The Department of Natural Resources surveyed North Turtle Lake, Vilas County, from April 1 through May 5, 2010, to determine the health of its fishery. Estimating walleye abundance was the primary objective of the survey. North Turtle Lake is a drainage lake with mostly sand and gravel substrate and a high-density walleye population. It has a surface area of 369 acres, 5.0 miles of shoreline and a maximum depth of 58 feet.

Largemouth Bass
Our sampling of North Turtle Lake was also done outside the spawning period for largemouth bass. We captured five largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling. The largest largemouth we captured was 16.2 inches long.

Walleye
We conducted a mark-recapture survey of North Turtle Lake's adult* walleye population from April 1-10, 2010. We captured and marked (fin clipped) 326 adult walleye in 10 days of fyke netting. A crew sampled North Turtle Lake with an electro-fishing boat on April 10 and captured 395 adult walleye. Nearly 11% (42 of 395) of those walleye bore the fin clip given during fyke netting.

Based on those results, we estimated that North Turtle Lake is home to 2,970 adult walleye (8.0 /acre). Approximately 13% (374 of 2,970) of adult walleye were 14 inches long or larger. The largest walleye we captured was a 26.7-inch female.

Smallmouth Bass
Smallmouth bass were an incidental catch in our survey of North Turtle Lake. Our sampling was not done during the peak of the smallmouth bass spawning season. We captured 53 smallmouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling. The largest smallmouth we captured was 19.0 inches long.

Largemouth Bass
Our sampling of North Turtle Lake was also done outside the spawning period for largemouth bass. We captured five largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling. Two of those largemouth were 14 inches long or larger. The biggest largemouth bass we captured was 16.2 inches long.
Northern Pike

We captured 39 adult* northern pike in fyke nets fished in North Turtle Lake from April 1-10, 2010. Only one of the adult northern pike we captured (a 26.5-inch male) was larger than 26 inches.

* Note: Adult northern pike are defined as all sexable northern pike and northern pike of unknown sex > 12 inches long.

Muskellunge

We captured 16 adult* muskellunge during our fyke netting and electro-fishing sampling of North Turtle Lake. Ten of the adult muskellunge we captured were 34 inches long or larger. Four muskellunge were 40 inches long or larger. The largest muskellunge we captured was a 49.5-inch female.

* Note: Adult muskellunge are defined as all sexable muskellunge and muskellunge of unknown sex > 20 inches long.

Other Species

We captured eight species of fish in our fyke netting and electro-fishing sampling of North Turtle Lake in addition to the game fish mentioned above. Yellow perch were the most abundant species in our fyke net catches. We also caught black crappie, bluegill, burbot, greater redhorse, pumpkinseed, rock bass and white sucker. In-water sampling will conclude with a survey of young-of-year walleye in fall 2010.

We are also conducting a creel (angler harvest) survey on North Turtle Lake this year. Creel clerk Marty Kiepke will count and interview anglers and examine their catch throughout the 2010-11 fishing season.

Table 1. General Fishing Regulations for North Turtle Lake, Vilas County, 2010

<table>
<thead>
<tr>
<th>FISH SPECIES</th>
<th>OPEN SEASON</th>
<th>DAILY LIMIT</th>
<th>MINIMUM LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walleye</td>
<td>May 1 - March 6</td>
<td>3</td>
<td>No minimum, only one over 14*</td>
</tr>
<tr>
<td>Largemouth and Smallmouth Bass</td>
<td>May 1 - June 18 (C&amp;R) June 19 - March 6 (Harvest)</td>
<td>None 5 in total</td>
<td>14 inches</td>
</tr>
<tr>
<td>Muskellunge</td>
<td>May 29 - Nov. 30</td>
<td>1</td>
<td>34 inches</td>
</tr>
<tr>
<td>Northern Pike</td>
<td>May 1 - March 6</td>
<td>5</td>
<td>None</td>
</tr>
</tbody>
</table>

A brief summary of selected fishing regulations for North Turtle Lake is included above (Table 1). While the regulatory information provided was current at the time the surveys were conducted, it is not comprehensive and should not be used as a substitute for the current fishing regulation pamphlet. You may obtain a copy of current fishing regulations when you purchase your fishing license, or download a copy from our web site at:

http://www.dnr.wi.gov/fish/regulations/

For answers to questions about fisheries management activities and plans for North Turtle Lake, Vilas County, contact:

Steve Gilbert, Fisheries Biologist
Wisconsin Department of Natural Resources
8770 Highway J
Woodruff, WI 54568
(715) 356-5211 Ext. 229
Email: Stephen.Gilbert@Wisconsin.gov

This report is interim only; data and findings should not be considered final. Results of creel surveys should be available by June 2011. Spring survey and creel survey summaries will be posted at:

http://dnr.wi.gov/fish/nor/northern.html

or contact:

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