

THE IPA NEWSLETTER

Mystic Lake, Middle Pond and Hamblin Pond in Marstons Mills, MA

Summer 2016 A quarterly publication of the Indian Ponds Association, Inc. Vol. 16 No. 3

IPA'S ANNUAL MEETING REPORT



The IPA Annual meeting for 2016 was again held at the lovely summer home of **Lew and Nancy Solomon** on Sunday, July 24th. We were all pleased to see that the wonderful weather cooperated and over 60 people met in the very warm but breezy lakefront lawn. Our members and friends gathered for a brief business meeting and a presentation by guest speaker **Mark Nelson**, a principal at Horsley & Whitten, followed by social time with food and wine.

After approving the minutes of the 2015 meeting we heard and accepted the financial report, presented by **Greg Cronin**, treasurer. Thanks to the generosity of our members, IPA has sufficient funds to continue producing this newsletter, to battle *Hydrilla*, and to continue our other efforts.

The Nominating Committee presented the slate of directors to be elected this year. For a first term: **Emory Anderson, Peter Atkinson, Holly Robillard, Barry Schwartz**; for second term: **Aaron Fishman**; for third terms: **Christine Bizinkauskas, Greg Cronin, Alex Frazee, Roberta Gough**; associates: **Dean Bryan, Susan Sawyer**. Our outgoing directors were **Emily Wheeler** and **Kathy Bryan**. Thanks are extended to each of them for their many contributions.

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HYDRILLA CONTROL UPDATE

This summer the Town of Barnstable contracted with SOLitude Lake Management to treat *Hydrilla* in Mystic Lake and Middle Pond. A systemic herbicide, fluridone, was applied on July 7th with a follow-up treatment on August 11th.

The proliferation of *Hydrilla* in Mystic Lake has been covered extensively in previous IPA newsletters. It is a notoriously aggressive invasive aquatic weed that has the potential to take over shallow portions of a freshwater body. Despite considerable efforts at hand-pulling, barrier implementation and "suction harvesting," it has steadily spread over the past six years. The plant's methods of propagation, including the formation of tubers that lie dormant while remaining viable for at least five years, make eradication a formidable challenge. Given the limited options available, the systemic herbicide fluridone (SonarTM) was thought to offer the best chance at control.

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Mark Nelson

IPA ANNUAL MEETING

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Treasurer Greg Cronin gave a brief report on the condition of the ponds and scholarship chair, Roberta Gough, presented the Schwarm Scholarship of \$1000 to **Mark Catanzariti**, who gratefully accepted and discussed his plans to study environmental science.

Emory Anderson introduced Mark Nelson, who spoke about the impact of septic systems on groundwater and lake systems. After his talk and time for questions and answers, we adjourned for a social gathering. The newly elected board of directors met briefly to elect officers for the coming year: **Emory Anderson** as president, **Peter Atkinson** as vice president, **Greg Cronin** as treasurer and **Maggie Fearn** as clerk.

—**Kathy Bryan**

MEET THE NEW IPA DIRECTORS

The IPA is pleased to welcome four new board members.

Peter Atkinson was born in the north of England, has been married to **Fiona** for 45 years, and they have two daughters. Peter commenced his career as a trainee accountant in the mid 1960s and held progressively senior management and executive positions in Brussels, New Orleans, Dubai, London and Houston before retiring in 2011 as president of a multi-national engineering and offshore construction company with operations in South America, Africa, the Middle East, Asia and the US Gulf of Mexico. He is a US citizen, golfer, beginner kayaker and amateur gardener with a home on Mystic Lake and an interest in its preservation.



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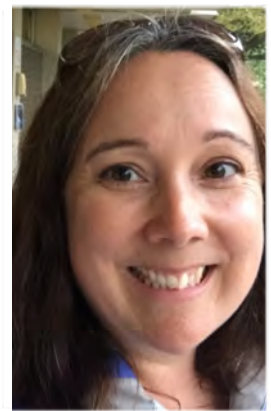
MEET THE NEW IPA DIRECTORS *(Continued from page 2)*



Not a newcomer to the IPA Board, **Emory Anderson** was re-elected at this year's Annual Meeting and was also elected president by his fellow directors. Emory first joined the IPA board in 2001 and then served as president during 2004–2008. Emory and his wife Geri have lived on the north shore of Mystic Lake since 1994.

Emory brings experience in scientific research and administration to the IPA. With a PhD in fisheries biology, much of his career (1970–1985 and 1994–1998) was spent at NOAA's Northeast Fisheries Science Center in Woods Hole as a fish stock assessment scientist. During 1985–1993 he was employed by the International Council for the Exploration of the Sea (ICES), the world's oldest (established in 1902) intergovernmental marine science organization headquartered in Copenhagen, Denmark, and served the last five years as ICES general secretary. From late 1998 until his retirement in September 2004 he was assigned to NOAA headquarters in Silver Spring, MD as the liaison between NOAA Fisheries and the National Sea Grant Office (located in NOAA's Office of Oceanic and Atmospheric Research), where he served as program director for fisheries. Since retirement, Emory has been involved in consulting and scientific reviews, and since 2008 has served as an editor of the ICES Journal of Marine Research and as editor of the ICES Cooperative Research Report series.

Five years ago, **Holly Robillard** and her young family moved to the Cape where Middle Pond immediately became a playground for the family. This draw to the water is a natural fit with her background in marine biology and environmental studies. Holly has worked for various non-profits to bring the natural environment into school classrooms as well as taking children into the natural environment.



When looking for a house on the Cape, **Barry Schwartz's** one criteria was that it be close to a lake for kayaking and swimming. Fortunately, he and his family found the Lynxholm neighborhood, and a home just a short walk to South Beach on Mystic Lake. They quickly joined the Indian Ponds Association, have enjoyed the annual meetings and speakers and joined in pulling *Hydrilla* to keep that nasty weed at bay.

As an active swimmer and kayaker, Mystic Lake and Middle Pond are extremely important resources that Barry is committed



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MOSQUITO CONTROL ON CAPE COD

The **Cape Cod Mosquito Control Project** has been using Integrated Pest Management (IPM) to control mosquito populations in Barnstable County since inception in 1930. This technique requires using a variety of methods to manage a pest population and this is what you will find our crews doing in your neighborhood on a regular basis! Mosquito larvae develop in stagnant water. The foundation of our project is to keep water moving and allow fish access as predators to control mosquitoes where ever feasible. Approximately every five or six years, depending on weather conditions, our crews work with Barnstable Natural Resources to open the outlet at Middle Pond. This prevents high water from the ponds from flooding adjacent low lying areas and creating mosquito habitat.

Our Barnstable crew regularly checks the area for standing water throughout the mosquito season. In addition, we are conducting surveillance in Marstons Mills to not only evaluate the efficacy of our program, but also to look for the presence of disease in mosquitoes in the area. This year, we have found mosquitoes carrying West Nile virus in the IPA area. The species that carry this disease develop in man-made containers, so residents can reduce their risk by checking their yards weekly and dumping out any containers holding water. Our crew also checks and treats the catch basins in the neighborhood. The main product we use to kill mosquito larvae is Bti, a bacteria, that specifically attacks mosquitoes. If anyone is experiencing a mosquito problem they can contact Cape Cod Mosquito Control at 508-775-1510.



-Gabrielle Sakolsky, Entomologist

"We have a lot of birds here in our area. If you find their mating season and put up bird houses at the right time, you will have birds in them two minutes later. The house wren is a brown bird that makes its nest out of sticks. Tree swallows like to put feathers in their nest. Black capped chickadees will fill a nest with moss. We hope you have fun watching our birds."

Taya (age 11) and Josie (age 8) Robillard



HYDRILLA UPDATE

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Treatment had been approved and funded for last year but was held up because of uncertainty over the effects the fluridone herbicide might have on nearby cranberry bogs. The biggest obstacle involved the bog directly north of Mystic Lake, which uses lake water for irrigation during the same months as the proposed herbicide application. This uncertainty was resolved by extending the water intake pipe in Mystic to a depth well below the thermocline—the herbicide does not mix with water at that depth, so water drawn for irrigation should not be affected.

Fluridone is a systemic herbicide that disrupts photosynthesis and can kill *Hydrilla* at concentrations as low as 3–5 parts per billion (ppb). For it to be effective, there has to be a sustained exposure for up to 60 days during the peak growing season. The Town of Barnstable contract with SOLitude called for an initial application of 6 ppb in Mystic Lake with up to two follow-up treatments of 3 ppb. It also called for an initial application of 20 ppb in a limited (approx 5 acres) area of Middle Pond where *Hydrilla* has been observed over the past three years.

A preliminary survey indicates that the treatment has been highly successful in killing the existing *Hydrilla* in Mystic Lake. Fluridone is a non-selective herbicide, so much of the native aquatic vegetation in Mystic Lake has also been affected. The treatment in the isolated area of Middle Pond also appears to have been successful in eliminating *Hydrilla*, with minimal impact on the native vegetation. A couple of small patches of *Hydrilla* were observed growing in Middle Pond in early September, considerably less than was found in the past two years.

The contractor posted notices a few days before treatment, but we received some feedback from residents that the advance notice was inadequate. Fluridone has low toxicity to animals and generally requires no restrictions on swimming or fishing. At the concentrations used, there is no restriction on drinking water. Detailed information about fluridone can be found at <http://dnr.wi.gov/lakes/plants/factsheets/FluridoneFact-sheet.pdf>. Because of the persistent nature of *Hydrilla*, treatments with fluridone will have to be repeated over several years to be effective.

—Greg Cronin

NOTICES OF LAKE TREATMENTS

Contractors and the Town of Barnstable post notices near access points to the lakes when they wish to notify residents and lake users of lake treatments. Notices may be posted on the streets, on trees, on posts or on official Town signs. The notices inform the public of the time of the treatment, and when the lake will be safe for drinking, pets, irrigation and swimming. ***Please be aware that the treatment will likely be ongoing, so be on the lookout for any notices that may be posted.***

Report from the Massachusetts Congress of Lake and Pond Associations (MACOLAP) Annual Workshop and New England Chapter of the North American Lake Management Society (NECNALMS) Annual Conference.

Being recent newcomers to the Cape and generally uninformed on the issues of lake management and preservation, Fiona and I were delighted by the opportunity to attend the MACOLAP & NECNALMS Annual Conference held in Marlborough on May 20th & 21st this year. We saw the opportunity as a necessary learning experience wherein we could hear some of the history and challenges facing the Cape fresh water lakes and ponds, and we were not disappointed.

The theme of the conference, attended by approximately 70 sponsors, speakers, staff and participants from throughout New England, was "Specific Strategies for Livable Lakes." The plenary session opened with a presentation on "The Three Legged Stool of Lake Management - Science, Economics and Institutional aspects" by program chair and IPA friend **Dr Ken Wagner**. Our take away from this session was that generally there are no quick, easy, scientific solutions for water quality issues; good and lasting solutions are usually expensive and the towns, commissions, lake associations and state and federal agencies need to make a more coordinated effort to prioritize goals, promote sound management and to facilitate successful action.

The initial presentation was followed by a very informative and constructive presentation from **Paul Hunt**, environmental manager, Portland

Water District, on their development of the "Sebago Lake Sub-watershed Assessment Project". Over the past 15 years the 450 miles of watershed surrounding Sebago Lake have been the subject of multiple surveys and erosion control projects based primarily on citizen interest and not on outcomes which would benefit the lake. The Portland Water District project was set up to evaluate the 34 sub-watersheds in the inclusive 450-mile watershed and rank them in order of importance to the overall water quality of the lake and prioritize future erosion control work in the watershed that would most benefit the quality of Sebago Lake.

The third session presented by **Patrick Goodwin**, Vertex Water and Aquatic Systems Inc., addressed "Lake Restoration Using Aeration and Alum When Watershed Management is Not Enough." This presentation covered the restoration of a 14 acre man-made community lake in Florida which was experiencing an extreme case of algae blooms, fish kills and objectionable odors. The restoration strategy incorporated an upgraded aeration system and alum treatments to reduce high levels of nutrients in the water column. The positive results illustrated the importance of in-lake treatment options for lake restoration when watershed management alone is insufficient.

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GO TO THE IPA WEBSITE: www.indianponds.org

IPA DIRECTORS *(continued from page 3)*

to keeping as pristine as possible. Barry loves walking down to South Beach and looking out over the lake to see mother nature in her unspoiled beauty. He feels fortunate to have acres of trees and very few homes that surround the lake. After swimming in the lake, he feels cleaner than when he takes a shower--and that's how we all want to keep it! Barry recently became knowledgeable in taking water samples to the County Health Dept. for analysis. Now that we've found a way to keep the ducks away from the beach, dock and float, water samples have tested very low for *e coli*. Barry is now happily in a semi-retirement period working just three days a week so he and his wife, Joyce, spend their time in Boston as well as Marstons Mills. They have two adult sons who also love the area and spend quality time with them.

LAKE MANAGEMENT CONFERENCE *(Continued from page 6)*

The general sessions were augmented by workshops on many topics of interest including:

- Running an effective hand harvesting program
- Aquatic plant ecology and identification
- Harmful algae ecology and control
- Low impact landscaping for lake-front homeowners
- Herbicide choices for rooted plant control
- How to perform a tax evaluation of your lake
- How to get a permit for drawdown, herbicides or dredging your lake
- Proactive management of harmful algae blooms
- Shoreline erosion
- A case study on European frog-bit
- Unit costs for lake management options
- Building an effective lake association
- Lobbying for your lake

The conference closed with presentations on "Cyanobacteria: types, blooms and toxins" and "A multi-tiered approach to monitoring".

While Fiona and I clearly could not attend every workshop and often did not fully comprehend the science or always understand the terminology, we did find those workshops we did attend informative and we felt we learnt far more than we contributed.

We also gained an appreciation of the frustrations many individuals and lake associations feel due to a perceived lack of coordination between the various New England state and federal environmental agencies and their sometimes inconsistent and diverse application of their individual mandates and environmental regulations. Nevertheless we came away from the conference inspired by the positive and proactive attitude of many participants and the overall enthusiasm and passion New Englanders have for the preservation of their environment and their willingness to get involved.

-Peter and Fiona Atkinson

CRAIGVILLE BEACH

a poem by
Jim McGuire

I went to my father's beach today
The one he loved as a young man.

Together, we have been coming here
Nearly 100 years.

It is July.

In the springtime flowers emerge as the season's warm.

In the summer, people come to this common ground of my father's beach, where the waves are manageable and the water refreshes.

The people here are from many places, they are of many colors, and they speak many languages. All the languages are filled with the warmth of the day.

They sit under a pure blue sky with lazy clouds shaded by a kaleidoscope of beach umbrellas. They share food and stories and games.

Here generations mix easily.

Children build castles against the tide with family and friends.

Hormones fill the air as young bodies display and hint of the next generation.

At my father's beach.



Photo Credits: Josie, page 4 - Holly Robillard; Mark Nelson, page 2 - Betsey Godley

INVASIVE GRAY WILLOWS BACK ON IPA RADAR SCREEN

An article in the summer 2006 issue of the IPA newsletter first drew attention to the presence of the invasive gray willow (*Salix atrocinerea*) in the Indian Ponds area. This tree thrives along the shores of ponds and streams, and because it is an introduced species, it offers little in the way of food or shelter for native organisms. Gray willows shade out everything and destroy the habitat of native plants, spread by seeds and sprout roots from the tips of their branches as they take over more and more of the shoreline. If left uncontrolled, gray willows will eventually obliterate a pond's shoreline and invade open water areas.



In autumn 2006, two experts (Tim Simmons, a restoration ecologist with the Massachusetts Division of Fisheries and Wildlife Natural Heritage & Endangered Species Program, and Tom Rawinski, a botanist with the U.S. Forest Service) were invited by the IPA to investigate and confirm the presence of gray willows along the shores of the Indian Ponds. Simmons and Rawinski pointed out that it is necessary to eradicate the gray willows and other invasive plant species in order to preserve native plant species and the animal life that depends on them for habitat and sustenance. As a result, the IPA conducted a survey of the shorelines of the three Indian Ponds and discovered that the majority of waterfront properties were infested with gray willows totaling several hundred trees.

Following considerable discussion with Town officials on possible plans for removing gray willows from homeowners' properties, a plan was finally developed and approved in November 2007. The plan involved a single group permit from the Town's Conservation Commission for the removal and treatment of gray willows. This single permit, the paperwork for which was handled by the IPA, was applied for collectively by all the owners of waterfront property on the three ponds who signed up to participate. The permit authorized Bartlett Tree Experts to cut and dispose of gray willows and treat the stumps with the herbicide "Rodeo". In order not to disrupt or damage other vegetation in the buffer zones of waterfront properties, cutting and treating was done from the waterside. Cut trees were loaded onto a floating brush platform, transported to an access point on the pond, offloaded, chipped, and trucked away. Costs to each property owner varied based on the number and size of trees removed. The actual removal work was begun in July 2008 and continued each summer for the subsequent two years, resulting in the removal of gray willows from well over half of the waterfront properties as well as some trees from Town-owned property.

Six years have elapsed since the last trees were removed under the three-year permit approved in 2007. During this time, there have been some changes in the ownership of waterfront properties, and the IPA has been made aware of some renewed interest to have gray willows removed. Consequently, this issue will be revisited by the IPA Board of Directors this fall to determine if there is sufficient interest to warrant an attempt to develop a new plan in collaboration with Bartlett Tree Experts and to seek a new permit from the Town. To assist in gauging the amount of interest, pond residents who are aware of gray willows on their property and are interested in having them removed are asked to contact Emory Anderson (emoryanderson@comcast.net).

—Emory Anderson

“ To preserve and protect the natural environment and ecological systems of the Indian Ponds and surrounding parcels of land and watershed and to participate in studies and work with other agencies, individuals, and groups to educate the public, serve the community, and promote and preserve the Indian Ponds and surrounding areas.”

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FORWARDING SERVICE REQUESTED

