2024 LATE SPRING ELECTROFISHING SURVEY REPORT

WATER: HIMLEY LAKE COUNTY: FOREST

INTRODUCTION AND SURVEY OBJECTIVES

The DNR conducted a late spring electrofishing survey of Himley Lake in 2024. This survey is designed to assess the bass and centrarchid panfish populations within the lake. All fish were collected for a 0.5 mile station and then all gamefish were collected for the rest of the survey. Himley Lake is located approximately 4 miles west of Wabeno, with boat access off of Richardson Lake Road.

General Waterbody Characteristics: Lake Class: Simple - Cool - Dark

Acres: 149
Shoreline Miles: 3.38
Maximum Depth (feet): 8
Lake Type: Seepage
Public Access: Boat Landing
Regulations: Statewide Regulations

WISCONSIN DNR CONTACT INFO.

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Table 1. Summary of all surveys conducted during 2024

SURVEY INFORMATION				
Species	**Survey Date(s)**	**Gear Used**	**Effort**	**Water Temp. (°F)**
Largemouth Bass, Centrarchid Panfish	5/30/2024	Boomshocker	3.38 Miles	67

FISH METRIC DESCRIPTIONS

Catch per unit effort (CPUE) is the number of fish per mile (electrofishing) or per net-night (netting) and is used to index abundance when we are unable to get a Population Estimate.

Relative stock density (RSD) is an index used to describe size structure of fish populations. It is calculated by dividing the number of fish larger than a certain length by the number of stock size fish for a given species. Stock size is a length set for each species and is used to offset potential large year classes of juvenile fish. Example: RSD6 is the percentage of fish (above stock length) that were greater than 6 inches during the survey.

Length frequency distribution (LFD) is a graphical representation of the number of fish captured by inch group. Smaller fish (or younger age classes) may not always be represented in the length frequency due to different habitat usage or sampling gear limitations.

Mean length at age is used to index growth. Structures are taken from a subsample of fish captured. These structures can be used to estimate the age of that particular fish. The mean length at each age is then used to characterize growth of the entire population.

SURVEY METHODS

- Surveys are designed to evaluate each species when they are particularly vulnerable to our gear.
- Standard fyke nets and/or electrofishing gear is used to capture fish.
- Data is collected from the target species of each survey to gather population metrics.
- Fish metrics are compared to previous surveys of this water, and the mean/median values for waters in this “area” (Florence and Forest Counties).

GEAR USED DURING THIS SURVEY

- **Boomshocker** is a specially designed boat that creates an electric current in the water immediately in front of the boat. The boat is driven along the shoreline and shallow areas of the lake, when the boat encounters fish they are momentarily stunned. Once the fish is stunned they can be netted out of the lake and placed in a holding tank. After data is collected the fish are returned to the lake.

Photo Credit: Wisconsin DNR

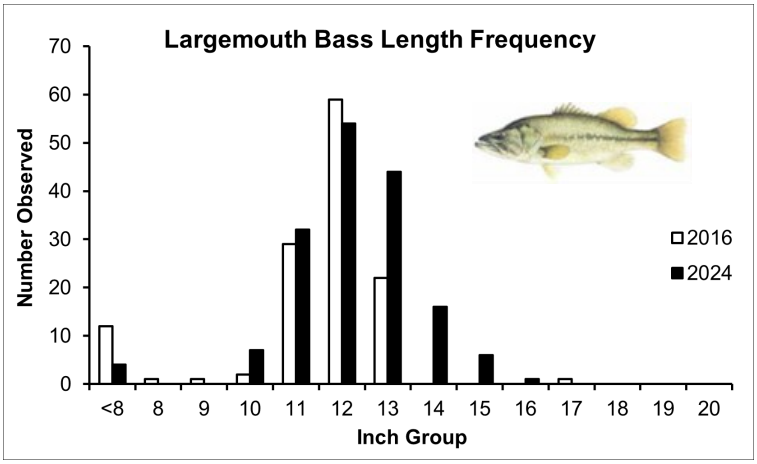
LARGEMOUTH BASS

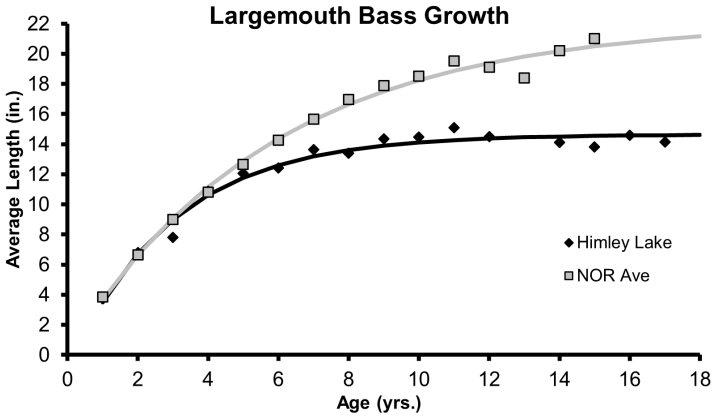
An electrofishing survey was conducted along the entire shoreline of Himley Lake on the night of 5/30/2024 to assess the largemouth bass population. During this survey 164 largemouth bass were caught, 160 of which were considered adults, for a relative abundance of 47.34 adults/mile. This is an increase since 2016 (35.28 adults/mile). An additional survey was conducted in 2016 (37.53 adults/mile), however this survey only had 1 dipper and may not be an adequate direct comparison to the 2024 survey. Current largemouth bass relative abundance is well above the area average (17.0 adults/mile), and the 75th percentile for its lake class (31.57 fish/mile). Himley Lake is considered to have a very abundant largemouth bass population.

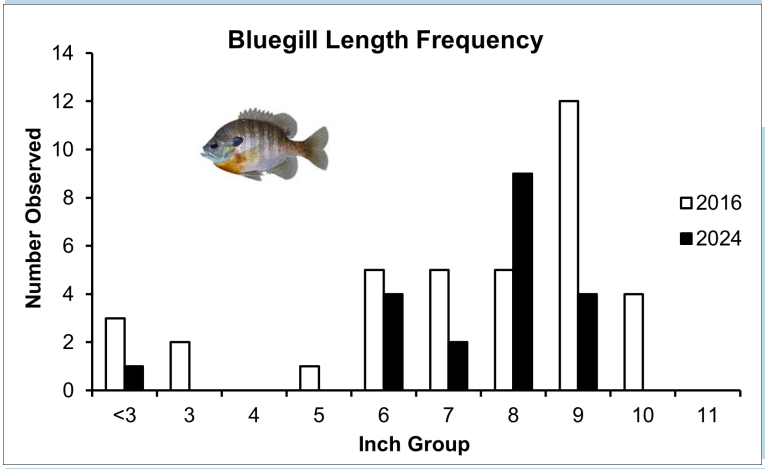
All largemouth bass caught were measured to assess the size structure of the largemouth bass population. All fish less than 8 inches were removed for size structure analysis. Of the sample, 75.6% were ≥ 12 inches and 0.6% were ≥ 16 inches. Size structure is very similar to 2016 when 71.3% were ≥ 12 inches and 0.9% were ≥ 16 inches. A length frequency figure comparing the two surveys can be seen to the right. Himley Lake is considered to have low size structure as it is below the area average of 69.5% ≥ 12 inches and 19.8% ≥ 16 inches.

Largemouth bass growth is very slow in Himley Lake. As seen in the figure to the right, it slows below the Northern Wisconsin regional average after age 4. On average it takes 9 years for a largemouth bass to reach the 14" minimum size limit in Himley Lake.

Both the 2016 and the 2024 survey had difficulty sampling fish with fish swimming into the very soft bottom and being unable to be netted. Actual abundance of largemouth bass is likely much higher than the data suggests.







BLUEGILL

A total of 20 bluegill were caught for a relative abundance of 40.0 fish/mile. This is an increase from the 2016 survey (11.35 fish/mile). Current bluegill relative abundance is below the 25th percentile for this lake class (42.11 fish/mile). Bluegill abundance is very low in Himley Lake.

All bluegill caught were measured to assess the size structure of the population. After removing fish less than 3 inches for analysis, 100% were ≥ 6 inches and 68.4% were ≥ 8 inches. Size structure has increased since 2016 (91.2% ≥ 6 inches and 61.8% ≥ 8 inches), however more fish were ≥ 9 inches in 2016. Size structure of the bluegill population is above the area average (61.6% ≥ 6 inches and 9.4% ≥ 8 inches) and considered high.

OTHER SPECIES

During this survey, the only other species observed was yellow perch which were of low abundance.

SURVEY NOTES

- The public launch to Himley Lake provides adequate angler access.
- This survey indicated a largemouth bass population that provides good angling opportunity, although large fish may be quite hard to come by. The panfish community may also provide an adequate angling opportunity, though abundance is very low.
- Himley Lake has had black crappie, pumpkinseed, white sucker, and darter species present in the past, however if these species are still present they have been reduced to non-detectable levels. This is likely due to competition and predation by the overabundant largemouth bass population.
- Himley Lake has been stocked with yellow perch (last stocked in 1937), northern pike (last stocked in 1965), and largemouth bass (last stocked in 1969). No stocking has occurred since 1969.
- The current regulations are somewhat appropriate for this water. The largemouth bass regulation should be changed to a more liberal regulation (no minimum size limit) to reduce abundance and increase size structure and growth. This could help to improve panfish abundance and overall angler opportunity. It is recommended that a late spring panfish netting survey be conducted prior to any regulation change.
- Himley Lake is considered a public access lake and is on a 8 year sampling rotation. The next survey is scheduled for 2032.