efforts, and detailed pesticide reporting, so the thinking is that much of the NPDES requirements can be met with existing processes.

Two notable items that the current process doesn’t include are pesticide monitoring, and any form of management plan, or what the EPA is referring to as Pesticide Discharge Management Plans.

According to NJDEP staff, there will be a fee for the new SPDES permit, but right now it looks like the fee will be “tiered” based on the entity responsible for obtaining the permit. They are also working on the logistics of Pinelands, and threatened and endangered species review. Again, these multi-agency reviews are part of the current permit process, so it is hoped that a new level of bureaucratic review won’t be necessary.

The NJDEP will be offering two training/informational sessions pertaining to the permit sometime this summer. Dates have not been announced yet.

In other NJDEP news, the NJ Water Chestnut Task Force has developed and published on the website a presentation and fact sheet pertaining to *Trapa natans* in NJ. It can be found at "<http://njaes.rutgers.edu/pubs/subcategory.asp?cat=6&sub=1001>" <http://njaes.rutgers.edu/pubs/subcategory.asp?cat=6&sub=1001>.

They have also created a survey form, which has been posted at "<http://morris.njaes.rutgers.edu/ag/index.html>". NJDEP hopes to get this form out to volunteer and lake resident groups in order to gather more information on invasive species.

continued on the next page

Advancing the Science of Aquatic Plant Management for 16 Years



Advancing the Science for a Sustainable Future

SePRO Corporation remains dedicated to innovative research and development of new technologies to address unmet needs of the aquatic plant management industry. Renovate® MAX G is an aquatic herbicide technology breakthrough for selective and systemic control of broadleaf aquatic weeds that is formulated on an exclusive biodegradable granule to deliver targeted control, improved results and value.

For more information visit our web site at www.sepro.com or call Sarah Miller, Atlantic Coast Aquatic Specialist at 252-903-8775 or sarahm@sepro.com



Renovate is a registered trademark of Dow AgroSciences LLC and is manufactured exclusively for SePRO Corporation. Always read and follow label directions. © Copyright 2010 SePRO Corporation.

NEW JERSEY *continued*

Aquatic plants are always a hot topic at Lake Hopatcong, the state's largest lake. Once again the state's funding of an annual weed-harvesting program on the 2,658-acre lake was delayed. One third of the lake supports aquatic plants, and *Myriophyllum spicatum* is common throughout the littoral zone. A new citizens group, the Lake Hopatcong Alliance, has tentatively received a \$120,000 grant from the IBOAT NJ program, which they plan to use for a detailed aquatic plant mapping of the lake, and informational booklets that will include how to prevent the transfer of invasive species that can be carried to the lake by boats and equipment.

Just downstream of Lake Hopatcong, a model of cooperative lake management is taking place at Lake Musconetcong. Three lakefront municipalities, the newly-formed Lake Association, the Regional Planning Board, and the State Park Service are all joining to support an application of the new herbicide Sculpin G (2,4-D amine) to control *Myriophyllum spicatum* and *Trapa natans* in the lake. The lake also contains populations of two protected *Potamogeton* species, so Sculpin G was chosen to control the target plants without impacting the native pondweeds. Following the spring herbicide application, the community will conduct hand-harvesting of any water chestnut re-growth later this summer. Pre and post plant mapping surveys are planned for the lake, and the management team hopes to present the project at the 2011 NEAPMS Annual Meeting.

NEW HAMPSHIRE:

Amy Smagula, New Hampshire DES

Over the winter the NH Exotic Species Program worked with the statewide lakes association and a legislative study group to increase program funding through legislation. One of the bills that was proposed in this year's legislative session seeks to establish a boater decal program similar to what the state of Maine implements. The stickers would cost \$10 for in state boaters and \$15 for out of state boaters. If passed, this legislation could result in approximately \$1.2 million of additional revenues each year to the Exotic Species Program. Funding would be earmarked specifically for invasive aquatic plant management and control activities.

During this timeframe we also wrapped up a research collaborative with Dr. Mike Netherland that focused on evaluating the viability of variable milfoil seeds and the survivability of seedlings under different experimental laboratory conditions. For a long time, little was known about the potential for variable milfoil seeds to germinate and contribute to recurring infestations of variable milfoil in waterbodies where the plant is considered an invasive species, and



how this factored into longterm management of infestations. According to Dr. Netherland's findings, variable milfoil seeds can be numerous, viable, can persist under varying environmental conditions, and can contribute to continued milfoil growth after control activities have been performed.

A final report will soon be made available on the Exotic Species Program website which can be found under that specific program listing at www.des.nh.gov. We hope that Dr. Netherland will also consider presenting his results at the upcoming NEAPMS meeting in January, 2011.

Lycott Environmental, Inc.

Providing Restoration Services
for Lakes, Ponds, Reservoirs
and Wetlands throughout
New England since 1971



Lycott Environmental, Inc.
600 Charlton Street, Southbridge, MA 01550
(800) 462-8211 • www.lycott.com



PENNSYLVANIA

Jack Hanish, Pennsylvania Lake Management Society

Undesirable, invasive little fishes were found in the Fairview gravel pits in northwest PA! The PA Fish and Boat Commission confirmed in late March that round gobies were present in the pit, probably for about a year based on size. This is the first time that this invasive species was found in an isolated setting where none existed before. The early conclusion was that they were probably introduced from someone's bait bucket. The good news out of this incident was that this was the very first time the PA AIS Rapid Response Plan was initiated. From all reports to date, the procedures got quick action

from a number of state agencies, with the PA Fish and Boat Commission in the lead. Signage of the threat was posted at the pit, and plans are underway for containment and possible future eradication.

Fish and Boat Commission (FBC) work is continuing on the review and revision of Chapters 71 and 73 of the Pennsylvania code, including the portions referring to invasive species. The goal is to complete the process by the end of 2011. Also, because of budget considerations, the FBC has decided to concentrate their control and eradication efforts on a list of species prioritized through a risk assessment analysis. European water chestnut made the first cut. Other

species will be added as necessary.

A number of bills are being introduced in the state legislature to deal with Marcellus Shale extraction activity, including a much needed update to the state's antiquated oil and gas laws. The trigger for this flare of activity has been a number of incidents involving land and stream contamination and exploding domestic water supply wells. Some headway has been made. At least the state is thinking about requiring an environmental impact study before any new permits are issued for drilling on state forest land.

Unfortunately, not much is making the press, or campaign rhetoric, on aquatic disinfection/ decontamination/ inspection procedures for shale drillers. This issue had been raised at a multi-municipal public meeting this past January with a gas company planning to drill in Luzerne County, PA. The inquiry came on the heels of the Dunkard Creek affair. At the same meeting, the company was informed of draft disinfection protocols being developed by the PA Fish and Boat Commission. The same company was queried again about their disinfection/ decontamination protocols at an April 20th water testing meeting. The response was the same: they have no protocols or procedures in place! This is disturbing because back in January the gas company was informed of the impending protocols and no progress had been made since that time, but we are still plunging full speed ahead to approve new drilling permits daily!

There are a growing number of local

Algae control from top to bottom

Cutrine®-Plus liquid and granular algaecides are formulated to control algae from top to bottom.

For more information, contact John Cortell
 Northeast Regional Sales Manager
 Ph: (815)-784-6984 | jpcortell@archchemicals.com

Phone: (800) 558-5106
www.appliedbiochemists.com

applied biochemists **ab**

continued on the next page

PENNSYLVANIA *continued*

and regional organizations in the state that are trying to draw public and government attention to the environmental threats (such as AIS spread) posed by the gas extraction process. As a result, the “M” word is being heard more often. We, the environmental peasants in Pennsylvania, can only hope that someone in government is listening. Legal action is being planned.

At the Pennsylvania Lake Management Society Annual Conference held early in March at State College, PA, there were some discussions among herbicide applicators on the NPDES permit issue for aquatic pesticides/herbicides. There was a small, unscientific consensus that if the permit fees and the application process gets too overbearing, the unintended consequences will be that cash and time strapped clients will go to the local supply store and then do their own thing (rightly or wrongly). Is this the same kind of thinking that gets discarded tires in our waterways?

The information for this newsletter was gathered from news items, public hearings, interviews, and agency meeting minutes. Any views expressed, unless placed in quotes with references, are those of the author and do not represent an official view of any government agency or person. My thanks to Ashley Walter, Pennsylvania Invasive Species Council (PISC) Coordinator and Sarah Whitney, PISC AIS Chair for their assistance in providing information for this article.

RHODE ISLAND:

Katie DeGoosh, Rhode Island DEM

In 2009, personnel at the Rhode Island Department of Environmental Management-Office of Water Resources (RIDEM-OWR) continued surveying the state’s freshwater lakes for the presence of aquatic invasive species. Although the state does not offer any program or funding specifically for AIS monitoring, control or education, staff in the Surface Water Monitoring (SWM) Program have mobilized highly skilled interns to survey on-the-ground and gather information. The SWM Program has also recruited other programs to keep an eye out when in the field, used the information to assess waterbodies as part of its Integrated Water Quality Monitoring and Assessment Report, and also reported online (<http://www.dem.ri.gov/programs/benviron/water/wetlands/pdfs/invasive.pdf>). The AIS monitoring effort is financed with a patchwork of federal funding through US EPA under Section 106 of the Clean Water Act and small grants from the Federal ANS Task Force administered by CRMC. The data collected are used to identify waterbodies where wildlife habitat

uses may be impaired by extensive AIS infestations. The troubling results further demonstrate the need for additional support of AIS education, monitoring, and management programs. Since the beginning of the AIS monitoring effort in 2007, OWR has checked 87 lakes in Rhode Island. AIS were observed in 66% (57/87) of lakes, with 60% (34/57) of infested lakes harboring more than one species. Variable milfoil (*M. heterophyllum*) is the most prevalent species, present in 47% (41/87) of surveyed lakes, followed by fanwort (*C. caroliniana*) in 37% (32/87).

While out in the field in 2009, the RIDEM Ambient River Monitoring (ARM) Program scouted for AIS in freshwater rivers and streams, documenting invasives in 13 RI rivers. Variable milfoil and fanwort are the most common river species, although Eurasian milfoil (*M. spicatum*) and curly-leaf pondweed (*P. crispus*) have also been observed. Hardy variable milfoil populations were observed June-August in the Woonasquatucket River and remained anchored in the sediment under extremely swift currents, withstanding maximum flows of up to 370 cfs (USGS provisional stream flow data).

First populations of Brazilian elodea confirmed

In 2009, RIDEM also documented two populations of Brazilian elodea (*E. densa*), marking the first confirmations of this species in Rhode Island.

continued on next page

John DeMonte



Syngenta Crop Protection, Inc.
107 Buck Run Dr.
Harrison City, PA 15636
Mobile: 724-713-7557
Fax: 888-244-7140
www.syngentavm.com

john.demonte@syngenta.com

For Further Assistance, contact our
Customer Resource Center at: 866-Syngenta (866-796-4368)

RHODE ISLAND *continued*

A small infestation was discovered by Aquatic Control Technology (ACT) in Hundred Acre Pond in South Kingstown, and options and recommendations for control were presented to the lake association this spring. A second, significantly larger, population was discovered by RIDEM personnel in Arnold Pond in Coventry. Roaring Brook—the outlet of Arnold Pond—flows into the Moosup River which drains into Connecticut. Officials in Connecticut, including CT DEP and The Nature Conservancy, were notified of the upstream population to warn of the potential movement of *E. densa* into CT waters.

More populations of water chestnut discovered

Two new populations of water chestnut (*Trapa natans*) were discovered during the 2009 summer field season. The largest known population of water chestnut in the state was discovered in Chapman Pond in Westerly, which is also plagued with a severe infestation of Eurasian milfoil. In October, the Westerly Land Trust, working with the Rhode Island Natural History Survey and in communication with RIDEM, organized a community water chestnut pull. It is expected that subsequent pulls will occur during the summer of 2010. The second water chestnut population was discovered by RIDEM's TMDL team in Turner Reservoir in East Providence, an

impoundment of the Ten Mile River. OWR personnel also confirmed its presence upstream in Central Pond, another impoundment of the Ten Mile—which also has a population of curly-leaf pondweed. These discoveries bring the count of water bodies known to be infested with water chestnut to a total of four in RI.

Plans for 2010 field season

This season, RIDEM personnel are anxious to observe the effects of the severe flooding that occurred during the record rain events this past March. Rushing flood waters threatened infrastructure throughout the state, damaging bridges and compromising the integrity of dams. Flooding destroyed the Geneva Pond dam in North Providence, draining and desiccating a 6 acre pond overwhelmed by fanwort. The Pawtuxet River, whose waters rose to a record 21 ft (flood stage is 9 ft), support populations of variable milfoil, fanwort and curly-leaf pondweed. The Blackstone, Wood-Pawcatuck and Woonasquatucket Rivers—all of which supported populations of AIS—also experienced substantially elevated flows. These heavy river flows likely scoured the substrate, depositing sediments downstream, and may have smothered vegetation or dislodged it to drift downstream. Although the scouring may have dislocated and naturally cleared out some invasives, these newly disturbed areas may be extremely susceptible to recolonization. The SWM Program plans to piggyback with other OWR programs revisiting many sites to note obvious changes in stream morphology and keeping any eye out for new invasive plant populations.

For Healthy Ponds & Lakes

Find Out Why More Professionals Rely on Vertex

Our Aeration Systems:

- ◆ Help Prevent Fish Kills
- ◆ Reduce Unsightly Algae
- ◆ End Foul Odors
- ◆ Reduce Muck Accumulation
- ◆ Inhibit Mosquitoes & Midges
- ◆ Require Less Maintenance

**Longest
Industry
Warranty**





I've dealt with water problems for a long, long, time. Trust me, the Vertex Aeration Systems really worked by breathing new life into my lake and pond.

Bill Dance

Call our Vertex Specialists for more details!

1.800.432.4302

www.vertexwaterfeatures.com



Vertex Water Features
Lake Aeration Systems & Floating Fountains

VERMONT

Ann Bove, Vermont DEC

July 1, 2010 will mark notable changes to how aquatic invasive species are managed in Vermont.

Vermont's 22-year-old law relating to the transport of aquatic invasive species will soon change. No longer will only the transport of the non-native invasive plants *Myriophyllum spicatum* and *Trapa natans* be illegal. Come July 1, the transport of *all* aquatic plants or aquatic plant parts on the outside of a vehicle, boat, personal watercraft, trailer or other equipment will be illegal. The law change means both the public and enforcement officers will not have to know how to distinguish one type of aquatic plant from another.

Vermont's transport law also currently prohibits the transport of two animal species: zebra mussels (*Dreissena polymorpha*) and quagga mussels (*D. bugensis*). And on July 1, the Secretary of the Agency of Natural Resources will be able to add additional species via rulemaking. The Vermont aquatic invasive species transport law is a ticketable offense. Fines are up to \$1,000 per violation.

The Secretary of the Agency of Natural Resources or his/her agent will have authority to enter upon lands, with permission from the landowner or lessee, to prevent the introduction and spread of new aquatic invasive species. "New" refers to a species not known to occur in a Vermont surface water or in a segment of Lake Champlain (the lake has five) as of January 1, 2007. Without permission, a warrant or subpoena must be obtained prior to entrance.

The Secretary will also have new emergency permitting authority aimed at initiating a rapid response to a new invasive species invasion. An emergency rapid response general permit is under development with a completion deadline of July 1, when the authority is authorized. Only the Commissioners of the Departments of Environmental Conservation and Fish and Wildlife will have the ability to apply for coverage under this general permit. Controls applicable under the permit will include biological controls, pesticides and other control techniques.

Response efforts to the presence of Myriophyllum heterophyllum continue.

Vermont's second-ever case of *Myriophyllum heterophyllum*, in the Missisquoi Bay segment of northern Lake Champlain, is believed too extensive and well-established for management to be considered practical. Instead, efforts in 2010 will focus on preventing the plant's spread to other waters in the state. An early detection workshop to train volunteers on identification of this and other aquatic invasive species is planned for June; a public access area "greeter" will be hired to rotate between six public accesses in the region and provide courtesy boat inspections; surveys of this lake segment and others will continue; and increased efforts to educate the public are planned.

Search and removal efforts for *M. heterophyllum* in Halls Lake on the eastern side of the state were underway early this spring - shortly after ice out in early April. Halls Lake has been coping with Vermont's

first population of this species since fall 2008. Although 24 infestation sites are known from the 84-acre lake, the amount of *M. heterophyllum* removed by hand in 2009 was only 5 cubic feet, reduced from 52 cubic feet in 2008. Surveys and handpulling are planned throughout the 2010 growing season in partnership with the town and lake association.

Federal funding increases for 2010 aquatic plant management efforts in the Lake Champlain Basin.

Thanks to the efforts of Vermont Senator Leahy, increased federal funding will be available to support Lake Champlain basin aquatic invasive plant control and species spread prevention projects. (Approximately 56% of Lake Champlain's 8,234 square mile-basin is in Vermont; this area includes over 353 lakes and ponds.) \$460,000 is available to support contracted water chestnut management and grants to municipalities involved in *Myriophyllum spicatum* control efforts, or for aquatic invasive species spread prevention programs. In 2009, only \$175,000 in federal funds were available for these same efforts. The hitch this year is whether the state and its local partners can piece together the needed \$500,000 in matching funds to accept the full federal pot.

NPDES news?

While Department legal staff following this issue believes Vermont's aquatic pesticide permits are adequate to meet NPDES requirements, we, like most, are waiting for EPA's issuance of a draft general permit and an opportunity to review it.

National Pollutant Discharge Elimination System (NPDES)

pesticide general permit (PGP) for point source discharges from the application of pesticides to waters of the United States has been released by EPA. This action is in response to a decision by the U.S 6th Circuit Court of Appeals in National Cotton Council, et al. v. EPA that clarified that NPDES are required for certain discharges from the application of pesticides.

You can find this draft at http://cfpub.epa.gov/npdes/home.cfm?program_id=410.

EPA is seeking comment for 45 days (**through July 19, 2010**) on the draft PGP and plans to issue the final PGP in December 2010. During the public comment period EPA will hold three public meetings (Albuquerque, Boise, and Boston), a public hearing (Washington, D.C.), and a webcast to provide an overview of the PGP requirements and the basis for those requirements, and to answer questions about the draft permit and how the public can best assist EPA in the public comment process. The date, time and location of the public meetings and public hearing are as follows:

Albuquerque, New Mexico: Monday, June 14, 2010, at the CNM Workforce Training Center, Room 101, 5600 Eagle Rock Avenue NE, Albuquerque, New Mexico, from 12:00 p.m. – 3:00 p.m.

Boise, Idaho: Wednesday, June 16, 2010, at the Bureau of Reclamation, Rooms 206 & 219, 1150 North Curtis Road, Boise, Idaho from 9:00 a.m. to 12:00 p.m.

Boston, Massachusetts: Monday, June 21, 2010, at EPA Region 1, 5 Post Office Square - Suite 100, Conference Room 1529, Boston, MA 02109-3912, from 1:00 p.m. to 4:00 p.m.

Washington, DC: Wednesday, June 23, 2010, at the EPA East Building, Room 1153, 1301 Constitution Avenue, NW, Washington, DC 20004, from 10:00 a.m. to 1:00 p.m.

The webcast will be broadcast on June 24, 2010, from 1:00 p.m. to 3:00 p.m. Eastern Standard Time (EST). For information on how to register and attend the webcast, see EPA's website at www.epa.gov/npdes/training.

More information on the NPDES requirements for discharges from pesticide applications is available at www.epa.gov/npdes/pesticides. Copies of the draft PGP, PGP fact sheet, and Federal Register notice can be downloaded from that site. [A pre-publication draft of the Federal Register notice is now available.] Details on how to provide public comment on the draft permit are provided in the Federal Register notice and, beginning on June 4, also at www.regulations.gov for docket number EPA-HQ-OW-2010-0257.

UPCOMING EVENTS

Lake Management in Lean Times: Focusing on Practical Solutions and Achievable Results

– NECNALMS

June 11-12, 2010

Worcester, MA

<http://www.uri.edu/ce/wq/ww/nec.htm>

The Aquatic Plant Management Society 50th Annual Meeting

July 11-14, 2010

Bonita Springs, FL

<http://www.apms.org/2010/2010.htm>

30th Annual International Symposium

North American Lake Management Society

Oklahoma City

December 6-9, 2010

<http://www.nalms.org>

AQUATIC HERBICIDES from NUFARM

Broad-spectrum control of weeds
in all aquatic environments.

Aqua Neat®

Solution®WS

Diquat E-Pro 2L

TAHOE® 3A

POLARIS®

WEEDestroy®AM-40

Mike Fleming

Northeast US Sales Representative

P.O. Box 8

McClure, PA 17841

(717) 994-3429

michael.fleming@us.nufarm.com

Better Choices. Better Business.

www.nufarm.com/us

© 2010 Nufarm. Important: Always read and follow label instructions. Aqua Neat®, Polaris®, Solution®, Tahoe™, and WEEDestroy® are trademarks of Nufarm.



NEAPMS 11th Annual Meeting & Conference, January 18-20, 2011

Wentworth By The Sea, New Castle, NH

