



WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Lake Belle View 2023 Fisheries Summary

LAKE: Lake Belle View

COUNTY: Dane

YEAR: 2023

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Introduction

Lake Belle View is a 44 acre drainage lake located in the village of Belleville, Wisconsin in southern Dane County. Lake Belle View has a maximum depth of 7 feet with substrate composed of 75% muck, 20% sand, and 5% gravel. The lake has abundant shoreline access in Belleville Community Park which has a small, gravel boat launch. Lake Belle View was formed in 1920 when the Belleville dam was constructed on the Sugar River.

Lake Belle View is classified as a complex, riverine lake using a Wisconsin lakes classification system developed by the Wisconsin Department of Natural Resources (DNR) that compares lakes of similar physical characteristics. Lake Belle View typically receives a spring electrofishing survey every 8 years. In 2023, DNR fisheries management conducted an electrofishing survey on Lake Belle View. The goal of this survey was to determine relative abundance and size structure for gamefish and panfish species.

LAKE BELLE VIEW RESTORATION

In 2010, the Village of Belleville and the DNR collaborated to perform a Lake Belle View restoration project where the lake was permanently isolated from the Sugar River by building a large berm with a water control gate on the west side of the lake. After construction of the berm, the lake was drained and dredged in winter of 2011. A few goals of this project were to reduce sediment loads, decrease nutrient inputs, improve water quality, increase the depth of the lake, increase aquatic plant growth and improve the composition of the fish community.

FISH STOCKING AND TRANSFERS

Following the completion of construction efforts, the lake was rewatered, and fish were added to the lake through private hatchery stockings and fish transfers from the Sugar River. In the summer of 2011, 26 fish species were collected from the Sugar River using electrofishing and transferred into the lake to establish an ecologically diverse fish community (Figure 5). The most recent fish stockings in Lake Belle View have focused on largemouth bass (Table 2).

COMMON CARP REMOVAL

After completion of the lake restoration project, common carp were found to be abundant which can cause habitat degradation and water turbidity issues. Common carp are a nonnative, nuisance species that tend to negatively impact native panfish and gamefish populations by uprooting native plant species and resuspending sediments through feeding habits. During the spring of 2014, the Lake Belle View was drawn down and a commercial fisherman was hired to seine carp out of the lake. A total of 2,200 lbs of carp were removed from the lake by commercial fishing and an additional 102 carp were removed in 2016 during a DNR electrofishing survey. In 2015 and 2017, Largemouth Bass were stocked as a predatory species in an effort to control the numbers of juvenile carp and increase gamefish numbers.

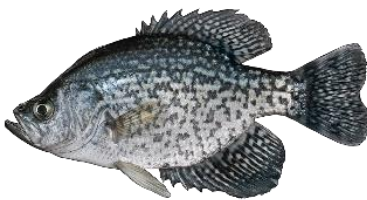
Methods

The DNR conducted a single night electrofishing survey around the entire perimeter of Lake Belle View on May 4, 2023 following standard procedures (Simonson 2015). A standard DNR maxi-boom shocking boat was used to sample the entire 2.2-mile shoreline where all fish species were collected. Gamefish and panfish species were collected and measured to the nearest tenth of an inch while non-gamefish species were only counted.

Fish Assemblage

Fish species sampled during this survey, in order of abundance, included bluegill (494), common carp (209), black crappie (88), largemouth bass (23), golden shiner (11), white sucker (4), bigmouth buffalo (2), black bullhead (2), yellow bullhead (2), northern pike (1) and quillback (1). Walleye and smallmouth bass have also been found in the lake in the past but were not present in the 2024 electrofishing survey. Curly-leaf pondweed and purple loosestrife, invasive plant species, are present at the lake.

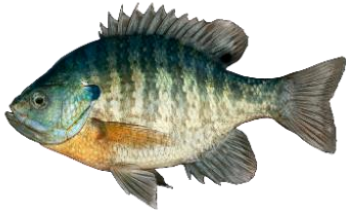
BLACK CRAPPIE



# Captured Per Mile	40
# Captured Per Hour	77
% Quality Size (Fish \geq 8)	2
% Preferred Size (Fish \geq 10)	0

A total of 88 black crappie were sampled in 2.2 miles of electrofishing which resulted in a catch rate of 40 black crappie per mile, much higher than observed in 2013 (7 fish per mile; Table 1). The average length of black crappie collected was 5.7 inches with sizes varying from 3.2 to 8.8 inches.

BLUEGILL



# Captured Per Mile	225
# Captured Per Hour	430
% Quality Size (Fish \geq 6)	0.2
% Preferred Size (Fish \geq 8)	0

A total of 494 bluegill were sampled in 2.2 miles of electrofishing which resulted in a catch rate of 225 bluegill per mile, much higher than observed in 2013 (121 fish per mile; Table 1). Compared to other complex, riverine lakes found in Wisconsin, the 2023 bluegill catch rate ranks high (just below the 90th percentile; Figure 3). The average length of bluegill collected was 4.4 inches with sizes varying from 1.7 inches to 6.8 inches (Figure 1).

LARGEMOUTH BASS



# Captured Per Mile	10
# Captured Per Hour	20
% Quality Size (Fish \geq 12)	65
% Preferred Size (Fish \geq 15)	26

A total of 23 largemouth bass were sampled in 2.2 miles of electrofishing which resulted in a catch rate of 10 largemouth bass per mile, much higher than observed in 2013 (3 fish per mile; Table 1). Compared to other complex, riverine lakes found in Wisconsin, the 2023 largemouth bass catch rate was moderate, between the 50th and 75th percentiles (Figure 4). The average length of largemouth bass collected was 12.9 inches with sizes varying from 7.4 inches to 17.0 inches (Figure 2).

NORTHERN PIKE



One northern pike was sampled at 34.3 inches in 2.2 miles of electrofishing. Although only one northern pike was sampled, this does not necessarily reflect a low population, as northern pike are not easily or consistently sampled with electrofishing gear and low catch rates are common.

OTHER SPECIES

Common carp were the second most common species collected in the survey at 209 individuals. The 2023 common carp catch rate of 95 fish per mile was lower than we observed in 2013 (195 fish per mile). A total of 11 golden shiners were found in the lake which serve as an excellent food source for gamefish species.

Four white sucker, 2 bigmouth buffalo, 2 black bullhead, 2 yellow bullhead and 1 quillback were also collected during the survey.

Summary

Overall, Lake Belle View has continued to improve with a diverse fish community that is dominated by panfish species and common carp following the lake restoration project. Abundances of bluegill and black crappie are at an all-time high, but size structure of panfish found in Lake Belle View continues to be an issue where these populations are likely experiencing density dependent growth. Common carp also continue to be present but at lower numbers compared to 2013. Further reducing common carp and bluegill may improve gamefish and panfish growth. It appears that the lake restoration and initial stocking efforts have established gamefish populations in Lake Belle View; no further stocking is necessary to maintain these fisheries.

The current special regulation for largemouth and smallmouth bass will remain in place on Lake Belle View where only one bass over 18" inches may be harvested each day. For all other species, Lake Belle View will continue to follow all statewide regulations for general inland waters (Table 3). Common carp continue to be abundant in Lake Belle View and if numbers remain high during the next survey on Lake Belle View, DNR will consider a potential carp removal project in the future. A removal project may lead to decreased turbidity and increased aquatic plant densities which favor panfish and gamefish. Increased gamefish numbers may result in improved panfish size structure as there would be more predators present to control small bluegill. DNR will monitor Lake Belle View on an 8-year rotation to track how the fish community changes over time.

Acknowledgements

Data collection for this survey was completed by DNR staff Andrew Notbohm, Mitchell Trow and Josh Jonet. Tim Simonson and Kyle Olivencia provided feedback and edits for this report.

If you have questions or comments about Fisheries Management activities on Lake Belle View, 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.

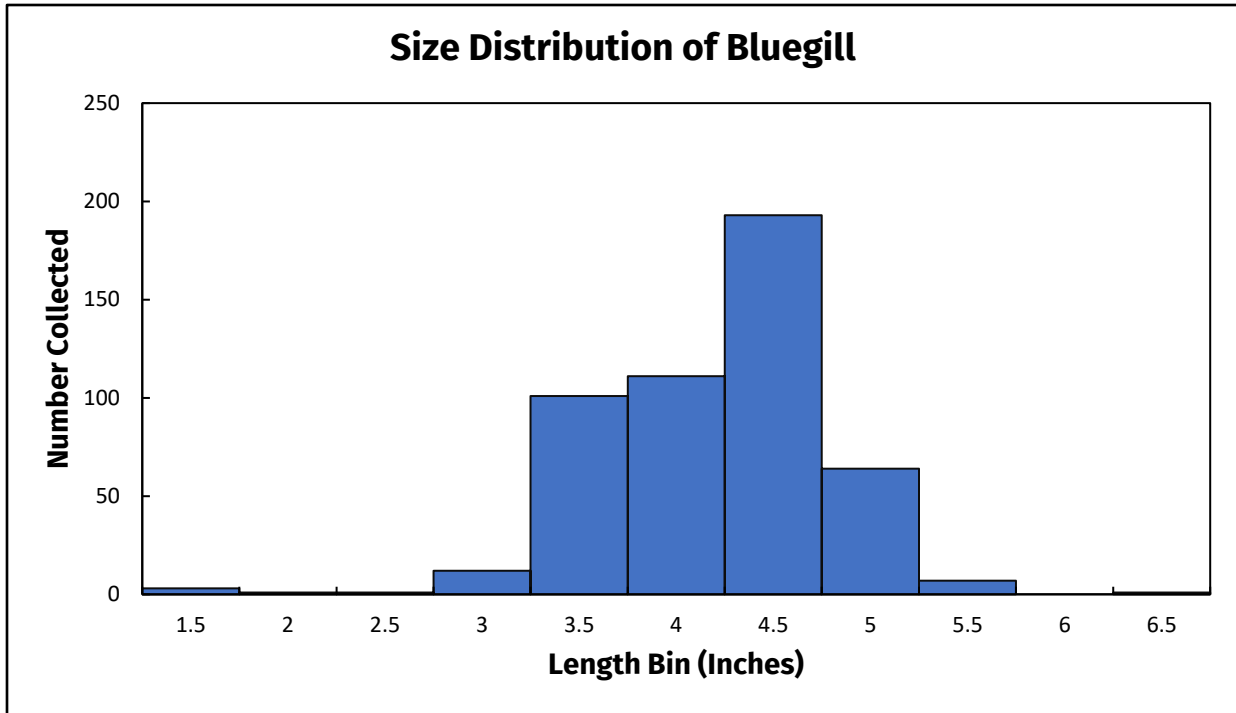


Figure 1. Length frequency of bluegill surveyed during the 2023 nighttime electrofishing survey on Lake Belle View.

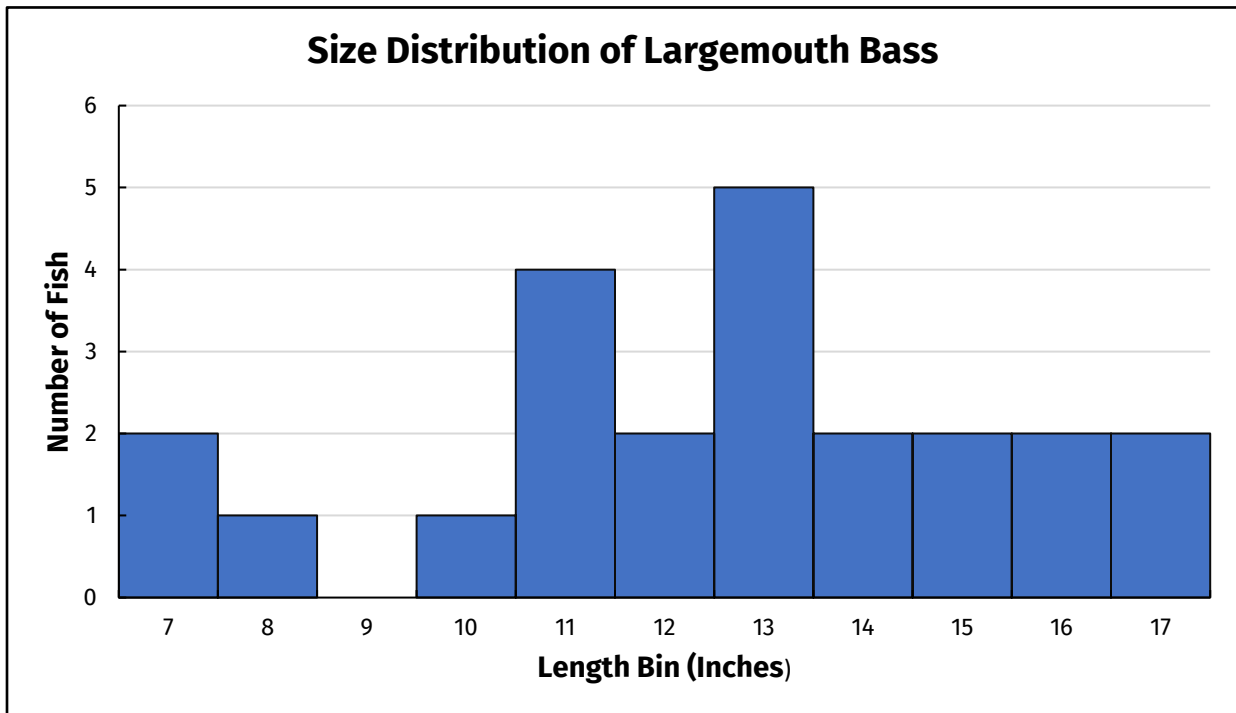


Figure 2. Length frequency of largemouth bass surveyed during the 2023 nighttime electrofishing survey on Lake Belle View.

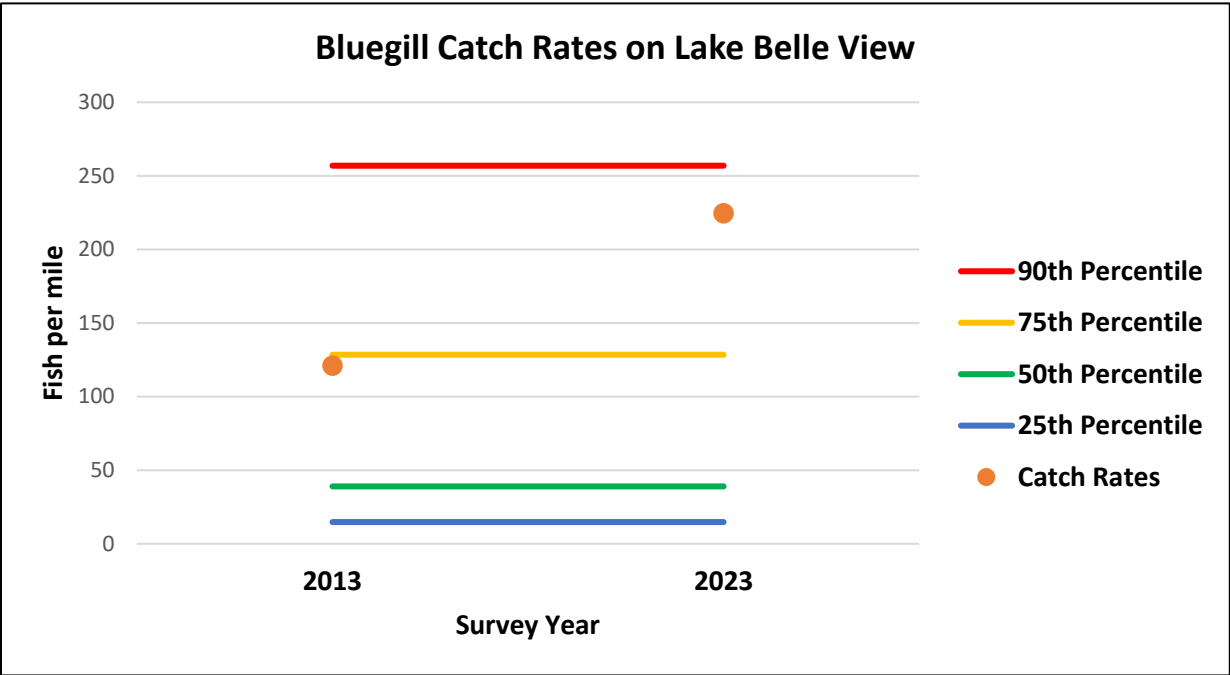


Figure 3. Catch rates of bluegill found during electrofishing surveys on Lake Belle View in 2013 and 2023 compared to mean catch rates for complex, riverine lakes in Wisconsin.

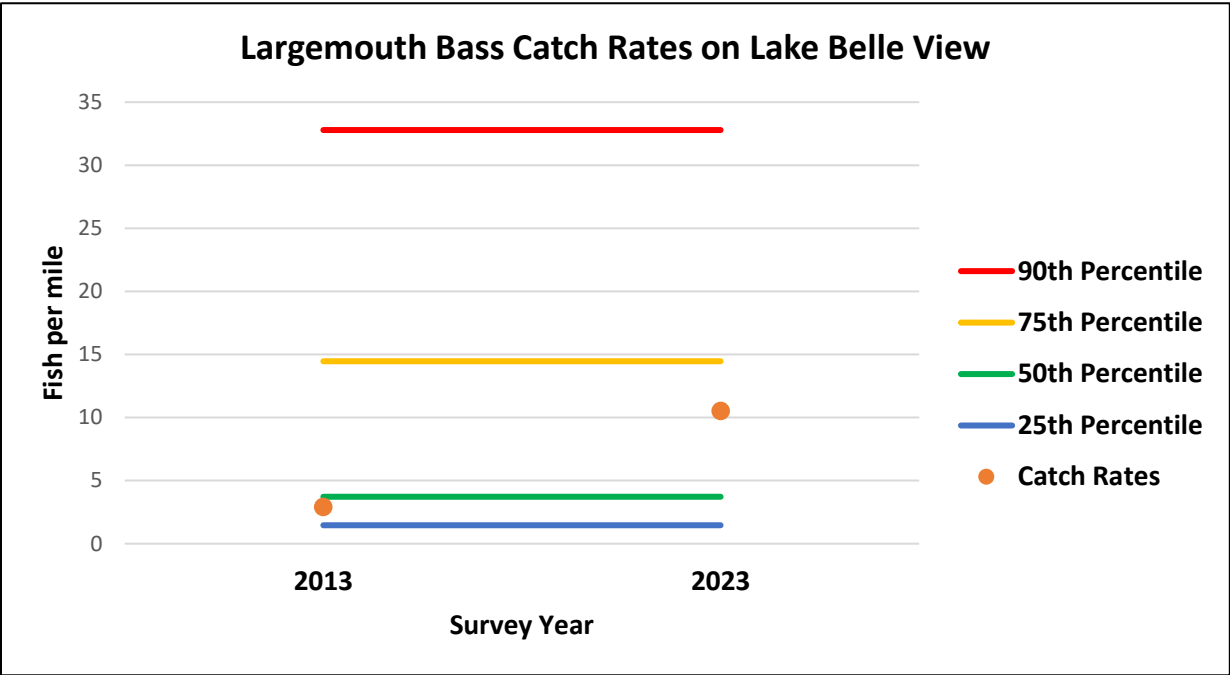


Figure 4. Catch rates of largemouth bass found during electrofishing surveys on Lake Belle View in 2013 and 2023 compared to mean catch rates for complex, riverine lakes in Wisconsin.

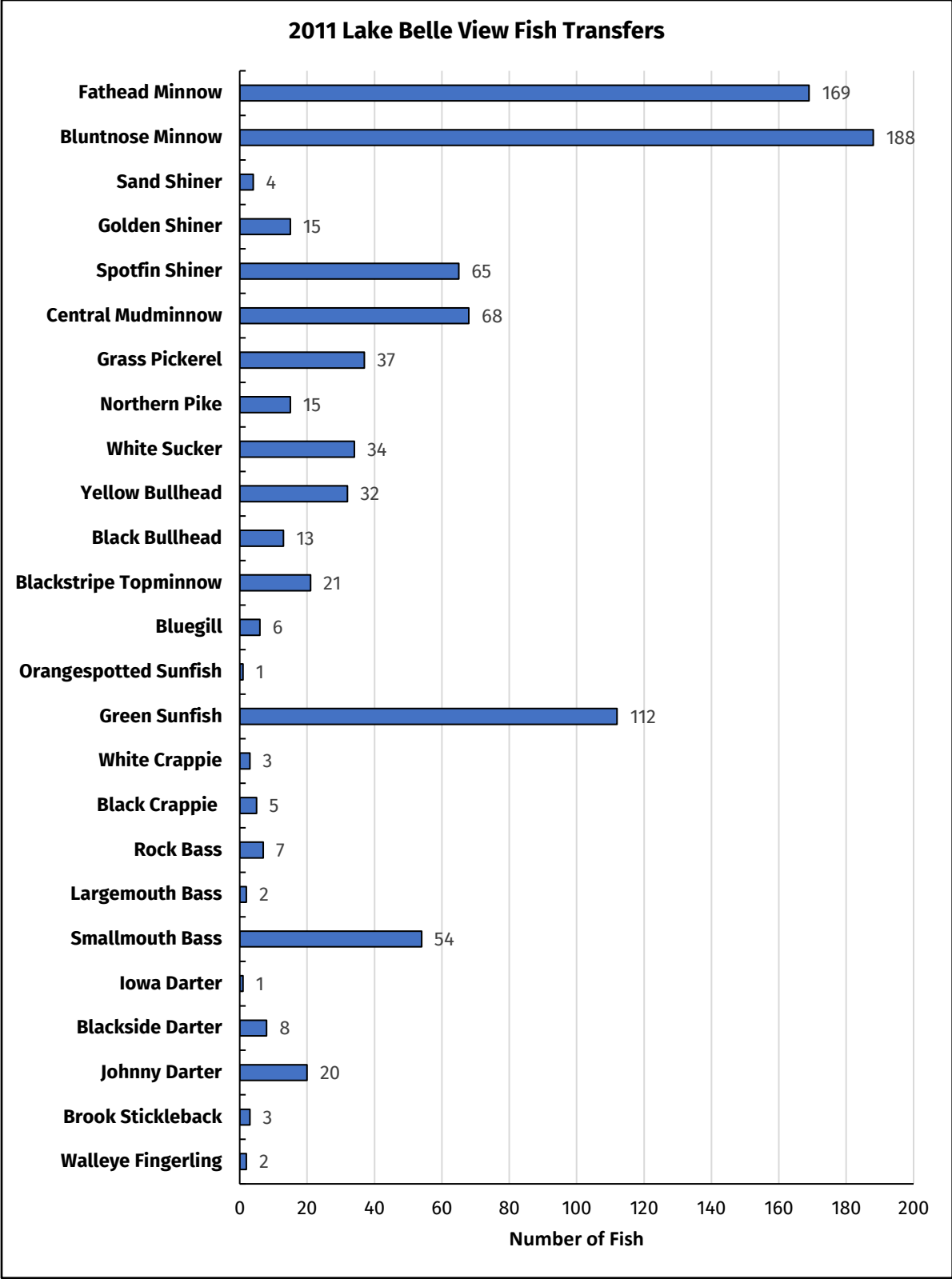


Figure 5. Fish transfers from Sugar River into Lake Belle View following the largescale lake restoration project in 2011.

Table 1. Catch information on black crappie, bluegill and largemouth bass surveyed in Lake Belle View during electrofishing surveys in 2013 and 2023.

Species	Year	Number Captured	Mean Length (Inches)	Maximum Length	Catch Rate (Number per mile)
Black Crappie	2013	13	4.9	8.9	7.25
	2023	88	5.7	8.8	40
Bluegill	2013	169	4	6	121
	2023	494	4.4	6.8	224.5
Largemouth Bass	2013	6	11.8	12.5	2.9
	2023	23	12.9	17	10.5

Table 2. Fish stocking records for Lake Belle View, Dane County, Wisconsin. First fish stocking following the lake restoration occurred in 2011.

Stocking Year	Species	Age Class	Number of Fish Stocked	Source
2017	LARGEMOUTH BASS	LARGE FINGERLING	2,640	DNR STOCKING
2015	BLUEGILL	LARGE FINGERLING	8,197	NON-DNR STOCKING
2015	LARGEMOUTH BASS	LARGE FINGERLING	3,295	DNR STOCKING
2014	NORTHERN PIKE	LARGE FINGERLING	120	DNR STOCKING
2014	LARGEMOUTH BASS	LARGE FINGERLING	1,313	DNR STOCKING
2011	BLACK CRAPPIE	UNKNOWN	200	PRIVATE
2011	BLUEGILL	UNKNOWN	200	PRIVATE
2011	LARGEMOUTH BASS	UNKNOWN	75	PRIVATE
2011	WALLEYE	UNKNOWN	40	PRIVATE
2011	NORTHERN PIKE	UNKNOWN	40	PRIVATE
2011	GOLDEN SHINER	UNKNOWN	50 LBS	PRIVATE

Table 3. Fishing regulations for Lake Belle View in Dane County, Wisconsin.

SPECIES	SEASON DATES	DAILY BAG LIMIT	SIZE LIMIT
Largemouth Bass & Smallmouth Bass	1 st Saturday in May to 1 st Saturday in March; Catch and Release Open Year-Round	1	18" 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.