Northern Pike Tagging and Tracking in Lake Muskoka

The Muskoka BassMasters host a major pike tournament on Lake Muskoka every year in May. Pike are captured throughout the lake and live-released at the Wharf in Gravenhurst. Over 200 pike were released in 2009.

The Wharf is at the extreme south end of the lake within Muskoka Bay which is isolated from the main lake by Lighthouse Narrows.

The MNR and the Club were interested in learning if the fish displaced into Muskoka Bay returned to the main lake and to where they were caught. The goal was to determine whether displacing the fish had an impact on the pike population. In 2009, pike caught in the tournament were marked with a coloured tag. Anglers were asked to report fish caught that had a tag.

About 15% of the tagged pike were caught again and reported by anglers through the summer of 2009. Additional fish were probably caught but not reported.

Thirteen pike were also implanted with radio transmitters. These transmitters send a signal that can be heard in on a directional antenna. Pike movements were monitored weekly through summer/fall, 2009, and again in the spring of 2010.

Pike, under anaesthetic, having radio-transmitter surgically implanted in the body cavity. Note trailing antenna at top of picture. Insets, clockwise from top left, transmitter, antenna, receiver.

About 15% of the tagged pike were caught again and reported by anglers through the summer of 2009. Additional fish were probably caught but not reported.

Below, are examples of the movements of two fish. Fish 11, on the left, was typical of the three fish captured in Muskoka Bay, all three quickly returned to near where they were captured and stayed in a small area throughout the summer. The 10 fish caught outside of Muskoka Bay and displaced a long distance from where they were caught behaved differently. Only three (including Fish 5, below, right) were confirmed to return to the main lake of which only one returned to the area where it was caught. Four stayed in Muskoka Bay throughout the summer. Three others stayed in the bay until they died (1 fish) or their signals were lost (two fish) during the summer.

By the fall of 2009, nine of the 13 pike with transmitters were still being tracked. The remaining fish will be tracked into the winter and will be recaptured prior to the 2010 tournament. Recaptured fish will be implanted with radio transmitters and tracked in a similar manner.

For more information on this project please contact: Stephen Scholten, Fisheries Biologist, Ministry of Natural Resources, Bracebridge (705)646-5523