

# THE IPA NEWSLETTER

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

Summer 2017     A quarterly publication of the Indian Ponds Association, Inc.     Vol. 17 No. 2



## GENEROSITY AND INVOLVEMENT

IPA members have been thoughtfully generous with their financial contributions in support of the ongoing work of the organization. This generosity, which has been evident each year, bodes well for the future of the IPA. A huge THANK YOU to those who have contributed!

We all know that money is necessary for the support of any organization; however, the personal involvement of people is equally important and indispensable. In the case of the IPA, participation by individual members is vital if the organization is to continue to function as it has for the past 60 years. In the past, we have been fortunate that members have willingly served on the board of directors when called upon. Between now and the 2018 Annual Meeting, we will be actively searching for at least three director candidates.

**Please respond positively if asked.**

## SNORKELING THE PONDS: A CLOSE-UP VIEW

On August 25 I undertook an aquatic vegetation survey of the areas treated with the herbicide, Sonar, to combat the invasive weed, *Hydrilla*. I first snorkeled the five acres north and east of the "cut" in Middle Pond. The results were encouraging. There was significant healthy native vegetation and only a handful of isolated, sick-looking *Hydrilla* patches. At least two native plants that had been common in the area, *Elodea* and a *Naiad* species, were conspicuously absent, which is to be expected following a Sonar treatment.

I also surveyed the area on the west end of Mystic in the area known as "ground zero," where the most prolific *Hydrilla* has historically been found. I found no signs of it, which is reassuring, but the quantity and diversity of the native vegetation has significantly declined following the lake-wide treatment. *Quillwort* was the only native plant I saw that was doing well. Three days later (August 28), I surveyed the littoral zone of the entire southern end of Mystic and once again found no evidence of *Hydrilla* and a paucity of native vegetation.

-Greg Cronin

### IN THIS ISSUE

- Annual Meeting Recap
  - Introducing Barnstable Clean Water Coalition
  - Status of Middle Pond Herring Run
  - On the Water: A Brief "State of the Ponds" Report
  - Final Word on 2017 Marstons Mills River Herring Count
  - Snorkeling the Ponds: A Close-up View
  - Goldfinch Glory
- AND MUCH MORE....**

## IPA OFFICERS AND DIRECTORS 2017-18

**President**  
Emory Anderson

**Vice President**  
Peter Atkinson

**Treasurer**  
Greg Cronin

**Clerk**  
Maggie Fearn

**Directors**  
Christine Bizinkauskas  
Kathy Bryan  
Aaron Fishman  
Betsey Godley  
Roberta Gough  
Holly Robillard  
Barry Schwartz

**Database Manager**  
Maggie Fearn

**Newsletter Editor**  
Kathy Bryan

**Webmaster**  
Tamar Haspel

IPA, Inc., PO Box 383  
Marstons Mills, MA 02648

<http://www.indianponds.org>  
[info@indianponds.org](mailto:info@indianponds.org)



The IPA is a 501(c)(3) organization and a registered public charity. All dues and contributions are tax deductible. This newsletter, with a circulation of approximately 700, is a forum for the exchange of ideas on matters concerning the IPA's mission, and the views expressed by authors of articles do not necessarily represent official IPA policy.

## FINAL WORD ON 2017 MARSTONS MILLS RIVER HERRING COUNT

In the previous issue of this newsletter, it was reported that over 5,200 river herring were visually counted at the Mill Pond herring ladder this spring, a 60% increase from the previous year. In spite of this increase, the run remains much smaller than years ago when local residents remember seeing vast numbers of river herring ascending the ladder to head for Middle Pond and Mystic Lake to spawn. In 2006, a moratorium on the harvest of river herring was imposed by the Commonwealth of Massachusetts, and a voluntary counting program was begun under

the direction of Kevin Galvin (initially with the Marstons Mills River Day Committee and later the Marstons Mills River Watershed Association) to provide data to the Massachusetts Division of Marine Fisheries (DMF) where the count data would be used to generate an estimate of the run size. This program continued under Kevin's direction until his untimely death in January 2012. Annette Nichols of the IPA coordinated the program in 2012 and 2013, after which it was taken over and handled by Three Bays Preservation (now Barnstable Clean Water Coalition). The run size calculated by DMF using the Mill Pond count data for 2006–2017 peaked at 87,308 in 2012, declined steadily to only 13,954 fish in 2016, but increased to 36,148 in 2017 (see table).

Year	Visual count	Run size
2006	719	6,482
2007	1,741	15,136
2008	5,232	43,948
2009	1,332	11,668
2010	478	4,174
2011*	53	494
2012	10,327	87,308
2013	8,117	56,987
2014	6,396	47,006
2015	3,667	23,840
2016	483	13,954
2017	5,251	36,148

\* Data likely underestimated due to count not covering entire spawning migration.

This spring, counts were resumed at the Middle Pond ladder, the second step for river herring to reach Middle Pond and Mystic Lake. This voluntary effort, under the direction of the Town's Natural Resources Program, resulted in a visual count of only 1,310 fish, according to Natural Resource Officer Amy Croteau, but an additional 1,000 were included in the count as a result of a member of the Mashpee Wampanoag Tribe personally moving fish, which was well within his rights as a tribal member. Volunteers who participated in the Middle Pond ladder count

(Continued on page 8)



introduced the current members of the board of directors and extended thanks to Director Chris Bizinkauskas for handling all arrangements for the post-meeting social hour, to Co-tuit Liquors, Stop & Shop, and Trader Joe's for their donations of beverages and food, and to Rev. Ernest Ryden of Osterville for the use of his PA system.

The minutes of the 2016 Annual Meeting and the treasurer's annual report were both presented and approved without comment or correction. The report

## ANNUAL MEETING RECAP

The 2017 Annual Meeting of the Indian Ponds Association was held Sunday July 16 at the home of John and Deirdre Kayajan at 32 Heath Row in Marstons Mills. Over 40 attendees gathered on a warm, sunny afternoon on the lawn overlooking beautiful Mystic Lake. After thanking the Kayajans for hosting the meeting, President Emory Anderson injected some history in his opening remarks by noting that this was the 60<sup>th</sup> Annual Meeting of the organization and that the last time the meeting was held at this venue in 2002, a large slate of new Directors was elected and the current by-laws were adopted. He named the following individuals (several now deceased) who were board members at the time of that meeting: Kevin Kavanagh (president), Ted Elliott (vice president), Bob Frazee (secretary), Joe Brown, John Hansen, John Kayajan, Bruce McHenry, Sheila Place, Ed Schwarm, and Emory Anderson. Lastly, he

of the Nominating Committee, which identified one candidate (Betsey Godley) for a new two-year term on the board of directors and two candidates (Kathy Bryan and Maggie Fearn) for their second two-year terms on the board, was presented, and the slate of candidates was approved unanimously. The recommendation by the board of directors to change Article VI (Association Funds), Section 2 (Maintenance of Funds) of the IPA by-laws was approved. The new wording of Section 2 is: "All funds will be kept in an account maintained in the name of the Association. Withdrawal in excess of \$500 [previously \$100] will require the signature of the president and treasurer. Withdrawal of funds in excess of \$1000 [previously \$500] will require the approval of the board of directors."

*(Continued on page 6)*

**TO SEE NEWSLETTER PHOTOS IN FULL COLOR  
GO TO THE IPA WEBSITE: [www.indianponds.org](http://www.indianponds.org)**



## INTRODUCING BARNSTABLE CLEAN WATER COALITION

Our mission is simple, but critical to every single person living in the 75+ square mile area in the Town of Barnstable: we will work to restore and preserve clean water. We use science to impact the way people think about, and use, water for drinking and for outdoor recreation, from swimming to boating, fishing, sailing, and all other uses of our priceless resource. We are passionate about both freshwater and salt water.

We do this through four directives: we monitor, educate, advocate, and mitigate.

For over 20 years, when we went by our former name of Three Bays Preservation, Inc., we began tracking water quality in marine embayments and kept a close eye on freshwater systems including ponds, streams, rivers, and coves. Through monitoring, we measured and continue to oversee the quality of water systems and compare these data over time.

Informing people about water quality is a critical task, and we do this through mainstream education programs, policy forums, and community events, all of which take place inside a building, in the field, or on the water.

*(continued on page 8)*



**American goldfinch in winter colors.**

## GOLDFINCH: In Winter Colors!

The other day, I saw a bird at one of my feeders that I could not identify. That, in itself, really surprised me because I thought I knew all of the birds that visit my deck. I searched through my Peterson's and finally found it. It turned out to not be a new bird, but a bird that should not be here in that configuration. It was a goldfinch in winter colors. Goldfinches should not have changed colors yet, as demonstrated by two or three that have visited my feeder since.

There are several types of birds that appear at our feeders on Cape Cod. We have those birds that fly in, grab a seed, and fly to some convenient location to brace the seed under one talon while they peck at it to crack the shell and get to the seed contained

inside. These include the chickadees and titmouses.

Then we have the species that sits on our feeder, cracks the seed cover with their bill without having to peck at them, and, using their bill and tongue, consumes the seed right there and grabs another one. The finches all belong to this last group. You can identify this kind of bird by

*(Continued on page 7)*

## ON THE WATER: A BRIEF “STATE OF THE PONDS” REPORT

Regular readers of this newsletter will notice a recurring theme in our all-in approach to pond stewardship. To that aim the African proverb “it takes a village” is apt: every member of our community has a role to play in ensuring a bright future for our ponds and the ecosystem that supports them.

This philosophy underpins the IPA’s collaborative efforts with government and like-minded organizations. Examples of that abound: for example, Zee Crocker’s impassioned argument at our recent Annual Meeting that as all water is connected, we are thereby all connected too.

Nothing however is more critical to advancing the IPA’s mission than participation of local neighbors and friends. After all, who is more likely to notice a change or development in your own back yard than you?

To follow is a brief update on the state of our ponds and some recent initiatives and news. All these activities offer scope for you to get involved – be it taking part in testing, volunteering for one of our work groups, or simply by keeping a close eye on the ponds and letting us know if you spot anything unusual.

### IPA pond water testing

We’re pleased to report that water quality in Hamblin Pond, Middle Pond and Mystic Lake is in good shape for this point in the season. As summer progresses it’s natural for the water to become less clear due to growth of algae and other phytoplankton. Also, sustained warmer temperatures speed up decomposition of organic matter, which can make the water appear cloudier than early in the season. Our positive report card is based on regular sampling at various depths undertaken in all three ponds since May. We test for temperature, dissolved oxygen, and clarity. In late August we also participated in the Cape Cod Commission’s annual Pond and Lake Stewardship (PALS) pro-

gram. This includes the above-mentioned measurements plus water samples collected at various depths for analysis of nitrogen, phosphorous, alkalinity, chlorophyll a, and pH at the School for Marine Science and Technology (CSP/SMASST) at UMASS Dartmouth.

### Update on invasive *Hydrilla* control

An issue over the past six to seven years has been the invasive *Hydrilla* in Mystic Lake and the area around the “cut” into Middle Pond. After efforts to eradicate it by hand-pulling and sunlight barriers weren’t adequate we asked the Town of Barnstable for help. Every year since the Town Council has supported pond treatment by herbicide (Sonar), allocating \$67,810 in the latest fiscal year. The most recent application of Sonar, which is harmless to humans, fish and animal life, took place on August 2 by the Town’s contractor, SOLitude Lake Management.

### Recovery of mussel populations

We’ve also had good news on the native mussels in Middle Pond and Mystic Lake. Fieldwork conducted for the Town by ecological consultants Biodiversity in July showed mussel populations in both ponds have significantly recovered over the last six years. Their preliminary results indicate densities are much higher at all their previously surveyed sites, and they found juveniles of all species – notably tidewater mussels – indicating a high level of regeneration. We will look forward to a full report after the data from the latest survey have been collated and analyzed.

### Watching brief on invasive Asian clams

On a different front, Greg Cronin recently investigated the reported presence of invasive Asian Clams near the public beach at Hamblin Pond. Upon snorkeling the area Greg found a handful, which were bagged and submitted to the Town Conservation Division. Any removal work deemed necessary would be the Town’s responsibility.

-Maggie Fearn

## IPA ANNUAL MEETING RECAP

*(Continued from page 3)*



**Roberta Gough and Schwarm Memorial Scholarship recipient, Mark Agostinelli.**

In his report, President Anderson said he enjoyed being back on the board after an eight-year absence working with people dedicated to the IPA's mission. Thanks to the action and vigilance of a great number of members, there have been no major 'brush fires' in the past year. He briefly summarized some of the IPA's recent activities: pond water testing at two-to-three-week intervals beginning in May; improved communication to residents of herbicide treatments of Sonar to Mystic Lake and parts of Middle Pond by the Town's contractor, SOLitude Lake Management; participation in Marstons Mills Village Day held in early September; our quarterly newsletter communication to residents and friends in the wider community, with a circulation of 700, with each issue also posted on the IPA website; a new gray willow removal initiative in conjunction with Bartlett Tree Experts; and participation with other groups to draft and submit a grant proposal to the National Oceanic and Atmos-

pheric Administration to help fund repair of the badly deteriorating Middle Pond herring run (see article on page 9).

Director Roberta Gough, chair of the Scholarship Committee, presented a check for \$1,000 to Mark Agostinelli. A Sturgis Charter Public School graduate and resident of Marstons Mills, Mark achieved the full International Baccalaureate Diploma. He intends to pursue a career in math, economics, or environmental science and will attend Princeton University. While at Sturgis, Mark contributed to marine science, resurrecting a computer-aided designed program for marine mammal trans-



**Zenas Crocker talking about the need to find better ways to restore and preserve clean water on Cape Cod.**

## IPA ANNUAL MEETING RECAP

*(Continued from page 6)*

port. His team's invention is already being used by WHOI and other organizations to help return beach-stranded dolphins to their natural habitat. The Schwarm Memorial Scholarship honors the memory and contribution of former IPA Director Edward Schwarm, who passed away in 2005.

The remarks by guest speaker Zenas Crocker, new Executive Director of the Barnstable Clean Water Coalition (formerly Three Bays Preservation), are summarized in a separate article on page 4.

A social hour followed the meeting. The new Board of Directors also met briefly to elect officers. All incumbents were re-elected.

*-Emory D. Anderson*

## GOLDFINCH

*(Continued from page 4)*

its conical shaped bill. Cardinals are also in this group, and they just fly in and park at my feeder.

Goldfinch is the state bird of Washington, New Jersey, and Iowa. They often flock with pine siskins, although I have not noticed that species on Cape Cod. Their preferred feeder food is black oiled sunflower seed, so since I don't use those in my feeder, I don't see them often. They do need water, so I more often see them at my water bowl.

The goldfinch's natural habitat is weedy fields and floodplains, where plants such as thistle and asters are common. They are also found in cultivated areas and orchards. American Goldfinches can be found at feeders at any time of the year, but especially during winter. I have not found any reference to why the bird I saw was already in winter colors. They seem to be fairly late changers.

This was a good example of why you should look for more identifying attributes than just color. The bird I saw did have a wedge-shaped bill, several wingbars, and a notched tail.

To encourage goldfinches to visit your yard and feeders, you should plant native thistles, as well as native milkweed. The milkweed is also important for the monarch butterfly. I don't know if you can buy those at Country Gardens, but they are abundant on the power lines and easy to dig up and replant. For your feeders, they are most attracted to sunflower seeds and nyjer. They don't mind feeders that sway in the breeze and are just as comfortable feeding on the ground below feeders where other birds have spilled uneaten seeds. You should keep the ground below your feeders raked so that no ground feeders pick up any contagious diseases.

Happy birding,

*-Dave Reid*



**MARSTONS MILLS RIVER HERRING COUNT***(Continued from page 2)*

observed hundreds of herring lined up in the flume below the ladder, but witnessed very few fish actually making the final jump into Middle Pond. Speculation is that many fish did so at night when volunteers were not present. It is also speculated that many herring were victims of predation during their journey from the Mill Pond ladder to the Middle Pond ladder. The total count reported to the DMF of 2,310 resulted in an estimated 10,200 herring entering Middle Pond and Mystic Lake, less than one-third of the estimated run size passing through the Mill Pond ladder.

According to Croteau, "While the count at Mill Pond is important in determining the population size as a whole, the count at Middle Pond is more indicative of the number of fish that actually make it to spawning grounds." Current plans are to again count the herring next year at the Middle Pond run. Thanks to those who participated this year, and we hope that many will sign up for next year.

-Emory D. Anderson

**Note:** John Sheppard, DMF Diadromous Fisheries Biology & Management Project, New Bedford, is gratefully acknowledged for providing much of the run size data shown in the table on page 2.

**BARNSTABLE CLEAN WATER COALITION***(Continued from page 4)*

We believe an informed electorate represents our best collective opportunity for consensus on water quality and restoring and preserving our priceless water supply for drinking, swimmers, boaters, fishing enthusiasts, and other outdoor recreational users.

Our small but intrepid team of engineers, scientists, seasonal help, and interns implement and test non-traditional technologies (NTTs) including alternative septic systems, permeable reactive barriers, water diversion gardens, and nature-based treatment systems. We also work to support municipal treatment projects and engage in public/private partnerships, all within the Cape Cod 208 Plan that addresses Section 208 of the federal Clean Water Act that directs municipalities to devise ways to treat wastewater. At BCWC, we do the right thing at the right time for the right reason the right way.

This fall, we hope to enhance our fledging partnership with the IPA as we start to plan the installation of various technologies along the Marstons Mills River, including the Indian Ponds. We believe we can piggyback the Town of Brewster's efforts on pond treatment and work to install similar pilot systems in the Indian Ponds area. These efforts should lay the foundation for solutions that are more long lasting and effective than the periodic alum treatments now being used. Stay tuned for more information!

For more information, please visit: [www.bcleanwater.org](http://www.bcleanwater.org) or reach us by email at [info@bcleanwater.org](mailto:info@bcleanwater.org). Our office is located at 864 Main Street in Osterville, and our phone number is 508-420-0780. I look forward to meeting you!

Zenas Crocker  
Executive Director, Barnstable Clean Water Coalition



## STATUS OF MIDDLE POND HERRING RUN

The Middle Pond herring run, connected to Middle Pond at its southwest corner, is a key link in the pathway that allows river herring to travel from the sea into and through Cotuit, West and North bays, Prince Cove, under Routes 28 and 149 in Marstons Mills, through the Mill Pond herring run, up the Marstons Mills River, and finally into Middle Pond and Mystic Lake where fish spawn each spring. Following spawning, the adults and the young (several months later) return to the sea via the same pathway. Because of its present poor condition and coupled with frequent periods of insufficient water flow, plans have been underway by the Town to replace the existing run and associated structures in order to facilitate the improved passage of river herring during their annual upstream and downstream journeys.

The run is a 1,100-foot man-made structure consisting of a series of weirs and pools currently constructed of timber and plywood that culminate in a concrete/wooden ladder that empties into a channel/lagoon several hundred feet long that connects to Middle Pond. The run was initially built by the Town of Barnstable in the 1880s to provide river herring with direct access to Middle Pond and Mystic Lake via a passage that bypassed the cranberry bogs farther upstream where the Marstons Mills River originates. Over the years, it has suffered deterioration and disrepair; various attempts have been made to repair the fish ladder and improve water flow. In 2003, a new concrete weir/ladder was constructed which lowered the fish run elevation by 1.5 feet. In 2005 (thanks to a \$20,000 grant from the Gulf of Maine Council on the Marine Environment obtained by Edward Schwarm of the IPA), 140 feet of the run were lined with FastDitch, a plastic stream-stabilizing liner, in an attempt to improve its condition. Because this material proved unsatisfactory, it was removed in 2007 and replaced by pressure-treated plywood. Periodic attempts to temporarily repair selected sections of the run have since been made.

Planning by the Town for the replacement of the run has been ongoing since 2010, when it was identified as a priority project under the Cape Cod Water Resources Restoration Program. The initial design proved unfeasible because of high costs, oversized footprint of the proposed design, and strict program time constraints that did not allow sufficient time for project completion. The Town then hired an engineering firm to complete additional hydrologic analyses and to re-design the structure to minimize ecological impact and reduce the cost. The project was put out to bid in 2016, but bids received were nearly double the available Town funds.



This spring, a proposal was submitted by the Association to Preserve Cape Cod, with support from the Town of Barnstable (Department of Public Works and Natural Resources Program), Indian Ponds Association, Three Bays Preservation, Massachusetts Division of Marine Fisheries, and the Cape Cod Conservation District for a NOAA Coastal and Marine Habitat Restoration grant in order to obtain the necessary additional funds (about \$365,000) to complete the project, whose overall cost is about \$756,000. In late July, it was learned that the proposal was not funded. Fortunately, the Town has granted an extension on the existing funds, and other funding sources are now being explored.

*-Emory D. Anderson*

**Map showing the Middle Pond herring (heavy green line) extending from the Marstons Mills River on the left to Middle Pond (top right).**

*"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." IPA Mission Statement*

INDIAN PONDS ASSOCIATION, INC.  
P. O. BOX 383  
MARSTONS MILLS, MA 02648

FORWARDING SERVICE REQUESTED

