



Genoa National Fish Hatchery News and Notes

January 2015

Friends Host Kids Ice Fishing Event at the Genoa Hatchery



A young angler shows off his catch

2015's annual Kids Ice Fishing Day held on February 6th was great fun in spite of this year's arctic weather blast in the upper Midwest. The U.S. Fish and Wildlife Service's 3 La-Crosse area fisheries offices again hosted a Kids Ice Fishing event with the help of our Friends Group,

the Friends of the Upper Mississippi. The event, which had humble beginnings back when it was held at Goose Island Park just south of LaCrosse Wisconsin, is now a highly anticipated winter event. Over 450 people arrived at the station on the 15th to learn more about ice fishing, and have an opportunity to fish a stocked pond for rainbow trout at the Genoa National Fish Hatchery. 250 kids from ages 5-12 and their parents, some who had never been ice fishing before were given a short primer on ice fishing and ice safety by Eric Leiss, (fish biologist and ice fishing expert from the LaCrosse Fish Health Center) then had an opportunity to fish for the rest of the morning on Pond 11. The children and their parents were then fed a light lunch provided by our Friends Group and sent home happy. Some children even caught their first fish through the ice. A warming tent with coffee and cocoa was available for a quick warm up, even though it was a warm day for Wisconsin, with highs all the way up to the mid 20's! A lot of carryover 2 year old rainbows were very receptive to the young anglers, with many going home with their limit of 5 fish per child. Many thanks go to our volunteers, the Friends Group, and the Genoa staff and staff from the 3 La-Crosse area fisheries offices to get kids and their parents outside to enjoy all nature has to offer, even in the midst of winter.

By: Doug Aloisi



Successful young angler with her catch

About Genoa NFH

Genoa NFH was established over 75 years ago and is one of 70 Federal Fish Hatcheries located across the Nation. Genoa cultures a variety of cold, cool, and warm water fish as well as freshwater mussels and one salamander 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.



Dragonflies set to arrive at Genoa NFH in 2015!

In February of 2013, staff from Genoa National Fish Hatchery travelled to Vermillion, SD to meet with students and faculty from the University of South Dakota studying the Hines Emerald Dragonfly.

The hatchery was contacted by the Green Bay and Chicago Ecological Services Field Offices to see if it would be possible to transfer small scale laboratory based propagation to a larger production scale. The Hines Emerald Dragonfly was placed on the Federal Endangered Species list in 1995. The primary reason for the species decline is loss of habitat due to urban development. The historic range for the dragonfly was Alabama, Illinois, Indiana, Ohio, Missouri, Michigan and Wisconsin. It has been extirpated from Alabama, Ohio and Indiana. Habitat restoration efforts are underway in several locations and with the culture methods being developed, there is great hope for this species to stabilize and re-establish in historic ranges. This small step two years ago led to a search for funding to begin working with this new species at Genoa NFH. In the fall of 2013, hatchery staff began working with USD and the Chicago Ecological Services Office on a proposal for the Cooperative Recovery Initiative. This initiative provides funding for projects working with threatened or endangered species on or near refuge lands. The fish hatchery is in a unique situation, being located within the Upper Mississippi National Wildlife and Fish Refuge, allowing the opportunity to apply for the funding. Genoa NFH seems to be an almost ideal setting for possible dragonfly culture with access to the hatchery's natural wetland and the multiple food sources utilized by the many species cultured at the hatchery.

A proposal was submitted in 2013, requesting funding for a mobile rearing unit, cage construction and additional staff for the hatchery to begin culturing the Hines Emerald Dragonfly as well as funding for a coordinator position at the Chicago ES Office and for USD to perform collection efforts and genetic sampling. The proposal made it to the final steps of the process but other projects were selected for 2014. The hatchery, the Chicago ES office and USD worked on the proposal again in the fall of 2014 and submitted a revised proposal. In early February 2015, the group received word that the proposal was selected and work will begin in the spring/summer of 2015! Stay tuned for updates on the construction of the trailer and cages and for the arrival of the Hines Emerald Dragonfly larvae at Genoa NFH.

By: Angela Baran

An adult Hines Emerald Dragonfly

Genoa National Fish Hatchery 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



Photo Credit: P. Burton



Lake Michigan Winter Cruise to collect rare bloater eggs

USFWS



A bloater chub

Another January has come and presented an opportunity for staff at the Genoa National Fish Hatchery to venture to Lake Michigan to assist with bloater chub spawning. This year proved to be a little nicer than last season out on the lake as the winter temperatures weren't quite as cold as they were. Although some windy days made the lake a little rough, the egg collections were accomplished successfully.

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 in the Great Lakes due to commercial fishing, habitat degradation and an invasion of non-native species such as invasive plankton, alewife, and zebra and quagga mussels. Because of these invasive species many of the native aquatic species in the Great Lakes are negatively affected. These species like all invasive species tend to quickly establish themselves and soon become a fierce competitor for food and niche space for native species. A top priority with Great Lakes managers has been to recover native species to provide a better balance in food-web structure and function.

Genoa Fish Hatchery biologists Orey Eckes, Jorge Buening, and Aaron Von Eschen assisted partner USFWS personal from Green Bay and Jordan River National Fish Hatchery in gathering and fertilizing eggs from bloater chubs from Lake Michigan in the month of January. The U.S. Fish and Wildlife Service provide fertilized bloater eggs from wild donor stock in Lake Michigan in support of Lake Ontario's current ongoing deep-water cisco restoration efforts. 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 to harvest and environmental factors such as weather. Once eggs were fertilized and disinfected they were shipped to the New York State Department of Environmental Conservation (NYSDEC), who then transported the eggs to the Ontario Ministry of Natural Resources (OMNR) White Lake Fish Culture Station (FCS) where they will be used as a future broodstock for Lake Ontario.

Genoa Fish Hatchery will play an important role in helping to sustain this species with its Quarantine Facility in the very near future. For 18 months the quarantine building will hold wild bloaters to be used as future captive broodstock until they have passed all fish health inspections before heading to Jordan River (MI) National Fish Hatchery. Jordan River NFH will keep the broodstock on site and will use those fish to produce eggs for restoration propagation in Lake Michigan and Lake Huron. By: Aaron Von Eschen



After trawling eggs are collected from ripe females

Putting our Friends to Work

In January it was once again time to give a face lift to the mussel culture operation by refurbishing used mussel cages. This time honored tradition has extended back over a decade. The cages spend a couple summers in the water and then we replace the wire screen and make any necessary repairs to the frames. This is work that the staff at the hatchery would be able to complete, but with the assistance of our friends and volunteers the work can be completed in a much more timely fashion. There were enough cages for repair this year that two cage work days were needed. In response to the need, Friends of Pool 9 and the Friends of the Upper Mississippi both stepped up with volunteers to aid in cage repair. Both repair days were well attended with at least 12 volunteers present. Over the two working days over 70 mussel cages were repaired and made ready for use this summer. The volunteers logged a total of 189 hours over the two days helping us get ready for the upcoming production season while allowing the Genoa NFH staff to focus their time on other efforts as a whole. In exchange for their generous efforts the Genoa NFH staff treated the volunteers to a lunch of grilled hamburgers, hot dogs and all the fixings'. It is our sincere hope that these cages will be fruitful and produce many mussels for stocking in local waters. History says we'll have a strong group of volunteers ready to go next winter when the next set of cages needs repaired. By: Nathan Eckert



Volunteers from the first work day with a trailer load of finished cages

Passing Down the “ART” of Fish Culture one Mesh at a Time

As spring rapidly approaches the hatchery staff is busy putting final touches on maintenance of equipment and buildings to prepare for the spring spawning season. In the months of April and May the staff is on the Mississippi River daily collecting walleye eggs for a myriad of stocking requests. Walleye eggs collected for Genoa Fish Hatchery will be hatched and reared throughout the summer in grow out ponds until reaching 6-8 inches in length. These fish will eventually be used as hosts for freshwater mussel propagation, in an effort to enhance populations of black sandshell mussels. In addition, eggs and fry are shipped to federal, state and tribal partnerships for restoration. In preparation for walleye spawning nets must be cleaned and repaired for any



Aaron takes a turn patching nets

damage that occurred the previous season. As a younger generation of biologists, it is essential to learn the “ART” of fish culture in addition to the biology. Over the years maintenance mechanic, Jeff Lockington has mastered the art of repairing hoop nets and is passing his experience to younger generations of fish biologists at Genoa. Having nets in proper working order is essential for maximizing walleye harvest during the spring spawning season. Passing this art down ensures that these essential techniques are taught to the next generation of biologist. As many of my colleagues can agree, fish culture is both an “Art” and a “Science.”

By: Orey Eckes

To Eat Or Not To Eat

Everyday developing organisms around the world experience phenomena that perpetuate their existence. For example, the cute button noses that babies have actually make it easier for them to breastfeed, or polliwogs completely alter their physiology in order to live as frogs and toads that breathe atmospheric oxygen. Even with the range of complexity for these occurrences the same general principle applies, help the organism survive.

At Genoa National Fish Hatchery we get to experience one of these adaptations first hand. As newly hatched salmonid fry mature they absorb their yolk sac and their mouths finish developing. When this process is complete they transition from a creature that simply lies on the bottom of the tank and absorbs food to an active predator with an active digestive system that finds its own meals.

Over the last 2 months this is exactly what the lake trout, coaster brook trout, and rainbow trout have been doing on station. There is some variability associated with species, when the different fish lots hatched, and between individual fish in the same lots. Generally within two weeks of the first fish of a lot swimming-up and eating, the whole group will. So as biologist we watch for those signs of swimming-up and a diminished yolk sac in order to start presenting food.

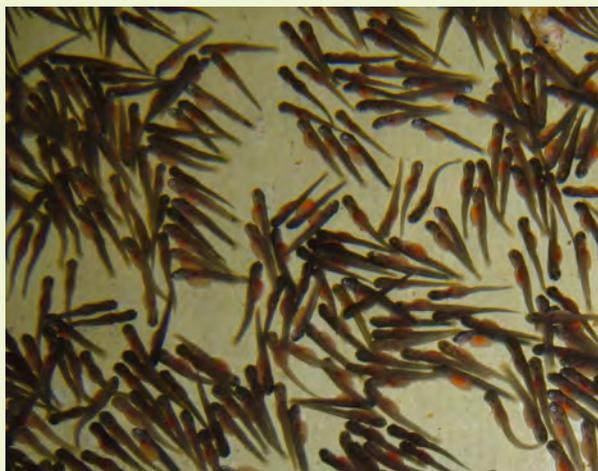
Understanding biological processes is one of the more difficult and more rewarding aspects of our job.

Whether it is simply the turning down of an infant's nose or a complete physiological make-over, things happen for a reason and it is our job to understand why.

By: Jorge Buening

Some more pictures from the Kids Ice Fishing Clinic.

Lots of kids having a good time on the ice!



Rainbow trout fry



Upcoming calendar of events

March 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3 Electrical Troubleshooting & Preventative Maintenance Madison, WI	4 Region 3 Annual Dive Team meeting La Crosse, WI	5	6	7
8 Daylight Savings Time	9 Spring Fish Health	10 Sampling Begins	11	12	13	14
15	16 Region 3 Project Leaders Meeting, Regional Office, Bloomington, MN	17	18	19	20	21
22 Freshwater Mollusk Conservation Society Biennial Symposium, St. Charles MO	23	24	25	26	27	28
29	30	31				