The Grapevine

Newsletter of the HONEOYE VALLEY ASSOCIATION

VOL. 29 Summer 2013

HVA Annual Meeting Saturday, July 13 9:00 at UCC in Honeoye

The Finger Lakes Institute at Hobart and William Smith Colleges (FLI) has been awarded funding through the Great Lakes Restoration Initiative to lead an Invasive Species Prevention project in the Finger Lakes in 2013. Species of concern include Hydrilla, Asian clam, Chinese mystery snail, bloody red shrimp, zebra mussels, quagga mussels, and round gobies, among others.

As part of the project, the FLI will station Watercraft Stewards at boat launches throughout the Finger Lakes and at two southern Lake Ontario bays in Monroe County to provide education for preventing the spread of aquatic invasive species. Stewards will also collect data about types of watercraft being used through the lakes and the numbers of watercraft entering and leaving launch sites.

Kirsten Goranowski coordinates the Finger Lakes Watercraft Steward Program which includes Honeoye Lake. Bruce Gilman and Kirsten will give a presentation at the annual Honeoye Valley Association meeting scheduled for Saturday July13th at 9:00 A.M. at the United Church of Christ located at 8758 Main Street in Honeoye.

On behalf the Board of Directors, the public is invited!

HONEOYE LAKE FIREWORKS – JULY 6, 2013

The 2013 Honeoye Lake Fireworks Celebration will be held on Saturday, July 6, at dusk. The fireworks display will be set off from Sandy Bottom Park and will be handled by Young Explosives of Canandaigua.

The fireworks celebration will be coordinated by the Richmond Fire Department. The Towns of Richmond and Candice are funding the fireworks display.

The fireworks are best seen from your boat on Honeoye Lake near the Park or from the hillsides overlooking the Park along County Road 36 (West Lake Road). See you there!!!



² About Your HVA...

The Honeoye Valley Association is a not-forprofit 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), send \$20 to the HVA, PO Box 165, Honeoye, NY 14471.

To contribute articles, letters or opinions for this newsletter, send them to the above address.

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 |
| Kay Luther | 229-2315 |
| Helen Johnson | 229-2273 |
| Terry Gronwall | 367-3000 |
| Jack Starke | 367-2079 |
| Don Bennett | 229-2003 |
| Dick Stoddard | 229-2455 |
| Don Cook | 367-9293 |
| Ed Jackson | 229-1090 |
| Amrut Patel | 671-1484 |

HVA LABOR DAY FOOD DRIVE TO BENEFIT HONEOYE FOOD PANTRY

The Honeoye Valley Association will be conducting a Food Drive to benefit the Honeoye Food Pantry from 1pm until 5pm on Labor Day (September 2) at the Honeoye United Church of Christ parking lot. The Honeoye Food Pantry is located at the Honeoye UCC.

Many cottagers close up their lake places on Labor Day and would have to haul the food back to their full time homes. This will provide an opportunity to make a needed donation to the Honeoye Food Pantry and save hauling everything back home. Of course, donations from anyone and everyone will be welcome and accepted.

Don Fox, Coordinator of the Food Pantry, indicates that jelly and paper products (toweling, toilet paper, bar soap, and Kleenex) have been in short supply this year. Any canned goods or dry goods would be greatly appreciated. Please avoid frozen foods or dairy products as storage is a problem. The Honeoye Food Pantry provides food for families in need in and around the Honeoye area.

The Honeoye Food Pantry is working on a new program for the Honeoye Central School District. Starting in September the Food Pantry is going to be helping low income students with a Back Pack Program. It will start with Kindergarten and First Grade and the following year they hope to add Second Grade or more. On Fridays during the school year the student will receive a bag of kid friendly foods for the weekend. The Food Pantry will be buying the food at first but hope to get community support with donations. The items will be single serve items of juices, mac and cheese, tuna fish, fruit cups, soups and any other items. Monetary donations toward getting this project started would be appreciated.

Volunteers will be at the church parking lot to accept your food and monetary donations. Please check your cabinets and pantries or even purchase a few extra items for this worthy cause on your next shopping trip. We look forward to seeing you from 1pm until 5pm on Labor Day afternoon at the Honeoye Church of Christ parking lot.



Watercraft Stewards to Help Stop Aquatic Hitchhikers in Honeoye Lake

By Lisa Cleckner, Finger Lakes Institute at Hobart and William Smith Colleges

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Boaters are encouraged to interact with the Stewards to learn more about the harmful impacts of aquatic invasive species and how to prevent their introduction and further spread. Boaters may be invited to complete a voluntary survey regarding boating practices and their knowledge of invasive species. Stewards will also ask to perform boat inspections. These inspections will help to ensure boats and recreational equipment are clean of materials that can lead to the potential transport of aquatic plants, invertebrates, and other organisms.

Through the FLI Watercraft Steward Program, boaters are encouraged to learn how to identify threatening invasive species and actively participate in the Aquatic Nuisance Species Task Force "Stop Aquatic Hitchhikers" campaign, which calls upon anglers, boaters, paddlers, SCUBA divers, waterfowl hunters and others to become informed about aquatic nuisance species and to follow simple preventative procedures every time they leave any body of water.

For more information about the FLI Watercraft Steward project, please see our blog at flisteward.wordpress.com or contact the FLI Director, Lisa Cleckner, at 315-781-4381.



FLI Watercraft Steward, Daniel Munsell, inspecting a boat to be launched on Cayuga Lake. Stewards can be recognized by their red hats and t-shirts.



Viral Hemorrhagic Septicemia

By Kirsten Goranowski, FLI Watercraft Steward Program Assistant

Aside from aquatic invasive plants and animals, diseases can have harmful effects on the environment and be regarded as invasive. A concerning disease in the Finger Lakes is Viral Hemorrhagic Septicemia (VHS), a highly contagious fish disease caused by an aquatic rhabdovirus that has no known cure[1]. The first reported VHS case within the United States was in 1988, found in spawning salmon in the Pacific Northwest. Historically considered the most serious viral disease of salmonids reared in freshwater environments in Europe, VHS has been found in marine finfish and freshwater fish in the Great Lakes region and Canada [2].

Although it is not known how VHS was transferred into the Great Lakes region, some experts believe it is possible that VHS mutated from a marine form and became newly pathogenic to native freshwater fish [2]. The species list of susceptible fish to infection is growing, and includes almost 50 species such as salmon, trout, pike, herring, anchovy, cod, flounder, sole, other flatfishes, smelt, perch, drum, rockfishes, sculpins, eels, mummichog, and sticklebacks [3].

There have been four different genotypes of VHS identified throughout the world. Types I, II, and III are mainly found in Europe and Japan, with Type IV being the only recovered type in samples taken from North America, Japan, and Korea. A newly identified sublineage of VHS IV is referred to as IVb, and this is the strain that has emerged in the Great Lakes watershed and Canada [3]. The pathogenicity of VHS virus varies by genotype and affects different fish species. One interesting piece of information is that not all infected fish develop VHS, but they can carry and spread the disease to other fish throughout their entire life [2].

The first report of VHS within the Finger Lakes region was on Conesus Lake in August 2006, after a die-off of walleye. Other waterbodies where detections have been found include Skaneateles Lake and the Seneca-Cayuga Canal. In a phone interview, Brad Hammers, Aquatic Biologist for the NYS Department of Environmental Conservation in Region 8, described random detection sampling as "a shot in the dark." He explained that the DEC does sample for VHS detection, but detections are usually made when there has been report of a fish kill [4].

The primary form of transmission of VHS is through the fish's shedding of urine and reproductive fluids such as ovarian fluids and sperm. Detection of the disease has also been found in fish feces. Furthermore, transmission of VHS can occur either by contact or through water. Studies have shown that virus survival is inversely correlated with temperature meaning that VHS survives longer at lower temperatures such as 40°F compared to higher temperatures such as 68°F. Optimal temperature for active infection is between 48-54°F [5].

As previously mentioned there is no known cure for VHS. Due to the potential effects of this disease, the Animal and Plant Health Inspection Service (APHIS) issued a Federal Order on October 24th, 2006, to prohibit the importation of certain live fish from Canada and interstate movement from eight states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin) bordering the Great Lakes [6]. Although there is no known risk to human health, the spread of VHS can be detrimental to fish populations.

As listed on the NYS DEC website, the best steps in preventing the spread include: [6]

- Do not transport fish from one body of water to another, as it is illegal to do without a NYS DEC fish stocking permit.
- Only release bait fish into the waterbody it was taken from. Bait purchased

- commercially should not be released into any body of water.
- Do not dispose of fish carcasses or fish byproducts in any body of water.
- Remove all mud, aquatic plants, and animals from all gear, boats, motors, and trailers before leaving a body of water
- Drain your live well, bilge, and bait tanks before leaving the water you are fishing or boating on. Anglers or boaters using any waterbody known to be infected with the VHS virus should disinfect their live wells and bait wells with a 10 percent chlorine/ water solution. Rinse well to remove all residual chlorine;
- Follow all fish health regulations.
- Inform your friends about the fish health regulations

What Are the Signs of VHS?

An individual may have internal/external hemorrhages, ascites (fluid in the abdomen), exophthalmia (bulging eyes), and erratic swimming behavior. In populations, the most evident sign is rapid die-offs [7].

[1] Cornell Cooperative Extension Invasive Species Program. (2013). *Viral Hemorrhagic Septicemia*. Retrieved from New York Invasive Species: http://www.nyis.info/index.php? action=invasive detail&id=28

[2] United States Department of Agriculture. (2006). *Viral Hemorrhagic Septicemia in the Great Lakes*. United States Department of Agriculture.

[3] VHSV Expert Panel and Working Group. (2010). Viral hemorrhagic septicemia virus (VHSV IVb) risk factors and association measures derived by expert panel. *Preventive Veterinary Medicine*, 128-139.

[4] Hammers, B. (2013, January). VHS. (K. Goranowski, Interviewer)

[5] Spickler, A. R. (2007, May 17). *Viral Hemorrhagic Septicemia*. Retrieved from http://www/cfsph.iastate.edu/Diseaseinfo/factsheets.php

[6] New York State Department of Environmental Conservation. (2013). *Viral Hemorrhagic Septicemia (VHS) in New York*. Retrieved from New York State Department of Environmental Conservation: http://www.dec.ny.gov/animals/25328.html

[7] Iowa State University. (n.d.). *Signs of Disease*. Retrieved from Focus on Fish Health: http://www.focusonfishhealth.org/signs-of-disease.php



Clinical Signs of VHS in Fish. Photo courtesy of Paul Bowser, Aquatic Animal Health Program, College of Veterinary Medicine, Cornell University



Bulging eyes. Photo courtesy of Dr. Mohamed Faisal, Michigan State University

What's Up With Walleye?

by Melissa Miller, A.S. Environmental Studies, A.S. Liberal Arts and Sciences from Finger Lakes Community College, Class of 2013

Posted on March 1, 2013 by Finger Lakes Institute

Walleye (Sander vitreus) are the largest members of the perch (Percidae) family. As with all percids, they have two dorsal fins. The first fin has spiny rays and the second has soft rays. What distinguishes them from other members of the family is that their tail fin is forked and has a white blotch on the tip of the lower half. They have large canine teeth on the lower jaw, and large eyes that give them a predatory advantage at night or in low light conditions. These aren't just any regular fish eyes though, these ones are awesome! For those readers that have been lucky enough to catch a walleye, you probably noticed they have an eye shine that kind of makes them look zombie-like, much like that of an animal 'caught in the headlights'. This is due to a reflective surface lining the eye called the tapetum lucidum.

Walleye are native to most states in the Northeast. Locally, they can be found in Honeoye, Conesus, Otisco, Owasco, and (if you're lucky) Cayuga Lakes. Be sure to check the Department of Environmental Conservation's fishing regulations page for open season, size, and daily catch limits.

In early 2000, a Walleye Culture program was set up at Finger Lakes Community College's (FLCC) Muller Field Station at the south end of Honeoye Lake. The property, consisting of 40 acres, was gifted to FLCC by Florence Muller in memory of her late husband Emil Muller. Partnered with the New York State Department of Environmental Conservation (NYS DEC), Assistant Professor of Environmental Conservation John Foust teaches students that are enrolled in Fish Culture Techniques, a hands on course offered at FLCC, the art of culturing walleye.

How do you culture walleye? Here's how it works (Credit to John Foust for procedure):

1. Capture "wild" broodstock (males and females from a breeding population). To do this, students set a trapnet in the Honeoye Inlet at the Muller Field station. Once collected, the length and weight of each fish is recorded, a scale sample is taken to age the fish, and each fish is marked. Walleye

- spawn in early spring, late March or early April, not long after ice-out or water temperature reaches 37-41°F (3-5°C). They migrate up tributary streams or move to near shore areas of lakes where females broadcast spawn their eggs over hard substrate. Males then deposit their sperm (milt) over the eggs.
- 2. Eggs are stripped from females into a collection bowl. This is done by gently stroking the abdomen from front to back.
- 3. Eggs are fertilized by expressing milt from males into the bowl of eggs by way of the same stroking motion.
- 4. Eggs and milt are mixed with a turkey feather while fresh water is added to ensure fertilization. Water activates the sperm cells and induces egg development.
- Eggs are mixed with a tannic acid solution to reduce stickiness and treated with iodine to disinfect them.
- 6. Eggs are transferred to upwelling culture jars. The eggs will swell as they absorb water, a process called water-hardening.
- The eggs are very fragile at this point and are left to incubate. They are checked daily to make sure water is flowing properly through the jars and to remove any dead eggs.
- 8. Egg development is dependent on water temperature and should hatch within 21-28 days at a temperature of 40-45°F. At this stage, they are called fry.
- 9. Fry should be stocked into a designated water body or a "grow-out" pond within 3-5 days to prevent cannibalism.
- 10. Fry stocked into "grow-out" ponds should be harvested during the summer months. At this point, they have grown into fingerlings and can now be stocked into a designated water body.

Why is culturing walleye at FLCC important? A couple of reasons. Walleye cultured here are used by the DEC in the management of walleye fisheries in both Honeoye and Conesus Lakes. As I mentioned earlier, walleye swim up tributaries to spawn. The Honeoye Lake inlet at Muller Field Station has proved to be inadequate spawning grounds due to its muddy bottom. Eggs get covered by mud and don't get the oxygen they need to survive. By culturing them in an ideal, controlled environment, survival rates drastically increase. This means that more fry are available to stock in Honeoye Lake with the hopes of increasing the population to improve lake health, and maintain recreational angling opportunities.

Conesus Lake's story is a little different. There is a non-native species of baitfish inhabiting the lake, alewives (Alosa pseudoharengus), also known as sawbellies. Sawbellies eat walleye fry as well as larger zooplankton which in turn eat cyanobacteria (blue-green algae). When there is nothing around to eat the cyanobacteria, an algae bloom happens. Cyanobacteria build up along the shoreline turning the water into pea soup. This can pose a threat to human health, as some strains are toxic. By taking on a top-down management approach and stocking larger walleye fingerlings into the lake, the hope is that with more walleye, a top predator, there will be fewer sawbellies, more zooplankton, and less algae.



Every spring, FLCC holds a Spring Open House, formally known as 'Walleye Weekend', where the public (kids welcome!) and prospective students are invited to the Muller Field Station to check out the facilities, talk with current staff and students, and participate in several interactive programs such as pond ecology, track/skull/pelt identification and, if the walleye are cooperating, WALLEYE CULTURE!





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| Date: | | | | |
| ☐ Individual (\$20) ☐ New Member ☐ Renewal Extra donation for water quality projects \$ | | | | |
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| Address: | | Address | | |
| City: | | City: | | |
| State: Z | Zip: | State: | Zip: | |
| Phone: | | Phone | | |
| I would also like to be involved with the committees circled below: | | | | |
| Aquatic Vegetation Boat & Safety Stream Monitoring | Membership Drive Publishing Litter Control | | Board of Directors Fish & Wildlife | |

Honeoye Valley Association PO Box 165 Honeoye, NY 14471