



Wisconsin Department Of Natural Resources

Fisheries Information Sheet

River: Fox River

County: Brown

Year: 2025

Introduction

A hoop net survey targeting catfishes was conducted on the Fox River from June 17 to July 25, 2025. This survey is part of the larger Lower Green Bay and Fox River Area of Concern habitat restoration and fish monitoring program. The goals of this survey were to evaluate channel and flathead catfish use of designated habitat areas prior to planned habitat enhancement and to better understand catfish populations in the Lower Fox River. Ninety-five net-nights of effort were allocated among 12 locations in the ~4-mile reach below De Pere Dam (Figure 1). Hoop nets were placed in the Fox River near Ashwaubenon Creek and Dutchman Creek outlets, inside Ashwaubenon Creek and Dutchman Creek, and at control sites in the Fox River. A combination of unseeded nets and nets seeded with a live flathead catfish as an attractant to target flathead catfish were fished (Table 1). Flathead catfish were tagged with Floy and passive integrated transponder (PIT) tags. Proportional Size Distribution (PSD) was calculated by dividing the number of fish within a given size class by the number of stock-sized fish (≥ 11 inches for channel catfish and ≥ 14 inches for flathead catfish), with PSD values between 40 – 60 generally describing a balanced size structure.

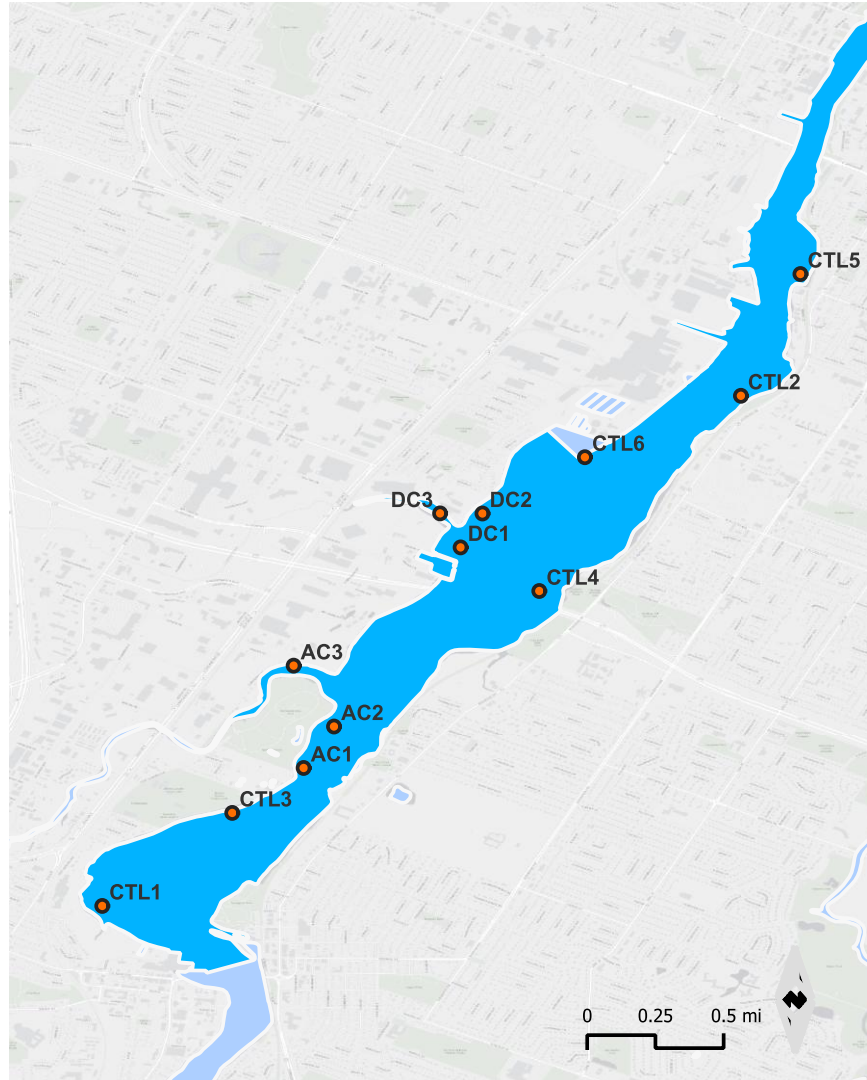


Figure 1. Locations of hoop nets set in the Lower Fox River at Ashwaubenon Creek (AC) and Dutchman Creek (DC) designated habitat areas along with various control (CTL) sites.

Table 1. Number of hoop net nights allocated between unseeded and seeded nets during 2025 Fox River hoop netting.

Site	Unseeded	Seeded
Ashwaubenon/Fox	14	9
Ashwaubenon Creek	3	1
Control	20	20
Dutchman/Fox	15	9
Dutchman Creek	2	2

Channel Catfish

Two-hundred and fourteen channel catfish were caught overall, resulting in a catch rate of 2.3 per net-night. Channel catfish catch was highly variable, with catches of 40+ and 70+ for individual net-nights, along with many zeroes. Overall, Ashwaubenon/Fox nets had the highest catch with 133 channel catfish, at 62% of total caught in survey, and an average catch rate of 5.8 per net-night (Table 2). Unseeded hoop nets had higher average catch rates of channel catfish than seeded at 2.9 per net-night compared to 1.4 per net night.

Channel catfish had an overall average length of 25.1 inches (range = 11.1–32.0 inches; Figure 2). Average length was highest at Ashwaubenon/Fox at 26.6 inches and Dutchman/Fox at 25.5 inches which also had the highest PSD-M with 38 and 37 (Table 2). Most channel catfish caught in the survey were of quality size with an overall PSD-Q of 91. Few channel catfish were caught in Ashwaubenon Creek and Dutchman Creek.

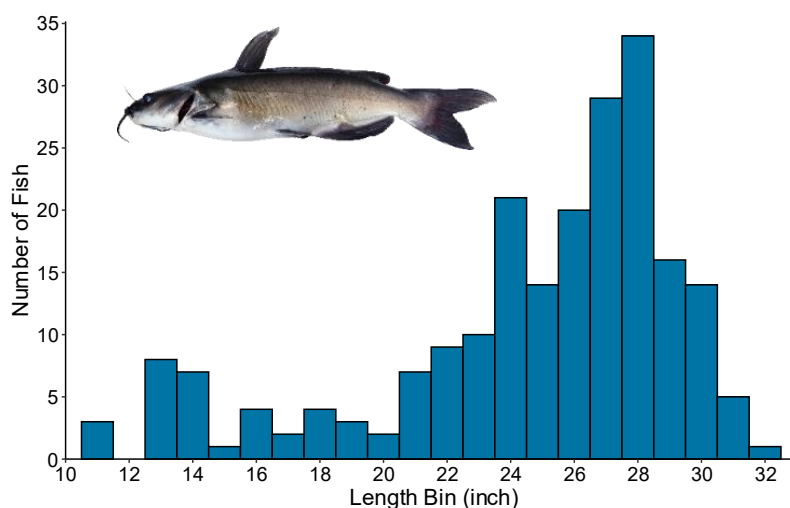


Figure 2. Length frequency distribution of channel catfish sampled during 2025 Fox River hoop netting survey.

Table 2. Site, number caught, average length (inches), Proportional Size Distribution (PSD) of quality, preferred, and memorable class for channel catfish caught during 2025 hoop net survey of the Fox River.

Site	Number Caught	Average Length	PSD-Quality (≥16 inches)	PSD-Preferred (≥24 inches)	PSD-Memorable (≥28 inches)
Ashwaubenon Creek	1	11.5	0	0	0
Ashwaubenon/Fox	133	26.6	99	83	38
Controls (Fox)	36	19.7	56	31	11
Dutchman Creek	3	24.9	100	67	0
Dutchman/Fox	41	25.5	100	76	37
All Sites	214	25.1	91	72	33

Flathead Catfish

One hundred thirty-four flathead catfish (1.4 per net-night) were caught, with two of those being recaptures of individuals tagged during this survey. Average catch rate was highest at control sites at 2.0 per net-night, followed by Ashwaubenon/Fox at 1.6 per net-night, and Ashwaubenon Creek at 1.0 per net-night. Seeded hoop nets had higher average catch rates of flathead catfish than unseeded at 1.8 per net-night compared to 1.1 per net-night.

Flathead catfish had an overall average length of 28.4 inches (range = 17.7–42.8 inches; Figure 3). Average length was highest at Ashwaubenon/Fox at 30.2 inches and control sites at 28.4 inches which also had the highest PSD-M at 29 and 21 (Table 3). Most flathead catfish caught in this survey were of quality size with PSD-Q of 97 and PSD-P was 42. One trophy-class flathead catfish was caught at a length of 42.8 inches.

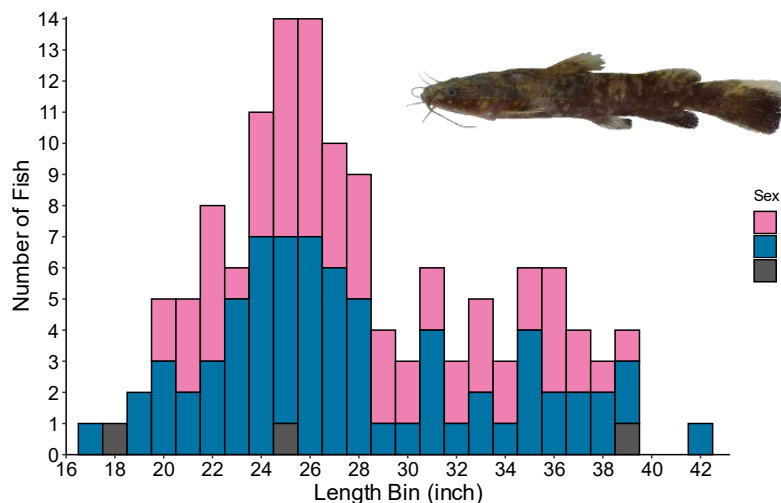


Figure 3. Length frequency distribution of flathead catfish sampled during 2025 Fox River hoop netting survey.

Table 3. Site, number caught, average length (inches), Proportional Size Distribution (PSD) of quality, preferred, and memorable class for flathead catfish caught during 2025 hoop net survey of the Fox River.

Site	Number Caught	Average Length	PSD-Quality (≥20 inches)	PSD-Preferred (≥28 inches)	PSD-Memorable (≥34 inches)
Ashwaubenon Creek	4	24.8	100	25	0
Ashwaubenon/Fox	35	30.2	97	60	29
Controls (Fox)	80	28.4	99	41	21
Dutchman Creek	3	25.3	100	33	0
Dutchman/Fox	10	23.6	80	0	0
All Sites	132	28.4	97	42	20

Summary

Overall, the Lower Fox River below the De Pere Dam supports robust populations of both channel and flathead catfish. Notably, we were encouraged by the high number of adult channel catfish ≥ 24 inches, considering there was a large channel catfish die-off in June 2022 due to columnaris, a naturally occurring bacterial disease. Seventy-two percent of channel catfish sampled were ≥ 24 inches and 33% were ≥ 28 inches. Flathead catfish had more of an evenly distributed size structure, with fish in the 24 – 28-inch range being most common. We also sampled several larger flatheads ≥ 35 inches with our largest being 42.8 inches. We plan on continuing this survey in 2026 and beyond as we continue to monitor fish populations and their response to habitat improvements within the Lower Green Bay and Fox River Area of Concern.

Acknowledgements

For questions about Lower Green Bay and Fox River Area of Concern Fisheries surveys, contact:

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