



WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Marshall Millpond 2024 Fisheries Summary

LAKE: Marshall Millpond

COUNTY: Dane

YEAR: 2024

Mitchell Trow – DNR Fisheries Technician

Introduction

Marshall Millpond is a 129-acre drainage lake on the Maunasha River located in Marshall, Wisconsin in the northeast corner of Dane County. Marshall Millpond has a maximum depth of 5 feet with substrate composed of 80% muck, 15% sand, and 5% gravel. The Maunasha River is the main inlet of Marshall Millpond; however, Stransky Creek (WBIC 839400) and Schumacher Creek (WBIC 839200) also flow into Marshall Millpond. The only outlet on Marshall Millpond is the Maunasha River located at the dam, which was built in 1913, on the southwest side of the flowage.

Marshall Millpond is classified as a simple, riverine lake using a Wisconsin lakes classification system developed by the Wisconsin Department of Natural Resources (DNR) that compares lakes of similar physical characteristics. Marshall Millpond typically receives a spring electrofishing survey every 8 years. In 2024, DNR conducted an electrofishing survey on Marshall Millpond. The goal of this survey was to determine relative abundance and size structure for gamefish and panfish species.

Methods

The DNR conducted a single night electrofishing survey around the entire perimeter of Marshall Millpond on May 1, 2024 following standard procedures (Simonson 2015). A standard DNR maxi-boom shocking boat was used to sample the entire shoreline on four different transects: two 0.5-mile segments where all fish species were collected along with 1.3- and 1.6-mile segments where only gamefish were collected. Gamefish and panfish species were collected and measured in inches to the nearest tenth while non-gamefish species were counted.

Fish Assemblage

Fish species sampled during this survey, in order of abundance, included common carp (67), white sucker (54), bluegill (45), largemouth bass (38), black crappie (20), golden shiner (3), channel catfish (2), northern pike (2), bluntnose minnow (1) and yellow bullhead (1). Walleye have also been stocked in the lake but were not present in the electrofishing survey. Curly-leaf pondweed and purple loosestrife, invasive plant species, are present at the lake.

BLACK CRAPPIE



# Captured Per Mile	20
# Captured Per Hour	39

A total of 20 black crappie were sampled in two 0.5-mile electrofishing transects which resulted in a catch rate of 20 black crappie per mile. The average length of black crappie collected was 5.6 inches with sizes varying from 3.1 to 11.6 inches.

BLUEGILL



# Captured Per Mile	45
# Captured Per Hour	87
% Quality Size (Fish \geq 6)	27
% Preferred Size (Fish \geq 8)	0

A total of 45 bluegill were sampled in two 0.5-mile electrofishing transects which resulted in a catch rate of 45 bluegill per mile. The bluegill average catch rate over the last 4 electrofishing surveys on Marshall Millpond was 43.6 fish per mile which is slightly lower than the catch rate found in 2024 (Table 1). Compared to other simple, riverine lakes found in Wisconsin, the 2024 bluegill catch rate ranks low (just above the 25th percentile; Figure 3). The average length of bluegill collected was 5.1 inches with sizes varying from 3.2 inches to 7.4 inches (Figure 1).

LARGEMOUTH BASS



# Captured Per Mile	10
# Captured Per Hour	21
% Quality Size (Fish \geq 12)	59
% Preferred Size (Fish \geq 15)	35

A total of 38 largemouth bass were sampled between four electrofishing transects around the entire lake for a catch rate of 10 largemouth bass per mile. The largemouth bass average catch rate over the last four electrofishing surveys on Marshall Millpond was 7.9 fish per mile which is slightly lower than the catch rate found in 2024 (Table 2). Compared to other simple, riverine lakes found in Wisconsin, the 2024 largemouth bass catch rate ranks low (slightly above the 25th percentile; Figure 4). The average length of largemouth bass collected was 12.2 inches with sizes varying from 4.2 inches to 17.9 inches (Figure 2).

NORTHERN PIKE



# Captured Per Mile	0.50
# Captured Per Hour	1

A total of 2 northern pike were sampled between four electrofishing transects around the entire lake for a catch rate of 0.50 northern pike per mile. The lengths of northern pike collected were 17.5 and 17.6 inches. Northern pike are not consistently captured using electrofishing and low catch rates are common. Spring fyke netting is a much better method to capture pike. For example, a 2021 spring fyke net survey on Marshall Millpond found a total of 100 northern pike at an average size of 26.8 inches with sizes varying from 11 inches to 42.3 inches.

OTHER SPECIES

Common carp were the most common species collected in the survey (67 individuals) followed by white sucker (54 individuals). Channel catfish were present in the lake with two individuals being found at 12.2 inches and 11.6 inches. Three golden shiners, one bluntnose minnow and one yellow bullhead were also collected during the survey.

FISH STOCKING

Marshall Millpond has a long stocking history that goes as far back as 1973. Stocking in Marshall Millpond has been dominated by northern pike and black crappie, but walleye have been stocked as recently as 2019 (Table 3). In 2021, an additional northern pike stocking evaluation using genetic analysis was completed to determine what percentage of the current northern pike population in Marshall Millpond is made up of stocked fish genetics. Preliminary results indicate that genetics from naturally reproduced fish make up 95% of the population while stocked fish were only contributing 5% to the current population. Since most of the northern pike population is naturally reproduced with fish recruiting to the fishery, future stocking will be discontinued.

Summary

Marshall Millpond is a diverse fishery with multiple gamefish species present. Marshall Millpond will continue to follow all statewide regulations for general inland waters (Table 4). DNR will monitor Marshall Millpond on an 8-year rotation to track how the fish community changes over time. Northern pike stocking on Marshall Millpond will discontinue.

Acknowledgements

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If you have questions or comments about Fisheries Management activities on Marshall Millpond, please contact Fisheries Technician Mitchell Trow or Fisheries Biologist Kyle Olivencia:

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References

Simonson, T. 2015. Surveys and Investigations – Inland Fisheries Surveys. Fish Management Handbook Chapter 510, Wisconsin Department of Natural Resources internal publication. Madison, Wisconsin.

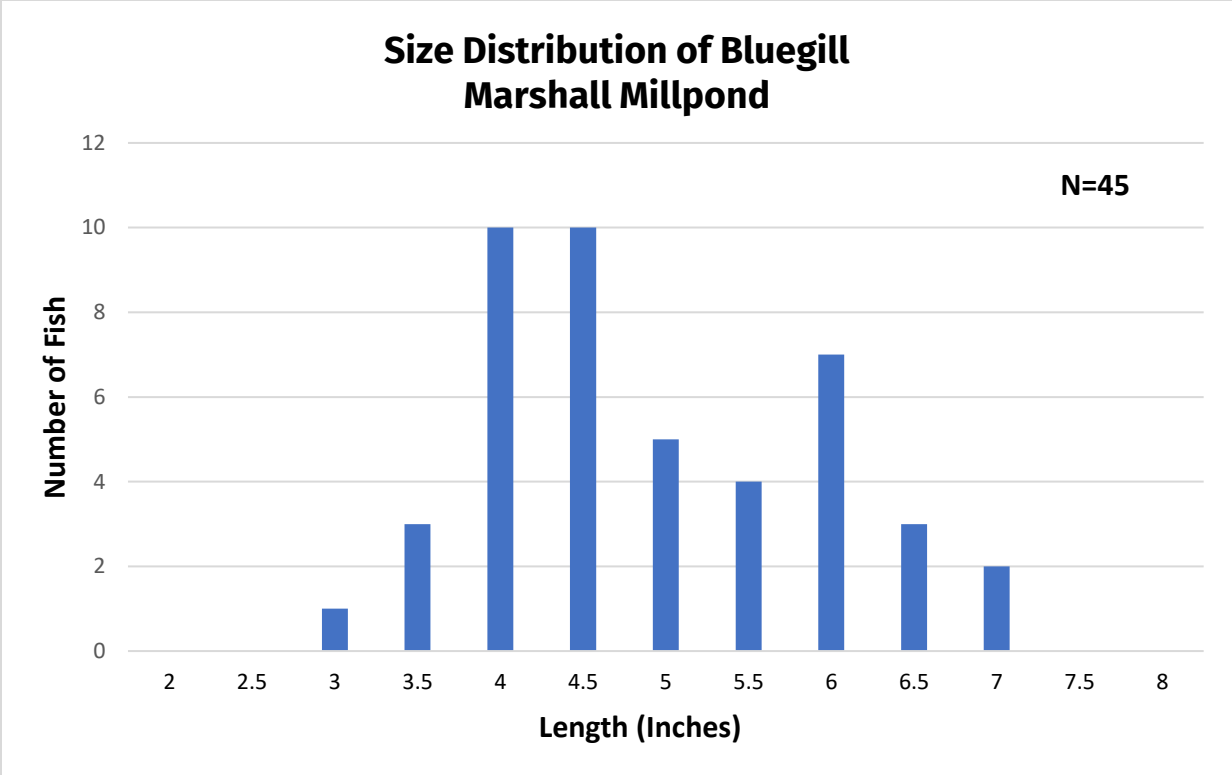


Figure 1. Length frequency of bluegill surveyed during the 2024 nighttime electrofishing survey on Marshall Millpond.

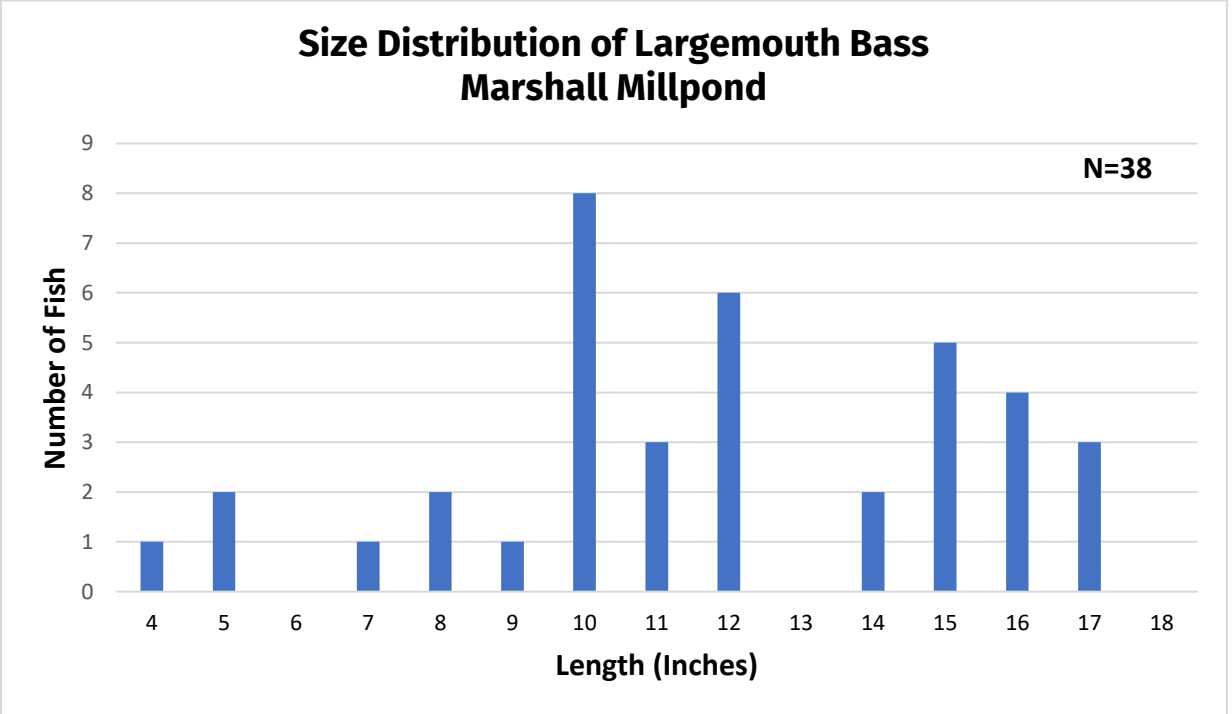


Figure 2. Length frequency of largemouth bass surveyed during the 2024 nighttime electrofishing survey on Marshall Millpond.

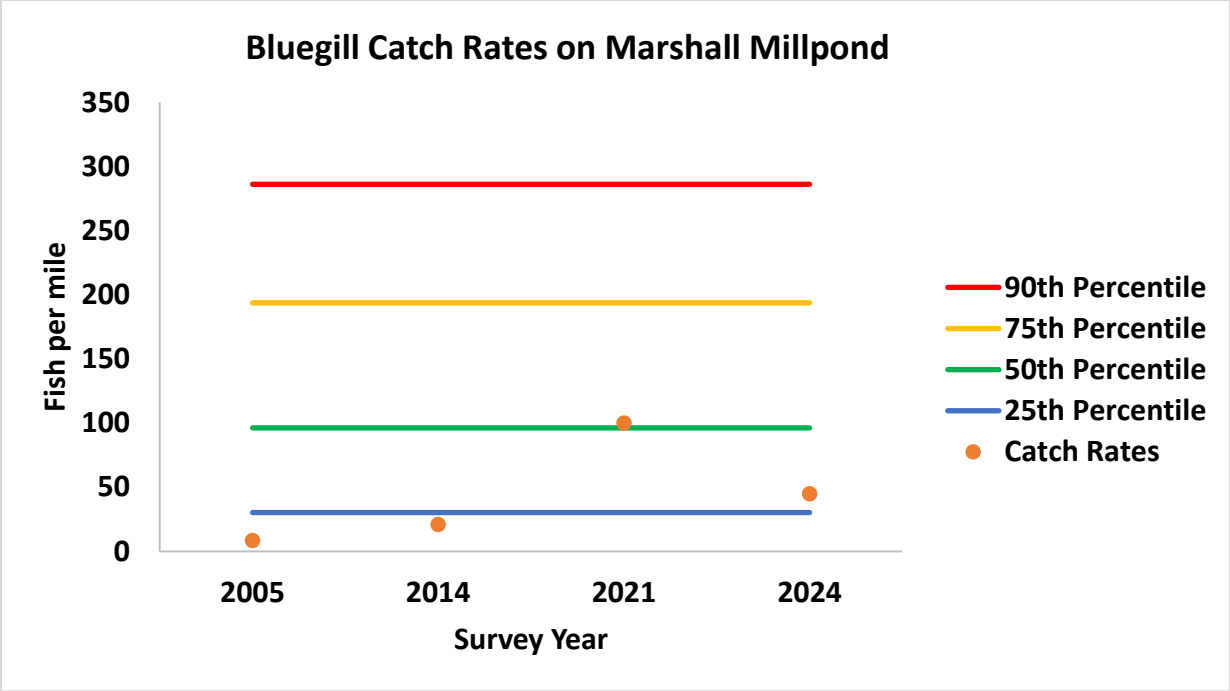


Figure 3. Catch rates of bluegill found during electrofishing surveys on Marshall Millpond in 2005, 2014, 2021, and 2024 compared to mean catch rates for simple, riverine lakes in Wisconsin.

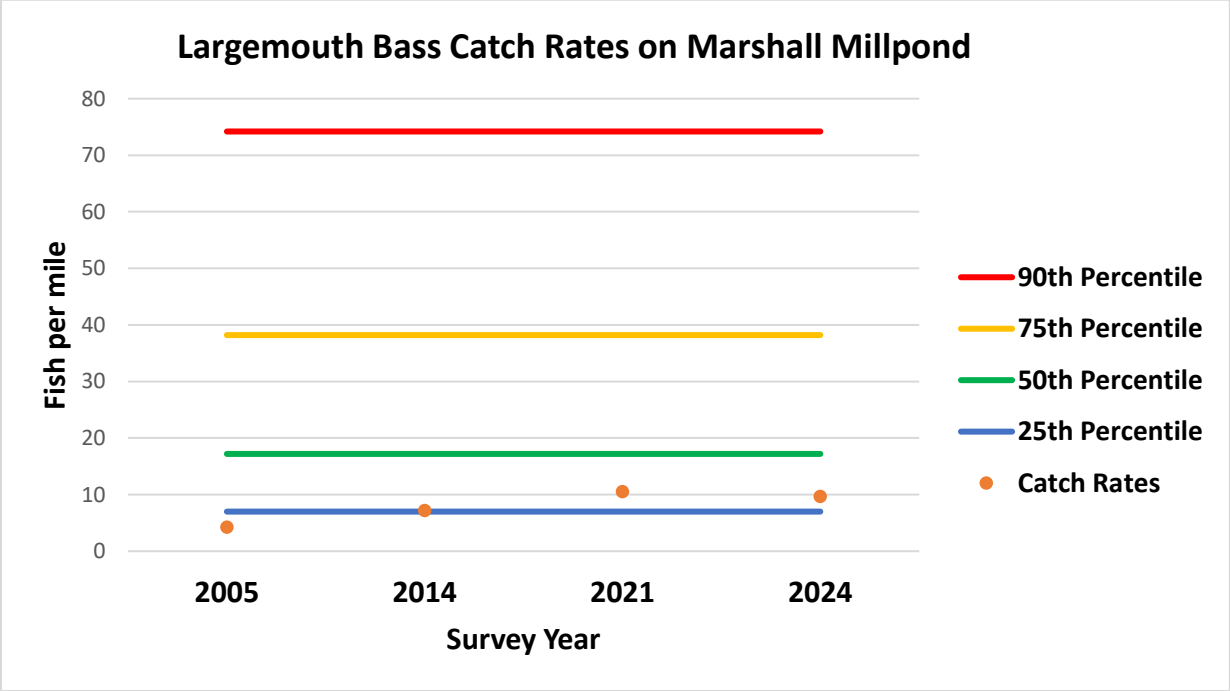


Figure 4. Catch rates of largemouth bass found during electrofishing surveys on Marshall Millpond in 2005, 2014, 2021, and 2024 compared to mean catch rates for simple, riverine lakes in Wisconsin.

Table 1. Catch information on bluegill surveyed in Marshall Millpond during electrofishing surveys in 2005, 2014, 2021 and 2024.

Year	Number Captured	Mean Length (Inches)	Maximum Length	Catch Rate (Number per mile)
2005	34	6.3	8.2	8.5
2014	21	6.0	7.1	21
2021	50	5.6	7.9	100
2024	45	5.1	7.4	45

Table 2. Catch information on largemouth bass surveyed in Marshall Millpond during electrofishing surveys in 2005, 2014, 2021 and 2024.

Year	Number Captured	Mean Length (Inches)	Maximum Length	Catch Rate (Number per mile)
2005	17	12.4	18.2	4.25
2014	18	13.5	15.5	7.2
2021	42	11.2	18.1	10.5
2024	38	12.2	17.9	9.7

Table 3. Fish stocking records for Marshall Millpond, Dane County, Wisconsin.

Stocking Year	Species	Age Class	Number of Fish Stocked	Source
2024	LARGEMOUTH BASS	LARGE FINGERLING	175	Private Stocking
2024	BLACK CRAPPIE	YEARLING	580	Private Stocking
2019	WALLEYE	YEARLING	200	Private Stocking
2019	NORTHERN PIKE	SMALL FINGERLING	970	DNR Stocking
2019	BLACK CRAPPIE	ADULT	220	Private Stocking
2019	BLACK CRAPPIE	YEARLING	399	Private Stocking
2018	BLACK CRAPPIE	YEARLING	700	Private Stocking
2018	WALLEYE	LARGE FINGERLING	575	Private Stocking
2017	BLACK CRAPPIE	YEARLING	600	Private Stocking
2017	BLACK CRAPPIE	ADULT	50	Private Stocking
2017	WALLEYE	YEARLING	450	Private Stocking
2017	NORTHERN PIKE	SMALL FINGERLING	970	DNR Stocking
2016	WALLEYE	YEARLING	50	Private Stocking
2016	LARGEMOUTH BASS	LARGE FINGERLING	50	Private Stocking
2016	BLUEGILL	YEARLING	600	Private Stocking
2016	BLACK CRAPPIE	YEARLING	400	Private Stocking
2015	NORTHERN PIKE	SMALL FINGERLING	970	DNR Stocking
2013	NORTHERN PIKE	SMALL FINGERLING	1290	DNR Stocking

Table 4. General fishing regulations for Marshall Millpond in Dane County, Wisconsin.

SPECIES	SEASON DATES	DAILY BAG LIMIT	SIZE LIMIT
Largemouth Bass	1 st Saturday in May to 1 st Saturday in March; Catch and Release Open Year-Round	5	14" or larger
Northern Pike	1 st Saturday in May to 1 st Saturday in March	2	26" or larger
Panfish*	Open All Year	25	None
Walleye	1 st Saturday in May to 1 st Saturday in March;	3	15
Catfish	Open All Year	10	None
Bullheads & Roughfish	Open All Year	Unlimited	None

*Panfish includes bluegill, pumpkinseed, sunfish, crappie and yellow Perch.