Genoa National Fish Hatchery News and Notes

January 2018

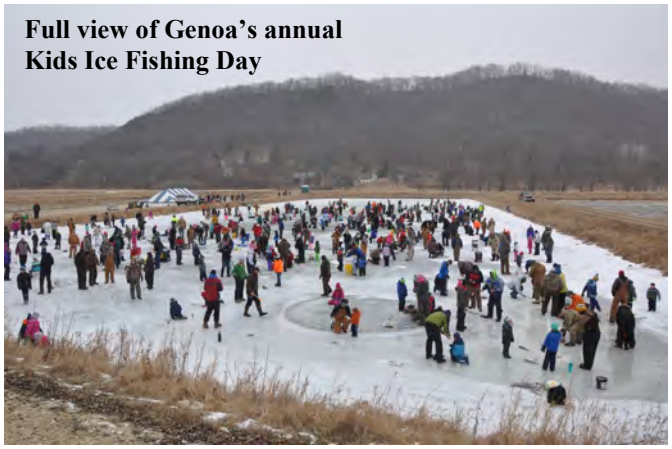
About Genoa NFH

Genoa NFH was established over 80 years ago by the Upper Mississippi River Fish and Wildlife Act. The mission of the hatchery has changed from providing sport fish for area waters to a conservation hatchery concerned with the recovery of endangered aquatic species.

The hatchery is open for tours during business hours. For large groups, please call for an appointment. You can reach the hatchery at 608-689-2605 from 7:30 am to 3:30 pm. You can also find us online at: fws.gov/midwest/genoa

And on Facebook at: facebook.com/GenoaNFH

Hot Time on a Cold Pond! Kids Ice Fishing Day Hits the Hard Water



Full view of Genoa's annual Kids Ice Fishing Day

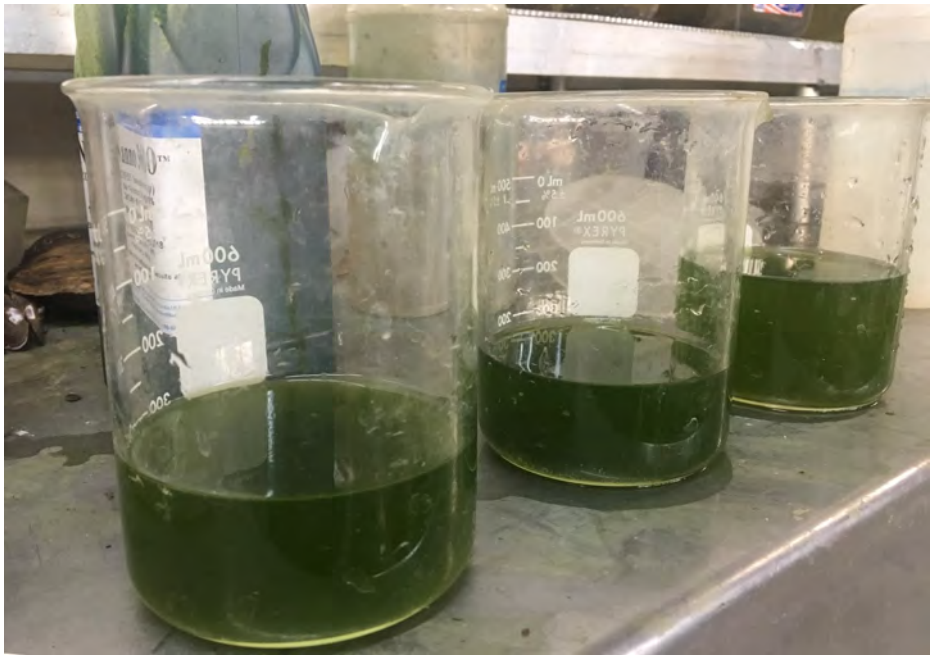
The weather outside wasn't quite frightful, but it was cool-ish for a Wisconsin winter this February 3rd for the Genoa WI) National Fish Hatchery's annual Kids Ice Fishing Day. The event, sponsored by our shared Friends Group with the Midwest Fisheries Center (the Friends of the Upper Miss), has sponsored this event and our spring Kids Fishing Day for over a decade now. The event has grown from a small event of less than 100 people, to a much anticipated outdoor extravaganza with 648 people attending! Three hundred and thirty children ages 5-12 participated in the fishing event, with the majority of them catching their 3 fish limit of rainbow trout. Lots of smiles were on hand, as some children caught their first fish through the ice. This is a great family event also, as parents and guardians are invited to help mentor their child as they learn to ice fish. A warming tent and plenty of hot chocolate was supplied to keep the participants comfortable, and after the fishing was done a light lunch was supplied to kids and adults alike. The food and drink was generously supplied and served by our Friends group. Genoa NFH and Midwest Fisheries Center staff were also on hand to supply bait and ice fishing gear and offer up some ice fishing safety tips and ice fishing techniques to help the kids be successful and safe. Judging by the size of the smiles at the end of the day, it looked like we have some new ice fishing enthusiasts in the making, and may just have made a family memory or two that will be cherished and revisited in the upcoming years. Hopefully a seed for loving the outdoors and desiring to preserve it will grow and be passed along to this next generation of conservationists as well. By Doug Aloisi

Proud fisherman!

Collection of prized trout

On your Mark, Get Set…….

You hear that title and the next thing that goes through your mind is GO! Make your plans and get them set is an accurate way to describe activities in the mussel program at Genoa NFH during the late winter. The GO is in sight (Mid-April), but there are many things to do between now and then. Looking at the calendar and thinking that two months is a long time to get things done only provides a false sense of security because between training classes and professional meetings a month can evaporate quickly, even in the winter. As we move through January we test new systems for culturing mussels as well as making plans for the upcoming season. Most of our brood mussels for the season were collected in the fall and held over, but a few trips will be required in April and May to collect the remaining animals needed for our planned projects. All of our host fish are currently waiting for spring in one of the hatchery ponds, but now we're working on getting a health certificate on a lot of mudpuppies to bring them to the hatchery next month so that they can be used for propagation of the salamander mussel. We will also try to spawn those adult mudpuppy to create a self-sustaining population for future use at the hatchery. February will bring our annual cage repair day which will require some advanced planning, and March is occupied by two formal meetings which will chew up time leading into our annual dive team meeting the first week of April. Once that dive meeting is over we'll be going full throttle on propagation and culture of mussels until early summer. All of this means that we have to be prepared now to ensure the productive season to come. This month we've tested a new heated recirculating unit to grow mussels during the winter. We've also re-started the beaker system that was built last year with hopes that we can fill and test it over the coming months. We also tested the use of live algae in addition to the commercially available preserved product that we've used to this point. By planning now for projects in April, May and June we can ease the stress of the moment when the busy part of the year arrives. By: Nathan Eckert



Three species of live algae tested as supplemental feed

Genoa National Fish Hatchery's mission is to recover, restore, maintain and enhance fish and aquatic resources on a basin-wide and national level by producing over 35 aquatic species of varying life stages, participating in active conservation efforts with our partners, and becoming a positive force in the community by educating future generations on the benefits of conservation stewardship

Fixer Upper Continued

Last month a hopeful makeover became a reality at Genoa National Fish Hatchery. Due to years of water damage to the support wall of the head tank in our holding house culture facility a repair was needed. Fast forward a month and much progress has been made. The support wall has been completed, new water supply lines have been put in place, and improved oxygenation systems have been installed. New oxygen lines have also been added to improve delivery of oxygen, create more working space, and allow for easier access to the oxygen supply tanks. The existing egg battery has been removed and will be replaced with a new more efficient egg battery along with new fry tanks for easier collection of fry before stocking. The new aluminum head tank has arrived and been placed. This new tank allows for a larger available water volume to supply fish rearing tanks, increased particulate setting time, and improved oxygenation. Stay tuned for further updates and our finished product. By Aaron Von Eschen

New support wall being constructed

Completed support wall

New head tank ready for delivery

New head tank and water supply lines in place

Lake Michigan Bloater Chub Collection

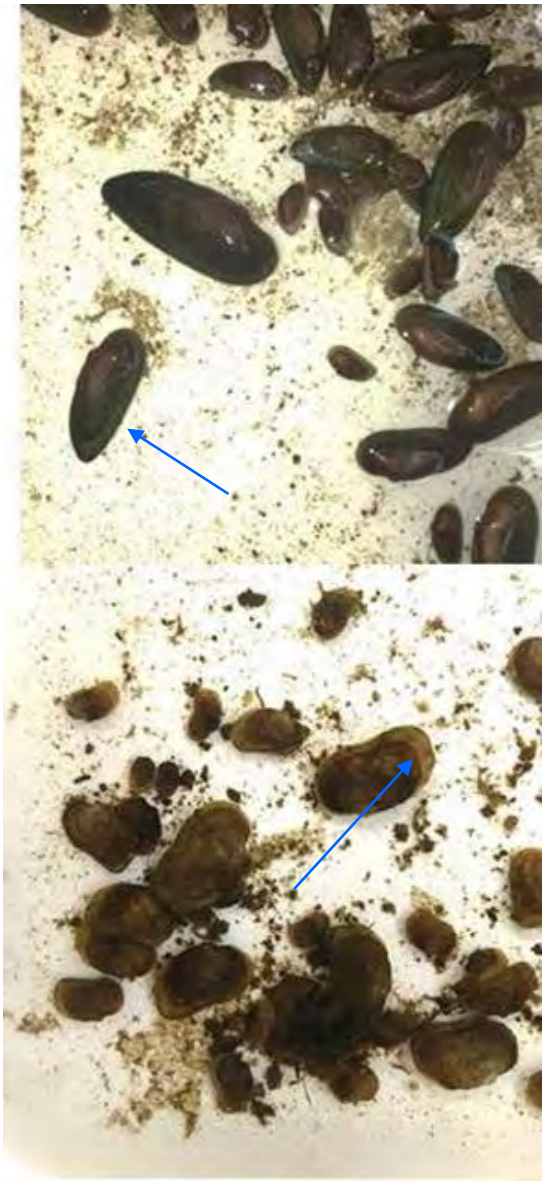
The Susie Q, a commercial fishing boat used to collect the fish (USFWS)

Staff at the Genoa National Fish Hatchery had the opportunity to assist with bloater chub spawning in Lake Michigan. Bloater chubs (*Coregonus hoyi*) are a member of the whitefish family and are an important part of the prey fish community in the Great Lakes and serve an important role in many predator-prey relationships. In an effort to re-establish this fish species the USFWS has joined forces with multiple agencies to create a brood stock to assist in the reintroduction of bloaters in the Great Lakes. Bloater chubs have experienced a decline due to invasive species and over-harvest. This has resulted in Great Lakes managers making restoration of bloaters a top priority. Genoa Fish Hatchery staff Orey Eckes, Jeff Lockington, and Erin Johnson assisted USFWS personal from Green Bay Fish and Wildlife Conservation Office and Jordan River National Fish Hatchery in gathering and fertilizing eggs from bloater chubs from Lake Michigan in the month of January. Collection of adult bloaters took place throughout the month with the assistance of commercial fisherman contracted to provide and operate the boats used to collect the fish. Bottom trawls were used in effort to capture the adult fish. Multiple challenges exist in trying to capture and spawn these fish including loss of viable eggs due to pressure changes during the long 300+ feet to the surface. Once spawning adults are captured the eggs from mature females are collected and fertilized with milt from the males. Once eggs were fertilized and disinfected they were shipped to the Jordan River National Fish hatchery as future broodstock and any surplus eggs will be used to support Lake Ontario's current ongoing deep-water cisco restoration efforts. Jordan River National Fish Hatchery will keep the broodstock on site and will use those fish to produce eggs for future restoration stocking in Lake Michigan and Lake Huron. By: Orey Eckes

Eggs removed from female fish (USFWS)

Bottom trawls were used to capture the adult fish (USFWS)

Testes removed from males to obtain milt for fertilization (USFWS)



A tropical trough: Warm water and lots of food leads to winter growth in rare freshwater mussels

Each autumn native juvenile mussels are transported to Genoa from our trailer and cage sites and are held in stasis in the mussel building on station until spring arrives and the river water begins to warm. This year a new idea emerged; warm up their system water. Using a heater, a pump to circulate water and algae feeders a recirculating system was built to maintain the mussel pan system at nearly 70˚F and keep the growing (hopefully) juveniles fed. Of course, all of the mussels didn't go into this warm system. Instead, they were split between the cold and warmed systems to make sure that if the system failed then all of our mussels weren't in one basket. There were five species produced this year that we divided; Black Sandshell, Washboard, Salamander Mussel, Federally Endangered Higgins' Eye, and Fragile Papershell. In order to find out whether the new system is effective for creating a good environment for growth we are measuring groups of each species of mussel that remained in the cold system as well as in the warm system each month. After one month the mussels in the cold system remained the same size while those in the warm system grew. Our visual observations told us the same thing (See pictures below) because the new growth is great enough that we see it on most of our animals as they crawl around in their pans but it's still valuable to be able to evaluate growth statistically. We hope that this means that many more mussels will be large enough to release each year, making it possible for GNFH to release many more mussels over time, working towards our goals of conserving these rare species. By Megan Bradley

The arrow indicates the size at which the mussel was moved in the warm system. All of the shell past this mark is new growth. Left to right are Black Sandshell, Washboard and Salamander Mussels

Upcoming calendar of events

March 2018

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2 **Regional FWS Mussel Coordination Meeting**	3
4	5	6	7	8	9	10
11 Daylight Savings Time Starts	12	13 Wildlife User Survey	14	15 Freshwater Mollusks Conservation Society Tour	16	17
18	19	20 2nd-5th grade Hamilton Elementary Tour	21	22 2nd grade Hamilton Elementary Tour	23	24
25	26	27	28	29	30	31