A comprehensive fishery survey was conducted of Kentuck lake, Vilas County, from April 17th through June 5th to determine the health of this fishery. Kentuck is a moderately fertile drainage lake with predominantly sand, gravel and rock substrates. It has a surface area of 957 acres, 6.0 miles of shoreline and a maximum depth of 40 feet.

**Muskellunge**

During the survey 98 adult muskellunge were captured and marked (fin clipped). Approximately 34% of the adult muskellunge were greater than 40 inches in length. The largest muskellunge captured was a 49.2 inch long female. Netting will again take place in the spring of 2016 to recapture muskellunge marked this year in order to make a population estimate.

**Walleye**

A mark-recapture survey of Kentuck Lake was conducted to estimate the number of adult walleye present. We captured and marked (fin clipped) 890 adult walleye in four days of netting and 169 during one night of electrofishing. Based on these results, Kentuck Lake was estimated to contain 2,073 adult walleye (2.2/acre). Most of the adult population (96%) is greater than 20 inches in length. These numbers do not reflect the entire walleye population present in Kentuck Lake. Smaller, juvenile walleye, are not part of this estimate. The largest walleye captured was a 29.7 inch long female. *Note: Adult walleye are defined as all sexable walleye (regardless of length) and those of unknown sex > 15 inches in length.*

**Muskellunge Length Distribution**

**Adult Walleye Population Distribution**

**Walleye Length Distribution**

**Largemouth Bass**

Largemouth bass are common in Kentuck Lake. Survey crews captured 201 fish eight inches or greater in length. Sufficient numbers of largemouth bass were not captured to allow for the calculation of a population estimate. 44% of the largemouth bass captured were 14 inches or greater in length. The largest largemouth bass captured was 19.4 inches long.

**Smallmouth Bass**

Smallmouth bass are common in Kentuck Lake. Survey crews captured 271 fish eight inches or greater in length. Sufficient numbers of smallmouth bass were captured to calculate a population estimate. The smallmouth bass population in Kentuck Lake (eight inches or larger) was estimated to be 1,983 fish (2.1/acre).

51% of the smallmouth bass in this estimate were 14 inches or greater in length. The largest smallmouth bass captured was 20.2 inches long.
PANFISH
Panfish information presented here was collected from fyke nets set at various times during the spring survey. Overall, Kentuck Lake has an abundant panfish population that lacks numbers of quality sized fish.

Bluegill
Bluegill are the most abundant panfish species present in Kentuck Lake. Few quality bluegill were captured in this survey. None of the fish from a random sample of 250 measured were greater than eight inches in length. The largest bluegill captured during the survey measured 7.5 inches long.

Black Crappie
Black Crappies are common in Kentuck Lake. From a random sample of 244 crappies measured, only 12% were 10.0 inches or longer. The largest crappie captured during the survey was 11.0 inches long.

Yellow Perch
Yellow perch are moderately abundant in Kentuck Lake. From a random sample of 385 fish measured, only 2% were 8.0 inches long or longer. The largest yellow perch captured during the survey was 9.2 inches long.

Other Fish Species
Other fish species captured during this survey but in lower numbers were: pumpkinseed, rock bass, white sucker, bluntnose minnow, mottled sculpin, creek chub, common shiner and golden shiner.

General Fishing Regulations for Kentuck Lake, Vilas County, 2015

<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 6</td>
<td>3</td>
<td>15&quot; min. length, 20-24” no harvest slot 1 fish over 24” allowed</td>
</tr>
<tr>
<td>Smallmouth Bass</td>
<td>May 2 - June 19</td>
<td>0</td>
<td>Catch and Release 18 inches</td>
</tr>
<tr>
<td></td>
<td>June 20 - March 6</td>
<td>1 in total w/ LMB</td>
<td></td>
</tr>
<tr>
<td>Largemouth Bass</td>
<td>May 2 - March 6</td>
<td>1 in total w/ SMB</td>
<td>18 inches</td>
</tr>
<tr>
<td>Muskellunge</td>
<td>May 23 - Nov. 30</td>
<td>1</td>
<td>40 inches</td>
</tr>
<tr>
<td>Northern Pike</td>
<td>May 2 - March 6</td>
<td>5</td>
<td>No minimum length</td>
</tr>
</tbody>
</table>

The regulatory information provided was current at the time the surveys were conducted. 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://dnr.wi.gov/topic/fishing/regulations/

This report is interim only; Watch for finalized summaries at: http://dnr.wi.gov/topic/fishing/north/trytysprngsrvys.html. Creel survey results should be available by June 2016 at: http://dnr.wi.gov/topic/fishing/north/trytrtycrlsrvys.html. For questions, contact:

Lawrence Eslinger, Treaty Fisheries Biologist  
Wisconsin Department of Natural Resources  
8770 Highway J  
Woodruff, WI 54568  
(715) 356-5211 Ext. 209

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

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