The Department of Natural Resources surveyed Lake Mohawksin, Lincoln County, from April 15 through April 30, 2009, to determine the health of its fishery. The primary objective of the survey was to estimate the abundance of the flowage's walleye population. Lake Mohawksin is a soft-water impoundment with predominantly sand substrate and a moderate-density walleye population. It has a surface area of 1,910 acres, 35.2 miles of shoreline and a maximum depth of 25 feet.

Walleye

We conducted a mark-recapture survey of Lake Mohawksin's adult* walleye population from April 15-22, 2009. We captured and marked (fin clipped) 2,120 adult walleye in eight days of fyke netting. Five crews sampled Lake Mohawksin with electro-fishing boats on April 22nd and captured 537 adult walleye. Nearly 24% (127 of 537) of those walleye bore the fin clip given during fyke netting. Based on those results, we estimated that Lake Mohawksin is home to 9,063 adult walleye (4.7/acre). Approximately 28% (2,521 of 9,063) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 28.2-inch female.

Smallmouth Bass

Smallmouth bass were not a primary target of our survey of Lake Mohawksin. Sampling occurred prior to peak smallmouth spawning. However, we did capture 151 smallmouth bass, 8-inches or larger, during our fyke netting and electro-fishing sampling. Nearly 53% (80 of 151) of those smallmouth were 14 inches long or larger. The largest smallmouth we captured was 20.2 inches long.

Largemouth Bass

Largemouth bass were also an incidental catch in our survey of Lake Mohawksin. We captured 17 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling. Approximately 29% (5 of 17) of those largemouth were over 14 inches long. The biggest largemouth bass we captured was 17.7 inches long.
Northern Pike
We captured 393 adult* northern pike in fyke nets fished in Lake Mohawksin from April 15-22, 2009. Approximately 8% (31 of 393) of adult northern pike we captured were greater than 26 inches long. The largest northern pike we captured was a 37.2-inch female.

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

Muskellunge
We captured 96 adult* muskellunge during our fyke netting and electro-fishing sampling of Lake Mohawksin. Nearly 70% of the adult muskellunge (67 of 96) we captured were 34 inches long or larger. Roughly one in four muskellunge (26 of 96) were 40 inches long or larger. The largest muskellunge we captured was a 45.4-inch female.

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

Other Species
We captured 15 species of fish in our fyke netting and electro-fishing sampling of Lake Mohawksin in addition to the game fish mentioned above. Bluegill and yellow perch were abundant in our fyke net catches. We also captured black bullhead, bowfin, burbot, golden redhorse, golden shiner, rock bass, shorthead redhorse, silver redhorse, white crappie, white sucker and yellow bullhead. Future in-water sampling plans include additional surveys for bass, panfish and young-of-year walleye in 2009 and netting of muskellunge in spring 2010.

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

Table 1. General Fishing Regulations for Lake Mohawksin, Lincoln 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>Continuous</td>
<td>3</td>
<td>15 inches</td>
</tr>
<tr>
<td>Largemouth and Smallmouth Bass</td>
<td>Continuous</td>
<td>5 in total</td>
<td>14 inches</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>Continuous</td>
<td>5</td>
<td>None</td>
</tr>
</tbody>
</table>

A brief summary of selected fishing regulations for Lake Mohawksin 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 Lake Mohawksin, Lincoln County, contact:

David Seibel, Fisheries Biologist
Wisconsin Department of Natural Resources
223 E Steinfest Road
Antigo WI 54409-2777
(715) 623-4190
Email: David.Seibel@Wisconsin.gov

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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