THE IPA NEWSLETTER

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

Summer 2020 A quarterly publication of the Indian Ponds Association, Inc. Vol. 20 No.3

IN THIS ISSUE

PRESIDENT'S REPORT

With our annual meeting having been canceled this year because of COVID-19, I take this opportunity to review what has been happening within the IPA, particularly during the past three months since the issuance of our spring newsletter.

Election of Directors

One of the important things that normally occurs at an annual meeting is the election of Directors. Because the annual meeting was cancelled, there was no opportunity for the usual election of Directors. Although the IPA By-laws are silent on how to deal with a cancelled annual meeting, Article III only says that "*In the event of the loss of a board member, the president will call a meeting of the board to appoint an interim member*." Given the very unusual circumstances brought on by the pandemic, the Board agreed to exercise common sense for the good of the organization, accept a very broad interpretation of the above statement in Article III as allowing the Board to act on behalf of the membership, and "cast a single ballot" approving the slate of candidates mentioned below.

In addition to the vacancy created by the departure of Aaron, who was leaving the Board by virtue of having served the maximum three consecutive 2-year terms, six other Directors, whose first or second 2-year terms were expiring, were eligible for re-election. Those who had served two terms and were eligible for a third term were Barry Schwartz, Peter Atkinson, and Emory Anderson. Those who had served only one term and were eligible for a second term were Bill Hearn, Jim McGuire, and Butch Roberts. Nicole Sturgis was nominated to fill the directorship vacated by Aaron Fishman (see article about Nicole on page 4). This slate of candidates was "elected on behalf of the IPA membership" by the Board via e-mail.

Looking ahead, two Directors (Maggie Fearn and Kathy Bryan) will cycle off the Board next year and three more (Anderson, Atkinson, and Schwartz) will exit in 2022. As you can see, there is an ongoing need for replacement Directors. Members willing to serve on the Board are encouraged to contact any of the existing Directors to learn more about what it means to serve in this way.

Board of Directors business

Because of the pandemic, the Board had not met in person since February 5, until its first in-person meeting in an outdoor setting using face masks and six-foot distancing on August 20. During the interim, it continued to conduct business via e-mail correspondence.

(continued on page 3)

TO SEE NEWSLETTER PHOTOS IN FULL COLOR
GO TO THE IPA WEBSITE: www.indian-ponds.org

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

http://www.indianponds.org
info@indianponds.org

UPDATE ON CYANOBACTERIA MONITORING IN THE INDIAN PONDS

This summer, staff from the Association to Preserve Cape Cod (APCC) have been diligently monitoring levels of cyanobacteria at the northeastern corners of the three Indian Ponds. Their work, which began in early June, complements similar monitoring done by the Town of Barnstable's Department of Health and Environment at each of the Town's public beaches. As reported in lots of news articles, cyanobacteria are a kind of microscopic freshwater algae that can form blooms capable of releasing harmful levels of potent toxins. To date, cyanobacteria levels in each of the Indian Ponds have not exceeded levels that warrant a "warning" posting or a "beach closure". We are fortunate so far, given that several nearby ponds in Barnstable (e.g. Long Pond in Marstons Mills, Schubael Pond, Lovells Pond, Hinckley Pond in Barnstable, Parker Pond in Osterville, Fawcett Pond in Hyannis) have received warning postings or beach closures.

The reasons why harmful levels of cyanobacteria have not been detected in the Indian Ponds are not clear. Mystic Lake and Middle Pond both contain substantial populations of *Microcystis,* an especially toxic type of cyanobacteria. The phytoplankton in Hamblin Pond is dominated by *Dolichospermum*, another toxic genus, but one that is less toxic than *Microcystis.* In all three ponds, cyanobacteria densities have been cycling up and down, but at levels below those warranting warnings or beach closures. At times, levels can be just below those warranting a warning posting. It is commonly stated that harmful cyanobacteria blooms are due to a combination of high nutrient levels and elevated water temperatures. It would seem that this year, surface water temperatures are conducive to blooms: water temperatures have exceeded 80°F since late July. Can it be that nutrient levels are relatively low in the Indian Ponds? I personally believe that it is more complicated than that. Perhaps the reason for the ongoing safe levels of cyanobacteria in the Indian Ponds is due to their relative depths. After all, they are among the deepest ponds in the area. Phosphorus, a key nutrient for algae, has a complex association with lake-bottom sediments. In relatively deep lakes, like the Indian Ponds, the water column thermally stratifies with the coldest water on the bottom and the warmest water on the top. During summer, much of the phosphorus associated with the sediments remains locked up in the deepest water and is unavailable to reproducing algae. Perhaps this explains why these ponds haven't needed postings, while more shallow ponds, which do not have strong thermal stratification, are experiencing routine postings. Continued monitoring is clearly warranted because any protection provided by the summer thermal stratification will disappear as the waters cool in late September and October. At that time, phosphorus levels may increase with resulting increases in cyanobacteria – but by then, the reduced water temperatures may be less supportive of blooms. That being said, just last year, Santuit Pond in Mashpee had harmful levels of cyanobacteria into the month of December. There is much to be learned about the dynamics of cyanobacteria blooms in our ponds.

Bill Hearn

NEW IPA WEBSITE IN PROGRESS

A new website is being developed, but is not yet ready to be launched. However, the old one is still there and we're always looking for good photos and videos of the ponds and their wildlife. Please send any you'd like to share to: IndianPondsWebmaster@gmail.com.

PRESIDENT'S REPORT

(continued from page 1)

Status of IPA membership

For a number of years, membership, defined as having paid annual dues, remained in the vicinity of about 170 households. It peaked at 196 in 2017, but has steadily declined since to 171 in 2018, 151 in 2019, and 149 this year. We are uncertain as to the cause for this serious decline, but the Board intends to delve into the matter and investigate ways and means of improving the membership. You can help by telling any new residents in your neighborhood about the IPA and inviting them to join.

Water quality study of Mystic Lake

As reported in the spring newsletter, the IPA Board has authorized a study of Mystic Lake this spring and summer to determine, based on water and sediment samples, the type and amount of phosphorus present, evaluate the sources of phosphorus, and assess options for improved control of the phosphorus so as to reduce the growth of planktonic algae. Dr Ken Wagner, Water Resources Services of Wilbraham, MA, who is conducting the study, did the first of three water and sediment sample collections on May 21 and the second on July 15. The third and final collection will be in early September, with Wagner's report to follow sometime later.

Pond testing

The three Indian Ponds have been tested bi-weekly for cyanobacteria and for dissolved oxygen (DO), temperature profiles from surface to bottom, and water clarity. As reported in the spring newsletter, the cyanobacteria monitoring this year is being done totally by personnel from the Association to Preserve Cape Cod (APCC). This began the first week of June and will continue through October. As of this writing, no dangerous levels of cyanobacteria have been observed in any of the three ponds. For more details, see article on page 2.

The testing for DO, temperature, and clarity began on May 12 in Mystic and Middle, and on June 1 in Hamblin, and will continue until about the end of October or early November, depending on weather conditions. In May and early June, water clarity in both Mystic and Middle was very good, with visibility down to 5–6 meters (16–20 feet). Visibility in Hamblin at the time of the first testing there on June 1 was poor (only 2.5 meters or 8 feet) due to the surface being covered by pollen, but subsequently improved to a high of over 7 meters (about 24 feet) in late July. Water clarity in Mystic and Middle gradually diminished in July and into August because of the production of algae, a normal occurrence. In the deeper two ponds, Mystic and Hamblin, thermal stratification at about 7–8 meters depth began in early to mid-June and continued until the present. Oxygen levels below the thermocline drop very quickly to almost zero from there to the bottom. Thanks to the warm weather, surface temperature in all three ponds was around 82°F by early August. But the warm weather and lack of any significant rain has also had an impact on the ponds; water levels have been steadily declining all summer. The IPA will again participate in the annual Cape Cod Pond and Lake Stewardship (PALS) program, the sampling and water sample collection for which takes place in the August-September period.

The fact that water clarity was so good in May and into early June was noticed by a lot of people. In fact, Dr Ken Wagner, who is conducting the study of Mystic Lake, commented about the high clarity to this writer following his first sample collection on May 21 and also pointed out that his water samples contained high concentrations of zooplankton, which feed on the planktonic algae. Following his second sampling on July 15, when water clarity had diminished considerably from the first sampling, he noted that the water samples were virtually devoid of zooplankton, explaining that they had been consumed by recently hatched young alewives, for which zooplankton is the principal food item. This is all nature in action.

SOLitude personnel administering treatment on Mystic Lake. Photo by Betsey Godley

Treatment for *Hydrilla*

The annual Town-funded chemical treatment of Mystic Lake and parts of Middle Pond for the control of the invasive *Hydrilla* was done this year on July 30. A follow-up treatment was completed on August 20. These treatments were conducted by SOLitude Lake Management, Shrewsbury, MA.

(continued on page 5)

PRESENTATION OF SCHWARM SCHOLARSHIPS

Ever since the Edward Schwarm Memorial Scholarship was first awarded in 2006, we have been able to meet and congratulate the winners in person at the IPA annual meeting in July. However, this year due to restrictions on group meetings, the annual meeting was cancelled. Our winners, Summer Stagman and Ethan Weiner, were presented with their certificates and checks in a socially distant way in the driveways of their respective homes. We wish them the best as they begin their college educations this fall. They have both shown perseverance and enthusiasm and we know they'll be successful!

Betsey Godley
Photos provided by Betsey Godley

Summer Stagman

Ethan Weiner

MEET THE NEWEST BOARD MEMBER

I am a long-time Cape Cod resident. I grew up in western Massachusetts in the town of Longmeadow and graduated with a BSBA from Western New England College. My husband Barry and I started a boat business in West Yarmouth that we ran for many years before selling it in 2002. We raised our two children here in Barnstable. I have been and continue to be working as a bookkeeper here on the Cape. I have always had a love of the water and grew up on a freshwater lake in the summers as a child. We lived on Lake Wequaquet for many years and have recently moved to Mystic Lake. I enjoy working outside in my yard, doing projects with my husband, traveling, entertaining, and spending time with family and friends.

Nicole Sturgis

PRESIDENT'S REPORT

(Continue from page 3)

Recreational activity on the ponds

With the weather being so warm and COVID-19 placing restrictions on many recreational activities, more people have been observed making use of the wonderful opportunities afforded us all by the ponds. We have noticed more people on the water with boats of all types, especially pontoon boats which have increased noticeably in number over the past several years on Mystic and Middle. Lots of kayakers and paddle boarders have been seen, as well as swimmers. While fishing has traditionally been a favorite activity on all three ponds, this seems to have slackened off this summer, especially on Mystic and Middle. Many have commented about seeing fewer fish of any species this summer. The reason(s) for this is uncertain. Have eagles, ospreys, and other fish-eating birds taken more than usual? Has the warm water been responsible? Hamblin Pond, however, continues to be popular for trout fishing.

Interactions with other lake and pond associations

We reported in the winter newsletter that the IPA had hosted a meeting on February 5 of representatives from various lake and pond associations within the Town of Barnstable during which a range of topics were discussed pertaining to water quality, sewage treatment, and Town management of its aquatic resources. It was agreed that the associations should continue to meet in order to investigate possible sources of funding for pond water quality issues and to better identify and articulate common concerns so as to frame appropriate questions and proposals to the Town. Unfortunately, the onset of the pandemic prevented further in-person meetings, but eventually we hope to again convene such meetings to pursue the above action items.

On a positive note, the Town has employed a new staff person to work on water quality issues. In April, Amber Unruh was hired as Senior Project Manager – Special Projects in the Department of Public Works. She will be involved in the Town's Comprehensive Wastewater Management Plan (CWMP), coordinating the annual estuaries and ponds monitoring and management plans, stormwater improvement projects, as well as managing various grant funding for projects in Barnstable. Since April, she has applied for various grant funding, managed the monitoring of estuaries, and is working with BCWC and SMAST to kick off the PALS sampling. Amber can be contacted at amber.unruh@town.barnstable.ma.us or 508-790-6400.

Emory A. Anderson

EAGLE FEATHER LAW

In the past several years, we have grown accustomed to seeing bald eagles in the skies over Cape Cod. We were also excited to hear, based on a report released to the press in May by the Mass. Division of Fisheries and Wildlife, that the first bald eagle nest since 1905 had been spotted on the Cape in the Town of Barnstable. This obviously bodes well for the future of these magnificent birds on the Cape. However, given the probability of people seeing bald eagles on a more frequent basis, we thought it appropriate to bring to your attention some important facts about eagle parts and feathers.

Bald eagles, as well as other birds, lose feathers over time in a process called molting. An eagle does not lose all of its feathers at a single time, but does so gradually; new feathers then replace the old ones. According to the National Eagle Center in Wabasha, MN, "For primary flight feathers, bald eagles will typically replace them once every year. In order to maintain balanced flight, they will molt their flight feathers symmetrically (the same feather on each wing). It then takes up to 3 months to fully replace a molted flight feather. For their contour feathers (outer body feather) and their downy feathers (insulator feathers), they continually molt a few at a time and will generally replace all of their feathers over a two year period." Therefore, because of the presence of bald eagles on the Cape, you may have occasion to find eagle feathers in the woods or on or near a lake where such birds might be perched or hunting. **Possession of such feathers is illegal according to federal law.**

(continued on page 7)

BROWN-HEADED COWBIRDS

A few years ago, I was driving down to Hyannis and as I passed my neighbor's house, I saw a bird playing in the dirt in his front yard. It was a bird that I had never seen before so I thought I would try to remember to look it up when I got home. This was back in the day when my "rememberer" worked a little better than it does now, so I was able to look it up. It turned out to be a brown-headed cowbird and was a new bird for my list.

The brown-headed cowbird male is distinguished by its finch-like head and smaller size. The adult male is black in color, with a distinctive brown head. The female is slightly smaller and is dull gray. Their total length is about 6–8 inches. The wingspan is about 14 inches and its weight is 1–2 oz, with the females being the lighter of the two.

Male brown-headed cowbird

The brown-headed cowbird is a "brood parasitic icterid". In plain English, that means that the female lays her eggs in the nests of other birds and then abandons them to be raised by the owners of the other nests. Since she may lay up to 24 eggs, she must be busy finding other nests to lay them in. The interlopers usually are the first chicks to hatch and immediately begin to remove any other eggs in the nest, usually by working them up to fall over the edge to the ground. Brown-headed cowbird eggs are a mottled gray-green and are usually quite distinctive from other eggs in the nest, but very few host birds seem capable of telling that they have an interloper in with their own eggs.

Female brown-headed cowbird

Each cowbird is raised by foster parents, but instead of flocking with others of the species that raised them, the young cowbirds begin congregating with other cowbirds before their first winter. It seems, according to some behavioral scientists who study those things, that cowbirds learn to recognize each other through sight and sounds.

Some birds, such as the yellow warbler, have a specific call that seems to be well known by birds of other species. This call is distinct from its alarm call for predators, such as blue jays. This call warns that a brown-headed cowbird is in the neighborhood. When female birds hear this call, they immediately rush to cover their nests to prevent the cowbird from laying an egg. Cowbirds trick more than 200 bird species into raising their young.

Brown-headed cowbirds feed on the ground in mixed species groups of blackbirds and starlings. Males gather on lawns to strut and display for mates, while females prowl woodlands in search of nests. Cowbirds are noisy, making lots of clicks, whistles, and chattering calls. In addition, they also have a gurgling flowing song.

As I said, I first saw the cowbird several years ago, so you might ask what brought it to mind for this article. Over the past weekend, on our back deck where I have four feeders set up, I saw a little sparrow trying to feed a bird twice its size. When I looked up the bird being fed, I found it to be an immature brown-headed cowbird. They are definitely in our neighborhoods, so keep an eye out for strange birds.

Dave Reid

TRIBUTE TO CURTIS CLAYMAN

Curt Clayman

Former IPA Director and seasonal resident of Wheeler Road, Dr Curtis (Curt) Clayman passed away on July 17 at the age of 82. Curt was elected to the Board in 2002, but served only until 2005 owing to his inability to devote as much time as he wanted to the work of the IPA while still maintaining his full-time medical practice as a family medicine specialist in Ashburnham, MA. With over 55 years in the medical profession, he had graduated from Boston University School Of Medicine in 1965 and was long affiliated with Heywood Hospital in nearby Gardner, MA. Curt had training in a wide range of medical disciplines and, in a sense, became a "jack of all trades" in his family practice.

Although Curt's time as an IPA Director was relatively short, he nevertheless devoted considerable time and energy to the work of the organization. He could always be counted on to speak up on issues at Board meetings as well as annual meetings. Being a skilled writer, he wrote three different articles for the IPA newsletter, one about mercury poisoning in humans in which he briefly reviewed this from social, medical, nutritional, and preventative viewpoints (fall 2003), another on the effect of run-off on bodies of water (spring 2004), and the third on sewage treatment as one answer to pollution (fall 2004). In all of these, his intent was to provide useful information to readers which would be beneficial to them and to the Indian Ponds environment.

My remembrance of Curt relates to his conversational trait. Regardless of the venue, one could always count on him to either start or join in a dialogue and, more often than not, enliven it with some humorous stories. We will all miss him and his friendly demeanor at IPA gatherings.

Emory D. Anderson

EAGLE FEATHER LAW

(continued from page 5)

Eagle feather.
Photo by Danielle DeYoung.

An eagle feather can be anywhere from 6 to 12 inches long and may have slightly different coloration depending on what kind of feather it is (wing, tail, body, or insulator) and whether it came from an adult or juvenile.

The federal Bald and Golden Eagle Protection Act or Eagle Act of 1940 prohibits the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit. Only Native Americans are allowed to possess any parts of either golden or bald eagles. **Anyone may take pictures or hold parts, but may not take and keep any eagle parts.** Fines for possession of any eagle parts, including feathers, range up to $250,000. For more details on the law regarding bald eagles, go to the following website: https://www.fws.gov/midwest/eagle/.

On the Cape, members of the Mashpee Wampanoag Tribe are allowed to possess bald eagle feathers and to use them to honor elders and their accomplishments. If someone should find an eagle feather, please contact the Mashpee Wampanoag's Director of Natural Resources, Chuck Green (508-477-0208 ext. 7 or chuckie.green@mwtribe-nsn.gov). Chuck is the recipient of four eagle feathers for his contributions to the community and environmental concerns. Field Agent Dale Oakley (dale.oakley@mwtribe-nsn.gov) can also be contacted, and someone from the Department will collect the feather. According to Director Green, you may hold onto a feather until the proper authorities are contacted and it can be handed over.

Emory D. Anderson and Danielle DeYoung

"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