

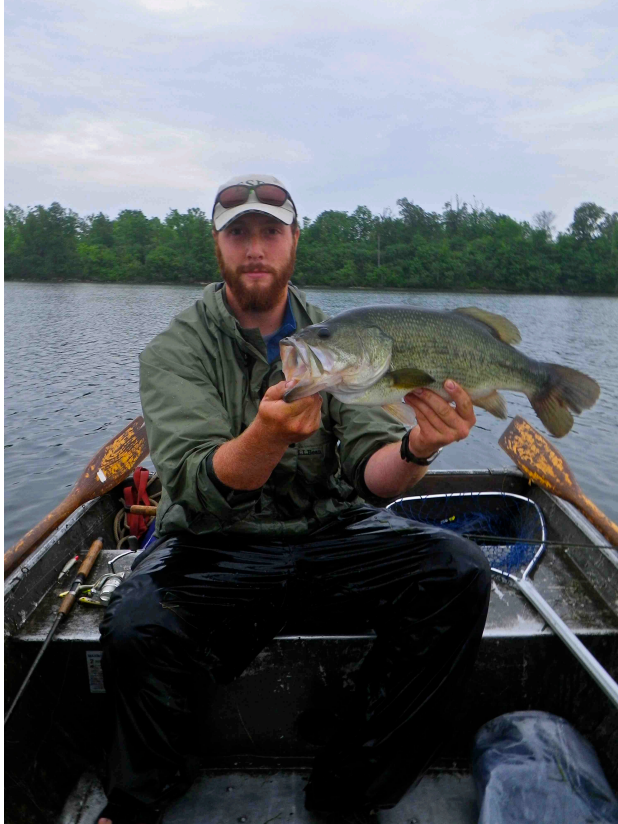
## **Lucky Star Ranch Fisheries Assessment**

### **Conducted by Brian Henning and Mark Leopold**

The reservoir at Lucky Star Ranch is characterized by low diversity of fish species with healthy populations. Sportfish include thriving populations of northern pike and largemouth bass, with very large black crappie and pumpkinseed populations in addition. There were eight species of fish found within the reservoir: largemouth bass, northern pike, black crappie, pumpkinseed, yellow perch, brown bullhead, banded killifish, and golden shiners.

Using a 30-foot beach seine, several 100-foot long hauls were done along the perimeter of the reservoir. The purpose of the fine-mesh 30-foot beach seine is to assess the population of young-of-year fish. Our findings show especially healthy populations of young-of-year largemouth bass, black crappie, and yellow perch. We observed a moderate amount of young-of-year northern pike as well.

We conducted an angling survey as a means of assessing the adult population of fish in the reservoir. Across 393 total minutes of angling (~6.5 hours) 83 fish were caught. That comes out to one fish every 4 mins 45 secs. A total of 14 northern pike were caught, averaging 24 inches in length and 2.30 pounds. A total of 65 largemouth bass were caught, averaging 15.9 inches in length, and 2.31 pounds. There was not much variation in the size of largemouth bass caught, with the largest being just less than 20 inches and 5 pounds. This suggests some crowding of year classes. Populations of gamefish appear to be quite healthy, though.



Left: 20 inch largemouth bass



Above left: A 9-inch black crappie. We observed crappie up to 14 inches long.  
Above right: A very large pumpkinseed. Populations appear to be doing quite well.



Above left to right: young-of-year largemouth bass, yellow perch, and pumpkinseed.  
Healthy young-of-year populations indicate healthy adult populations.