



IRON RIVER NATIONAL FISH HATCHERY

OCTOBER—DECEMBER NEWSLETTER



Surplus Brood Stock are Transferred to Red Cliff Tribal Fish Hatchery *by Carey Edwards*



Top left: Surplus brook trout brood stock are loaded into tanks destined for Red Cliff Tribal Fish Hatchery. **Above:** Biologist Brandon Kessler and Carey Edwards net the remaining brook trout out of a circular tank. **Below:** Small surplus brood stock are placed into buckets and poured into tanks on the distribution truck.

The Iron River National Fish Hatchery maintains 6,000 adult and juvenile lake trout and coaster brook trout annually. These fish produce eggs that are used for restoration purposes in the upper Great Lakes region. Their eggs are utilized at Iron River NFH as well as other federal, state and tribal hatcheries around the region. Adult brood fish are “retired” as their efficiency at producing eggs declines, egg/fish requests decline or space is needed for new brood fish. The hatchery staff makes every effort to place these fish in the local fishery.

Transfers to other facilities occur from time to time as well. This fall we had an opportunity to help Red Cliff Tribal Fish Hatchery invigorate their captive brood stock population. Biologists from Red Cliff picked up two year classes of surplus juvenile coaster brook trout, 1,500 fish in total, for transport to their new home. The Red Cliff Hatchery has replaced their Nipigon brook trout with the Tobin Harbor coaster brook trout. They have received eggs from the Iron River NFH for several years to meet production needs while their brood population matures. The Iron River NFH was happy to assist a partner hatchery and delighted to put surplus fish to good use.



The Royale Treatment *by Carey Edwards*

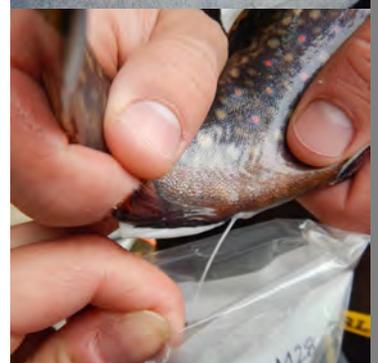


The Iron River National Fish Hatchery (NFH) maintains approximately 10,000 adult and juvenile captive lake trout and coaster brook trout brood stock. Infusion of wild genetics into these captive lines is paramount for successful brood stock management. This fall, staff from Iron River NFH (Carey Edwards and Brandon Keesler) and the Ashland Fish and Wildlife Conservation Office (Henry Quinlan) made the trek to Isle Royale National Park to collect gametes from coaster brook trout found in Tobin Harbor. Peak spawning time for coaster brook trout in Tobin Harbor is usually the second and third weeks in October. Even though the Park is preparing to close during this time and move its Headquarters back to the mainland in Houghton, MI, we are graciously allowed to make “dry camp” in one of the housing units for summer interns. Though there isn’t water, heat or electricity in the building, there is a roof over our heads and soft beds to sleep on. Isle Royale NP is the largest island in Lake Superior and is open to the public from late spring to early fall. Being an island, it is only accessible by boat or plane and weather conditions dictate when visitors to the island can come or go. Our ten day journey began with a 2 hour/56 mile boat ride on the R/V Chub with the return trip taking 4 hours! All of our personal, field and sampling gear, lab supplies, generators and cooking supplies, and food and water are stowed for the voyage.

Fish are collected using fyke nets which are a series of funnel shaped nets in which fish get trapped in. They are set near the shoreline throughout Tobin Harbor and monitored daily. Brook trout and other fish species are caught and biological data is collected. Mature brook trout are transported to holding pens until ready to spawn. All other

fish and immature brook trout are released.

The goal is to create 40 families. Once the decision is made to spawn fish, male gametes are collected in plastic bags and checked under a microscope for viability before collecting and fertilizing eggs from females. Once the eggs are fertilized with the milt, they are rinsed, disinfected, and sealed in containers with well water from the hatchery. The containers are packed in coolers for transport back to the mainland and continue on to a quarantine facility at Genoa NFH to incubate, hatch and grow for 18 months before becoming brood stock at Iron River NFH. Plans are in the works for another wild brood line to be collected next year. Stay tuned for more information on the progress of our new brood line.



Volunteers Help Kick-Off Brook Trout Spawning Season *by Carey Edwards*

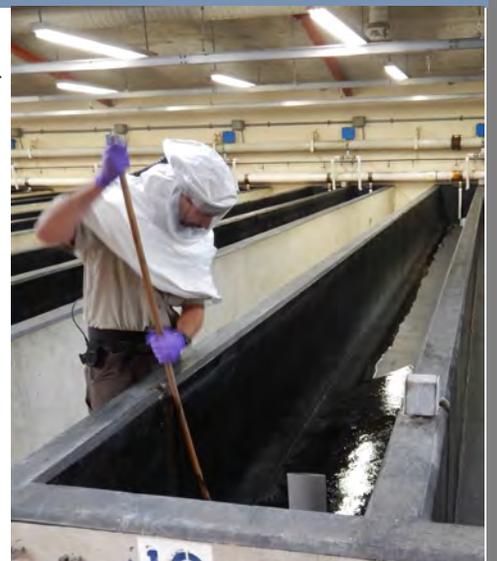
The Iron River National Fish Hatchery (NFH) maintains 6,000 adult lake trout and coaster brook trout for restoration purposes in the upper Great Lakes Region. Every fall, fish are sorted by sex and maturity and spawned. Eggs are collected, incubated and either shipped to other government agencies or kept at Iron River NFH for production purposes. Over 10,000 pounds of fish are handled multiple times in this process and sometimes we need a helping hand to get the job done in a timely and efficient manner. Helping out this year were volunteers from the Red Cliff Tribal Fish Hatchery (TFH) and 1854 Treaty Authority. Red Cliff TFH currently raises coaster brook trout and walleye. This partnership allows staff from both facilities to share techniques and ideas on different hatchery management practices and forge stronger ties for future collaborations. Volunteers from 1854 Treaty Authority have been coming to Iron River NFH for the past five years to help out during spawning and sorting. This has provided a dependable source of help for the hatchery while providing cross training for staff from 1854 Treaty Authority. The staff at Iron River would like to say “Thanks for a job well done!”



Nursery Building Raceways Get Facelift *by Nick Starzl*

Maintenance at a National Fish Hatchery is a never ending issue which managers throughout the nation must assess. Some projects are too large, or dangerous for hatchery crews to tackle. Others can simply be too costly and would take many years to find their way into station budgets, like the recent raceway floor rehab project in the Iron River National Fish Hatchery’s nursery building. The twenty two 45’ x 3’ concrete tanks in the nursery building are original to the hatchery. The tanks are coated with a black epoxy paint on the inside for several reasons. It keeps the tanks from eroding over the many years of water flowing through them, and it helps keep fish waste products from adhering to the walls and floor. Throughout most of the year, each tank is brushed daily in order to keep the culture environment clean for the fish. Eventually over 30 years of use, the floors of the tanks needed a fresh coat of epoxy to maintain their use. It is estimated that if the job were to be hired out it would consume half of the stations annual maintenance budget of \$85,000 to be completed.

So in October of 2014, the hatchery staff decided to “roll on” and get the job done themselves. By purchasing the supplies and doing the job in house, it only cost the station around \$4,000. Many thanks go out to the crew of the Iron River Fish Hatchery for doing what needs to be done, even during busy times of the year with limited help.



Lake Trout Egg Shipments Complete *by Carey Edwards*



Above: Eggs are wrapped in wet cloth diapers. Below: Biologist Paul Larson loads the top tray with ice before sealing the coolers for transport.



The Iron River National Fish Hatchery (NFH) maintains approximately 6,000 adult lake trout and coaster brook trout for restoration purposes in the upper Great Lakes. Fish are spawned in the fall, eggs are collected and incubated and then shipped to other entities, including federal, state and tribal agencies in and out of the region.

For the second year running, Iron River NFH has successfully fulfilled all Klondike Reef lake trout requests, providing 800,000 eyed eggs for cooperators and production at Iron River NFH. This is due to the implementation of LHRH injections which improved survivability to the eyed egg stage from 35% to 85%. Iron River NFH will receive an additional 1.85 million lake trout eggs from both in and out of the region as well to meet production goals. Stay tuned for more information on brook trout spawning.

Why do hatcheries ship eggs? Not every hatchery is a brood facility, meaning that not every facility holds adults and completes the egg-taking process. These non-brood facilities need a source of fish or fish eggs to fulfill their mission and fish production goals. That is where the brood facility “takes their order” and plans for the amount of eggs and which strain will be given to the other facilities. At Iron River, we rear certain strains for Great Lakes Restoration. However, the strain that fish managers want for the south end of Lake Michigan is not always the particular strain of brood that Iron River NFH rears. Therefore, we also receive eggs from other facilities, to meet our production goals.

Why eggs not fish? You can disinfect eggs and not fish. The main purpose of all hatcheries is to culture healthy fish for the public. To reach that goal, we prefer

not to ship fish from hatchery to hatchery, because we may also be shipping disease.

Do you ship eggs in water? No. After the eggs are disinfected for shipping to another facility, they are wrapped in wet cloth diapers and layered on perforated Styrofoam trays and placed in coolers especially made for egg shipping. The top tray is loaded with ice that slowly melts and allows the fish in the eggs to breathe.

The Hatchery, out and about...*by Carey Edwards*

The Iron River National Fish Hatchery hosts many events for all ages and is open to the public every day from 7 a.m. to 3 p.m. for viewing and self-guided tours. We also participate in many outreach events throughout the year that are off station. These events forge new ties with partners and make old ones even stronger. They also allow us to advertise the hatchery’s mission to a huge audience that we can’t reach normally. We’ll see you around!

Protect Our Waters Fun Fair: The Iron River National Fish Hatchery participated in the first annual Protect Our Waters event hosted by the City of Superior’s Environmental Services Division of Public Works. The evening held food, games and prizes. The fun fair showcased how different agencies and companies from the area protect our local watershed and ways that everyone can get involved to help make a difference. The hatchery provided an informational booth with a fish game and prizes and an aquarium with coaster brook trout. This was a wonderful and fun way to share how the Fish and Wildlife Service and the Iron River National Fish Hatchery is making a difference through lake trout and coaster brook trout restoration in the upper Great Lakes.

Great Lakes Aquarium: Occasionally we get the opportunity to showcase our brood fish in other ways. Our fish can also be found in the 85,000 gallon Isle Royale display at the Great Lakes Aquarium in Duluth, MN.



Staff Updates and Hatchery Happenings...



Meet Carey Edwards. Carey is the newly selected Assistant Hatchery Manager and has worked at the Iron River National Fish Hatchery for over 6 years. Carey originally hails from Galion, Ohio and completed her formal education at Northland College in Ashland, WI. She holds a degree in Biology and Chemistry. Before coming to Iron River NFH, she worked for USGS and the Wisconsin DNR. Carey gained a wealth of experience with over 12 years at Les Voigt and

Brule State Fish Hatcheries. Carey's FWS highlights include being on the ground floor of a successful lake trout restoration program, being selected as an official delegate to China and being immortalized in Lego form. Carey enjoys spending time with her husband and two daughters, skiing, fishing, camping, four-wheeling and taking care of her farm. Please join us in congratulating Carey in her new official role. Check out this webpage for more info on Carey and other women featured in **Women in Science: Connecting with the Future** at <http://www.fws.gov/midwest/news/WomenInScience-CareyEdwards.html>



Staff Photo: Pictured from left to right biologist Shawn Sanders, administrative assistant Mallory Mackey, assistant manager Carey Edwards, biotech Brandon Keesler, hatchery manager Nick Starzl, animal caretaker Deb Frostman, biologist Paul Larson.

★ The 3 mile trail system is open year round for visitors to enjoy. It is groomed for classic cross country skiing and snowshoeing all winter long. Check out our **Facebook page** for the latest updates on trail conditions.

January 2015

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

February 2015

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
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15	16	17	18	19	20	★
22	23	24	25	26	27	28

March 2015

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

★ Look for the Candlelight Trek in February

Friends of the Iron River National Fish Hatchery

This could be you!! Join the Friends of the Iron River National Fish Hatchery today. Come share your ideas and thoughts and help promote the hatchery and its resource.

The Friend's of the Iron River National Fish Hatchery have been working behind the scenes with hatchery staff to obtain a grant for future hatchery trail projects. Stay tuned for the results in the next newsletter. Why wait? Come join the fun now!! Check out the Friends merchandise at the hatchery. Not a member? Membership information can be found at the Friend's website: <http://ironriverhatcheryfriends.org>, through Facebook, by emailing the Friends at something-fishy@ironriverhatcheryfriends.org or by contacting the hatchery office 715-372-8510. New members are always welcome. Come join of the fun.

