The Department of Natural Resources surveyed White Birch Lake, Vilas County, from April 24 through May 13, 2011, to determine the health of its fishery. The survey was primarily focused on estimating the abundance of the lake’s walleye and muskellunge populations. White Birch Lake is a drainage lake with predominantly sand substrate and a low-density walleye population. It has a surface area of 117 acres, 2.3 miles of shoreline and a maximum depth of 27 feet.

**Northern Pike**

We captured 24 adult northern pike in fyke nets from White Birch Lake from April 24 through May 6, 2011. Two of those adult northern pike were more than 26 inches long. The largest northern pike we captured was a 28.3-inch female.

**Largemouth Bass**

Our sampling was not done during the largemouth bass spawning period. We captured 61 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of White Birch Lake. Four of those largemouth were 14 inches long or larger. The biggest largemouth bass we captured was 18.2 inches long.

**Walleye**

We conducted a mark-recapture survey of White Birch Lake’s adult walleye population from April 24-28, 2011. We captured and marked (fin clipped) 105 adult walleye in five days of fyke netting. A crew sampled White Birch Lake with an electro-fishing boat on April 28th and captured 27 adult walleye. Approximately 59% (16 of 27) of those walleye bore the fin clip given during fyke netting.

Based on those results, we estimated that White Birch Lake is home to 165 adult walleye (1.4/acre). Approximately 42% (70 of 165) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 27.7-inch female.
Muskellunge

We captured 33 adult muskellunge during our fyke netting and electro-fishing sampling of White Birch Lake. Nearly 76% (25 of 33) of the adult muskellunge we captured were 34 inches long or larger. Three of those muskellunge were 40 inches long or larger. The largest muskellunge we captured was a 42.1-inch female.

Other Species

We captured seven species of fish in our fyke netting and electro-fishing sampling of White Birch Lake in addition to the game fish mentioned above. Yellow perch were the most abundant species in our fyke net catches. We caught moderate numbers of bluegill. We also caught black crappie, mottled sculpin, pumpkinseeds, rock bass, and white sucker. In-water sampling will conclude with a survey of young-of-year walleye in fall 2011.

We are also conducting a creel (angler harvest) survey on White Birch Lake this year. Creel clerk John Logan will count and interview anglers and examine their catch throughout the 2011 open-water fishing season.

Table 1. General Fishing Regulations for White Birch Lake, Vilas County, 2011

<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 7 - March 4</td>
<td>5</td>
<td>15 inches</td>
</tr>
<tr>
<td>Largemouth and Smallmouth Bass</td>
<td>May 7 - June 17 (C&amp;R)</td>
<td>None</td>
<td>14 inches</td>
</tr>
<tr>
<td></td>
<td>June 18 - March 4 (Harvest)</td>
<td>5 in total</td>
<td></td>
</tr>
<tr>
<td>Muskellunge</td>
<td>May 28 - Nov. 30</td>
<td>1</td>
<td>34 inches</td>
</tr>
<tr>
<td>Northern Pike</td>
<td>May 7 - March 4</td>
<td>5</td>
<td>None</td>
</tr>
</tbody>
</table>

A brief summary of selected fishing regulations for White Birch 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/

This report is interim only; data and findings should not be considered final. Results of creel surveys should be available by June 2012. Watch for survey summaries at: http://dnr.wi.gov/fish/nor/northern.html or contact:

Dennis Scholl, Treaty Fisheries Supervisor
Wisconsin Department of Natural Resources
8770 Highway J
Woodruff, WI 54568
(715) 356-5211 Ext. 209
Email: Dennis.Scholl@Wisconsin.gov

For answers to questions about fisheries management activities and plans for White Birch 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