The Department of Natural Resources surveyed Irving Lake, Vilas County, from April 23 through May 13, 2011, to determine the health of its fishery. The primary objective of the survey was to estimate the abundance of the lake’s walleye and muskellunge populations. Irving Lake is a drainage lake with chiefly muck and sand substrate and a low-density walleye population. It has a surface area of 403 acres, 4.0 miles of shoreline and a maximum depth of 13 feet.

**Walleye**

We attempted a mark-recapture survey of Irving Lake’s adult* walleye population from April 23-28, 2011. We only captured and marked (fin clipped) five adult walleye in six days of fyke netting. The largest walleye we captured was 13.2 inches long.

* Note: Adult walleye are defined as all sexable walleye and walleye of unknown sex > 15 inches long.

**Largemouth Bass**

Our sampling was completed prior to the largemouth bass spawning period. However, we did capture 50 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Irving Lake. Two of those largemouth were 14 inches long or larger. The biggest largemouth we captured was 15.9 inches long.

**Northern Pike**

We captured 57 adult* northern pike in fyke nets fished in Irving Lake from April 23 through May 6, 2011. Four of the adult northern pike we captured were 26 inches long or larger. The largest northern pike we captured was a 31.4-inch female.

* Note: Adult northern pike are defined as all sexable northern pike and northern pike of unknown sex > 12 inches long.
Muskellunge
We captured 93 adult* muskellunge during our fyke netting and electro-fishing sampling of Irving Lake. Nearly 80% (74 of 93) of the adult muskellunge we captured were 34 inches long or larger. Roughly one in nine muskellunge (10 of 93) were 40 inches long or larger. The largest muskellunge we captured was a 43.2-inch female.

* Note: Adult muskellunge are defined using PSD stock size as all sexable muskellunge and muskellunge of unknown sex ≥ 20 inches.

Other Species
In addition to the gamefish listed above we captured a 19.1-inch smallmouth bass in Irving Lake. We also captured seven other species of fish in our fyke netting and electro-fishing sampling of Irving Lake. Yellow perch were the most abundant species in our fyke net catches. We caught moderate numbers of black crappie. We also caught bluegill, golden shiner, pumpkinseed, 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 Irving 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 Irving 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 Irving 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 Irving Lake, Vilas County, contact:

Steve Gilbert, Fisheries Biologist
Wisconsin Department of Natural Resources
8770 Highway J
Woodruff, WI 54568
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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:

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