The Department of Natural Resources surveyed Palmer Lake, Vilas County, from April 25 through May 2, 2009, to determine the health of its fishery. The primary objective of the survey was to estimate the abundance of the lake's walleye population. Palmer Lake is a fertile drainage lake with primarily sand substrate and a low-density walleye population. It has a surface area of 635 acres, 6.7 miles of shoreline and a maximum depth of 13 feet.

**Walleye**

We conducted a mark-recapture survey of Palmer Lake's adult* walleye population from April 25-30, 2009. We captured and marked (fin clipped) 171 adult walleye in six days of fyke netting. A crew sampled Palmer Lake with an electro-fishing boat on April 30th and captured 57 adult walleye. Nearly 32% (18 of 57) of those walleye had been marked during fyke netting.

Based on those results, we estimated that Palmer Lake is home to 509 adult walleye (0.8/acre). Approximately 84% (426 of 509) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 27.2-inch female.

**Largemouth Bass**

We captured 69 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Palmer Lake. Approximately 68% (47 of 69) of those largemouth were 14 inches long or larger. The biggest largemouth bass we captured was 21.2 inches long.

**Northern Pike**

We captured 162 adult* northern pike in fyke nets fished in Palmer Lake from April 25-30, 2009. Approximately 95% (154 of 162) of adult northern pike we captured were less than 26 inches long. The largest northern pike we captured was a 29.7-inch female.

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

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

We captured 17 adult* muskellunge during our fyke netting and electro-fishing sampling of Palmer Lake. Approximately 47% of the adult muskellunge (8 of 17) we captured were 34 inches long or larger. The largest muskellunge we captured was a 40.5-inch female.

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

### Other Species

We captured seven species of fish in our fyke netting and electro-fishing sampling of Palmer Lake in addition to the game fish mentioned above. Black crappie and yellow perch were abundant in our fyke net catches. We caught moderate numbers of bluegill and pumpkinseed. We also captured rock bass, white sucker and yellow bullhead. In-water sampling will conclude with a survey of young-of-year walleye in fall 2009.

We are also conducting a creel (angler harvest) survey on Palmer Lake this year. Creel clerk Marty Kiepke will count and interview anglers and examine their catch throughout the 2009-2010 fishing season.

### Table 1. General Fishing Regulations for Palmer Lake, Vilas County, 2009

<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 2 - March 7</td>
<td>3</td>
<td>15 inches</td>
</tr>
<tr>
<td>Largemouth and Smallmouth Bass</td>
<td>May 2 - June 19 (C&amp;R)</td>
<td>None</td>
<td>14 inches</td>
</tr>
<tr>
<td></td>
<td>June 20 - March 7 (Harvest)</td>
<td>5 in total</td>
<td></td>
</tr>
<tr>
<td>Muskellunge</td>
<td>May 23 - Nov. 30</td>
<td>1</td>
<td>34 inches</td>
</tr>
<tr>
<td>Northern Pike</td>
<td>May 2 - March 7</td>
<td>5</td>
<td>None</td>
</tr>
</tbody>
</table>

A brief summary of selected fishing regulations for Palmer 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 2010. If you are interested in a summary of the creel survey or want an update on this year’s fyke netting and electro-fishing survey results, contact:

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8770 Highway J  
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For answers to questions about fisheries management activities and plans for Palmer Lake, Vilas County, contact:

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