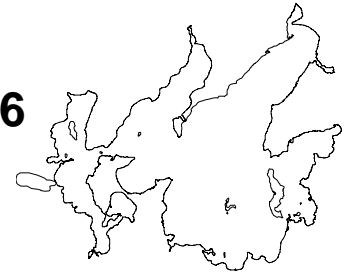




Leech Lake Update 7/31/2006

Walker Area Fisheries Office
07316 State Hwy. 371 NW
Walker, MN 56484
218-547-1683



Greetings!

This email is the first periodic email we are sending to Leech Lake area resorts, businesses, and others interested in DNR activities on Leech Lake. The goal of these messages is to keep you up to date with our findings and our current activities on the lake. It has been a busy year to this point, and our annual sampling is just getting started. Below is a summary of the major points of interest.

Double-crested cormorants

To date, nearly 3,000 cormorants have been culled on Leech Lake. Major control efforts are over for the year, however, 20 additional birds will be taken per week for the cormorant diet study. The U.S. Fish and Wildlife Service approved the taking of 7,400 cormorants for the state of Minnesota. Up to 4,000 cormorants from Leech Lake may be taken. Currently, there are approximately 1,900 cormorants on Leech Lake. Two graduate students continue their work on 1) quantifying what cormorants eat on Leech Lake and 2) relating the diet work back to the fishery (what does it mean for Leech Lake fish populations).

Stocking

Earlier this year, volunteers helped DNR staff stock more than 22 million walleye fry. At the time, these fish were the size of mosquito larvae. Now, eleven weeks later, stocked and wild walleye are approaching five inches in length. In addition to walleye fry, the Leech Lake Division of Resource management raised 206,000 walleye frylings. With help from the Walker Office, these fish were stocked the last week of June. Walleye frylings are larger than fry and smaller than fingerlings. All stocked walleye were marked with a chemical (called oxytetracycline) that identifies them as either fry-stocked or fryling-stocked. By marking these fish, we can estimate the hatch of wild fry and determine the stocking contribution to the 2006 walleye year class.

Shoreline Seining

On July 10, we started sampling for young-of-the-year walleye and yellow perch using a long net called a shoreline seine (Figure 1, page 2). This standard assessment work gives us our first look at the new year class and so far, what we are seeing is encouraging. We sample at five stations around the lake and all have young walleye present. Their abundance and average size are good signs for a strong year class. Trawling (a purse-like net pulled behind a boat) in mid-August will provide more information. Some trawling two weeks ago for a walleye diet study found a number of walleye from the 2005-year class already 10 inches in length. With two more months to grow this year, anglers can expect the 2005-year class to reach "keeper" sizes sometime next summer.

Rusty Crayfish

Rusty crayfish are an invasive exotic species to Minnesota and Leech Lake. Native to the Ohio and Tennessee River valleys, they were likely brought to this area by anglers for use as bait. There is concern that rusty crayfish are eating walleye eggs in large enough numbers to reduce the number of hatching walleye. Late this winter, the MN DNR and Bemidji State University started research to address what impacts rusty crayfish may have on Leech Lake walleye. Laboratory work found rusty crayfish are active at water temperatures that walleye spawn in and also revealed most activity occurred at night. Divers from the MN DNR and Cass County Dive Team counted crayfish along likely walleye spawning shoals to estimate their density. Later this summer, a graduate student will further this research at Bemidji State University.

Rusty crayfish are known to impact fish populations, especially bass and panfish. Here are three Minnesota lakes that have high densities of rusty crayfish. It appears the bass/panfish populations in these lakes are decreasing, yet, the walleye are numerous. Eagle's Nest #3

<http://www.dnr.state.mn.us/lakefind/showreport.html?downum=69028503>

Newfound Lake

<http://www.dnr.state.mn.us/lakefind/showreport.html?downum=38061900>

Sucker Lake

<http://www.dnr.state.mn.us/lakefind/showreport.html?downum=38053000>

Of Interest

While seining near Five Mile Point, we caught a larger than normal fish. A muskellunge feeding in the shallow waters found its way into our net (Figure 2). This is the third time I have sampled muskie in a seine. The fish was photographed and released to continue feeding in the warm, shallow water. It's possible this fish hatched on the nearby spawning habitat that was protected by the land purchase and creation of Five Mile Point Aquatic Management Area (AMA). Conservation efforts such as this certainly go a long way to protecting Leech Lake fish populations, habitat and water quality.



Figure 1. Seining for fish on Leech Lake

Figure 2. A muskellunge sampled near Five Mile Pt.

If you have questions or comments, please contact:

Pat Rivers (pat.rivers@dnr.state.mn.us) 218-547-1683

or

Harlan Fierstine (harlan.fierstine@dnr.state.mn.us) 218-547-1683