Spring 2017

HPWA is a 501(c)3 Charitable Organization

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Dennis White, Government Liaison

Jerry Levine, Invasive Committee

Phil Angell, Member-at-Large

Website

www.<u>TheHerringPondsW</u> <u>atershed.org</u>

Upcoming Events

March 20, 6:30 pm HPWA General Meeting British Beer Company Dr. Jon Way will speak on Eastern Coyote and Coywolf ecology and behavior.

May24, 7:30 am Spring Bird Walk Meet Pres. Brian Harrington at the turn circle at the north end of Little Herring Pond Rd. for bird walk around the conservation property between Triangle and Little Herring Pond,

President's Message

Brian Harrington, President

Water, water everywhere – Not long after I moved into the Herring River Watershed my daughter mentioned that our tap water had a funny smell to it. We switched to drinking bottled water. Testing showed that there were traces of a harmful gasoline additive that somehow had made its way to our remote well. The odor gradually faded, and after about 6 months the chemical was no longer detectable. Luckily, the "plume" had passed. Our neighborhood wells, like mine, tap into an aquifer. We depend on the aquifer for our drinking water, and also as the primary source of water in our watershed lakes and rivers. Ours is known as the Plymouth-Carver solesource aguifer (PCA). The PCA is a crucial resource for our southeastern Massachusetts communities.

The Plymouth/Carver Aquifer was created approximately 16,000 years ago as glaciers retreated. As the glacier melted, broad areas of sand and gravel – known as outwash plains - washed out of the ice. These immensely permeable surface sands make for a very high yielding groundwater system, but also makes the aquifer extremely susceptible to contamination. You can think of the aquifer as a broad, deep and slow-moving, under ground river. Due to the sandy soils of the PCA, water readily discharges to the surface, supporting natural communities (eg. ponds, riverbottoms, maple swamps, bogs) that define our region's character. Plymouth alone has more than 400 ponds.

Many of our local ponds aren't connected to a stream and are considered windows on the aquifer. The Herring Ponds watershed is an exception, like a giant gravy platter, it drains aquifer water through the Carters and Herring Rivers towards the ocean. Still, like other coastal ponds, our watershed ponds provide a glimpse of where the aquifer surface (or water

table) is exposed. Other important habitats supported by the aquifer include Atlantic white cedar swamps and coastal rivers, such as the Wareham, Agawam, Red Brook, and Eel Rivers. The cedar swamps, including small patches in the Herring River Watershed, are home to a number of rare and declining species. Our coastal rivers serve many functions including recreation, spawning areas for migratory fish and, in historic times, were centers of trade, commerce and manufacturing.

As Plymouth grows the risks of contamination to our aquifer increases, along with the demand for water. High-density development increases the potential for fouling our ponds and wells, and the aquifer itself. Because the PCA is a vast area of sand and gravel, water flows freely throughout its boundaries, typically moving slowly in a southeasterly direction. The water in a pond today may be far to the southeast a month later. Once pollution occurs, cleaning up an aquifer is costly. Clean-up costs for the Sagamore Lens on Cape Cod are expected to exceed \$850 million. You could buy 1,200 school busses for that. A coordinated protection effort is the best way to preserve the quality and quantity of our water. Poorly planned growth is a blueprint for polluting our aquifer, and along with it, our lakes, wells and ponds. Today our communities enjoy clean water. Together, we must take care to balance human needs with the protection and management of the natural resources that make this the special home we so enjoy. We need to be good stewards to insure a quality aquifer for ourselves and our grandchildren. We all lose from carelessness and poor planning. Become involved. Tell your Selectmen, your Planning Board, and your Zoning Board that you care. Visit our web site [www.theherringpondswatershed.org] and our Stewardship Guide to learn more about our valuable aquifer resources; they are precious and they are fragile.

Spring Bird Walk

Join President Brian Harrington at 7:30 AM on 24 May for our annual spring bird walk. We will meet (rain or shine) at the turn-circle at the north end of Little Herring Pond Road in Cedarville (Plymouth) and walk through woodlands between Little Herring Pond and Triangle Ponds. No guarantees, but this is a good place to find Scarlet Tanagers! Bring what you might need, including binoculars if you have them. We will try to have one or two extra pairs of binoculars for loan.



Volunteer River Herring Counters

We will be counting River Herring swimming upriver at the South end of Great Herring Pond (at Sandy Pond Road bridge) in our historical herring run again this spring. Volunteers are asked to count herring during a 10-minute time slot, one or more times per week, from April - May 2017. Time slots will be 11-1, 1-4, and 4-7. We need lots of volunteers to cover all the time slots to obtain meaningful data. A half-hour training will be provided. To volunteer or learn more email Brian at Brian.Harrington205@gmail.com.

This effort builds on a project of the state DMF which operates an automated herring counter close to the point where herring enter the Herring River at the Cape Cod Canal. We are hoping that our counts will provide an understanding of what proportion of these herring enter into Great Herring Pond. Our project will also be a comparison point to a number of similarly managed projects at other points of the Massachusetts coast.

Upcoming HPWA Meeting



Dr. Jon Way will speak on the Eastern Coyote/Coywolf Ecology and Behavior on March 20th at the British Beer Company in Cedarville. Join HPWA for a lively talk from Jon about our close neighbors, the eastern covotes and coywolves. Dr. Way is the author of Suburban Howls and My Yellowstone Experience and the founder of Eastern Coyote Research. He is a Cape Cod native who earned a Ph.D. from Boston College studying covotes. Jon will share photos and information ranging from the natural history of covotes to their hybridization with wolves. Admission is free; refreshments and socializing start at 6:30pm with complimentary light refreshments and a cash bar. The program will begin at 7:15pm. Space is limited so please reserve your place by going to the HPWA website www.TheHerringPondsWatershed.org and clicking on the 'March 20 Coyote Ecology' button. This event is sponsored by the Herring Ponds Watershed Association, and funded by a grant from Direct Energy Solar.

Lawn and Garden Tips

By Geri Williams

Americans spend \$40 billion annually on the upkeep of their lawns, with much of the money spent on the overuse of fertilizers and pesticides. There are, however, better ways to grow green lawns. The easiest, safest and cheapest solution is to avoid synthetic chemicals and use alternative lawn-care methods, such as applying organic fertilizers, composting, cutting down on watering,

limiting the amount of impervious surface on your property and installing rain barrels. Another way to cut down on the amount of lawn chemicals is to replace grass with native plants, which have adapted to this climate and are more pest resistant. They also attract beneficial insects, such as dragonflies and ladybugs that feed on pests. Keep the grass at least 3.5 inches to strengthen roots and shade out weeds. Leave clippings on the lawn. They provide about 50% of the fertilizer a soil needs. Apply organic fertilizer, especially in the fall. In general organic fertilizers improve the soil – instead of feeding the lawn or plants - making grass and landscaping more durable and safer. You'll have a safer lawn with less cost and effort.

Invasives Committee

by Jerry Levine, Chair

The purpose of the Invasive Committee is to understand the effect that plants and animals that are not native to our area is having on our ecosystem. The invasive organisms generally do not have naturally occurring entities that will control their growth and propagation. It is critical that we identify the organisms and work with the state, town etc. to control them. It is the intention of the committee to determine the extent of invasive plants and animals in our watershed and seek methods of control. I am in the process of contacting individuals from the state, town and education facilities in our region to provide training and assistance in dealing with this issue. I will be calling a meeting of the Invasive Committee as soon as some of our members return from their winter activities. If this committee is to be successful in protecting our valuable watershed we need additional volunteers to take an active role in our committee. No experience is required; we will educate you. Please contact Jerry at Jersail123@gmail.com. We live on and around a precious resource, let's get together and protect it.

Watershed Water Quality - Something for Everyone

by Don Williams, Water Quality Co-Chair

The Herring Ponds Watershed Association (HPWA) Water Quality Committee (WQC) has launched a number of important initiatives and will be proposing new programs that will benefit all constituencies (swimmers, fishermen, boaters, nature lovers and users of the aquifer) of our watershed. Specifically, our watershed residents can look forward to positive initiatives that will make our watershed better for all.

Swimmers:

The HPWA Board of Directors has approved sampling 10 sites this summer that have heavy swimming use. Testing for bacterial contamination will be run to be sure that swimming will be safe. While no excessive bacteria have ever been detected in the 8 years of sampling, the Board voted to be pro-active in this matter to prevent any health incidents. *Fishermen:*



The good news for our fishermen is that the Massachusetts Department of Environmental Protection sampled Great Herring Pond for mercury contamination this past summer. While past mercury levels in smallmouth bass were found to be high enough to issue a warning. The current mercury results came back below the MDEP advisory level of 0.5 ppm. We were asked to keep in mind that there is a statewide advisory still in place and that the fish sample did not include any large (old) specimens. Mercury tends to be higher in larger fish. The HPWA dissolved oxygen (DO) meter needs replacement and the Board

of Directors has approved the purchase. Jack Kedian will oversee frequent DO measurements. DO is an important measure of pond quality and healthy levels of oxygen are essential for the more desirable gamefish such as bass. The WQC has made it a priority to monitor DO monthly during summer at many locations to gauge the success of ongoing efforts to improve water quality.

Boaters:

Invasive plant species have a way of clogging water intake ports on boats and excessive milfoil and yellow floating heart can crowd the pond surface preventing boat passage entirely. HPWA Director, Jerry Levine, has agreed to chair the Invasive Committee that will monitor these plants.

Nature Lovers:

The health of the watershed fish is fundamental to the well-being of the flora and fauna of the watershed. Runoff is a significant contributor to pollution in our ponds. The Town of Plymouth has secured a grant of \$54,000 to design ways to remediate runoff (rain gardens, diversion pipes) in the two most significant runoff areas on Great Herring Pond. Both are in the Eagle Hill section. Runoff contributes potassium (algae blooms) and bacteria (potential health issues) to the pond and control should contribute significantly to water quality improvement. Frequent DO sampling will allow measurement of the extent of the improvement. The plan is to solicit input from residents this spring, then proceed with the construction phase starting as early as fall, 2018.

Users of the Aquifer:

The underlying health of the aquifer beneath us is important to all of us. The WQC is considering various ways to obtain an accurate assessment of that health.

Other News:

The HPWA Watershed Management Plan is on schedule to start spring, 2018. The Watershed Management Plan will identify the source(s) (septic, pond sediment, runoff) of nitrogen and phosphorus pond pollutants and make recommendations for remediation. I am working on simplifying water quality

data and making it more meaningful to our readers. Charts and/or graphs will be included on the website in the near future.

Education Committee News

by Lee Pulis, Chair



Bird Box Building Workshop

HPWA's February 11th 2-hour Screech Owl and Bluebird Box Building Workshop drew partners Tidmarsh Farms, Living Observatory, Mass Audubon, SEMPBA, and Plymouth Woodchucks. Approximately 45 people attended, to assemble 50 owl boxes and 15 bluebird boxes to take home and erect. An additional 25 bluebird houses are destined to make up two new bluebird trails of 10 and 15 boxes, with a third set of ten boxes available and ready-to-go, mounted on poles. It was a boisterous event, hosted at Tidmarsh Farms' West barn. Costs of wood and hardware were fully recovered. The event also yielded seed money for another project and a sizeable donation to the Mass Audubon fund drive toward purchase of the property to create Plymouth's Tidmarsh Wildlife Sanctuary.



Special thanks to Phil Angell and Jim Smith for their work on logistics of the saw mill order, and wood storage, transport, and cutting involved in making 100 birdhouse kits for our eager participants to assemble.

See photos, a video, and media coverage of the kits, construction, owl calling contest, and associated Project HOOT! on the HPWA public Facebook page: https://www.facebook.com/HerringPondWatershedAssociation/ (If not a FB member click "Not now", scroll down to view)



HPWA has invited **Plymouth** elementary schools to host special science education standards-aligned assembly programs for 3rd grade students featuring Herring Woman (Nancy Carroll) with take-home handouts of our super hero graphic comics about the migration of the Mighty River Herring. We are still waiting to see how many principals take us up on our offer to increase awareness among youth and their parents in our locally historic, but declining keystone resource.

HPWA is sponsoring and helping to plan Watershed Action Alliance's "Solutions for Healthy Waters" Conference, Thursday, March 16, 2017 at Camp Kiwanee, Hanson, MA http://www.watershedaction.org/index.php/2017-conference Register now and join fellow concerned citizens, water professionals, conservationists and decision-makers to learn methods for invasive plant control, effective science communication, and drought and flood resilience. Share resources and network with others concerned about water and watersheds in our region.

The newly-formed Massachusetts
Coastal Pine Barrens Partnership held
a partners' forum at Cape Cod
Community College on Friday, January
20, 2017. HPWA presented a poster and

filmed a brief video as one of 22 participating partners.

Volunteer now! Our volunteer herring count is getting organized to start around April 1. HPWA will be hosting a table at the Healthy Plymouth

Opportunities Program Job Fair at
Plymouth South High School on March
14 to promote volunteer herring counting as valued citizen science and community service.

Dangers of Cold Water

by Paula Kuketz, Water Safety Committee Chair

Although the weather is warming up and many are anxious to enjoy boating and swimming on the pond, the water is still very cold. Remember off-season boating carries risks not faced by summertime boaters. An accidental plunge over the side can be fatal regardless of air temperature or your ability to swim. Within a few minutes in cold water, hands, arms and legs become numb and useless. A person will be unable to swim, or even hold on to a capsized boat. It is mandatory to wear a PDF when in any kind of boat until May 1st.

A Word of Thanks

By Marlene vonGoeler Ken Cannon, who now lives in Hawaii, worked on behalf of the HPWA for many years. He set up our first web site and was our long-time Web Master, he designed our fish logo and the bumper sticker decals. He created a map of the Pond and printed it to award members who contributed \$100 or more. Perhaps most importantly, he maintained connections with numerous government and private sources and constantly brought us new information. In 2009 he visited the Department of Natural Resources in Boston and returned with our first map of the ACEC, which determined the boundaries of our watershed. We're grateful for his important contributions and miss his lively presence.. Aloha Ken!

Our Yearly Membership Drive will kick off in May

We'll be sending out our annual dues request letter in early May. Please return it promptly with a generous donation. Your support enables the HPWA to help protect our unique and fragile watershed and environment with water testing and many varied educational opportunities, as well as working with local government agencies.

HPWA Membership Form 2016-2017
Name
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Address
City/Town
_
Phone
E-mail
\$15 <u>Individual</u> Membership,
\$25 Family Membership
\$55 Contributing Membership
\$100 Sustaining Membership
Make checks payable to: The Herring Ponds Watershed
Association, Ltd.
Mail to: HPWA
P O Box 522, Sagamore Beach, MA 02562

The Town of Plymouth will be holding a Hazardous Waste **Collection Day on April 15** from 9am-1pm at the DPW site at 169 Camelot Rd. This is an opportunity to dispose of unneeded pesticides & herbicides, fertilizers, oil based paints and stains, hazardous cleaners, poisons, flammable liquids and aerosols, pool chemicals, etc. at no cost. Protect our aquifer and environment! Dispose of harmful items properly.