The Department of Natural Resources surveyed Rock Lake, Vilas County, from April 3 through April 13, 2010, to determine the health of its fishery. The primary objective of the survey was to estimate the abundance of the lake’s walleye population. Rock Lake is a drainage lake with substantial areas of sand and gravel substrate and a low-density walleye population. It has a surface area of 122 acres, 3.6 miles of shoreline and a maximum depth of 18 feet.

**Walleye**

We were unable to capture enough walleye from Rock Lake to complete a walleye population estimate. We captured 56 adult* walleye during our fyke netting and electro-fishing sampling of Rock Lake from April 3-10, 2010. Nearly 36% (20 of 56) of those walleye were 14 inches long or larger. The largest walleye we captured was a 24.2-inch female.

**Smallmouth Bass**

Our sampling of Rock Lake occurred prior to the peak spawning season for smallmouth bass and was not focused on estimating their abundance. We captured three smallmouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Rock Lake. The largest smallmouth bass we captured was 11.4 inches long.

**Largemouth Bass**

Largemouth bass were also an incidental catch in our survey of Rock Lake. We captured two largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Rock Lake. The biggest largemouth bass we captured was 15.5 inches long.

* Note: Adult walleye are defined as all sexable walleye and walleye of unknown sex ≥ 15 inches long.
Northern Pike
We captured 18 adult* northern pike in fyke nets fished in Rock Lake from April 3-10, 2010. Only one of the northern pike we captured (a 29-inch male) was larger than 26 inches.

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

Figure 4. Length frequency distribution of 18 adult* northern pike captured in fyke nets during a fisheries survey of Rock Lake, Vilas County, in spring 2010.

Muskellunge
We captured 32 adult* muskellunge during our fyke netting and electro-fishing sampling of Rock Lake. Over 56% of the adult muskellunge (18 of 32) we captured were 34 inches long or larger. Roughly one in five muskellunge (6 of 32) were 40 inches long or larger. The largest muskellunge we captured was a 44.8-inch female.

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

Other Species
We captured nine species of fish in our fyke netting and electro-fishing sampling of Rock 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 black crappie and bluegill. We also caught common shiner, golden shiner, 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 Rock Lake this year. Creel clerk Marty Kiepke will count and interview anglers and examine their catch throughout the 2010-2011 fishing season.

Table 1. General Fishing Regulations for Rock 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>5</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 Rock 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 2011. Spring survey and creel survey summaries will be posted at:

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

or contact:

Mike Coshun, Treaty Fisheries Biologist
Wisconsin Department of Natural Resources
8770 Highway J
Woodruff, WI 54568
(715) 356-5211 Ext. 209
Email: Michael.Coshun@dnr.state.wi.us

For answers to questions about fisheries management activities and plans for Rock 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

Updated: July 12, 2010
By: Mike Coshun

File: Rock_Spring_Summary_2010