



# NOR'EASTER

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## A MESSAGE FROM THE PRESIDENT

I am pleased and honored to serve as your NEAPMS president. I could not have done it without praising a few individuals. First, the Society is blessed with one of the hardest working Executive Boards ever! Each member has made my job so easy. With that accolade I must acknowledge my three past presidents under whom I served as a Board member – Jo Ann Dunlap (2014), Paul Lord (2013) and John McPhedron (2012). They set a high bar of expectation I hope I have lived up to.

Secondly, I would like to praise the Society membership. We have one of the most cordial and experienced memberships I know. No one ever says “no” when asked to help out. Many I consider personal friends and colleagues.

Thirdly, I need to praise the students. They are our next generation of researchers, managers and regulators. They (with much thanks to their mentors) are bright lights on the horizon – possessing a high technical academic background, enthusiastic about the workings of our society and doing cutting-edge research that is often supported by our scholarship program.

2015 has been a very good year for the society. We are solvent which has allowed us to serve the Society

membership. Our January meeting was the most attended in our 16-year history, bringing 194 attendees from every state within our membership area and a number of folks from outside as well. We had 19 exhibitors and brought in approximately \$50,000. Additionally an impressive number of our members attended and presented at the NALMS national conference in Saratoga Springs last month. The Society made many new contacts through our exhibitor table that will hopefully generate new members.

Our upcoming conference next month once again in Saratoga Springs is shaping up to be even larger than last year, with a broad scope of presentations of interest to our entire membership (kudos to a great job by the Program Committee). Our sponsors continue to provide financial backing enabling the Executive Board to keep costs of the conference within the means of all our attendees for which the Society is fortunate. I look forward to seeing many of our members at the Gideon Putnam in January.

The society has been fortunate that the activities at our annual meeting have made considerable contributions to the Scholarship Fund to support our students and their research.

This year both current and past recipients will be making presentations at the conference.

A major objective of our Society's mission is to provide a forum to keep our membership vibrant, informed and engaged. Its Board of Directors is committed to keep our members at the forefront of what is happening in aquatic plant management – new products & technologies, new regulations both state & federal, new research and most of all new people. Our mission is embellished by our annual meeting so I encourage each member to come. There is no better way to interact with “like-minded” professionals, to network, to bring new people into the Society, to introduce our students to a wealth of diverse professionals and to introduce new products than to attend the annual conference.

I wish everyone a healthy and safe holiday season. Mark your calendars for January 2017 when we will return to the Wentworth Inn in Portsmouth, NH. Until then I look forward to seeing everyone next month at the Gideon Putnam for the best conference ever!

Chuck Boylen

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## OFFICERS

### President

Chuck Boylen

518-276-8430

[boylec@rpi.edu](mailto:boylec@rpi.edu)

### Treasurer

Will Stevenson

508-765-0101

[westevenson@lycott.com](mailto:westevenson@lycott.com)

### Editor

Chris Doyle

908-850-0303

[doyle@alliedbiological.com](mailto:doyle@alliedbiological.com)

### Vice President/ President Elect

Chris Doyle

908-850-0303

[doyle@alliedbiological.com](mailto:doyle@alliedbiological.com)

### Secretary

Amy Smagula

603-271-2248

[amy.smagula@des.nh.gov](mailto:amy.smagula@des.nh.gov)

### Past President

JoAnn Dunlap

800-275-3325

[jdunlap@cygnetenterprises.com](mailto:jdunlap@cygnetenterprises.com)

## DIRECTORS

### Mark Heilman

317-388-3336

[markh@sepro.com](mailto:markh@sepro.com)

### Glenn Sullivan

908-850-0303

[glenn@alliedbiological.com](mailto:glenn@alliedbiological.com)

### Chris Borek

609-815-1654

[chrisborek@blacklagoon.us](mailto:chrisborek@blacklagoon.us)

### Meg Modley

802-372-3213

[mmodley@lcbp.org](mailto:mmodley@lcbp.org)

### Joe Pinkerton

717-816-3116

[joe@aeclakes.com](mailto:joe@aeclakes.com)

### Eric Paul

315-272-5666

[eric.paul@dec.nygov](mailto:eric.paul@dec.nygov)

*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*

# STATE UPDATES: WINTER 2015 MAINE

**John McPhedran**

Maine Department of Environmental Protection (DEP)

**Infestation Status**

**Salmon Falls River:**

Maine's latest documented find, European naiad (*Najas minor*), now bumps up the Pine Tree State's named infested waterbody total to 49. Found initially in early September by ace-volunteer plant monitor Dennis Roberge, Maine and New Hampshire officials soon after confirmed the discovery in the 1,040-acre impoundment within Salmon Falls River, a border water body with shorelines in Lebanon and Acton, Maine and Milton, New Hampshire. The impoundment in Maine includes Northeast and Milton Ponds.

Aiming to monitor the extent of the infestation so as to consider interstate responses for 2016, DEP along with volunteers from York County Invasive Aquatic Species Project and the Three Ponds Protective Association found well-established populations in Northeast Pond and in the narrow thoroughfare leading to Milton Pond with the thickest growth in northern portions of Northeast Pond.

Maine DEP and NHDES distributed invasive species warning signs for posting at boat ramps and issued an October 6th press release (<http://>

[www.maine.gov/dep/news/news.html?id=659186](http://www.maine.gov/dep/news/news.html?id=659186) ). Also notified were boat ramp and other land owners, fishing tournament organizers, and fisheries warden services from both states. DEP and NHDES staffers will huddle this winter to determine control strategies.

European naiad has been confirmed in one small Maine Pond in Kittery and in a handful of New Hampshire water bodies.

**Annabessacook Lake:**

DEP's rapid response effort engaged staff in eleven rapid response/manual removal visits to manage variable leaf water milfoil (VLM, *Myriophyllum heterophyllum*) in 1,400-acre Annabessacook Lake.

The infestation was confirmed in Winthrop lake in September 2014. The most widespread and dense VLM populations share ideal plant habitat with native milfoil species, thereby challenging *in situ* identification. Also, this habitat resides close to a channel leading to a busy public boat ramp. Since DEP staff observed prolific re-growth after removal of VLM within this area, the agency is considering 2016 boat traffic management as well as plant control strategies to be undertaken by area partners the Annabessacook Lake Improvement Association, Cobbossee Watershed District and Friends of the Cobbossee Watershed.

**Damariscotta Lake:** DEP continues to report stability in controlling hydrilla

*“European naiad has been confirmed in one small Maine Pond in Kittery and in a handful of New Hampshire water bodies.”*

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<p>Ron Lemin IVM-Aquatic Territory Manager Bangor, ME (mobile) 207-944-6160 Email: <a href="mailto:ronald.lemine@cpsagu.com">ronald.lemine@cpsagu.com</a></p>	<p>Jerry Lewis IVM- Aquatic Territory Manager Lancaster, PA (mobile) 804-314-5573 Email: <a href="mailto:jerry.lewis@cpsagu.com">jerry.lewis@cpsagu.com</a></p>
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## STATE UPDATES: WINTER 2015 MAINE (CONTINUED)

Unless otherwise noted, all pictures are credited to S. LaVigne and C. Doyle

“DEP continues to report stability in controlling hydrilla (*Hydrilla verticillata*) in Damariscotta Lake.”

(*Hydrilla verticillata*) in Damariscotta Lake. Weekly surveillance of Davis Stream, a tributary found in 2010 to host a nascent population of hydrilla, resulted in another season of no detections. The last pulls from this inlet stream were four plants in 2013.

What remains, however, is the quest for the perfect benthic barrier for the Cranberry Point 0.3-acre lagoon—Damariscotta Lake’s pioneer population of hydrilla found in 2009. Through control measures that range from hand removal, herbicide, deploy-

ment of a variety of benthic barrier materials and more hand-removal, the hydrilla’s shag carpet-dense biomass has been reduced to mere individual plants.

In 2015, however, labor-intensive barrier management now eclipses plant removal because of substantial off-gassing from the lagoon’s organic substrate which billow barrier materials. Also, the varied composition of emergent native vegetation within the lagoon precludes opportunities to cover the entire lagoon uniformly.

With that theory dashed, DEP informed Midcoast Conservancy (*née* Damariscotta Lake Watershed Association) in November that their continued surveillance and hand removal efforts remain essential to hydrilla management. At that time, DEP also piloted a bolt of yet another type of benthic barrier material—this time, a woven geotextile. DEP continues to ponder permanent solutions to this now relatively small infestation.

**Pickerel Pond:** Pickerel Pond, Maine’s *other* – and first – hydrilla infestation, remains hydrilla free. DEP’s lake-wide survey of the Limerick pond using SCUBA divers, subsequent surveillance by York County Invasive Aquatic Species Project and frequent vigilance of the Pickerel Pond Association continue to find no offending plants in 2015. The last find was in 2012, a single plant, during a DEP SCUBA survey. The pond was treated with fluridone for nine consecutive years beginning in 2003.

Due to the insidious nature of hydrilla and the challenges in surveying all available habitat, the DEP continues to keep Pickerel Pond on its infested waterbody list.

**Salmon Lake:** DEP SCUBA divers continued to survey a 6-acre outlet cove of Salmon Lake for Eurasian water milfoil (*EWM*, *Myriophyllum spicatum*) in 2015 and found none. No EWM has

### Too Many Weeds Spoil the Fishing



Exotic invasive aquatic plants such as Hydrilla, Eurasian Watermilfoil and Curlyleaf Pondweed, can be detrimental to a healthy fishery in lakes across the country.

These invasive plants when left unmanaged can alter the ecosystem of lakes and reservoirs, cause a decline in the fishery, and interfere with other valued uses of waterbodies.

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Therefore the DEP staff considered the ultimate benthic barrier a permanent pond liner weighed down with rip-rap deployed on top of the coming winter’s ice. The theory: encourage reestablishment of native plants from the fringing sphagnum mat on top of a newly defined substrate. NPDES permitting and land owners’ approval were explored as was the state of the art permanent pond liners able to purge off-gas.

Then came early autumn rainstorms that raised water levels. And the resultant discoveries of robust hydrilla plants outlying rehydrated habitat among pickerel weed beyond the reach of existing benthic barriers.

## STATE UPDATES: WINTER 2015 MAINE (CONTINUED)

been detected in the Belgrade Lake since 2009 when it was treated with 2, 4-D. DEP removed the lake from its list of infested state waters in 2013. EWM was first detected in 2008.

**Invasive species scorecard:** With inclusion of 2015's finds, Maine still reports an enviable record of having documented invasive aquatic plants in only 0.85% of all named waterbodies.

### Outreach

**King Middle School:** DEP-ers Denise Blanchette and Karen Hahnel led approximately eighty 7<sup>th</sup> graders from the Portland school in a hands-on workshop to identify VLM using live

aquatic plants.

The students are undertaking an 8-12 week program focused on invasive plants and the use of remotely operated vehicles (ROVs). In this case, the ROVs—all 35 of them—are submersible, designed and built by the students themselves in an attempt to identify VLM and other aquatic invasive plants.

Blanchette and Hahnel also accompanied students in the field testing the ROVs as surveillance tools.

**Ducks Unlimited:** Just in time for the hunting season, DEP contributed an article to the northern New England Ducks Unlimited

members-only online newsletter in September that stressed the importance of checking and cleaning hunting gear for invasive aquatic plants.

Duck hunters use unique equipment such as decoys, decoy anchoring equipment and poles (for propelling boats) which can snag and permit transport of vegetation if left unchecked.

For more information, please check DEP's website <http://www.maine.gov/dep/water/invasives/> or email [milfoil@maine.gov](mailto:milfoil@maine.gov).

*“With inclusion of 2015’s finds, Maine still reports an enviable record of having documented invasive aquatic plants in only 0.85% of all named waterbodies.”*



*“Duck hunters use unique equipment such as decoys, decoy anchoring equipment and poles (for propelling boats) which can snag and permit transport of vegetation if left unchecked.”*



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## STATE UPDATES: WINTER 2015 NEW HAMPSHIRE

*“...a statutory change to include language relative to cleaning and draining transient recreational gear”*



*“Emphasis is placed on integrated management to reduce the density and distribution of invasive aquatic species”*

**Amy Smagula**

New Hampshire Department of Environmental Services (DES)

**New Infestations in 2015**

The growing season of 2015 was a rough one for New Hampshire in terms of new infestations. For a long time we’ve had few to no infestations, but in 2015 several new infestations were documented. Unfortunately most had been in existence for a few years before they were documented, making them large and beyond the early detection/rapid response phase. The following new waterbodies/species were documented in 2015:

Three new infestations of variable milfoil (*Myriophyllum heterophyllum*) were documented:

- **Turee Pond**, Bow (32 acres when documented)
- **Oxbow Lake**, Canterbury (~15 acres when documented)
- **Pine Island Pond**, Manchester (~10 acres when documented)

In addition to the milfoil,

several new infestations of (European) spiny naiad (*Najas minor*) were found:

- **Northwood Lake**, Northwood
- **Little Island Pond**, Pelham
- **Milville Lake**, Salem
- **Northeast Pond**, Milton

**Control Projects during the 2015 Growing Season:**

During the 2015 growing season a number of control activities took place to manage infestations of invasive aquatic plants, as detailed in the table, below.

Many waterbodies received more than one management practice as the emphasis is placed on integrated management to reduce the density and distribution of invasive aquatic species in New Hampshire’s waterbodies.

**Legislative Update:**

It looks like there will be just one piece of legislation to track relative to invasive aquatic species in the 2015-2016 New Hampshire Legislative Session.

A legislative service request (LSR) was submitted in early November for a statutory change to include language relative to cleaning and draining transient recreational gear, so as to reduce the risk of spread of invasive aquatic species between waterbodies. It is expected that this LSR will manifest into a bill, which the Department of Environmental Services, and partners, will be following through the winter.

2015 New Hampshire Management Practice	Number of Waterbodies
Hand pulling	5
Diver Assisted Suction Harvesting	45
Benthic Barrier	2
Herbicide Treatment	31



# STATE UPDATES: WINTER 2015

## PENNSYLVANIA

**Brian S. Pilarcik**  
 Pennsylvania Lake  
 Management Society

### Hydrilla in Pennsylvania

The Pennsylvania Invasive Species Council (PISC) is currently trying to get a handle on the scope of *Hydrilla verticillata* infestation within Pennsylvania waters. Of particular concern are recent discoveries in relatively close proximity to the Great Lakes watershed. Currently an initiative is underway to confirm suspected hydrilla infestations within the Commonwealth. PISC has formed sub-committees to identify, and better prepare for hydrilla spread across Pennsylvania. If you have a suspected find of hydrilla in Pennsylvania waters you should contact Trilby Libhart ([tlibhart@pa.gov](mailto:tlibhart@pa.gov)), Pennsylvania Department of Agriculture State Botanist for direction on confirming the find.

### Hydrilla Survey conducted on Pymatuning Reservoir

Pymatuning Reservoir is one of Pennsylvania and Ohio's top fishing and tourist destinations, drawing in recreational and tournament anglers

from all around the country. In addition to its recreational draw, the reservoir lies less than 30 miles from the shore of Lake Erie. Both of these factors make it a prime candidate to become a source of infestation for surrounding waterbodies. A detailed aquatic vegetation survey was conducted on Pymatuning Reservoir by a coordinated team of Federal, State, Local, and private agencies. Assistance was provided by both Pennsylvania and Ohio resource professionals, Crawford, Lawrence, and Warren County Conservation Districts, University of Pittsburgh, Western PA Conservancy, PA Sea Grant, as well as others.

The effort was made possible by guidance and assistance by Dr. Michael Netherland and Dean Jones from USACE ERDC and University of Florida. The team consisted of six survey crews spreading out across the 17,000 acre reservoir collecting plant data from nearly 1,900 sample points. Preliminary results of the survey indicate the infestation is currently limited to the southern half of the reservoir, with the greatest concentration on the extreme southern end. Survey data will

assist both PA and OH management efforts on the reservoir.

### Water Chestnut Efforts in Pennsylvania

Currently Water Chestnut, *Trapa natans*, has only been found in Warren County (NW PA) and several locations in Southeastern Pennsylvania. Hand pulling efforts have been underway in both regions. In 2015 at least 75 volunteers donated over 523 hours statewide toward hand pulling plants.

*“Currently an initiative is underway to confirm suspected hydrilla infestations within the Commonwealth”*

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## STATE UPDATES: WINTER 2015 PENNSYLVANIA (CONTINUED)

*“In addition to protecting Lake Towhee from being completely overrun by water chestnut, this work mitigates the spread of this plant from Lake Towhee to Lake Nockamixon”*

In addition to hand pulling in Warren County Jamestown Audubon conducted an herbicide application on a large infestation.

Meghan Rogalus of Bucks County Conservation District reports: “During three work days, seven dump truck loads, or approximately 70 cubic yards, of water chestnut were removed. That’s a little over two commercial-sized dumpsters’ worth of plant material that was removed before setting seed this year. In addition to protecting Lake Towhee from being completely overrun by water chestnut, this work mitigates the spread of this plant from Lake Towhee to

Lake Nockamixon, just a couple of miles downstream.

Although there is still a large population of water chestnut in Lake Towhee, the lower lake margins have been thoroughly scanned; and for the third season in a row there are currently patches of open water north of the boat launch. Later this year, we’re also looking into initiating an effort to remove many of the seeds that collect along the shoreline to hopefully help

further reduce the transport of seeds down Kimples Creek and into Lake Nockamixon.”

In addition to hand pulling in Warren County Jamestown Audubon conducted an herbicide application on a large water chestnut infestation.

*Meghan Rogalus also contributed to this article.*



Above, and to the left, Water Chestnut Hand Pulling Activities in Pennsylvania

(Photos Courtesy of B. Pilarcik and M. Rogalus)



# STATE UPDATES: WINTER 2015 NEW YORK

## Scott Kishbaugh

NYSDEC Division of Water

There were several activities related to AIS oversight and coordination;

- The New York Invasive Species Advisory Committee (25 NGOs) met on June 26 and the Council (9 agencies) met on May 7.
- The updated NY State Aquatic Invasive Species Management Plan was released on July 15, during Invasive Species Awareness Week.
- The statewide invasive species public awareness poll conducted by the Cornell University Human Dimensions Unit final report found that respondents differed in perspectives and behaviors regionally (for example, less awareness in New York City – Long Island areas). Boaters were particularly aware of how their behavior could contribute to invasions. The majority of respondents would be willing to change their behaviors depending upon cost, time, and difficulty involved.
- The 2015 field season for projects funded through Great Lakes Restoration Initiative funds under US Fish and Wildlife Service and administered in partnership with the

Finger Lakes Lake Ontario Watershed Protection Alliance (FOLLOWPA) include:

- Citizen Science and eDNA project focused on Asian Carp, Northern Snakehead, and Rusty Crayfish (SLELO PRISM)
- Train the Trainer Watercraft Inspection Program (NY Sea Grant)
- Eastern Lake Ontario and Finger Lakes Region Aquatic Invasive Species Prevention and Outreach (Watercraft Stewards) (Finger Lakes Institute)
- Eastern Lake Ontario Water Chestnut Control (Onondaga County Department of Health)
- Finger Lakes Region Hydrilla Rapid Response and Control (Tompkins County Soil and Water Conservation District)

### Prevention:

An expanded boat steward and decontamination pilot program in the Adirondack Park region was launched Memorial Day weekend and completed its first season by October 1st. DEC recently surveyed all existing boat stewardship and watercraft inspection sites in the state – this data will inform efforts to increase coverage across the state. NYS will soon be releasing an RFP for AIS Spread Prevention Grants


## Hydrilla Management


**Cayuga Inlet:** The Hydrilla Task Force of the Cayuga Lake Watershed (HTF) conducted hydrilla management and eradication treatments during the 2015 season. Similar to previous seasons, combination treatments utilizing both contact herbicides (Aquathol-K, active ingredient endothall) and low-dose, systemic herbicides (Sonar, active ingredient fluridone) were used. Treatments encompassed infestation areas in the Cayuga Inlet, Fall Creek, and for the first time ever the southeast corner of Cayuga Lake.

*“The updated NY State Aquatic Invasive Species Management Plan was released on July 15, 2015.”*

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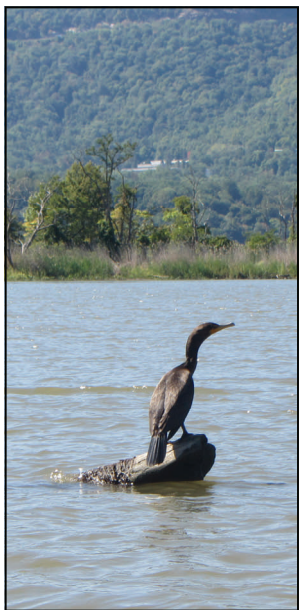
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## STATE UPDATES: WINTER 2015 NEW YORK (CONTINUED)



*“The most recent (26<sup>th</sup>) hydrilla infestation in New York was found at a very small pond in Tinker Nature Park located in Henrietta, NY in late September.”*



Due to the delayed onset of hydrilla growth in 2015, Aquathol-K (Aq-K) treatments did not begin until later in the season; August 18<sup>th</sup> and August 25<sup>th</sup> in Cayuga Inlet and Fall Creek, respectively. Aq-K treatments addressed hydrilla biomass (stems/shoots/leaves) above the sediment. One strategy change for 2015 was the use of an Aq-K injection system in Fall Creek to improve herbicide target concentration and retention time. Injection occurred over a 36-hr period.

After initial Aq-K treatments in the inlet and Fall Creek, follow-up Sonar applications were conducted. Sonar application in the southeast corner of Cayuga Lake began earlier in the season; starting on July 21<sup>st</sup>. Sonar application was used to prevent possible hydrilla re-growth. While treatments within the inlet were very effective, there was evidence of hydrilla re-growth in Fall Creek (cove and golf course lagoon). A small-scale physical removal effort was conducted in the golf course lagoon in late September to address this re-growth.

With treatments finalized for the 2015 season in early October, the HTF will continue post-treatment water quality monitoring and plant community monitoring/sampling through late fall. Treatment and plant community

reports will follow in late 2015/early 2016, and the HTF and its stakeholders will begin planning for the upcoming 2016 treatment season.

**Croton River:** The hydrilla infestation in Croton River and Bay was monitored as a follow up to last year’s survey. In addition, an aquatic plant survey was conducted at more than 40 Hudson River locations north and south of Croton to better delineate the extent of the hydrilla infestation. No hydrilla was found at any of the designated locations. A dye-study of the Croton River flow dynamics was conducted in early October to provide data on flow dynamics for future management decisions. These results will be evaluated over the coming months in support of determining next steps for responding to this infestation.

**Henrietta:** The most recent (26<sup>th</sup>) hydrilla infestation in New York was found at a very small pond in Tinker Nature Park located in Henrietta, NY in late September. Despite the late date for the discovery, the Finger Lakes PRISM immediately initiated discussions with key stakeholders and NYSDEC staff, and was able to coordinate a sterile grass carp stocking to enhance spread prevention. Benthic matting will be installed at select locations in the pond in the spring of 2016.



**Erie Canal/Tonawanda Creek:** A five mile stretch of the Canal between the Delaware bridge and the West Canal Marina was treated with Endothall starting in late July. USACE reports that the treatments resulted in a reduction in overall hydrilla frequency in the Canal from 33% to 1%, and overall hydrilla tuber densities were reduced by more than 90% in the first two years of the Project. Control of the Service Drive ramp (which was problematic in 2014) improved substantially in 2015, and several of the key native species severely impacted during the 2014 treatments stabilized in 2015. Federal funds supported the work in 2015, and Great Lakes Restoration Initiative (GLRI) funds have been committed for 2016.

*This report was completed with the assistance of James Balyszak (Cayuga Hydrilla Program Manager) and Cathy McGlynn (DEC AIS coordinator).*

## STATE UPDATES: WINTER 2015 CONNECTICUT

The editorial staff is looking for one or more members interested in providing editorial assistance for the Nor'easter. If you are interested, please contact Chris Doyle (doyle@alliedbiological.com).

*“Long term monitoring of invasive aquatic plants continues by The Connecticut Agricultural Experiment Station’s Invasive Aquatic Plant Program (CASES IAPP)”*



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**By Greg Bugbee**  
Connecticut Agricultural Experiment Station

Connecticut approved \$180,000 in this year’s Department of Energy and Environmental Protection’s (DEEP) budget for a variety of aquatic invasive species (AIS) programs including matching grants to municipalities (\$140K), rapid response (\$10K), prevention and education (\$30K). Fourteen applications were received and are currently being evaluated.

Fragments of hydrilla (*Hydrilla verticillata*) were discovered in Coventry Lake by a UCONN biology class. After several unsuccessful attempts, the source was finally found in a small cove. Control is likely to be performed using DEEP’s rapid response funds.

Long term monitoring of invasive aquatic plants continues by The Connecticut Agricultural Experiment Station’s Invasive Aquatic Plant Program (CASES IAPP). The program has completed aquatic vegetation surveys of 227 Connecticut lakes and ponds. Nearly 60 percent of the water bodies contained AIS.

Water chestnut (*Trapa natans*) was found in one new lake and two new ponds. The ponds were less than one acre and not connected to streams that could be a source of propagules suggesting waterfowl could be transporting nutlets to the sites. A total of 44 water bodies have been resurveyed at least five years later to determine how invasive plants are changing the quality of lakes over-time. In addition, Lake Candlewood, Connecticut’s largest lake, was surveyed for the ninth consecutive year to determine the effects of alternate year deep and shallow winter draw-down on Eurasian water-milfoil (*Myriophyllum spicatum*), minor naiad (*Najas minor*) and curly leaf pondweed (*Potamogeton crispus*).

Using matching funds from the 2014 CTDEEP invasive aquatic plant grant program, just over 4,000 triploid grass carp were introduced into Candlewood Lake in June 2015. CAES IAPP will be monitoring their effects on AIS. Repairs to the dam at Bashan Lake (East Haddam) were completed in the spring. The work required the lowering lake level nearly 18 feet.

Less than normal precipitation, resulted in little refilling of the lake with extensive wetland and terrestrial vegetation, including phragmites (*Phragmites australis*) getting a foothold in the exposed sediment. Funding from local residents was used to apply herbicide and cut the most extensive areas.

Flyboarding (pictured to the left) is now occurring in some Connecticut lakes. This form of recreation involves a person using a jetpack that is attached to a personal water craft. The flyboarder can fly up to 50 feet into the air or to dive headlong down into water. Issues such as the effects on AIS and sediment dispersion are being evaluated as is the need for regulation.

Two longtime friends and contributors of NEAPMS retired from CTDEEP this year. Nancy Murray, who handled so many of the difficult “state listed species” issues and Brad Robinson, who led the pesticide permitting program will be missed and their years of service to the state have been greatly appreciated.



# STATE UPDATES: WINTER 2015 NEW JERSEY

**Chris Doyle**  
Allied Biological, Inc.

## NJ COLA Update

The New Jersey Coalition of Lake Associations continues to grow and become more actively engaged with its lake association members. The newly formed Board of Directors meets every other month in an effort to tune in on hot button topics and respond to the membership. In addition to well-attended meetings in March and May, two additional meetings were organized in the fall of 2015. In October, presentations on Integrated Lake Management (from a local lake association), NJDEP Management and Lake Issues, and a Q & A session with a NJ lake consultant occurred. In November, presentations on website development for the Coalition, as well as hydro-raking and “non-traditional” aquatic plant management techniques (presented by a NJ lake consultant) were well-received by those in attendance.

NJ COLA also conducted a comprehensive membership survey this year in efforts to identify future presentation topics

and general direction of the organization. NJ COLA had a productive 2015, and looks to build on that hard work in 2016 and beyond. Future goals include four more meetings in 2016 on a variety of lake topics, a new State of the Art website, a focus on education, fostering the mission and sustainability of NJ COLA, interaction with nearby state lake associations and increasing the membership of the organization. This latter goal is crucial in 2016, as the Coalition is poised for long-overdue growth amid a myriad of lake issues, such as AIS, HABS, and nuisance weed management.

## NJISST Update

The New Jersey Invasive Species Strike Team had another busy field season in 2015, following another successful annual conference in the spring. In addition to countless hours of education, outreach, monitoring and eradication projects regarding invasive species, one aquatic project of note in 2015 was the management of a suspected population of Chinese pond mussel (*Sinanodonta woodiana*), the only documented population in North America. The discovery was made a few years ago, following the discovery of another AIS, bighead carp, at a prop-

*“Future [NJCOLA] goals include four more meetings in 2016 on a variety of lake topics, a new State of the Art website, a focus on education, fostering the mission and sustainability of NJ COLA, interaction with nearby state lake associations and increasing the membership of the organization.”*

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# STATE UPDATES: WINTER 2015 NEW JERSEY (CONTINUED)

*"This project is a testament of the value volunteer groups and citizen-scientists can bring to the table in the never ending battle against AIS"*

erty purchased by the New Jersey Conservation Foundation (NJCF). The property was a former fish farm, the former site of the first farmer to commercially raise grass carp in the USA.

The NJISST was awarded two grants for the project. It included training citizen-scientists to survey the Wickcheoke Creek Watershed for Chinese pond mussels, eradicate any existing populations in several ponds on the NJCF property, and develop an eradication plan for any additional

populations discovered during survey activities. A full report of the project will be posted on the NJISST website ([www.njisst.org](http://www.njisst.org)) later this year. Following a mid-summer chemical application to target the mussel in several small ponds on the NJCF property, citizen-scientists received training by State mussel experts and to date have searched nearly half of the 14 miles of streams in the watershed looking for living Chinese mussel populations or shells that might indicate an established population. So far, no additional

populations have been confirmed, which is good news. Future monitoring efforts will be ongoing. This project is a testament of the value volunteer groups and citizen-scientists can bring to the table in the never ending battle against AIS, and its potential for application in invasive aquatic plant monitoring projects.



NJISST Science Director Mike Van Clef points out distinguishing features of Chinese pond mussel to volunteers. (Photo: NJISST)



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## STATE UPDATES: WINTER 2015

### VERMONT

*“One species not previously confirmed in the state, the macroalgae starry stonewort was confirmed in an isolated cove of Lake Memphremagog.”*



*“State Motorboat Registration Fund and Army Corps of Engineer funds supported \$463,430 in Aquatic Nuisance Control grant funds awarded to 34 municipalities implementing aquatic invasive species management in the state.”*

**Ann Bove**  
Vermont DEC

Two new water chestnut populations were confirmed this year, Coggman Creek (connected to already confirmed Coggman Pond) in West Haven and an unused quarry pond in Blissville. Both populations were managed. Five new locations of European frogbit were identified, all in wetland locations.

One species not previously confirmed in the state, the macroalgae starry stonewort was confirmed in an isolated cove of Lake Memphremagog (see VIP post below). Management of this species is under consideration.

Contracted and VTDEC staff-initiated water chestnut management operated for the first time in 33 years without the guidance of a field supervisor. Despite this handicap, 2015 management was successful and continued to make progress in reducing population densities and preventing spread in Lake Champlain and at 25 other waterbody sites. Adequate funding, high water levels and experienced contractors



Starry Stonewort (A. Bove)

contributed to this success. Data processing is underway.

State Motorboat Registration Fund and Army Corps of Engineer funds supported \$463,430 in Aquatic Nuisance Control grant funds awarded to 34 municipalities implementing aquatic invasive species management in the state. 37 municipalities applied for these funds, requesting a total of \$1.31M.

VTDEC partnered with NHDES to bring internationally recognized didymo researcher, Max Bothwell, Ph.D to Vermont in October. Dr. Bothwell presented the case of *Didymosphenia geminata*, an overview of the understanding of this species from 1993 to present, ending with:

“The proximate cause of [didymo] blooms is P limitation. Blooms are the consequence of oligotrophication, not a new variant with bloom-forming tendency.” (See Taylor and Bothwell, 2014. BioScience.)

Roughly 30 public access greeter programs were active in 2015. Staff conducted seasonal site visits to all programs, providing technical assistance, sample identification and general support. Four trainings were offered at locations statewide in the spring. Greeter Programs submit annual data in December; a program summary will be available in 2016.



## STATE UPDATES: WINTER 2015 VERMONT (CONTINUED)

Two, day-long Vermont Invasive Patrollers (VIP) workshops were attended by 21 people. VIP staff conducted four practice (educational) surveys with 29 VIPs and lake residents at Lake Memphremagog, Lake Eden, Lake Iroquois, and Mirror Lake. Surveys are still coming in. As of September 24th, VIP staff had been notified that 20 volunteers contributed over

80 hours collectively in their surveying efforts of 15 Vermont lakes. A trained VIP on Memphremagog reported, and VT DEC staff confirmed, a new aquatic invasive macroalgae, *Nitellopsis obtusa* (starry stonewort). This is the first time this species has been recorded in Vermont. (For more information, visit <http://vtwatershed-blog.com/2015/09/16/>

[new-aquatic-invasive-species-confirmed-in-lake-memphremagog/](#)).

A recommendation of the Lake Champlain Basin AIS Rapid Response Task Force after the confirmation of spiny waterflea in Lake Champlain in 2014, the Program produced a spiny waterflea sign and posted it at all Lake Champlain VTDFW public launch sites and many inland VT public access launches, representing over 200 access points.

Vermont's AIS Program welcomed Josh Mulhollen in April. Josh comes to the Program with a strong background in AIS spread prevention and decontamination. He heads up Vermont's spread prevention efforts and is the Program's animal lead.

### Spiny Waterflea has invaded!



Confirmed in Lake Champlain in 2014

Spiny waterflea are invasive zooplankton that have adverse effects on native species, and are easily transported by bait buckets, bilge water, and other fishing gear.

Many spiny waterfleas appear as a bristly glob of jelly with black eye spots on fishing lines and other gear.



Photo by Jeff Gunderson

Take these steps before launching AND before leaving any waterbody, including Lake Champlain, to prevent further spread of spiny waterflea and other invasive pests.



**Clean**

off mud, plants, and animals from boats, trailers, and equipment. Rinse boats and trailers with hot water. Soak fishing lines, anchor lines, and all used gear in hot water for at least 5 minutes.



**Drain**

your boat and equipment away from the water. This includes the motor, all live-wells, bait buckets, bilges, ballast tanks, and other reservoirs that could transport lake water.



**Dry**

anything that comes into contact with the water for up to 5 days. This period of time is needed to completely kill resting eggs of spiny waterflea and other invasives.

For more information or to report an invasive species sighting, call 802-828-1535 or visit [www.watershedmanagement.vt.gov/lakes.htm](http://www.watershedmanagement.vt.gov/lakes.htm)



The NEAPMS Board is looking for individuals interested in submitting State Updates for the following states: Rhode Island and Delaware. If you are interested in contributing to the *Nor'Easter*, please contact Chris Doyle at [doyle@alliedbiological.com](mailto:doyle@alliedbiological.com)

“...staff had been notified that 20 volunteers contributed over 80 hours collectively in their surveying efforts of 15 Vermont lakes.”



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# STATE UPDATES: WINTER 2015

## MARYLAND

**Mark Lewandowsky**  
Maryland DNR

### Hydrilla Control

The Maryland Department of Natural Resources (DNR) had a successful year two effort for the *Hydrilla* Management Plan in Deep Creek Lake (DCL). The plan consists of population monitoring, chemical control, education and outreach. DNR first observed *Hydrilla* in fall 2013, during routine SAV monitoring. Fluridone treatments began after the first emergence of *Hydrilla* in May with contractors conducting an application every three weeks until the end of August. A Fastest™ assay was collected by RAS field staff weekly between each Sonar™ treatment to ensure the proper dosage rate. All new infestations were treated with a contact herbicide. Only one small infestation was found and no live *Hydrilla* was found within the sampled treatment areas. DNR will continue this level of treatment for three more years in hopes of exhausting the tuber bank and achieving positive control.

### Zebra Mussels

Zebra mussels have ex-

panded much farther south than reported in 2014. Small zebra mussels attached to SAV were first found by DNR biologists conducting juvenile fish surveys in Middle River in August. Follow up snorkel surveys in Middle River documented zebra mussels attached to SAV and artificially armored shore lines at multiple locations along with dark false mussels. A commercial crabber reported to DNR zebra mussels fouling gear set off Middle, Bush, and Gunpowder River subestuaries. Additional, unverifiable citizen reports from Elk River and Middle River were received in September. DNR will inspect buoy anchors from around the upper Chesapeake Bay for the fifth year in December.

### Water chestnut

Maryland DNR worked with the Sassafras Riverkeeper to remove water chestnut from Lloyds, Turners, Woodland, Island and Dyer creeks on the Sassafras. Biologists and volunteers also went out on the Bird River to remove it from Days Cove, and smaller coves near Railroad creek. Forty bushes were removed from the Sassafras and less

than five from the Bird. In VA, a much larger infestation of a related species, *Trapa bispinosa*, was found in Pohick Bay, on the VA side of the Potomac River. VA biologists and volunteers removed an estimated 5.8 tons of plants in 2015, compared to 3.6 tons measured last year.

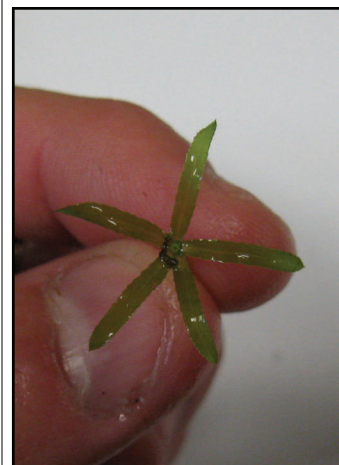
### Snakehead

The 2015 Actions taken by MD DNR to help control and prevent spread of Northern Snakehead in Chesapeake Bay watershed included:

- 1) Reviewing and commenting on the ANSTF adopted, National Control and Management Plan for Members of the Snakehead Family (Channidae);
- 2) Working with USFWS to directly remove snakeheads with boat electrofishing in a targeted tributary of Potomac River;
- 3) Incentivizing harvest by anglers and archers;
- 4) Encouraging reporting and harvest by the general public with press releases and tournaments;



*“The Maryland Department of Natural Resources (DNR) had a successful year two effort for the Hydrilla Management Plan in Deep Creek Lake (DCL).”*





## STATE UPDATES: WINTER 2015 MARYLAND (CONTINUED)

5) Discussing approaches to improve enforcement of existing regulations that prohibit live possession.

There were 63 sub-adults and 59 adults that were harvested from Pomonkey Creek between May and July by MD DNR and USFWS in an effort to determine the level of harvest needed to cause a reduction in population size. Currently these agencies are working with NPS and local politicians to host a fishing

derby that targets snakeheads at Great Falls National Park where the species has been identified this year. Snakeheads have been reported throughout most major tributaries of Maryland's Chesapeake Bay watershed, including the upper Chesapeake Bay. New sightings are reported and verified by MD DNR before being sent to USFWS, and then to USGS to be incorporated into their on-line database for aquatic invasive species.

### Mute Swans

During 2015, Mute Swan management activities by Maryland DNR (MDNR) and partners (US Fish and Wildlife Service, US Army) were limited due to a reduced (<60) Mute Swan populations. An aerial survey of the tidewater areas of the upper Chesapeake Bay was conducted in mid-April to locate swans and active swan nests for egg oiling and culling. Sixty-three swans and 11 nests were observed. A fall survey was also flown in mid-September to locate swans for control. Forty-eight adult swans and two broods containing 10 cygnets were observed.

### Blue/Flathead Catfish

Blue/Flathead Catfish have continued to expand in MD and VA. Tributary Summaries are available for the Susquehanna, Potomac, Patuxent, Nanticoke, Choptank, York, James, and Rappahannock Rivers. Maryland and Virginia have been collaborating on developing a plan to create a fishery that will control the current population and limit the spread into other rivers in the Chesapeake Bay region.



*“During 2015, Mute Swan management activities by Maryland DNR (MDNR) and partners (US Fish and Wildlife Service, US Army) were limited due to a reduced (<60) Mute Swan population.”*



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*Scholarship  
Committee*

*Chuck Boylen*

*Mark Heilman*

*Meg Modley*

*Bin Zbu*

*Chris Doyle*

*Mark June-Wells*

*Robynn Shannon*

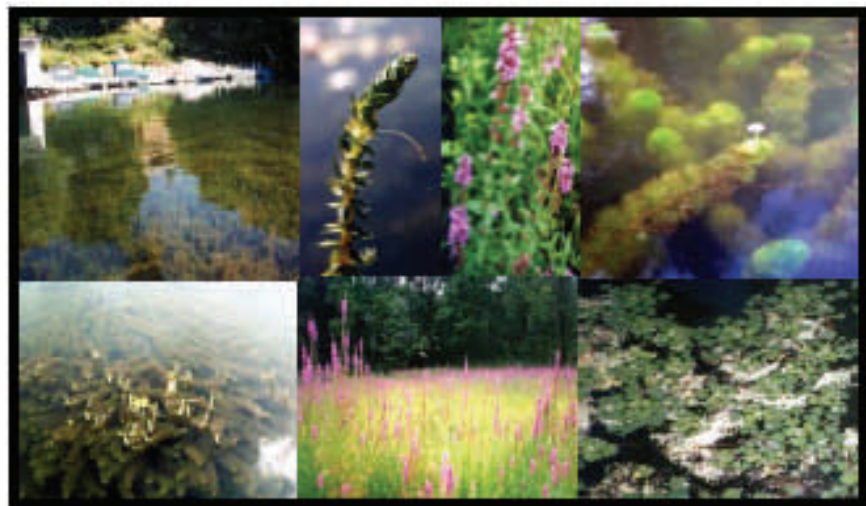
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# NEAPMS AT NALMS 2015 CONFERENCE

The North American Lake Management Society's (NALMS) Annual Conference was hosted in the Northeast this year. Numerous NEAPMS members attended the conference in Saratoga Springs, New York, spreading the word about our society.

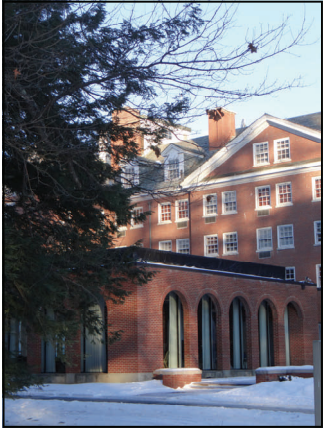


NEAPMS President Chuck Boylen and NEAPMS Secretary Amy Smagula staff the NEAPMS booth at the NALMS Annual Conference in November, 2015.



A familiar NEAPMS member attends the Paint, Sip, Fun workshop at the NALMS Annual Conference in Saratoga Springs, NY.





*“When done with the program, students will have completed all the academic requirements to be certified by NALMS. After a few months of work experience they can join an elite group of about 100 NALMS Certified Lake Managers.”*



## ENHANCING OPPORTUNITIES FOR CAREERS ON INLAND WATERS

**Bill Harman, CLM**

SUNY Oneonta Biological Field Station

Professionals with lake management skills are more in demand every year. Lake Managers work on lakes, ponds and reservoirs to reduce problems with weeds and algae, improve water quality and fisheries and help folks resolve conflicting recreational uses.

Nationwide, programs are being developed at liberal arts colleges leading directly to employment in positions in Science, Technology, Engineering and Mathematics (STEM) areas. New degrees are being offered at the Master’s degree levels. Termed Professional Science Master’s (PSM) degrees they require several weeks of cooperative experiences, effectively employment in professional venues, replacing the traditional thesis research required in liberal arts Master’s degree programs. A new PSM track has been developed and nationally approved at the State University of New York College at Oneonta where the only Master’s degree programs in Lake Management are offered. PSM programs require collaboration from an advisory board. To date Oneonta’s board includes Ken Wagner, Glenn Sullivan, Scott Kishbaugh, Scott Fickbohm, Scott Ingmire, Steve Souza, Mark Mobley, West Bishop and Bill Jones.

Admission to either the PSM or MS in Lake Management degree programs require a four year undergraduate degree, usually including courses in the natural sciences, communication, government and business. It is expected applicants may have a diversity of widely varying technical and liberal arts backgrounds. The program includes 32 hours of theory and closely-aligned field and laboratory experiences.

Five North American Lake Management Society (NALMS) Certified Lake Managers (CLMs) compose the faculty and staff at Oneonta’s Biological Field Station (BFS) on Otsego Lake, the headwaters of the Susquehanna River, where most of the program takes place. Since its establishment in 1967, the BFS has expanded from its original 365 acres to over 2,600 acres including over 30 ponds, wetlands and streams. A partnership with the NYS Federation of Lake Associations (NYSFOLA) provides access to hundreds of inland lakes. The BFS has recently undergone \$5,000,000 in renovations while the National Science Foundation has awarded six major grants for equipment acquisition and facilities improvements.

The PSM degree requires an 8 to 12 week cooperative experience in a professional venue. The MS degree requires thesis research involving the development and implementation of a comprehensive management plan and monitoring of short-term responses on a selected body of water. There is a core of required courses including Lake Management, Management of the Aquatic Biota and a Lake Management Seminar.

# ENHANCING OPPORTUNITIES FOR CAREERS ON INLAND WATERS (CONTINUED)

Electives include courses in biology such as Limnology, Lake Monitoring, Phytoplankton Ecology, Wetland Plant Identification and Delineation, Biological Invasions and many others. There are also electives in the Earth Sciences and more in all areas that one would expect to find at a liberal arts college with over 6,000 students.

To date, the minimum financial support any student in the MS track has received has been \$7,500 annually for the two year program, the maximum over \$17,000. It is expected that professionals offering co-op experiences will provide some support supplementing college fellowships. There have been two or three teaching assistantships available that include waiver of tuition and fees plus a stipend of \$4,000 annually.




Photo by B. Harman

The first students receiving the lake management degrees were employed before they finished the program. The majority have positions with consulting firms that manage water bodies from Georgia to Pennsylvania and Ohio and nearby states. When done with the program, students will have completed all the academic requirements to be certified by NALMS. After a few months of work experience they can join an elite group of about 100 NALMS Certified Lake Managers.

Those interested can contact Bill Harman, CLM, SUNY Oneonta Biological Field Station, [Willard.harman@oneonta.edu](mailto:Willard.harman@oneonta.edu); <http://BFS.Oneonta.edu>, or [www.Oneonta.edu/academics/biology](http://www.Oneonta.edu/academics/biology).

*“The first students receiving the lake management degrees were employed before they finished the program.”*



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# NEAPMS Annual Meeting January 12-14, 2016

## PRELIMINARY CONFERENCE PROGRAM

### Tuesday January 12, 2016

9:00-10:00 AM	<b>Cygnets Workshop Registration</b>
10:00 – 3:00 PM	<b>Cygnets Aquatic Applicator's Symposium</b> (lunch provided for workshop attendees) Presentations providing technical insight for aquatic applicators – RSVP required, see registration form for details, or contact Jo Ann Dunlap at <a href="mailto:jdunlap@cygnetsenterprises.com">jdunlap@cygnetsenterprises.com</a> .
12:30 – 5:30 PM	<b>NEAPMS Conference Registration</b>
3:30 – 5:30 PM	<b>Plant Workshop Open Session and Quiz*</b> Chris Doyle, Allied Biological *To include a special introduction and discussion on water soldier ( <i>Stratiotes aloides</i> ) by Robert McGowan of the Ontario Federation of Anglers and Hunters
5:30 – 6:30 PM	<b>Cocktail Hour in Exhibit Hall (cash bar)</b>
6:30 PM	<b>Dinner and Entertainment on Your Own</b> (a list of local eateries will be provided to registrants)

### Wednesday January 13, 2016

8:15 – 9:45 AM	<b>Registration/Exhibits</b>
8:30 – 9:30 AM	<b>Continental Breakfast</b>
9:45–10:00 AM	<b>Welcome</b> Charles Boylen, Ph.D., NEAPMS President
10:00 – 10:30 AM	<b>Boat Ownership as a Model for Lake Management</b> Kenneth J. Wagner, Ph.D., Water Resource Services
10:30 – 11:00 AM	<b>Regional Collaboration for Successful Aquatic Invasive Plant Management in the Northeastern US: Past History and Future Outlook</b> Mark Heilman, Ph.D., SePRO Corporation
11:00 – 11:30 AM	<b>New York State's New Aquatic Invasive Species Management Plan</b> Catherine McGlynn, NYS DEC
11:30 – 12:00 PM	<b>Emerging Risk: Water Soldier (<i>Stratiotes aloides</i>) in Ontario- Preventing its Spread to the Great Lakes</b> Holly Simpson, Ontario Ministry of Natural Resources & Forestry
12:00 – 1:00 PM	<b>Lunch</b>
1:00– 1:30 PM	<b>Industry Updates</b>
1:30 – 2:00 PM	<b>Monoecious <i>Hydrilla verticillata</i> Competition in Cool and Warm Climates</b> Amy Henry, NC State University
2:00 – 2:30 PM	<b>Monoecious <i>Hydrilla verticillata</i> in North Carolina Lotic Systems</b> Erika Haug, NC State University
2:30 – 3:00 PM	<b>Multi-Year Hydrilla Control Program at Deep Creek Lake</b> Mark Lewandowski, Maryland DNR
3:00 – 3:30 PM	<b>Break/Exhibits/Posters</b>
3:30 – 4:00 PM	<b>The Distribution and Ecology of <i>Nitellopsis obtusa</i> in New York, U.S.A.</b> Robin Sleith, The New York Botanical Garden
4:00 – 4:30 PM	<b>Sixteen Years with Starry Stonewort?</b> G. Douglas Pullman, Ph.D., Aquest Corporation
4:30 – 5:00 PM	<b>NEAPMS Business Meeting/APMS &amp; AERF Updates</b>
5:00 – 5:30 PM	<b>Poster Slam Session-fast-paced 3-minute poster overviews</b>
5:30 – 7:00 PM	<b>Poster Session/Exhibits/Attitude Adjustment Hour (Cash Bar)</b>
6:00 – 9:00 PM	<b>NEAPMS Awards Banquet</b>
9:00 – Wee hours	<b>NEAPMS Networking</b>



## Thursday January 14, 2016



7:30 – 8:30 AM	<b>Continental Breakfast/Registration/Exhibits</b>
8:30 – 9:00 AM	<b>Managing Hydrilla in Stormwater Retention Ponds</b> Eric Schutman, Syngenta Professional Products
9:00 – 9:30 AM	<b>Ecotoxicology and its Role in Aquatic Plant Management</b> Ashlee Kirkwood, Smithers Viscient
9:30 – 10:00 AM	<b>Combinations of Copper and Auxin Herbicides for Control of Variable-Leaf Milfoil in New Hampshire Ponds: A Small Plot Demonstration Project</b> William Ratajczyk, Applied Biochemists
10:00 – 10:30 AM	<b>Break/Exhibits/Posters</b>
10:30 – 11:00 AM	<b>Effectiveness and Yield of Hand Harvesting</b> Kenneth J. Wagner, Ph.D., Water Resource Services and Mercedes Gallagher, Center Pond Association
11:00 – 11:30 PM	<b>Triploid Grass Carp- A Biological Tool for Nuisance Aquatic Vegetation Management in Connecticut</b> Mindy Barnett, CT DEEP
11:30 – 12:00 PM	<b>Aeration's Effect on Algae: A Review of Successes and Failures</b> Patrick Goodwin, Vertex Water Features
12:00 – 1:00 PM	<b>Lunch and Silent Auction Announcements</b>
1:00 PM	<b>Adjourn</b>

## Posters (alphabetically by author)

### **Recreational Boat Use and Lake Disturbance in Relation to Non-Native Macrophyte Biomass and Native Macrophyte Communities in New York State**

Andrew S. Brainard, Ph. D. Candidate, SUNY ESF

### **Identifying the Effects of Eutrophication and Disturbance in the Nitella and Macrophyte Communities in Lake George**

Jeremy Farrell, RPI Darrin Fresh Water Institute

### **Pelagic Algal Data Collection and Analysis**

Claire Garfield, SUNY Oneonta

### **Interaction between Eurasian watermilfoil and the Specialist Milfoil Weevil, *Eurychiopsis lecontei***

Christine Goodrich, Ph.D. Candidate, RPI

### **The Flora of Yellowstone**

Eric Hellquist, Ph.D., SUNY Oswego

### **Spreading the Word, Not the Species: Expanding Watercraft Inspection and Boat Stewardship Programs Throughout New York**

Catherine McGlynn, NYS DEC

### **The Relative Frequency of Sexual and Asexual Reproduction in populations of *Myriophyllum spicatum* in Massachusetts**

Anastasia Mozharova, Ph.D. Candidate, UMASS Boston

### **Chemical Treatment on Eurasian watermilfoil (*Myriophyllum spicatum*) in Millsite Lake**

Nick Muehlbauer, SUNY Oneonta

### **Managing Eurasian Watermilfoil, Can Pulling Weeds Produce Results?**

Alejandro Reyes, Graduate Student, SUNY Oneonta

### **Reducing the Use of Algaecides and Herbicides in Lakes**

Kevin Ripp, Aquafix, Inc.

### **Utilizing an Aquatic Invasive Species Response Team for Landscape Level Management in the Adirondack Park**

Erin Vennie-Vollrath, Adirondack Park Invasive Plant Program and the Adirondack Chapter of The Nature Conservancy

### **Microscopic Plastic Particles as Emerging Pollutants**

Kiyoko Yokota, Ph.D., SUNY Oneonta





The 2015 Poster Contest, which featured a slam session and prizes for best poster in two categories, was a huge success. Do you have what it takes to win it all in 2016?



## SILENT AUCTION

Please consider contributing an item to the NEAPMS Silent Auction Table at the Annual Conference in January. Items in past auctions included poker chips, GPS units, top shelf Vermont maple syrup, the finest honey in NY State, roadside emergency kits and the famous Hydrilla Killa t-shirts.

Contact **Ann Bove** ([ann.bove@state.vt.us](mailto:ann.bove@state.vt.us))

or **John McPhedran**

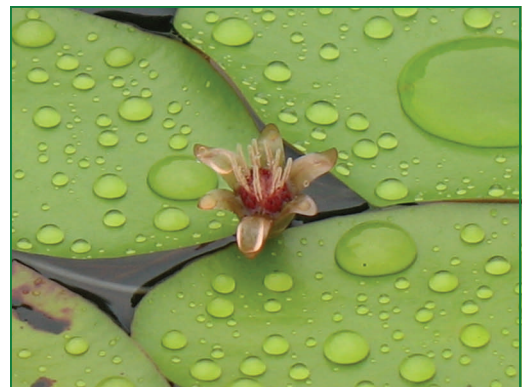
([john.mcphedran@maine.gov](mailto:john.mcphedran@maine.gov)) with questions or items to donate to the Silent Auction.

Proceeds from the Silent Auction go straight to the Scholarship Fund.



# The 2016 NEAPMS Scientific Poster Contest

The Board of Directors is pleased to announce the return of the scientific poster contest at the 2016 NEAPMS conference. Two categories will be awarded prizes supplied by a gracious sponsor: Student and Professional. Posters will be judged by an esteemed panel of NEAPMS members on criteria such as design and layout, suitability to the society's goals, study design, and presentation of the content. If you are interested in sponsoring the NEAPMS Poster Contest this year, please contact Glenn Sullivan ([glenn@alliedbiological.com](mailto:glenn@alliedbiological.com)). If you are interested in becoming a Poster Judge, please contact Meg Modley





**Check Out Our Website:**  
[www.neapms.net](http://www.neapms.net)

*If you'd like to advertise in the Nor'Easter, please contact Glenn Sullivan ([glenn@alliedbiological.com](mailto:glenn@alliedbiological.com)). Both 1/4 page and business card-sized ads are available.*

*If you have any questions, comments, or suggestions, please reach out to a Director for discussion at our January Board Meeting.*



*See you in January at Saratoga Springs!*

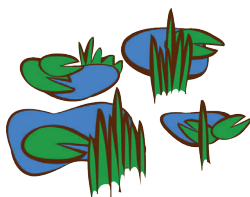
## ANNOUNCEMENTS

**February 26-27, 2016:**  
**PALMS**  
 State College, PA  
[www.palakes.org](http://www.palakes.org)

**March 21-23, 2016:**  
**WAPMS**  
 San Diego, CA  
[www.wapms.org](http://www.wapms.org)

**March 6-9, 2016:**  
**MAPMS**  
 Grand Rapids, MI  
[www.mapms.org](http://www.mapms.org)

**April 29-May 1, 2016:**  
**NYSFOLA**  
 Hamilton, NY  
[www.nysfola.org](http://www.nysfola.org)



**July 17-20, 2016:**  
**APMS**  
 Grand Rapids, MI  
[www.apms.org](http://www.apms.org)