



WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Fisheries Information Sheet

LAKES: Buckhorn Lake and Emerald Lake

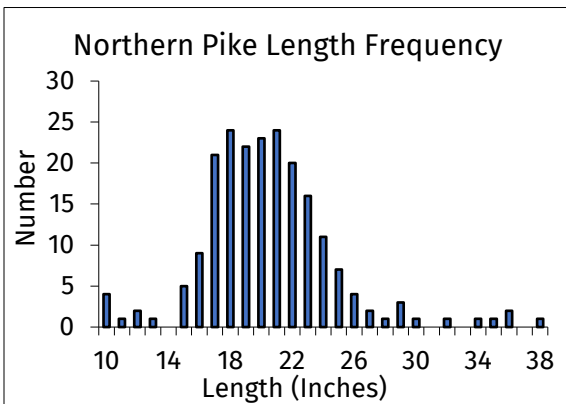
COUNTY: Jackson

YEAR: 2023

Introduction

The Department of Natural Resources surveyed Buckhorn Lake and Emerald Lake simultaneously during the month of April to assess the fish community. Buckhorn Lake and Emerald Lake (also known as the Backwater Lakes) are connected via power canal that is operated by Hatfield Hydropower. The following summarized data is a combination of both lakes due to regular fish passage between the waterbodies. Buckhorn Lake is 24 acres in size and has a maximum depth of 19 feet. Emerald Lake is a 26 acre lake and has a maximum depth of 18 feet. Surveys targeted Northern Pike, Walleye, Largemouth Bass and panfish using fyke nets and boat electrofishing gear.

NORTHERN PIKE

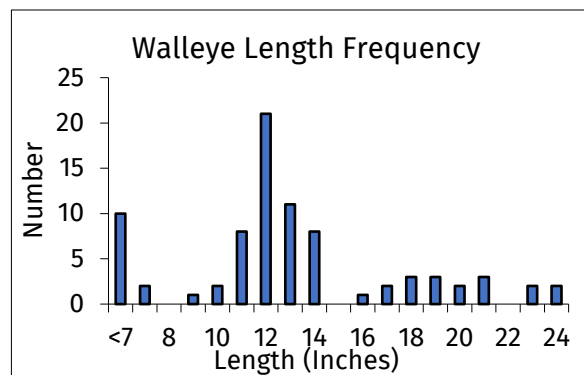


Northern pike were surveyed at a high density of 4.0 per acre and are the most common gamefish in the system. The population estimate conducted concluded the population to be around 200 individuals. The largest individual measured 38 inches long with 8% of the population at the legal harvest size of 26 inches.

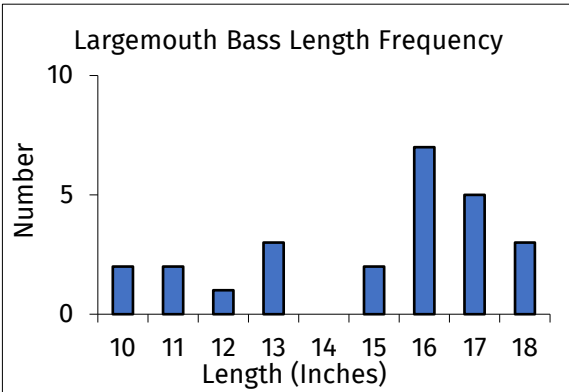
WALLEYE



Walleye were documented at a moderate density. A total of 71 individuals were captured with 25% measuring over 15 inches. The largest walleye measured 24 inches.



LARGEMOUTH BASS

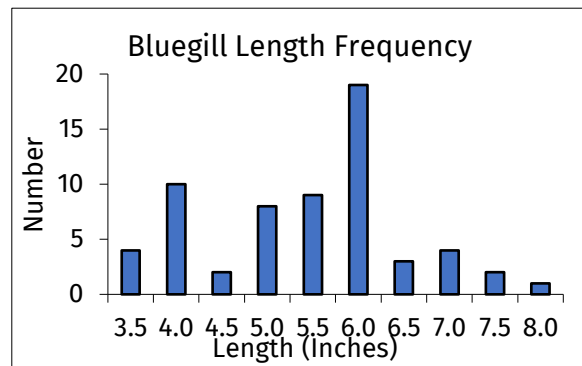


Largemouth bass were captured in low to moderate density. A total of 25 were handled during the survey with 68% of those being greater than 14 inches. The largest bass measured was 18.8 inches.

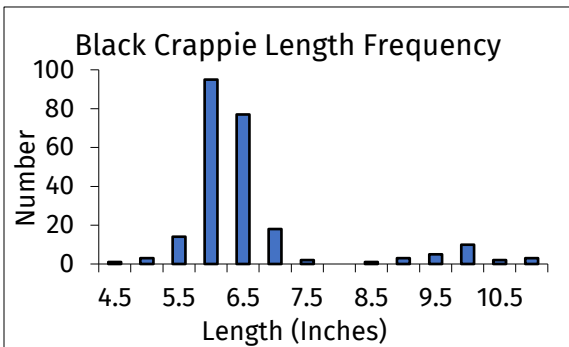
BLUEGILL



Bluegill were documented in low density. However, timing of the survey was unfavorable for panfish due to cooling water temps from unusual weather patterns. A total of 62 bluegill were surveyed with 11% of those measuring over 7 inches.



BLACK CRAPPIE

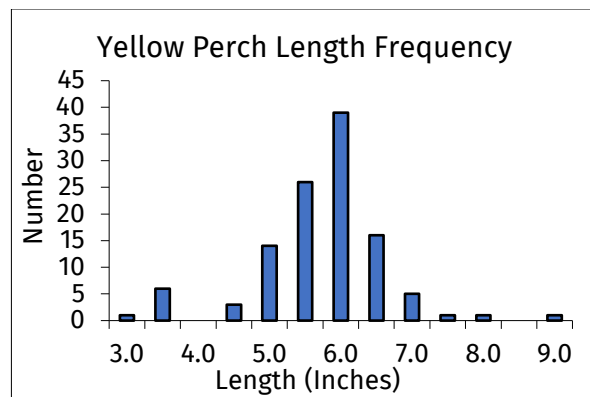


A total of 234 Black crappie were handled during the survey. Black crappie ranged from 4.5 inches to 11 inches in length. 10% of the crappies were greater than 9 inches.

YELLOW PERCH



Yellow perch were surveyed at a low density. A total of 113 fish were documented ranging from 3 inches to 9 inches in length. The population shows poor size structure.



OTHER SPECIES

The Backwater Lakes support a diverse fishery. During the survey muskellunge, smallmouth bass, channel catfish, white crappie, pumpkinseed, common carp, white sucker, shorthead redhorse and golden redhorse were handled in low densities.

Summary

Buckhorn Lake and Emerald Lake water levels are controlled by Hatfield Hydropower. In 2019 and 2020 the water was lowered in order to repair the dam on the canal. In subsequent years the fish populations have grown and recovered. Every species has younger cohorts of fish that will grow and mature into quality sized fish given time. There are no concerns for future stocking needs.

Acknowledgements

For answers to questions about fisheries management activities on Buckhorn Lake and Emerald Lake, contact:

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