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

Talking fish and mussels with the Secretary of the Interior and Congressman Kind.

On August 14th Secretary of the Interior Sally Jewell was in the La Crosse area with Congressman Ron Kind. They gathered for an all employee meeting and question and answer session for staff from both the U.S. Fish and Wildlife Service (USFWS) and the U.S. Geological Survey (USGS). The meeting was held at the Upper Mississippi Environmental Sciences Center (UMESC) in La Crosse, and was attended by both Tom Melius and Leon Carl, the respective regional directors for the USFWS and USGS. After the all employee gathering the group was given a full tour of UMESC with stops along the way highlighting work done by federal employees in the area. One stop on the tour was held at the UMESC fish hatchery. A display of freshwater mussel siphoning was set up to demonstrate how mussels help clean our water. At that stop Genoa NFH biologists Nathan Eckert and Aaron Von Eschen spoke to the group about fish and freshwater mussel propagation at Genoa NFH and how their efforts work along with the different projects at UMESC. While the stop only took a few minutes the information was well received and both the Secretary and Congressman Kind enjoyed their brief introduction into current happenings and partnerships at the hatchery.

By: Nathan Eckert

Lake Sturgeon Produced for Missouri DOC to Restore Upper Mississippi River Population

Lake sturgeon spawning in the river

Exciting findings coming from Missouri this spring documented lake sturgeon spawning in Missouri for the first time since they had been nearly extirpated. Populations have been at record low levels since the early part of the last century due to overfishing, pollution and habitat destruction. This year successful spawning was recorded, with resulting fry hatching successfully. Since the 1980's a lake sturgeon restoration and stocking program was carried out by our partners, the Missouri Department of Conservation. The Genoa National Fish Hatchery began assisting in Missouri's stocking efforts in 2004 when the lake sturgeon propagation program received funding to increase lake sturgeon restoration efforts. Funding was initiated to increase sturgeon populations throughout the Midwest by building a sturgeon culture building at the Genoa hatchery to produce fingerlings for targeted restoration efforts where sturgeon have been extirpated across their historic range. Through these efforts lake sturgeon fingerlings have been provided annually to support restoration efforts in the Mississippi River and lower Missouri Rivers in Missouri since 2004. Lake sturgeon have a unique life history, which includes a very long life span sometimes reaching over 100 years, and a long period of time before they reach reproductive age. Most females are over 18-25 years before spawning for the first time. Although fingerlings stocked in 2004 have not yet entered reproductive age, due to the high survival rate of stocking fall fingerlings the confidence of these fish to make a strong contributing year class of spawning age fish is high. This past week trucks from the Missouri Department of Conservation arrived at Genoa to pick up this year's production of 13,000 fingerlings to stock in tributaries of the Mississippi River. They were placed in the tributaries in hopes that the fish will migrate down to the big river to feed and grow and return to the tributaries to spawn and use as nursery areas for the small fry and fingerlings. Cooperative restoration efforts such as these that include habitat conservation and improved water quality are necessary to ensure that these unique fish will last another century as part of Missouri's, and subsequently our nation's native fauna. By: Doug Aloisi

Juvenile lake sturgeon

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

Genoa National Fish Hatchery
75 Years of Fisheries Conservation
1932-2007

Hines Emerald Dragonfly Recovery Program at Genoa National Fish Hatchery

Top: Pulling and checking cages
Bottom: Dragonfly larva in the cage

This summer, Genoa National Fish Hatchery became the first federal fish hatchery to house and propagate a federally endangered insect. Hine's Emerald Dragonfly (HED) larvae arrived on station at Genoa National Fish Hatchery on June 2, 2015. This marks the beginning of the collaborative effort among the Genoa NFH, Chicago ES Office, Upper Mississippi National Wildlife and Fish Refuge and University of South Dakota (USD) funded through the Cooperative Recovery Initiative. USD has been working with the dragonfly for several years and has studied their growth, tracked their genetics and has developed the first captive rearing techniques for the species. Genoa will take the methods and work with USD to adapt them to larger scale production and to tailor them to the site specific variables. As a new species on station and new methods of culture are being developed, the decision was to use larvae from the more stable population of HED along the Wisconsin River. Once the methods are tested and the best ones determined, Genoa NFH will begin raising the more imperiled population from Chicago, IL. The larvae are placed in cages and are checked each week to ensure they are free of debris, the cages are undamaged and to spot check the larvae, opening one cage in each grouping. Each month, the cages have been pulled, larvae placed in a holding container overnight to allow them to empty of food and the next day they are weighed and measured before being placed back into the water. Genoa staff worked with University of South Dakota to develop the initial rearing plan at the hatchery, placing larvae in deep and shallow water in both the wetland and one of the hatchery ponds, to determine the best conditions for the larvae. The first cage assessment was on June 30th, with staff from USD demonstrating proper handling techniques for the larvae, ensuring correct identification of the larvae and evaluating the food available in the cages. This first assessment brought both extremes of news, the great news of excellent growth of the larvae in the pond system, some growing 400% in just one month and the unfortunate news that in the wetland conditions in the last week before their check a large number of the larvae were lost. While it was initially thought the wetland would be the most ideal location for the larvae, the heavy rains leading to prolonged flooding conditions and deeper than normal levels in the wetland showed temperatures and oxygen levels could not be controlled as well as in the pond setting. Temperatures in the pond varied between 70 and 87 F throughout the month, daily temperatures only varying by 3 - 4 F. Temperatures in the wetland however, varied between 65 and 92 with daily temperatures varying by 10 – 15 F. The final check before the first assessment showed dissolved oxygen levels as low as 1.2 mg/L in some of the wetland locations. After the first assessment, it was decided to move the remaining larvae to the pond, shelving the wetland as a possible rearing location. USD has completed studies showing larvae can be reared together without cannibalism as long as they are approximately the same size, which was the logic behind attempting to raise 2 newly hatched fry together in one cage. During the assessment, it was found that both larvae survived in only few cages, most cages only had 1 surviving larva. The theory is that the growth on the smallest larvae was so great in the first month, one grew faster than the other and consumed it. After these adjustments to the rearing practices at the hatchery, the larvae continue to grow well and survival is on par or slightly better than the field locations. The larvae will remain in the pond until late fall,

when a portion of them will be brought into the newly constructed trailer, where the colder winter pond water will allow them to go dormant for the winter. For the 2016 growing season, modifications will be made to the cages, newly hatched larvae will be kept alone in the cages. The hatchery is also looking forward to receiving their first batch of eggs to hatch on station and growing the larvae to place in next summer's cages.
By: Angela Baran

Volunteers really come through for Genoa during sturgeon tagging season

Coded wire tagging lake sturgeon

At Genoa National Fish Hatchery, the lake sturgeon program is one of the largest and most time intensive programs that take place. In recent years the station has more than doubled the annual production of lake sturgeon and with all the extra fish an extra set of hands is definitely needed. That extra set of hands is specifically needed when it comes times to tag all of the fish. Before leaving the hatchery each fish is marked with a coded wire tag which continues a unique identification number. This information is then recorded and used by biologists to monitor these fish once released into the wild.

This year at the hatchery four different strains of lake sturgeon were collected. Between the four strains nearly 80,000 lake sturgeon were intensively reared. Once they reached the 5-6 inch range they were ready for tagging to begin. This is when volunteers play a crucial role to the hatchery and the lake sturgeon program. With so many fish to tag it would be feasible for hatchery staff alone to be able to tag all of these fish in preparation for stocking. The hatchery reached out to the friends groups of the hatchery and before long volunteers were beating down the doors to the hatchery. Over 20 people volunteered over 220 hours of sturgeon tagging this year. This task could not be accomplished without the help of friends groups and volunteers. The hatchery staff is appreciative for all of our wonderful volunteers. Thank You for your hard work!!! By: Aaron Von Eschen

Tagging help from Bailey at the La Crosse FWCO and volunteer Don Schroeder

Milkweed and Monarchs in the Classroom!!!

Due to declines in monarch butterfly habitat the Genoa National Fish Hatchery has focused efforts on conserving the monarch butterfly migration as part of Monarch Joint Venture in the form of habitat restoration. Last fall, staff at Genoa collected thousands of milkweed pods from around the hatchery grounds. Seeds were removed from the pods and later planted for restoration of milkweed on the hatcheries 75 acres of suitable habitat. As the summer nears to an end hatchery staff has observed noticeable increases in milkweed plants. With the increase of milkweed plants we have documented numerous eggs and larvae occupying and feeding on the leaves. With increase in larval numbers it's no surprise that we have been seeing many adults flying around. As fall is near we have begun collecting milkweed pods for the next planting season in hope of further increasing milkweed abundance at the hatchery.

The hatchery has taken steps to also engage others in monarch conservation. Southern Bluffs Elementary school is partnering with the hatchery to make students aware of the threats that monarchs face and what they can do to help. Teachers are incorporating monarch butterfly lessons in their science curricula with the help of fish and wildlife employees from the hatchery through teaching and engaging youth about monarch conservation. As the school has begun, hatchery staff has taught students about milkweed restoration and how important milkweed in the Midwest is to monarch butterflies. Milkweed pods were brought into the classroom to give students a chance to identify plant structures as well as collect seeds for the hatchery to plant. This hands on learning gives students a vested interest in the project. Within the next month students will return to see the results of their work paying off during outdoor classrooms lessons at the hatchery. The fall lesson will consist of a hatchery tour and field surveys for milkweed, larval and adult monarch butterflies.

According to monarch joint venture it is known that milkweed plants are essential for larval caterpillars and nectar plants are critical for survival of adult butterflies. Accompanying a strong milkweed abundance with a nectar garden aids in the survival of both larvae and adults. For the past few years Genoa has been partnering with the Gardening Club of La-Crosse, WI to help plant native nectaring plants to support adult monarchs. These native nectar plants which bloom throughout the summer provide food for adult monarchs. Monarch conservation is well on its way at Genoa with the help of many partners and through teaching future generations the importance of monarch conservation.

By: Orey Eckes

Upcoming calendar of events

October 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Pond Harvesting and Fish Stocking			1	2	3
4	5 Spawning Wild Lake Trout, Cayuga Lake NY Stocking Lake Sturgeon	6	7 Mussel Cage Removal at Dubuque	8	9	10
11	12	13	14 DeSoto School Tour	15 Prairie du Chein School Tour	16	17
18	19 North American Sturgeon and Paddlefish Society Annual Meeting	20	21	22	23 Lincoln Middle School Fall Outdoor Classroom	24
25	26	27	28	29	30	31