



WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Fisheries Information Sheet

LAKE: Upper Eau Claire

COUNTY: Bayfield

YEAR: 2025

Introduction

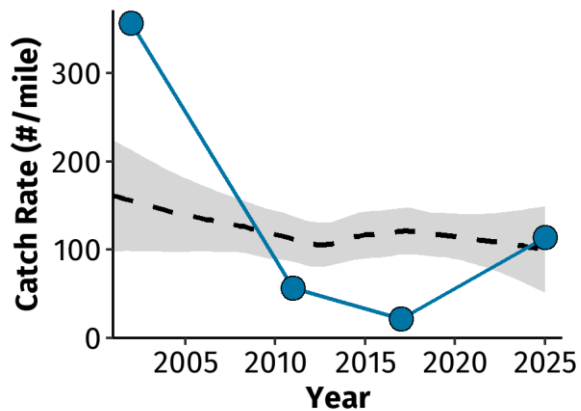
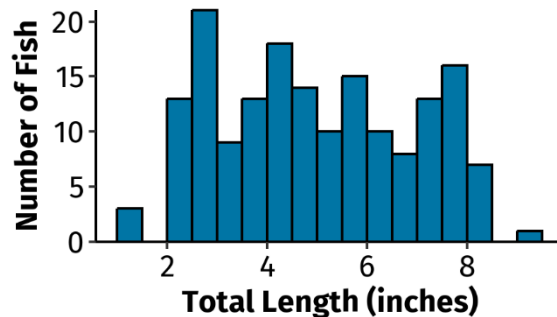
A late spring electrofishing survey was conducted on Upper Eau Claire Lake (WBIC 2742700) in Bayfield County on May 14th, 2025. All species were collected along 1.5 miles of shoreline and gamefish were collected along an additional 4.5 miles of shoreline. Although these surveys primarily target bass and bluegill, other species observed included smallmouth bass, walleye, northern pike, muskellunge, yellow perch, rock bass, white sucker, emerald shiner, spottail shiner, blacknose shiner, mimic shiner and bluntnose minnow. Comparisons were made to previous surveys and similar Wisconsin lakes in the same lake class.

BLUEGILL



There were 171 bluegills captured and length ranged from 1.2 to 9.2 inches. Bluegill catch rate (blue dots) was near the average for similar Wisconsin lakes (dashed line). Since the 2017 survey, the bluegill catch rate increased, but size structure decreased slightly. Twenty 6–7-inch bluegills were kept for aging. Age ranged from 5 to 7 years with a mean of 6.3 years, which is relatively slow growth for Douglas and Bayfield counties.

Year	2017	2025
# Captured Per Mile	22	114
Quality Size ($\geq 6"$)	52%	32%
Preferred Size ($\geq 8"$)	3%	5%

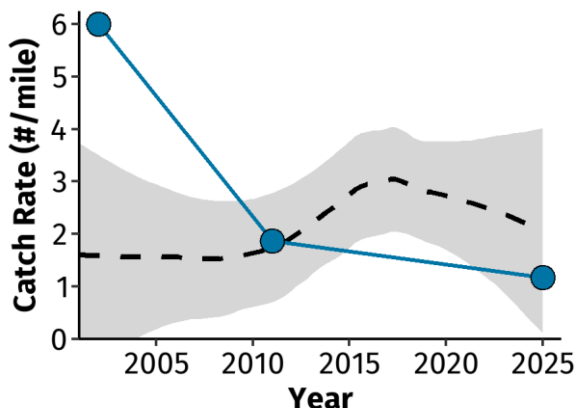
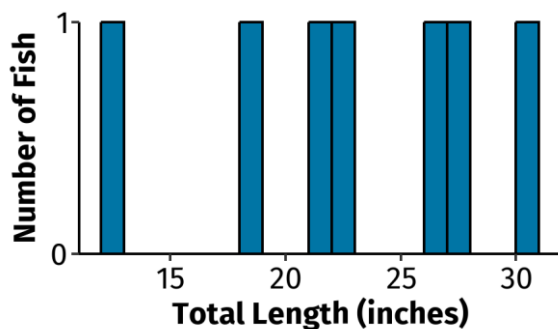
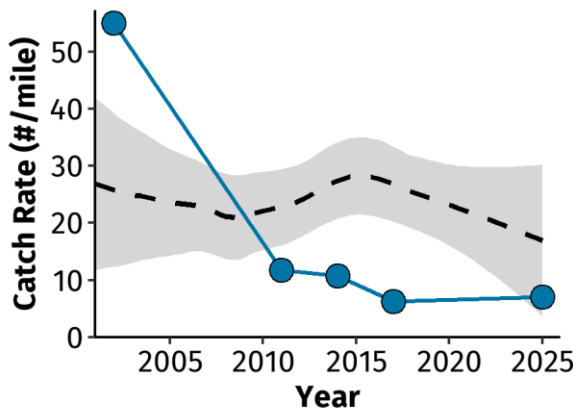
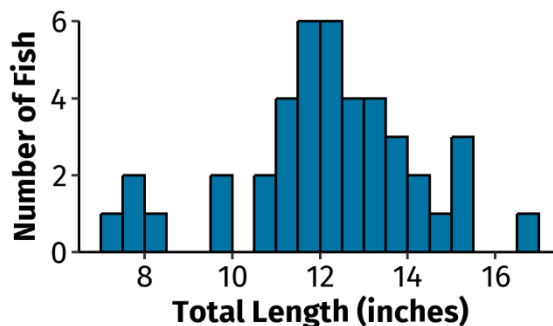


LARGEMOUTH BASS



There were 42 largemouth bass captured and length ranged from 7.4 to 16.6 inches. Largemouth bass catch rate (blue dots) was below average for similar Wisconsin lakes (dashed line). Since the 2017 survey, the largemouth bass catch rate increased slightly and size structure declined.

Year	2017	2025
# Captured Per Mile	6.2	7.0
Quality Size ($\geq 12"$)	73%	57%
Preferred Size ($\geq 15"$)	15%	10%



NORTHERN PIKE



There were seven northern pike captured and length ranged from 12.0 to 30.4 inches. Northern pike catch rate (blue dots) was slightly below average for similar Wisconsin lakes (dashed line). Since the 2011 survey, the northern pike catch rate decreased slightly and size structure increased.

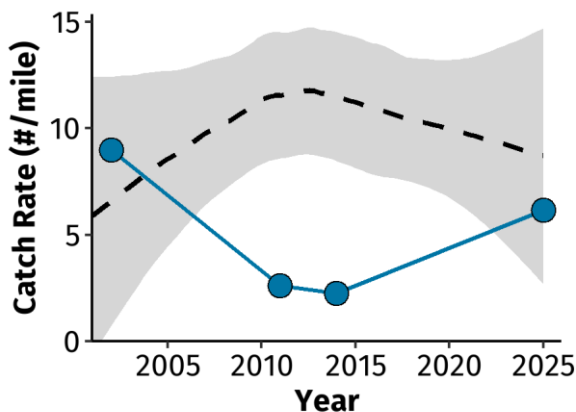
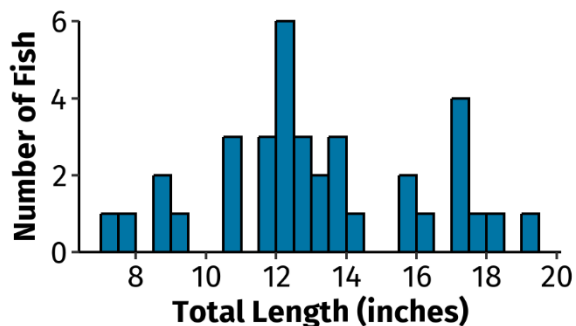
Year	2011	2025
# Captured Per Mile	1.9	1.2
Quality Size ($\geq 21"$)	45%	71%
Preferred Size ($\geq 28"$)	0%	14%

SMALLMOUTH BASS



There were 37 smallmouth bass captured and length ranged from 7.0 to 19.3 inches. Smallmouth bass catch rate (blue dots) was near the average for similar Wisconsin lakes (dashed line). Since the 2014 survey, the smallmouth bass catch rate increased and size structure remained similar.

Year	2014	2025
# Captured Per Mile	2.3	6.2
Quality Size ($\geq 11"$)	64%	76%
Preferred Size ($\geq 14"$)	46%	30%



OTHER SPECIES

There were 58 rock bass captured, and length ranged from 2.6 to 9.7 inches. There were 38 walleye captured, and length ranged from 7.6 to 20.3 inches. Three muskellunge were captured and were 13.2, 18.0 and 38.4 inches. Other species captured in low numbers (less than five fish) included yellow perch, black crappie, spottail shiner and white sucker.

Summary

Upper Eau Claire Lake features productive fisheries for a wide range of gamefish and panfish. Smallmouth bass and northern pike had moderate abundance and good size structure. Largemouth bass remain in low abundance and harvest of small individuals is encouraged to maintain size structure. Bluegills had moderate abundance and size structure with relatively slow growth. Slow growth indicates that food is limited, so a more restrictive panfish regulation would not benefit the bluegill population in Upper Eau Claire Lake and could instead decrease size structure. One black crappie was captured, but black crappies are not sampled well by electrofishing surveys. Although walleye and muskellunge were captured in this survey, a walleye population estimate was completed in April of 2025 and a muskellunge population estimate will be completed in spring of 2026. Results from the walleye and muskellunge population estimates will be compiled along with the results of this survey in a comprehensive fisheries survey report published in 2026.

General fishing regulations for Upper Eau Claire Lake in Bayfield County, Wisconsin.

SPECIES	SEASON DATES	DAILY BAG LIMIT	SIZE LIMIT
Largemouth Bass (LMB)	1 st Saturday in May to 1 st Sunday in March	5 in total with SMB	None
Smallmouth Bass (SMB)	3 rd Saturday in June to 1 st Sunday in March	1	18 inches
Northern Pike	1 st Saturday in May to 1 st Sunday in March	5	None
Panfish	Open all year	25	None
Walleye	1 st Saturday in May to 1 st Sunday in March	3	18 inches
Muskellunge	Saturday nearest Memorial Day to Dec 31	1	40 inches

For fisheries management questions about Upper Eau Claire Lake, contact:

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