



Leech Lake Update, July 2014

Walker Area Fisheries Office
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Greetings!

This update is part of a series of reports the Minnesota Department of Natural Resources (DNR) is 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 current activities on the lake. Earlier updates are available by visiting <http://www.dnr.state.mn.us/areas/fisheries/walker/index.html>.

Feel free to contact our office if you have any questions or comments, would like copies of previous updates not posted on the website, or if you would like to be added to the mailing list.

Walleye fry stocking

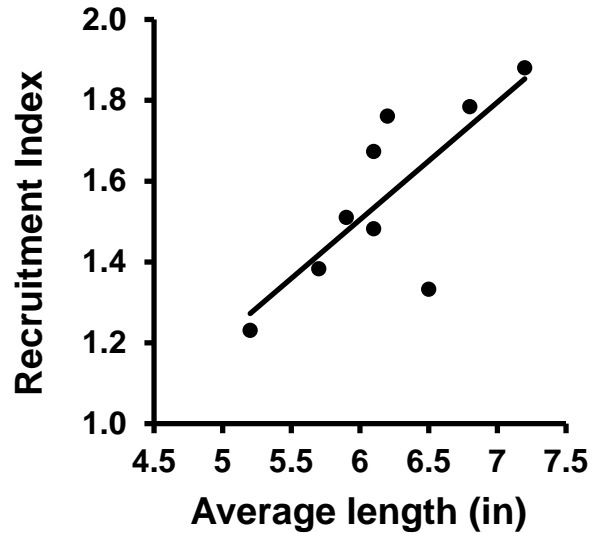
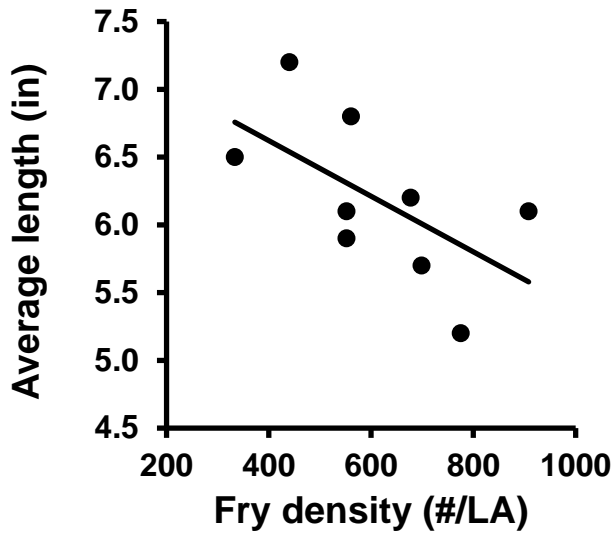
- Approximately 7.5 million (OTC-marked) fry were stocked from May 24-26, 2014. Stocking rates have been either 7.5 or 20-22.5 million fry per year from 2005 through 2014.
- Thank you to Larry Jacobson, Steve Jacobson, Nancy Wolf, and Chris Zimmer for assisting with stocking efforts.

<u>Main Lake</u>	<u>Number</u>	<u>Western Bays</u>	<u>Number</u>
Boy Bay	653,172	Steamboat Bay	767,004
Headquarters Bay	654,823	Walker Bay North	383,502
Portage Bay	1,306,344	Walker Bay South	109,572
Sucker Bay	1,137,261	Kabekona Bay	54,786
Main Basin	1,728,854	Agency Bay	50,371
Trader's Bay	654,823		1,365,235
	6,135,277		

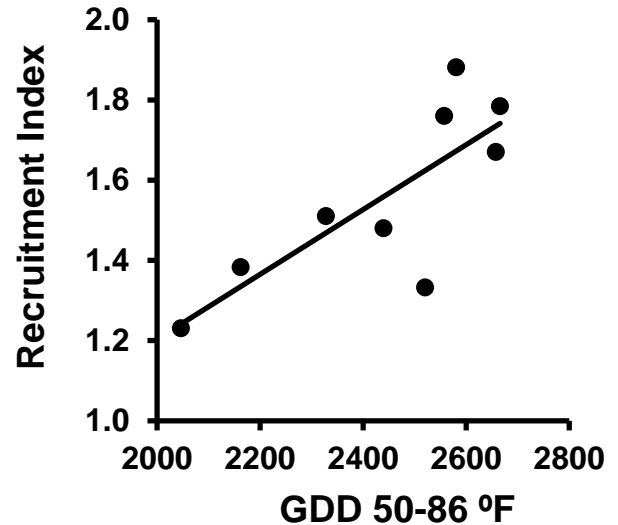
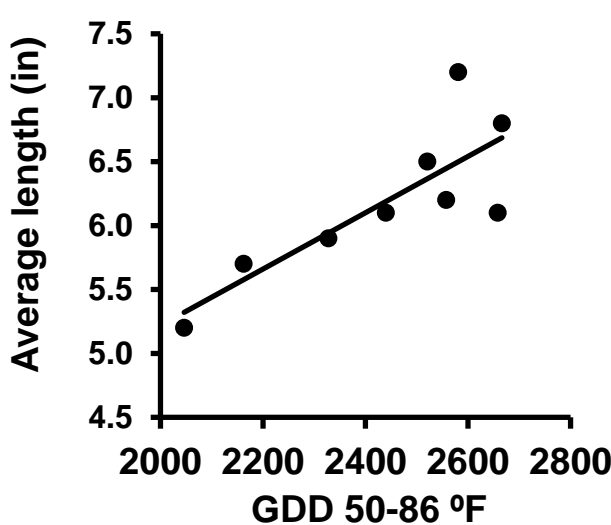
Total number of walleye fry stocked throughout Leech Lake, 2014.

Preliminary fry stocking findings

- Lower walleye fry densities result in increased growth rates for young-of-year walleye by mid-September (page 2, top left figure).
- The larger the size of young-of-year walleye by mid-September, the higher the likelihood of survival and recruitment to the fishery (page 2, top right figure).
- Longer, warmer summers (higher growing degree day units; i.e. GDD units) result in better young-of-year walleye growth (page 2, bottom left figure), likely due to increased algae and zooplankton production.
- The longer and warmer the summer (higher GDD units), the higher the likelihood of surviving and recruiting to the fishery (page 2, bottom right figure).



The total walleye fry density (fry/littoral acre) and the average length (inches) of young-of-year walleye sampled by electrofishing in September in Leech Lake, 2005-13 (Above left). The average length (inches) of young-of-year walleye sampled by electrofishing in September and the resulting walleye year class strength in Leech Lake, 2005-13 (Above right).

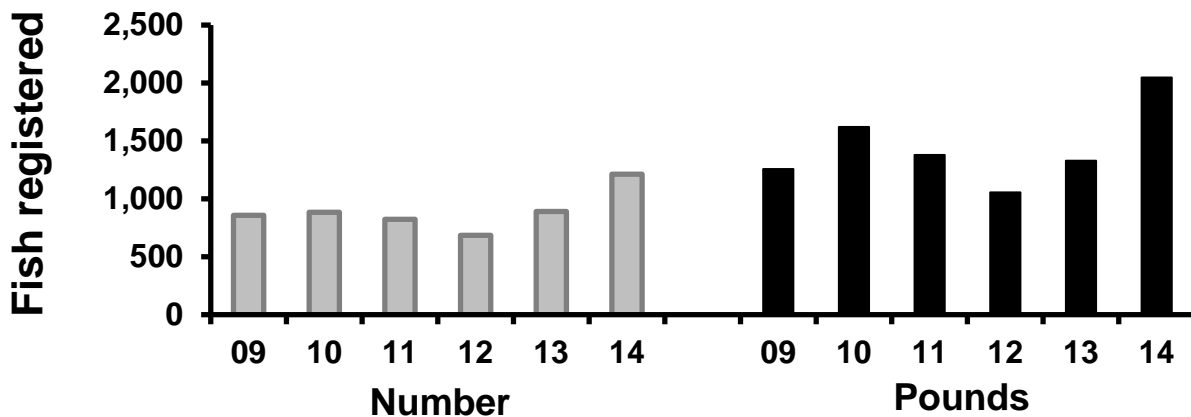


Growing degree days (GDD; 50-86 °F) and the average length of young-of-year walleye sampled by electrofishing in September in Leech Lake, 2005-13 (Above left). Growing degree days (GDD; 50-86 °F) and the resulting walleye recruitment index in Leech Lake, 2005-13.



Leech Lake Walleye Tournament

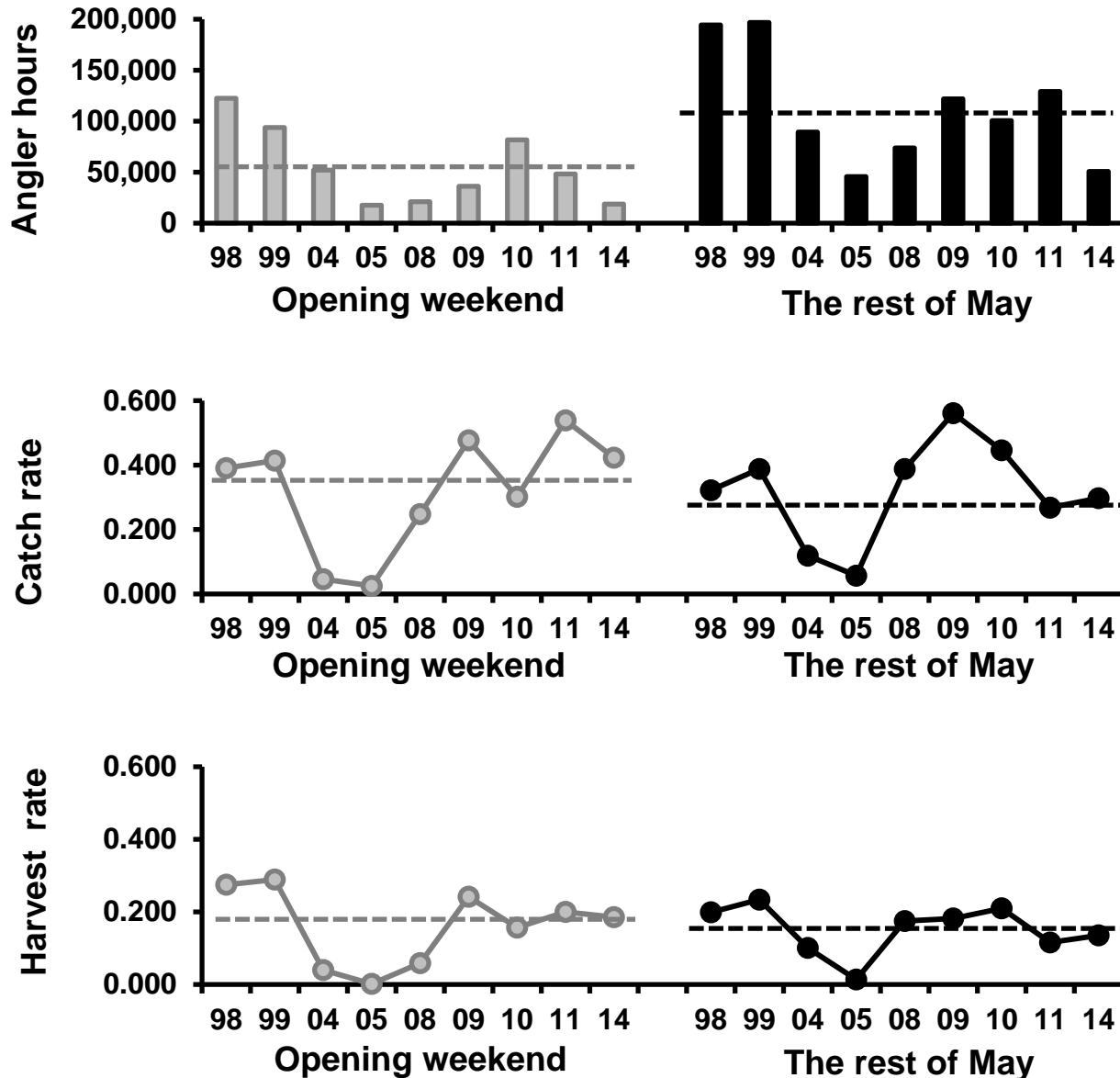
- From May 31 through June 1, 2014, 157 two person teams competed in the Leech Lake Walleye Tournament. Participants in 2014 registered 1,213 walleye that weighed 2,047 pounds, the most in terms of number and pounds in the past six years.
- John Eaton (Leech Lake Association), Chuck Allen (Leech Lake Association), Stephanie Shearen (Cass County Soil and Water Conservation District), Will Pehling (Northstar Sportsmens Club), and others that assisted prior to and throughout the tournament with AIS prevention efforts.
- For further tournament information please contact the communications director for the tournament, Gretchen Gribbon, by phone (218-547-1853) or email (wacc@arvig.net).



The number and pounds of walleye registered in the Leech Lake Walleye Tournament, 2009-2014.

Leech Lake Angler Creel Survey

- The new 20-26" protected slot limit (PSL) took effect on May 10, 2014. The bag of 4, with one fish over 26" remains in effect..
- To monitor angler response to the regulation change, angler creel surveys will occur throughout the 2014 open water season and 2014-15 ice fishing season.
- Results from May indicate the number of hours anglers fished Leech Lake on opening weekend and throughout the rest of May were low compared with recent surveys (page 4, top figure), despite good catch and harvest rates (page 4, middle and bottom figures).
- During May, 55% of walleyes anglers caught were outside of the 20-26" PSL, while 9% were 18-19.9".
- During May, anglers harvested 95% of walleyes the caught from 14-19.9", while they harvested 37% of walleyes from 26-30".



The estimated number of hours anglers fished during opening weekend and the rest of May on Leech Lake, 2014 (top figure). Walleye catch and harvest rates (fish per hour) by all Leech Lake anglers during opening weekend and the rest of May, 2014 (middle and bottom figures). Long term averages are reported with dashed lines on each figure.

2014 survey plans

- 2014 survey plans include sampling juvenile walleye and perch via seining in July, trawling in August, and electrofishing in September, and conducting a lakewide gill net survey in mid-September. Zooplankton will be sampled monthly from May through October.
- If you have any questions regarding walleye stocking, please contact Doug Schultz, Walker Area Fisheries Supervisor (doug.w.schultz@state.mn.us).
- IF YOU WOULD LIKE TO VOLUNTEER THIS YEAR AND ASSIST WITH ANY OF THE ASSESSMENTS DESCRIBED ABOVE, PLEASE CONTACT: Matt Ward (matt.ward@state.mn.us) Large Lake Specialist at 218-547-1683.