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Leech Lake Muskie Study Already Generating Results

Improved Muskie Management End Goal

Leech Lake muskies are one of Minnesota's premier fish, drawing tens of thousands of anglers annually to this famed fishery. Leech Lake also supplies brood stock for the state's muskie stocking efforts statewide.

A landmark muskie study, launched last May, is expected to provide answers to questions that will strengthen muskie management efforts.

The study, funded in part by MN-FISH, was developed to answer the following:

- How muskies move throughout this 112,000-acre system.
- Which habitats do they use seasonally.
- What are the mortality rates of muskies in Leech Lake (angler caught and natural).

At the August 7 MN-FISH board meeting, Leech Lake fisheries specialist Baylor Short, provided an update on the study's progress to date.

Currently, 20 muskies are outfitted with acoustic tags that allow researchers to track their positions. Fifteen the tagged fish were captured by trap nets and five were captured through angling.

Additionally, 20 muskies received traditional Floy tags, which when recovered will help researchers estimate the size of the muskie population in Leech.

Muskie movement is tracked using both Active Tracking (tracking with a hydrophone-equipped boat) and Passive Tracking (using sensors placed on the lake bottom in pinch-points around lake).

To date, 62 active muskie detections have been recorded, along with a significant amount of passive data to be analyzed off-season.

Data shows Leech Lake muskies are using all available lake habitats, including rocks, weeds and open water areas. One fish traveled an incredible 28 straight-line miles since tagged; another was caught just three days after it received a surgically implanted tag. So far, the mortality rate of study fish is zero.

Some bad news—some of the researchers' equipment was stolen from a truck parked at a popular boat landing. MN-FISH donated an additional $2,200 to replace that gear as quickly as possible to allow the study to continue with minimal interruption.

We'll continue to update members as this study continues over the next 2.5 years.