The Grapevine

Newsletter of the HONEOYE VALLEY ASSOCIATION

VOL. 32 **Fall 2014**

WATERSHED AND LAKE 101

You probably have seen signs in the Honeoye area that say "Entering the Honeoye Watershed."You or your children might have asked,"*What is a watershed?"* Understanding what a watershed is helps us often understand what causes many of the problems in our lakes. A watershed is the land that water flows across or under on its way to a stream such as the Honeoye Inlet, river such as the Genesee River or lake such as Honeoye Lake. Landscape is made up of many interconnected basins or watersheds. Within each watershed, all water runs to the lowest point such as a stream, river or lake. On its way, water travels over the surface and across farms, fields, forest lands, suburban lawns, lake cottage lawns and city streets; or it seeps into the soil and travels as groundwater. Large watersheds like the ones for the Mississippi River, Columbia River and Chesapeake Bay are made up of many smaller watersheds across several states.

Watersheds come in many different shapes and sizes. A watershed can be affected by many different activities and events. Construction of cities and towns, farming, logging and the application and disposal of many garden and household chemicals can affect the quantity and quality of water flowing from a watershed into a stream, river or lake.

Everyone lives in a watershed, and we are a part of a watershed community. The animals, birds and fish are, too! People influence what happens in watersheds, good and bad, by how the natural resources such as soil, water, air, plants and animals are treated. The quantity and quality of water draining from a watershed are dependent upon the climate, vegetation, soils, geology, and development of that watershed. Activities that change the vegetation and surface characteristics of some watersheds will affect the quantity and quality of water contributed to a stream. For example, a great volume of water, perhaps of poorer quality, will flow from a parking lot than from a forest or pasture. This volume of water from a parking lot may result in increased flooding in a watershed because the greater volume exceeds the natural ability of the stream to transport the water. What happens in small watersheds, such as pollution, also affects the larger watershed downstream.

In the next "Watershed and Lake 101" article I will look at the 3 different types of watersheds.

Source:

http://www.agintheclassroom.org/TeacherResources/InterestApproaches

Diet for a Small Lake, Second Edition, Prepared by the New York State Federation of Lake Associations, Inc. in cooperation with the New York State Department of Environmental Conservation, page 5, 2nd ed.

About Your HVA…

The Honeoye Valley Association is a not-for-profit volunteer organization that works in a variety of ways to protect and preserve the environmental quality of the Honeoye Lake watershed.

To become a member (and receive this newsletter regularly), go to our website and sign up. The cost is $20 for an individual membership or $30 for a family (2) membership.

To contribute articles, letters or opinions for this newsletter, send them to HVA PO Box 165 Honeoye, NY 14471 or visit us on our website at www.hvaweb.org .

The HVA Board of Directors meets at 7 p.m. on the second Wednesday of the month, March through November. We meet at the United Church of Christ on Main Street. All meetings are open.

The HVA Board of Directors:

Hugh Turner	367-3522
Frank Powell	367-2927
Carole Baker	425-0505
Terry Gronwall	367-3000
Bill Woods	229-7626
Don Cook	367-9293
Mike Weidner	229-5702
Amrut Patel	671-1484
David Baker	425-0505
Dan LaLonde	

The HVA has a new website

A few months ago, the HVA began to launch a new web site.

The new site and the supporting databases will result in one membership list which will have all information about the member and their spouse or significant other all in one place!

For people who want to join the HVA, they are able to register and pay online. For current members and those who just joined, they will begin receiving informational emails telling members of important issues and information. The website also has an events calendar which now contains the HVA board meetings and the annual meeting noted. We will use the events calendar to note HVA and important community events.

Members can log into the new site using their email address (and the password they received when they registered) to renew their membership and pay online. Also while logged in, members will be able to see member only content that is being considered. We hope you see that the new web site and capabilities increase the value of your membership.

At the annual meetings we will be using the new membership database to pass out voting ballots if any items at the annual meeting require a membership vote. This should be more effective and accurate than a show of hands we used in the past.

The new website can be found directly via the HVAweb.org url as it is today to make it easy to find the site as you do today.

We also want to thank Jack Starke and Dave Beckwith who designed and support the old web site. Their efforts created the great base of information that exists today. We would not be at the point of launching the new web site without their leadership and dedication.

We hope you like the new web site and its capabilities. If you have any suggestions for content, please feel free to send an email to info@hvaweb.org

It is with Gratitude that we say Good-bye

It is important to me and the Board of Directors for the Honeoye Valley Association that we acknowledge the hard work and dedication of several board members who have decided to step aside and take a well-deserved rest. They have served you for a very long time.

Ed Jackson

Ed has attended countless town of Richmond and Canadice Town Board meetings representing the interests of the Honeoye Lake and watershed, is serving as an Ontario County Soil & Water Conservation District Board member, and was a past President of the HVA. His expertise in local and county governments has been a huge factor in securing their support for our efforts. His influence on all of us is extraordinary.

Kay Luther

Kay for years has supported the HVA by being the treasurer. She has every month kept us on sound fiscal ground, collecting the dues, sending out payments and preparing our annual statement and filing with the I.R.S.

Dick Stoddard

Dick has been a board member for several years. It was his idea to minimize the effects of the railroad flares so commonly used for our Ring of Fire July 4th celebration that we started the electric flare program. He also led the use of the bright yellow sandwich signs you see that very effectively announce the roadside cleanup and the annual meeting.

Jack Starke

Jack was instrumental in many of our water quality endeavors including the alum treatment, Watershed Management Plan, and the stream bank erosion studies. His efforts have been to slow the infusion of new phosphorus into Honeoye Lake and to minimize the legacy phosphorus effect on plant and algae growth. Having climbed many of the stream beds on the west side of the lake, I can tell you that he is tireless and exacting in his research. Jack for many years was our representative to the Watershed Task Force.

Don Bennett

Don served as our water quality committee chairman, Alum project committee chairman, and contributed to many key HVA accomplishments. He always has a positive influence on all of us.

Tom Young

Tom has been an advocate for improving Honeoye Lake water quality his whole life. He actively served on many HVA committees. Also, he collected CSLAP water quality data for a number of years.

Dave Beckwith

Dave has been our web master for years and speaks a language foreign to me. He talks of FTP servers and such but he has managed our web site with fervor and dedication for over 10 years. He is to be commended as we move to a new web site that will help us with membership, news blasts and other computer based outcomes.

Whats Happening To Our Zebra Mussels (Dreissena polymorpha)?

with Bruce Gilman, Ph.D., Finger Lakes Community College Professor of Environmental Conservation, Canandaigua, New York

My first visit to Honeoye Lake was in 1977 while attending an Independence Day picnic at a friend's cottage. Little did I know then about how important the lake and its watershed would become to my subsequent research activities. Over the years, with Finger Lakes Community (Con't on p. 8)

NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Cleaning and Disinfection Techniques Q&A for Boaters

Is there one best way to clean or disinfect a boat, trailer or associated equipment?

The most effective way to ensure that a boat or trailer is not transporting aquatic invasive species is to carefully inspect it for clinging invasives, remove any plants and debris identified and thoroughly drain and dry it. During hot, dry summer periods it will usually take about 5 days to completely dry a boat. Drying boating equipment during wetter, cooler periods of the year will take more time. Drying times based on the location in NY and time of year can be estimated at www.100thmeridian.org/emersion.asp (see link to the right). Should you not be able to dry your boat completely, various disinfection techniques are described on the DEC website.

I am hearing much about mandatory boat inspection and boat washing programs. What can you tell me about these programs?

Pressure washing is a technique that can be used to clean hulls.

Boat inspections, whether conducted by a boat owner or by a lake steward or other designated individual at a boat launch, are a great way to ensure that boats and trailers are AIS free before they launch or leave a site. Boat washing is a technique that can be used to clean boat hulls and is particularly effective in removing AIS such as zebra mussels that can firmly attach to boat hulls. Proper boat washing entails the use of hot water (140° F), high pressure and a contact time of at least 10 seconds to kill and dislodge the attached mussels. This technique should not be confused with the rinsing of boats with tap water that saltwater anglers commonly complete to remove corrosive salt from boat hulls. Mandatory inspection and boat washing programs are commonly used in western states to combat the expansion of zebra and quagga mussels into large reservoirs important for hydroelectric, drinking water and irrigation. Mussel colonization can complicate the movement of water through canals, dams, pipes, etc. Unlike the states east of the Mississippi where these species are common, zebra and quagga mussels are not yet found in abundance in these western states.

Are there any drawbacks to boat washing programs?

Hot water, high pressure boat washing units can be expensive and beyond the ability of the average boat owner or lake association to afford. These units also require trained staff to operate. Used incorrectly, they can damage boats. Complete disinfection also requires that all water holding compartments, as well as the engine cooling system be flushed with hot water. Users should check to make sure that 140 ° water is compatible with pumps and engine components before disinfection. Flushing inboard engines can be difficult and may require a marine technician to complete. Complete disinfection on larger recreational boats may require 30 minutes or more to complete.

On large bodies of waters with multiple access points it may not be feasible to wash all boats entering or departing a lake. Long lines at boat launches, typical on busy summer weekends at boat launches, will get even longer resulting in many frustrated boaters and decreasing interest in participation in the program. The waste water from washing operations which will include gas, oil and other contaminants will also need to be disposed of in a manner consistent with DEC regulations. If not properly contained, boat wash wastewater and removed AIS can flush into the adjacent waterbody.

What about self-service car washes? Are they effective for removing AIS from boats and trailers?

Car washes typically do not heat water to the recommended 140° F and may not have sufficient pressure to dislodge zebra mussels. Depending upon water temperature, a contact time of at least 30 seconds is recommended.

Are there any other alternatives for immediate disinfection?

(Con’t. on p. 6)

Household steam cleaners can be used to disinfect small boats and equipment.

Household steam cleaners can be effectively used to disinfect small boats and are particularly effective for live wells, bait wells and bilge areas that may be difficult to pressure wash. Larger commercial units can be employed for larger boats or in situations calling for the disinfection of large numbers of boats. The smaller units can usually be purchased for under $200.

Are there any chemical disinfectants that are effective on AIS?

There are no disinfectants available for use by boat owners that are specifically labeled to kill all aquatic invasive species. There are, however, a number of household disinfectants and chemical compounds that can be effective against various AIS and fish diseases.

(Con't. from p.3)

College colleagues and students assisting, I have studied the composition and productivity of macrophyte communities, fish populations, water quality, benthic invertebrates, internal nutrient loading, and land use/land cover patterns.

In 2001, unusual surface foam streaks appeared on neighboring Canandaigua Lake and at the same time zebra mussel shells were washing up in great numbers along its shoreline. We hypothesized that a mussel die-off had occurred and their dead remains were somehow contributing to the foam. The following year we used a PONAR dredge to sample the lake bottom at several locations. Using shell length as a proxy for mussel age, we discovered that nearly all of the living mussels were less than a year old, verifying that a die-off had indeed taken place the prior year. To compare the Canandaigua Lake "recolonizing" population age-class structure to a normal one composed of many cohorts, we also sampled the Honeoye Lake zebra mussel population in 2002.

Last fall, Honeoye Lake residents reported that they were finding very few zebra mussels on their docks when they were removed in preparation for the winter ice. Had a die-off of mussels also occurred in Honeoye? There were no tell-tale foam streaks or large wrack lines of empty shells, but maybe that should not have been expected at Honeoye. With most of the lake bottom composed of soft silty substrates, the zebra mussel populations were never as great as in Canandaigua Lake. Perhaps they had simply declined due to lack of palatable algae brought on by their own selective filter feeding of the plankton community. The best way to verify a zebra mussel population decline would be to re-sample the same locations studied in 2002, and compare our results. This would also provide us an opportunity to discover if other bottom dwelling invasive species had entered the lake, especially Asian clams (*Corbicula fluminea*) and quagga mussels (*Dreissena rostriformis bugensis)*.

So in mid-July 2014, we surveyed the zebra mussel population in Honeoye Lake again. Assisting this time were Nadia Harvieux (Finger Lakes Institute Education Program Manager), an FLCC student, the Ontario County aquatic vegetation management staff and four Nature Conservancy students interns from New York City. Needless to say, that was quite a field crew! I processed all of the samples in the lab, tallying and weighing the mussels. Overall, the zebra mussel density declined by about 30% (from 1647/m^2 in 2002 to 1199/m^2 in 2014). Total mussel biomass declined by about 35% (from 292 g/m^2 in 2002 to 188 g/m^2 in 2014). Indeed the perception of the public was correct.

And about the other bottom dwelling invasive species, both good news and bad news – we found no quagga mussels in our dredge samples but four suspected Asian clams were collected on gravelly substrates along the northeastern shore of the lake. We're awaiting DEC confirmation of our tentative identification.

Zebra Mussel

Membership Drive is ON! Please spread the word to your friends and neighbors to JOIN the Honeoye Valley Association (HVA)

Membership Special and New Dues Structure! Single, Family, or Business Memberships are now available

New members who join will receive FREE extra months of membership- memberships will remain active through March 31, 2016

*** Join and pay online at http://www.hvaweb.org ***

The HVA acts as an advocate for the protection and improvement of the Honeoye Lake Watershed. Activities include communicating with governmental agencies and political representatives, educational outreach, monitoring of the lake ecosystem, and is a clearinghouse for information related to these activities. Please encourage others to join to support the activities of the HVA!

Want more information? Please browse our UPDATED website to read about the ongoing activities of the HVA and for tips and ideas how YOU can directly help to improve our watershed.

You can also Follow the HVA on Facebook and join the conversation: https://www.facebook.com/groups/HoneoyeValleyAssociation/

One Lake, One Community

On the Hunt For Hydrilla

Hydrilla is an aquatic invasive species that has been found in New York State waters in a limited number of locations during the last five years. In 2011 approximately 80 acres was found at the Cayuga Inlet in Ithaca, and in 2012, 200 acres was found in the Tonawanda Creek near Buffalo. The monoecious variety of hydrilla that has been found in New York State is well adapted to the temperate lake conditions in NYS since large areas of hydrilla were able to grow rapidly without detection. Hydrilla is identified as an invasive plant by both federal and state governments across the United States. Hydrilla over winter as turions but is most likely spread by fragmentation similar to Eurasian watermilfoil. Spreading by plant fragments allows hydrilla to easily invade large areas of connected waterbodies. It also is spread by boats, trailers and waterfowl that move among lakes and rivers. Unfortunately, this highly invasive plant looks very similar to some very common native plants and at least one other exotic plant. This creates great challenges in finding small patches of the plants before they grow into dense beds that are much more difficult to control. With nearly 20,000 lakes and ponds and many miles of streams and rivers in New York State, TNC, NYSFOLA and the State of New York need more eyes looking for these plants.

Early detection is critically important to assess the threat and develop rapid response plans to address any newly discovered hydrilla infestation. Working together, New York State, Tompkins County, and City of Ithaca have been successful in controlling hydrilla in the Cayuga Inlet, and the US Army Corps of Engineers is working to prevent the spread of the Tonawanda Creek infestation out of a contained portion of the Erie Canal. Keeping both infestations out of the larger Great Lakes system has required a large effort to implement a series of complex herbicide applications. It is likely that future large infestations found too late will not be controllable.

This might ultimately result in the spread of Hydrilla throughout New York state, similar to the migration of Eurasian watermilfoil out of the Finger Lakes region into more than 300 lakes statewide starting in the 1940s. Volunteers can maximize the number of water bodies examined and greatly improve the likelihood of eradicating the plant before it moves into many waterbodies. Early August is a good time to search for Hydrilla since it will be fully developed and near the surface of water bodies. TNC, NYSFOLA and its partners are looking to recruit as many volunteers as possible to look for hydrilla in lakes, ponds, streams and rivers throughout the state, in hopes of finding the next location before it grows into an unmanageable infestation.