

SURVEY REPORT

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION



FISH MANAGEMENT SURVEY AND RECOMMENDATIONS

FOR

WILEY POST MEMORIAL LAKE

2025

SURVEY REPORT

State: Oklahoma

Project Title: Wiley Post Memorial Lake Fish Management Survey Report

Period Covered: 2025

Prepared by: OFRL Research Biologists

Date Prepared: January 2026

Wiley Post Memorial Lake

ABSTRACT

Surveys of Wiley Post Memorial Lake were conducted in 2010 and 2025 for Largemouth Bass using standardized electrofishing, 2020 for Channel Catfish using hoop nets, 2011 for crappie using trap nets, 2021 and 2022 for Blue and Flathead Catfish using low frequency electrofishing, and 2022 for Blue and Flathead Catfish using large mesh gill nets. The fishery consists of Largemouth Bass, various sunfish species, White Crappie, Blue Catfish, Channel Catfish, and Flathead Catfish.

INTRODUCTION

Wiley Post Memorial Lake is located approximately five miles northeast of Maysville on County Rd. E 1480 in McClain County, Oklahoma. The lake is a 302-acre impoundment with a maximum depth of 18 feet and a total water storage capacity of 2,082 acre-ft. It is classified as eutrophic with an average secchi disc visibility of around 27 cm. Fish habitat consists primarily of rip rap, submerged trees, and water willow at various sites around the lake.

Primary management concerns include a stunted Blue Catfish population as well as poor Channel Catfish growth. Channel Catfish were stocked regularly from 2014-2020 when stocking was suspended due to suspected artificial stunting from overstocking as well as competition with a highly abundant Blue Catfish population (Appendix 1). Please see the statewide regulations for more information concerning licensing and regulations ([Fishing Regulations | OK Department of Wildlife Conservation](#)).

Surveys of Wiley Post Memorial Lake were conducted in 2010 and 2025 for Largemouth Bass using standardized electrofishing, 2020 for Channel Catfish using hoop nets, 2011 for crappie using trap nets, 2021 and 2022 for Blue and Flathead Catfish using low frequency electrofishing, and 2022 for Blue and Flathead Catfish using large mesh gill nets.

Aquatic Nuisance Species

Common Carp are the only known ANS in Wiley Post Memorial Lake.

Electrofishing- Bass, Random (44.02)

Overview

Wiley Post Lake was sampled via electrofishing on April 22, 2025 to assess the Largemouth Bass population. The entirety of the shoreline was sampled for 100 minutes total (10, 10-minute runs). The average water temperature was 20 °C. A total of 26 Largemouth Bass were collected. Issues with high turbidity, high water levels, and low conductivity contributed to the small sample size of Largemouth Bass collected. This sample size is not sufficient to base management decisions on, but general summary data is included below. Resampling is planned for Spring of 2026 to collect additional data.

Largemouth Bass

The average total length (TL) of Largemouth Bass at Wiley Post Lake was 384 mm with a minimum TL of 165 mm and a maximum TL of 513 mm (Table 1). Mean catch per unit effort (CPUE) was 16 with a standard error (SE) of 4, resulting in a 95% confidence interval (CI) ranging from 8 to 23 fish per 10-minute sample (Table 2). Relative standard error (RSE) was 23.78, suggesting that CPUE from this gear may track relative abundance coarsely. However, RSE values for sub stock, stock, quality, preferred, and memorable size classes indicated that CPUE likely would only detect a large change in relative abundance at best for the size groupings observed. The overall mean relative weight (Wr) for Largemouth Bass (104.94) was above acceptable (i.e., ≥ 90). Sub stock, stock, quality, preferred, and memorable size classes also exhibited acceptable Wr values.

RECOMMENDATIONS

1. Continue to monitor population dynamics for sportfish species (Largemouth, White Crappie, Sunfish Spp., Catfish Spp.).
2. We plan on resampling Largemouth Bass this coming spring to get an adequate sample for age, growth, and population metric analysis.
3. We also highly encourage the harvest of Blue Catfish to help mitigate the impacts of a highly abundant, slow growing population.

Table 1. Sample size, mean TL (mm), mean weight (g), and associated ranges for Largemouth Bass.

Species	Number	Mean TL (range)	Mean Weight (range)
Largemouth Bass	26	384 (165-513)	1122 (50-2665)

Table 2. Total catch per unit effort for Largemouth Bass.

							N RSE =	
							12.5	N RSE =
							U 95%	20 (40%
Species	Mean	Count	RSE	SE	L 95% CI	CI	(25% range)	range)
Largemouth Bass	15.60	10	23.78	3.71	8.33	22.87	36	14

Table 3. Catch per unit effort by size category for Largemouth Bass.

Species	Size Category	Mean	RSE	SE	L 95% CI	U 95% CI	N RSE = 12.5 (25% range)	N RSE = 20 (40% range)
Largemouth Bass	Substock	1.20	66.67	0.80	-0.37	2.77	284	111
Largemouth Bass	Stock	1.80	50.92	0.92	0.00	3.60	166	65
Largemouth Bass	Quality	2.40	40.82	0.98	0.48	4.32	107	42
Largemouth Bass	Preferred	9.00	31.82	2.86	3.39	14.61	65	25
Largemouth Bass	Memorable	0.60	100.00	0.60	-0.58	1.78	640	250

Appendix 1: Species, number, and size of fish stocked in Wiley Post Memorial Lake since 2012.

Date	Species	Number	Size (inches)
2014	Channel Catfish	24,216	7-11
2017	Channel Catfish	24,822	6-7
2018	Channel Catfish	10,120	7
2019	Channel Catfish	12,468	7
2020	Channel Catfish	10,416	7