THE IPA NEWSLETTER

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

Spring 2024

A quarterly publication of the Indian Ponds Association, Inc.

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MARK THE WEEKEND OF JULY 20–21: IPA PONDS APPRECIATION DAY AND ANNUAL MEETING

Be sure to reserve some time on Saturday July 20 and Sunday July 21 so that you can participate in two big IPA events. The first-ever Ponds Appreciation Day will be held on Saturday and the 66th Annual Meeting will be held on Sunday. We hope to see you there. See the poster announcements for the two events on page 3.

INDIAN POND ASSOCIATION SCHOLARSHIP AWARDS

Emory and Geri Anderson Scholarship

The Indian Ponds Association is proud to announce Carter Hickey is the 2024 recipient for this scholarship. Carter lives in Marstons Mills and will graduate from Barnstable High School in June.

Some of Carter's accomplishments are as follows:

- Inducted into the National Honor Society.
- Achieving the rank of Eagle Scout at age 16. His Eagle Scout project was making improvements at Sandy Neck Beach. Carter is now a trained adult leader for the Boy Scouts of America.
- Becoming an Ambassador for the Robotics Pathway and Club and being instrumental in growing the BHS club to 30 students.
- Employed as an intern for the Barnstable Clean Water Coalition collecting water samples.
- Led studies in the Environmental Science class of the local water sources and ran tests in the school lab to help determine the cause of bacterial blooms.
- Co-founded new board gaming club to provide students an all-inclusive safe environment for an after-school activity.
- Tutors students in English and math.

This fall, Carter will attend the University of Maine for Civil Engineering with plans to focus on Environmental Engineering. Carter states that he hopes, "to return to the area in the future and help to make changes to improve our environment and allow us to interact with our ecosystem in a more environmentally friendly manner."

Edward Schwarm Memorial Scholarship

The Indian Ponds Association is proud to announce Hailey Fink is the 2024 recipient for this scholarship. Hailey lives in Marstons Mills and will graduate from Barnstable High School in June. Hailey was a Barnstable High School Dual Enrollment student taking college classes at Cape Cod Community College.

Some of Hailey's accomplishments are as follows:

- Member of the Math Honor Society.
- Member of Mu Alpha Theta, a National High School and Two-Year College Mathematics Honor Society.
- Member of the Barnstable 4-H club since 2014 and has participated in the Leadership Club Youth Leader for the last four years. Joined the 4-H kitchen committee, cooking meals, planning events, and making the kitchen more sustainable. Participated in the Muddy Paws Dog Club, winning first at states in 2018 and 2019.
- Member of the BHS Environmental Green Club. (Continued on page 6)

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A NOTE FROM YOUR PRESIDENT



The Indian Ponds Association Board of Directors has been very busy since the last newsletter. Starting with a discussion about mussels with Dr Allison Roy, University of Massachusetts Amherst and US Geological Survey and Dr Jason Carmignani, Mass. Natural Heritage and Endangered Species Program, we decided to have a Ponds Appreciation Day. Dr Roy also encouraged us to initiate another mussel survey to gauge the health of our mussel populations. In the meantime, we have the upcoming alum treatment, the plans for which are moving along n a steady, slow regulatory pace.

Dr Ken Wagner of Water Resources Services, under the direction of Amber Unruh from the Barnstable Department of

Public Works, has been selected to oversee and manage the alum treatment. The project has passed through the Mass. Division of Marine Fisheries, the Mass. Natural Heritage and Endangered Species Program, and the Barnstable Conservation Commission and has been approved to move forward. The next step is the selection of a contractor to do the work. As approved, the treatment will take place between October 1 and December 31, 2024. You will have an opportunity to ask questions at our Annual Meeting on Sunday, July 21.

During our meeting on February 20 with Dr Roy, and Dr Carmignani, it was suggested that the time was right for another mussel survey of Mystic Lake and Middle Pond. The Board of Directors approved this project, and we are in the process of contracting with Biodrawversity, LLC, Leverett, MA, to do the survey later this summer. This is the same organization that performed the mussel surveys in 2007, 2009, 2011, and 2017. This survey will give us a clear indication as to the health of our mussel population, its recovery from the massive die-offs experienced in 2009 and 2010, and a baseline for comparison with the survey required to be conducted four years after the upcoming alum treatment. This comparison will determine if there will have been any impact on the mussel population because of the alum treatment.

Dr Carmignani also offered to host a snorkeling-with-mussels event to provide hands-on education about the mussels within our ponds. This exciting opportunity will be part of our Ponds Appreciation Day to be held on July 20. We are partnering with other conservation-minded organizations on the Cape to create this free event with activities for all ages. We hope to build a connection between the Indian Ponds Association, the broader Marstons Mills village, and the local conservation-minded organizations through a shared appreciation of the natural world in and around our ponds. See the notice posted in this newsletter and mark this date on your calendar.

Our bi-weekly pond testing began on May 9 and will run through the middle of October. This is an opportunity for anyone to learn how we monitor the water quality of our three ponds. This process takes less than a couple of hours and is a great opportunity to get out onto our ponds and learn what we do. The data, both current and historical, has been critical to understanding the health of our three ponds and alerting us to developing problems. Back in 2019, this data alerted us to the deteriorating condition of Mystic Lake and the need for the subsequent pond study by Dr Ken Wagner that prompted this current planned alum treatment. It has also convinced us that the earlier alum treatments to Hamblin Pond (1995 and 2015) are working extremely well and are providing very good clarity and water quality to that pond. This testing protocol is now the gold standard on the Cape, so much so that Barnstable County, through the Cape Cod Ponds Initiative has contracted with the Association to Preserve Cape Cod to do this testing on 50 of the ponds on Cape Cod that do not have the benefit of this data collection by an organization such as the IPA. *(Continued on page 7)*

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NOTICE:

Indian Ponds Association Annual Meeting

> Sunday July 21, 2024 3:00 to 6:00 PM

The Michael R. Kramer Center at Fuller Farm, 995 Route 149

Business Meeting: Election of Board, Scholarship Awards

Discussion of the Mechanics of the Alum Treatment

Traditional Social Hour

Indian Ponds Association Ponds Appreciation Day

Saturday July 20, 2024 10:00 AM to 3:00 PM Hamblin Pond Town Beach

Events: Snorkeling with Mussels Kayak Race Turtle Nest Building Kids Activity Table Tour of Bog Restoration Project

Co-sponsors: Barnstable Land Trust Orenda Barnstable Clean Water Coalition

Marstons Mills Historical Society's 2024 Hydrangea Festival

Jarden Cours

Saturday July 13th and Sunday July 14th, 2024 10am to 4pm Four Beautiful Gardens http://www.marstonsmillshistorical.org/HydrangeaFestival This is a rain-or-shine event, to benefit the Marstons Mills Historical Society

Come and enjoy the flowering of the Season!

HELP PROTECT OUR MUSSEL POPULATION FROM ZEBRA MUSSELS



Zebra mussels are typically found in infested lakes and rivers attached to hard surfaces including rocks, other mussels, plant stems, docks, boats, and pipes.

The threat

In Vermont, zebra mussels have become established in Lake Champlain and Lake Bomoseen; in Massachusetts,



they have been observed in Lake Onota (Pittsfield) and Laurel Lake (Lee and Lenox); and in Connecticut: Lake Zoar, Lake Lillinonah, and Lake Housatonic. Zebra mussels have been detected in decorative moss balls sold in pet stores throughout New England

(see picture). While assessing fish communities in a lake in southeastern Quebec last year, a zebra mussel was found attached to a lake chub (*Couesius plumbeus*), a species of minnow typically about 12 centimeters long. The mollusk had latched onto the hapless minnow using protein fibers called byssal threads, which they also use to attach to plants, rocks, and concrete.

A previous article about zebra mussels in the 2009 summer issue of this newsletter (see newsletter archives on IPA website) reported the first confirmed sighting of this invasive species in July 2009 in Laurel Lake near Lee, Massachusetts.

Description

Zebra mussels (*Dreissena polymorpha*) get their name from the striped pattern on their shells. Shells are usually yellowish brown, but can vary from light to dark with many or few stripes. Zebra mussels are D-shaped and generally do not exceed 2 inches in length. They attach to objects using strong, sticky threads called byssal threads.

Impact

Zebra mussels have many ecological and economic impacts in waters they have invaded. They reproduce quickly, form dense colonies, and can completely coat lake bottoms in densities of more than 10,000 per square meter. Zebra mussels are efficient filter feeders. One mussel can filter one liter of water per day, siphoning vast amounts of microscopic plants known as phytoplankton from the water. This reduces available food resources for native species that rely on plankton and can impact native mus sel

populations in particu-lar, which have greatly de clined since the introducion of zebra mussels. Zebra mussels also impact native mussel species by attaching to the outside of their shells, suffocating them.



Zebra mussel shells are extremely sharp and break easily when stepped on, which can cause injury to people walking or swimming in infested waters.

Control and prevention

Colonies in intake pipes have been treated chemically and thermally. However, once established in lakes and ponds, populations are almost impossible to eradicate. The best management option is spread prevention.

Zebra mussels are usually spread unintentionally on boats, trailers, and other vessels as well as equipment used in the water. Zebra mussel larvae are microscopic and float in the water column. This makes them easy to accidentally transport in live wells or bait buckets and other areas that contain water or stay damp. Suspended larvae can also spread by water currents.

Adult zebra mussels can be spread when attached to boat hulls or plant fragments caught on boat trailers. When vessels and equipment are transported to another waterbody without proper cleaning, zebra mussels can be spread and introduced to the new lake or river.



A CAPE COD LAWN

If you have lived on the Cape long enough, you probably know what a Cape Cod lawn is. Some older properties still retain these mosaics of moss and a variety of native species that may include sedges, violets, wintergreen, lowbush blueberry, bearberry, and native little bluestem grass. This is what a Cape Cod lawn is composed of—whatever will grow in the poor sandy soils of our region. Often there are mosses of different kinds, and sometimes what grows has flowers, like blue-eyed grass (*Sisyrinchium montanum*).

Cape Cod lawn is an open area that is not irrigated, fertilized, or otherwise treated with chemicals. It is diverse with species, undulating with height of plants, a natural area, except for maybe occasional mowing as necessary to maintain walkways during the growing season. It goes dormant in the heat of the summer, and many a true Cape Codder brags about the last mow at the end of June and not having to touch the mower until the fall!

While many native plants will show up on their own because they are deposited by the wind, or birds, or The traditional turf lawn of suburbia demands water and lawn chemicals—and mowing. Our Cape summers are dry, and even hotter and drier in recent years with watering bans in almost all Cape communities. Our waterways are overbur-



dened with nutrients, some of which come from fertilizers and stormwater runoff. The truth is, the suburban turf lawn just doesn't belong on Cape Cod.

Granted, giving up lush turf lawn that's green all yearround means a social change for some. But change can happen. We already have an acceptable alternative, and it's the Cape Cod lawn. It requires a more relaxed view of our yardscape and turning away from the hyper-pressure to have golf course perfection that essentially grew out of successful marketing by the lawn industry for over 75 years. As the author of *A New Garden Ethic*, Benjamin Vogt, says, "We just have to 'rethink pretty'."

Changing a social norm is possible. Remember when we made the healthy move to ban smoking from public spaces? Some thought it was an impossible change, but it happened, and we are all better for it. So too, we can move from fertilized lawns to a good old Cape Cod lawn.

If you already have a Cape Cod lawn, know that your yard demonstrates your stewardship of the Cape's natural resources and shows that you care about the Cape's water and a healthy environment.

How do you transition to a Cape Cod lawn?

- Simply stop lawn treatments, including fertilizing and spreading lime (often done to try to change the pH—a futile effort in the long term). Stop irrigating. Water conservation is always a good practice.
- Reduce your mowing frequency. It will benefit pollinators and other valuable insect life.
- If you can't go cold turkey (or your roommate can't) you can top-dress with compost and overseed bare areas in late spring or early fall with Dutch white clover and drought-tolerant fescue grass seed available at your local nursery.
- Allow moss to flourish. (It doesn't need mowing!)
- Control invasive species. Know the non-native invaders on your sites so that you'll know the appropriate action to keep them at bay. For example, if you have

A CAPE COD LAWN (Continued from page 5)

bittersweet on your property, you will want to pull any young seedlings that appear.

- Leaving some little bare sandy spaces is okay! It may be the perfect habitat for one of our many solitary native bees to nest, such as the squash bee that pollinates your zucchini.
- Plant trees for shade—this will help your Cape Cod lawn stay greener longer. You'd be surprised what a few hours of shade will do.
- · While many native plants will show up on their own be-

HELP PROTECT OUR MUSSEL POPU-LATION FROM ZEBRA MUSSELS

(Continued from page 4)

The most effective way to prevent the spread of zebra mussels is to practice **Clean**, **Drain**, **Dry** spread prevention methods. **Drain** all water from your boat, canoe, kayak, and other vessels and any equipment used in the water. **Clean** off any mud and plant fragments and dispose of properly. **Dry** all damp areas of boats and vessels, such as live wells and bilges, with a towel and let air dry in the sun for at least five days before using in any other water

INDIAN POND ASSOCIATION SCHO-LARSHIP AWARDS (Continued from page 1)

- Member of the DECA business club, receiving a district-level recognition for the top written score in the tourism category.
- Volunteers at the Mills River Horse Rescue Sanctuary.
- Tutors students in math.

This fall, Hailey will attend the University of Massachusetts Amherst for Environmental Science in the College of Natural Sciences. In her own words, Hailey says, "I hope tomake a constructive difference in the world by actively parcause they are deposited by the wind, or birds, or existing in the seed bank in the soil, you can actively diversify your lawn with native species by supplementing with native sedges or wild strawberry and other low-growing native species appropriate for the site.

You have permission to have a Cape Cod lawn because, after all, you live on Cape Cod, and aren't there better ways to spend your time and money?

This article provided courtesy of Association to Preserve Cape Cod (APCC)

body. If this is not possible, rinse equipment with hot, high-pressure water.

This method of prevention: **Clean, Drain, & Dry** also helps prevent the spread of harmful invasive organisms such as milfoils, curly leaf pond weed, *Hydrilla*, fanwort, water chestnut, and rock snot, just to name a few. So, please do your part to protect our freshwater ponds and our mussels in particular. Practice **Clean, Drain & Dry** before moving your boat, kayak, or canoe to another body of water.

Note: Much of this article is reprinted with permission from the Vermont Department of Fish and Wildlife.

ticipating in environmental research, constructing sustainable food systems to improve societal health in regards to food scarcity, nutrition, animal welfare, and environmental health."

The IPA Scholarship Committee was greatly impressed with the quality, energy, sincerity, and dedication of all the applicants received this year. We are proud of the students and the Barnstable High School to present to us such competent and capable candidates who share an appreciation and love of our natural environment and are dedicated to its preservation.

> IPA Scholarship Committee Marty Roberts (Chair), Tom Odjakjian, Gay Rhue, and Jerry Wollak

LATEST NEWS ON MARSTONS MILLS RIVER HERRING COUNT

This spring, Barnstable Clean Water Coalition (BCWC) has organized volunteer river herring counts at the Middle and Mill Pond fish ladders on the Marstons Mills River for the tenth consecutive year. Volunteer counts are an integral part of helping the MA Division of Marine Fisheries estimate the herring populations, which have undergone historic crashes. After a banner year in 2023 that had the highest run estimates since volunteer counts began (92,723 fish at Mill Pond and 55,926 fish at Middle Pond), counts are comparatively down this year. However, population fluctuations are normal due to a multitude of environmental factors, and we hope our counts will continue to trend upward in coming years, signifying a rebound in herring populations. This spring, volunteers found that fish arrived early and were already moving up the river on our first day of counting on April 1 and many have already spawned and are headed back to the ocean. If you would like to help monitor the herring population and volunteer to count herring next spring, you can reach out at <u>www.bcleanwater.org</u>.

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TRIBUTE TO THE IPA BIRDMAN



Dave Reid, whose name long-time readers of this newsletter will recognize, passed away on May 2 at the age of 81 after a surprisingly short battle with cancer. He was the author of many articles about birds and birding on Cape Cod that were routinely included in issues of the IPA newsletter.

In 2007, my wife Geri, who was the editor of the newsletter at that time, asked Dave, whom we had known as a friend for many years and were aware of his great interest in birds, if he would be willing to write an article about birds for the newsletter. Dave kindly agreed, and his first article was published in the 2007 fall issue of the newsletter. Since reader feedback indicated great appreciation for that article, he agreed to continue writing articles, some of his own choosing and others based on requests. Over the

next 18 years, Dave authored a total of 62 articles, all except four being about birds. The four exceptions were about bats in the 2012 winter edition, chipmunks in the 2019 fall issue, and foxes vs. coyotes and squirrels in the 2023 summer and fall issues, respectively. He had agreed to write the nonbird articles because he had run out of bird topics. His very last article, again on birds (The robin in winter), was published in the 2024 winter issue just several months before his death.

At the IPA annual meeting held on July 28, 2019, I had the honor to present Dave with IPA's prestigious Order of the Turtle award in recognition of his then 13 years of service to the IPA via his very educational and entertaining bird articles. This was an award established in 2007 by the Board of Directors to honor individuals, mainly outside the IPA membership, who had made significant contributions to the mission of the IPA. Previous recipients of the award were John Klimm (2007), former Barnstable Town Manager, and Rob Gatewood (2007), former Director of the Town's Conservation Division; Ed Eichner (2008), water scientist formerly with the Cape Cod Commission's Water Resources Office; Tim Simmons (2009), former restoration ecologist with the Massachusetts Division of Fisheries and Wildlife Natural Heritage & Endangered Species Program; Dr. Ken Wagner (2011), President of Water Resource Services; Evelyn Steele (2018), widow of John Steele, former director of the Woods Hole Oceanographic Institution, who provided valuable organizational advice when the IPA was updating itself as a non-profit, charitable organization; she and her late husband were also strong financial supporters of the IPA. Emory and Geri Anderson were jointly given the award in 2022.

Prior to his death, Dave lived in Centerville with his wife Claire. Geri and I became friends with them in the 1970s while we were all members of First Lutheran Church in West Barnstable where Dave, at different times, served as usher, communion assistant, treasurer, and web designer. Following service in the US Army during the Vietnam War,

> he received a college degree in subsequently accounting and worked in finances for various businesses and churches throughout the country. Dave was an avid birdwatcher, and he and Claire travelled all around the world to see different species of birds. He was also a faithful brother at Mariner's Lodge in Cotuit where he served as Master twice. Very proud of his Scottish

ancestry, he learned to play the bagpipes as an adult and was a founding member of the Highland Light Scottish Pipe Band. In true keeping with Scottish tradition, a bagpiper played at his funeral held May 18 at First Lutheran Church.

The IPA is fortunate to have benefited from Dave's avian experience and enthusiasm over the past 18 years. We convey our sincere condolences to his wife Claire and family.

Emory D. Anderson

A NOTE FROM YOUR PRESIDENT

Continued from page 2)

Your continued support demonstrating the love of these three ponds has energized the Board of Directors to pursue the agenda for this summer that I have just laid out. However, this is a very ambitious plan and will require many more volunteers to make it a successful summer. If you are willing and able to become a citizen scientist and help with the pond testing or assist in the various volunteer roles that will be needed for our Ponds Appreciation Day, now is the time to step up. Please send an email to <u>In-</u><u>fo@indianponds.org</u> with your interest and availability to make this a great summer for our three ponds.



"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. PO BOX 383 MARSTONS MILLS, MA 02648

FORWARDING SERVICE REQUESTED



