

U.S. Fish and Wildlife Service

Jordan River NFH Accomplishment Report

Partnerships and Accountability

(See Jeremiah Johnson article under *Workforce Management*).

Aquatic Species Conservation and Management

Jordan River National Fish Hatchery (NFH) Staff Assist with Lake Trout Spawning

Annually the brood stock facilities in the Great Lakes Lake Trout Program request assistance during fall spawning, and this year Jordan River staff were able to assist the Iron River and Sullivan Creek NFHs. Fish Biologist Wayne Talo helped out at Iron River NFH the first week in October, while John Johnston provided assistance at Sullivan Creek. Fish Biologist Paul Haver worked at Sullivan Creek the week of October 9. Student Temporary Employment Program (STEP) employee from Jordan River NFH, Chris Olds, intermittently traveled from Lake Superior State University to aid in spawning at the Sullivan Creek NFH as well.

-Tim Smigielski

Egg Receipts for 2007 Year Class

We began receiving shipments of lake trout eggs that had been spawned during the fall at our three brood hatcheries in mid-November. Eggs are shipped after they have reached the “eyed” stage, or the stage at which the eye of the developing fish can be seen within the egg. Typically, between 60 and 70% survive to first feeding, or about six to eight weeks after we receive them. From these eggs, we intend to raise approximately a million fish to 2.5 inches in length for transfer to the Pendills Creek NFH (Brimley, Michigan) during the spring / summer of 2007. The remaining fish should number slightly more than two million, and we anticipate releasing them into Lakes Michigan and Huron during the spring / summer of 2008.



Lake trout eggs beginning to hatch

- USFWS Photo

No additional shipments of eggs are anticipated. The following table summarizes our egg receipts for this year:

Brood Year 2007 Lake Trout Egg Receipts

Strain	Source	Number	% of Total
Lewis Lake Wild	Saratoga NFH (Wyoming)	3,275,412	60.37%
Lewis Lake Wild	Sullivan's Creek NFH (Michigan)	546,639	10.08%
Superior Apostle Island Wild	Iron River NFH (Wisconsin)	791,796	14.59%
Seneca Lake Wild	Sullivan's Creek NFH (Michigan)	811,674	14.96%
		5,425,521	

-Wayne Talo

Jordan River NFH Biologists Assist with Brood Stock Transfer

Biologists John Johnston and Tim Smigielski from the Jordan River NFH assisted John Shuman of the Pendills Creek NFH in hauling adult lake trout out of Sullivan Creek NFH on October 22. About 300 brood lake trout, whose best years were behind them, were stocked in Gull Lake in Kalamazoo County. This stocking was coordinated with Michigan Department of Natural Resources (DNR) fisheries staff out of the Plainwell, Michigan office.

-Tim Smigielski

Fish Marking Begins

Fin clipping of the 2006 year class of lake trout began in the first week of December. All hatchery-reared lake trout released into the Great Lakes must be readily identifiable as such to differentiate them from wild, naturally-spawned lake trout. This helps researchers in assessing the success of the Great Lakes Lake Trout Restoration Program. The fin clip pattern changes every year, on a seven year rotation. This year's is a combination clip: right pectoral and left ventral. Most of the lake trout released in 2007 will have this mark, with the exception being a small number of fish to be used for special studies, which will receive a coded wire tag and an adipose fin clip.



Clipping a right pectoral fin

-Photo by Wayne Talo

As every fish is individually handled and clipped, this work is very time consuming. We have a crew of seasonal employees, some of whom have been working here for many years, clipping fins and tagging fish for us. Marking is expected to continue through March.

-Wayne Talo



Septic Maintenance Project Important to the Residents at Jordan River NFH

On December 22, Bob Petersen, Maintenance Mechanic, and John Johnston, “Septage” Biologist, performed “one of America’s dirtiest jobs.” The maintenance of the sewer pipes leading to the hatchery residences’ common septic tank has recently become an annual winter ritual. Tree roots invading the system through cracks in the ceramic sewer pipes collect material and begin to form plugs. If a sewage backup occurs, it is inconvenient for everyone and unsanitary for those who live on station. With three families and five children living on-site, it’s just a fact of life that it needs to be done. Bob and John are heroes and we all thank them for the preventative maintenance.

-Tim Smigielski

Public Use

Jordan River Biologist Teaches Bear Cubs How to ID Fish

This is how it happens. You innocently go to your son’s science lab as a volunteer instructor in October. The dad at the next table asks, “So what do you do for a living?” He happens to be the local scout master. An exchange of cards, one email, and we’ve reached 45 more people with our stories. The scouts have their meetings in the evenings at 6pm and it’s too dark for a full blown tour of the hatchery at that time. So, Tim Smigielski went 20 miles down the road to Gaylord on December 21. Tim did a presentation for the boys and parents called *How to Identify Great Lakes Trout and Salmon*. He also discussed lake trout restoration and sea lamprey control. The scouts and parents really enjoyed this type of educational opportunity and have planned a tour during open hours at the hatchery. The scouts that are in the area for spring break will be headed to the hatchery in March 2007.

-Tim Smigielski

Cooperation with Native Americans

(Nothing to report).

Leadership in Science and Technology

Jordan River NFH Represented at the 2006 Fish Culture Workshop

Representatives from USFWS Midwest Region hatcheries gather annually at the Fish Culture Workshop to discuss their work with their peers. This year’s event was hosted by the Pendills Creek NFH in Sault Ste. Marie, Michigan. Fisheries Biologists Paul Haver and John Johnston presented slide shows detailing the specifications for Jordan River’s new fish distribution truck (to

be delivered in the spring of 2007) and the work done this fall to prepare the *M/V Spencer F. Baird* for hauling fish.

-Wayne Talo

Aquatic Habitat Conservation and Management

Initial Meeting to Plan Improvements to Effluent Management

Cleaning effluent from the Jordan River NFH currently passes through an off-line settling basin system before it reaches the Jordan River. The purpose of the off-line settling basin system is to slow down the flow of waste-laden water so that solid particles can settle out and be retained, rather than pass through to the river. This system has been in place since the mid-1970s. An aquaculture consulting group called FishPro was contracted by the USFWS to propose improvements to the Great Lakes Lake Trout Rehabilitation Program facilities. The report they produced includes a basic design for improvements to our settling basin system.



Off-Line Settling Basins

USFWS

Craig Swedenborg, USFWS Engineering Division, Fort Snelling, Minnesota, visited the hatchery on December 19 to discuss the upcoming rehabilitation work to be done on our effluent treatment system. He toured the proposed construction site and received input from staff regarding additional features we would like incorporated into the design.

-Wayne Talo

Workforce Management

Senior Honor Student in Fish and Wildlife Biology Volunteers at Jordan River NFH

(Note: This article should have been published as part of our August report, but was missed)

Emily Heinzmann was raised in Gaylord, Michigan and graduated from St. Mary Cathedral High School as valedictorian in 2003. This fall she will be starting her fourth year at Colorado State University as an Honor student where she is completing a major in Wildlife Biology and a minor in Fisheries. Throughout the school year Emily actively participates in Colorado State's chapter of The Wildlife Society and The Society for Conservation Biology. Emily will also be working in a research lab studying aquatic invertebrates in stream food webs. In addition, she enjoys spending time volunteering for various organizations, one of which is now Jordan River National Fish

Hatchery. During her time at Jordan River, Emily received valuable, hands on experience that she feels is not available in a classroom setting. Emily gained an understanding of cold water hatcheries by performing daily fish culture duties, participating in meetings and conference calls and taking part in the planning and implementation of hatchery operations.

-Emily Heinzmann

Volunteer Completes Work at Hatchery

Jeremiah Johnson volunteered at the Jordan River NFH between May and October 2006 as part of a cooperative agreement with the Michigan DNR. Jeremiah is a seasonal employee at the Michigan DNR Charlevoix Research Station. As per our agreement, the hatchery provided cheap on-site housing in exchange for Jeremiah's part time labor. This arrangement benefited all involved. Jeremiah received affordable housing and broadened his fisheries work experience, and the hatchery staff greatly appreciated his efforts and contributions and very much enjoyed working with him. Thanks a lot, Jeremiah, and good luck in the future!



Jeremiah Johnson

-Photo by Wayne Talo

-Wayne Talo

New Hatchery Volunteer

Nathan Skop is from East Jordan, Michigan and a graduate of East Jordan High School in 2001. After high school he attended Kalamazoo Valley Community College for two years, then transferred to Western Michigan University where he studied biology. While at Western, Nathan worked in an Environmental Studies Research lab where he studied the effects of disease organisms on aquatic invertebrate populations. Nathan graduated from Western Michigan University in December of 2005, with a major in Biology and a minor in Chemistry. In the spring of 2006 he started working as a seasonal employee for the U.S. Fish and Wildlife Service Sea Lamprey Control Program. Nathan started volunteering at the Jordan River National Fish Hatchery in December looking to gain experience and an understanding of how a hatchery operates.



Nathan Skop

Photo by Wayne Talo

-Nathan Skop