

U.S. Fish and Wildlife Service

Jordan River NFH Accomplishment Report

Partnerships and Accountability

(Nothing to report)

Aquatic Species Conservation and Management

Recent Lake Trout Losses Due to Predation at Jordan River NFH: A Cause for Action

A group of ducks (mallards, possibly mixed with mergansers and golden eyes) were the cause of a recent major mortality at Jordan River NFH. An estimated 4,500 lake trout died on the morning of January 30, due primarily to stress-induced suffocation. These lake trout were already coded wire tagged and adipose fin clipped in preparation for stocking in northern Lake Huron.



Since Jordan River NFH began operating in 1964, avian predators (including great blue herons) and mammalian predators (such as mink, raccoons, and opossums) have been responsible for the annual loss of 150,000 to 300,000 lake trout yearlings. The birds land on the raceways and cause a flight response in the trout. The fish smother each other, usually after running to the tail end of the raceway in attempts to escape predation. In this most recent example, the tail screen of the raceway became plugged with the suffocated fish, nearly causing it to fail.

That would have meant a loss of over 60,000 marked and tagged yearlings slated for stocking in Lake Huron's northern refuge. The 4,500 yearlings lost in January were part of an ongoing strain evaluation comparing the survival and wounding rates of two different lake trout strains in the presence of sea lamprey populations. This study also serves as an assessment of the sea lamprey control program by examining sea lamprey wounding rates on Superior-Marquette Domestic (now replaced with Superior-Traverse Island Wild) strain lake trout over time.

The Jordan River staff does employ various predator deterrent methods during their annual production cycles. However, the really frustrating consequence is that there is no way to tell how many fish are consumed by the predators until a final tally is completed just prior to their release. In 2002, an independent consultant retained by the Service to evaluate the Region 3 lake trout production hatcheries recommended a new production raceway enclosure be constructed at Jordan River NFH. This building would be designed to exclude predators, reduce sun exposure, eliminate snow removal difficulties and

prohibit algal growth while providing an overall more efficient and safer rearing environment. USFWS Fisheries Regional Staff along with Jordan River NFH Staff are working toward implementation of the 1.2 million dollar solution, the much needed enclosure.

New Brood Year is on Feed

All of our approximately 3.6 million Brood Year 2004 lake trout are feeding, marking the beginning of our busiest time of year. We are now caring for two year classes of lake trout, fin clipping 1.26 million fish, and beginning preparations for this spring's fish distribution. To accommodate the weekend workload, we are staffing an additional employee in the mornings.

Snow Removal Machinery Down for Repairs

On January 30, 2004 our Bobcat was hauled away for repairs to the wheel bearings. We use this machine as a backhoe, a bucket loader, an industrial size forklift, and as a snowblower to move snow from three miles of roadway. It was loaded on a flatbed trailer for transport to AIS in Williamsburg, but the tow truck got stuck trying to make it up our notoriously steep and slippery entrance road. The Bobcat was removed from the trailer so Bob Petersen could use the Case bucket loader to pull the tow truck and trailer to the top of the hill. Bob was then driving the Bobcat to the top of the hill when the casing and wheel bearings broke and the wheel fell completely off. The three wheeled Bobcat was then dragged up the hill by the Case, using its backhoe as support in the absence of the fourth wheel. Somehow the Bobcat was loaded on the trailer and taken to the AIS shop. So what was supposed to be a simple task of hauling away the Bobcat turned out to be a four hour job, requiring four people on a cold and snowy day. The estimated cost to repair the Bobcat is \$9,000.00. Thank goodness we haven't had a major snowstorm since the Bobcat went down.



Public Use

Visitor Center Attendance Remains High At Jordan River NFH

The winter of 2004 has proven to be a snowy one for northern Michigan, much to the delight of snowmobile enthusiasts. Since the winter of 2000, the visitor center at the hatchery has been an inviting stop for local snowmobilers interested in a warm up and some interesting interpretive displays. Jordan's visitor center is



open 24 hours a day, seven days a week. The visitor center provides hot beverages, clean restrooms, plus the opportunity to gain insight into the mission of the hatchery, as it relates to the Service's lake trout restoration efforts around the Great Lakes Basin. Jordan River NFH staff has partnered with the East Jordan Snowmobile Club to provide this extraordinary outreach opportunity. The visitor center guest register continues to be filled with positive greetings, comments and suggestions.

Cooperation with Native Americans

(Nothing to report)

Leadership in Science and Technology

Jordan River NFH Completes Annual Coded Wire Tagging Project

On January 13, 2004, coded-wire tagging operations commenced at the Jordan River National Fish Hatchery. This work was completed on February 12, after approximately 535,000 yearling lake trout were tagged and adipose fin-clipped. Annually, a crew of six permanent-intermittent staff is employed to mark and tag the yearlings at a cost of approximately \$11,300. Six



different strains, including Green Lake, Lewis Lake, Seneca Lake, Superior Apostle Island, Superior Isle Royal and Superior Traverse Island, were tagged with a unique code number. The tagging effort remains paramount to the Lake Trout Restoration program in Lake Huron and Lake Michigan. This 2003 year class will be released at 22 different sites around Lake Huron and Lake Michigan. Future tag return data will be used in monitoring and evaluation of the USFWS interagency Lake Trout restoration efforts in both of these lakes. Specifically, these tagged fish will be used to:

1. compare survival rates of different lake trout strains,
2. characterize the migrations of Lewis Lake strain lake trout released into Lake Huron, and to
3. assess sea lamprey predation rates in northern Lake Huron.

Fin Clipping Begins

On February 23, 2004, a crew of 11 permanent seasonal employees began fin clipping the Brood Year 2003 production not already implanted with a coded wire tag. Every year, all non-coded wire tagged lake trout raised in hatcheries for release into the Great Lakes receive a fin clip to identify them as hatchery-origin fish to researchers who may later

collect them in their surveys. The fin clip pattern changes annually, facilitating quick age identification in the field. This year's clip is a combination left pectoral/right ventral clip.

Aquatic Habitat Conservation and Management

(Nothing to report)

Workforce Management

CPR/First Aid Training

Maintenance Mechanic Bob Petersen conducted First Aid and CPR classes (adult, child, and infant) for staff on January 7-9, 2004. He again taught the same courses on the evenings of January 13-14. These evening sessions were attended by staff unable to attend the sessions during regular work hours and some of their family members.

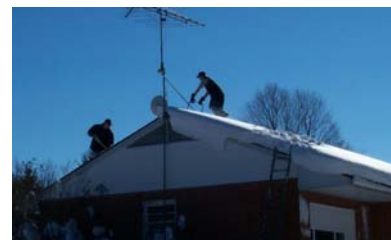
Emergency Hire

On February 9th Scott Rozanski was brought on as a 60 day emergency hire, after serving as a volunteer for the hatchery since September 2003. Scott has helped with many of the daily hatchery duties such as cleaning and feeding lake trout in the raceways and basement tanks. He assisted in the tagging and clipping process by doing sample counting. Scott has also been a great help to the hatchery maintenance mechanic by doing snow removal and routine maintenance of equipment.



Snow Load

Scott Rozanski (Emergency Hire), Wayne Talo (Biologist), and Bob Petersen (Maintenance Mechanic) were tasked with the duty of removing snow from the rooftops of the hatchery houses. The Jordan River National Fish Hatchery has five houses at the facility, and during the first week of February all the snow was removed from the roofs. January was a particularly heavy snowfall month in which an estimated five feet of snow fell. Some of the snow drifts on the east side of the houses were between 30 and 36 inches deep. After experimenting with several snow removal techniques, Scott and Wayne decided that it was easier to





remove the snow in layers. The first layer was cut into large chucks and removed by an ordinary snow shovel. The final layer was quickly removed by a larger device called a Yooper Scooper. The removal of the snow from the roofs was timely, as last week of February and the first week of March were marked by above normal temperatures and plenty of sunshine. The minimal amount of snow left on the roofs permitted quick melting and efficient water run off, eliminating the chances for ice damming and consequent water damage to the houses.