

SURVEY REPORT

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION



FISH MANAGEMENT SURVEY AND RECOMMENDATIONS

FOR

LITTLE RIVER PARK PONDS

IN MOORE

2024

## Survey Report

**State:** Oklahoma

**Project Title:** Little River Park Ponds

**Operating Authority:** City of Moore

**Period Covered:** 2024

**Prepared by:** Oklahoma Fishery Research Laboratory

**Date Prepared:** Jan. 2025

### Little River Park Ponds

#### ABSTRACT

Little River Park Ponds were surveyed by spring electrofishing in 2024 and summer hoop netting in 2024 to assess the fish population in both ponds. Both Little River Ponds had not been sampled since 2013 renovations. There was also a fish kill in the summer of 2024 that was attributed to a low-oxygen conditions due to an algae bloom. The fishery consists of various sunfish species, Channel Catfish, White Crappie and Yellow Bullhead. Stocking of Largemouth Bass and Bluegill are recommended.

## INTRODUCTION

Little River Park Ponds consist of two ponds, North Little River Pond and South Little River Pond. They are located in Cleveland County at 700 SW. 4<sup>th</sup> St Moore, OK 73109 in Little River Park. The impoundments are comprised of 0.70 miles of combined shoreline, 2.4 acre of combined surface area. These ponds were impounded in 2005 and reshaped in 2013. The shoreline is completely accessible for both ponds. The north pond has an overflow that drains into the south pond. There was a fish kill in the summer of 2024.

This pond is a Close to Home Fishing Pond. Close to Home Fishing Ponds are managed as put-and-take fisheries. Current management practices for the pond include stocking Channel Catfish and hybrid sunfish (Appendix 1, Appendix 2). Close to Home fishing ponds have an aggregate limit of 3 Channel Catfish and/or sunfish. Only rod and reel fishing is allowed, with a limit of three fishing poles per angler. Everything else falls under statewide regulations.

The sampling goal was to establish relevant baseline data for sunfish spp. since it has not been sampled since being drained and refilled (2013). The fishery primarily consists of Black Bullhead, and White Crappie, along with, Bluegill Sunfish, and Channel Catfish. The pond was sampled in 2024 with electrofishing and hoop netting.

### Aquatic Nuisance Species

There are no known ANS in Little River Park Ponds.

## RESULTS

### Spring Electrofishing

Both ponds were surveyed in spring of 2024 by means of boat electrofishing. Due to small pond size both north and south ponds are treated as one. North Little River was shocked for one unit of effort with a total of 33 fish captured, which included Bluegill Sunfish (4), Longear Sunfish (3), Orangespotted Sunfish (22) and Black Bullhead (4). Little River South was also shocked for one unit of effort with a total of 9 fish captured including Longear Sunfish (4), Bluegill Sunfish (3), and Black Bullhead (2).

Mean total length (TL) of Orangespotted Sunfish sampled was 75 mm with a minimum TL of 59 mm and a maximum TL of 94 mm (Figure 1). Mean TL of Black Bullhead sampled was 187 mm with a minimum TL of 177 mm and a maximum TL of 220 mm.

### Summer Hoop netting

#### Overview

Both ponds were surveyed in summer of 2024 by hoop netting. Due to small pond size both north and south ponds are treated as one. Each site was run once daily to reduce turtle mortality. The mean surface temperature was 29.4° C (84.9° F). A total of 658 fish were caught and 8 species were represented. Black Bullhead (416) and White Crappie (173) were the most encountered species. Channel Catfish, Longear Sunfish, Bluegill Sunfish, Hybrid Sunfish, Orangespotted Sunfish, Green Sunfish were also encountered.

#### Black Bullhead

The mean TL of Black Bullhead was 187 mm with a minimum TL of 92 mm and a maximum TL of 276 mm (Figure 2). Black Bullhead had a mean catch per unit effort (CPUE) of 47.95 (18.34-77.56 95% confidence interval (CI)) with a standard error (SE) of 15.11 and relative standard error (RSE) was 31.51 (Table 1). No preferred, memorable, or trophy sized fish were caught (Table 1). Substock, stock, and quality sized fish had mean CPUEs of 1.50, 45.18, and 1.27 respectively and SE ranged 0.84-13.80 (Table 1). Each size class of fish had a RSE > 25 (Table 1). The overall relative weight (Wr) was 68.92. Substock, stock, and quality size fish had a Wr of 74.81, 68.70, and 70.53 respectively. The maximum weight for an individual in this sample was 270 g (0.60 lbs).

## Channel Catfish

The total number of Channel Catfish sampled was 9 with a mean TL of 428 mm, a minimum TL of 366 mm, and a maximum TL of 467 mm (Figure 2). Channel Catfish had a mean CPUE of 1.04 (0-2.07 95% CI) with a SE of 0.53 and RSE of 51.04 (Table 1). No substock, preferred, memorable, or trophy sized fish were caught (Table 1). Stock, and quality sized fish had mean CPUEs of 0.11 and 0.92 respectively and SE ranged 0.11-0.50 (Table 1). Each size class of fish had a RSE > 25 (Table 1). The overall Wr was 92.60. Stock and quality size fish had a Wr of 83.96 and 93.68 respectively. The maximum weight for an individual in this sample was 955 g (2.11 lbs).

## Sunfish

The mean TL of all Sunfish was 125 mm. Bluegill (26) had a mean TL of 112 mm with a minimum TL of 88 mm and a maximum TL of 138 mm. Bluegill stock size had a mean CPUE of 2.98 (0.41-5.56 95% CI) with a SE of 1.31 and RSE of 44.03 (Table 1). Only stock size Bluegill Sunfish were caught (Table 1). The Wr was acceptable at 99.03. The maximum weight for an individual in this sample was 56 g (0.12 lbs). Green Sunfish (1), Hybrid Sunfish (9), Longear Sunfish (21), Orangespotted Sunfish (2) and Sunfish spp. (1) were also observed.

## White Crappie

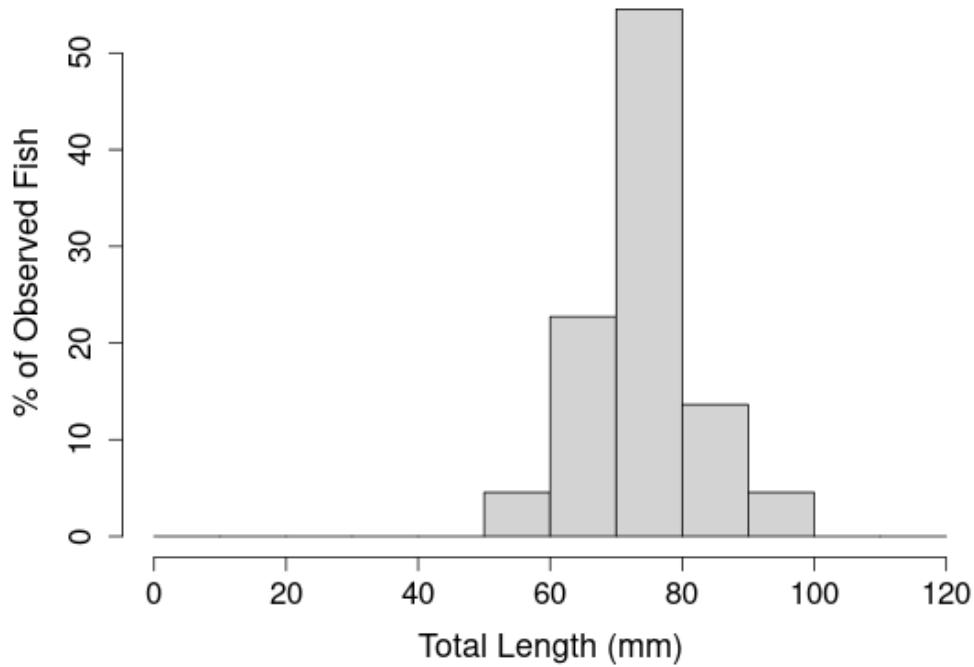
The total number of White Crappie sampled was 173 with a mean TL of 168 mm, a minimum TL of 132 mm, and a maximum TL of 355 mm (Figure 3). Stock White Crappie had a mean CPUE of 18.87 (17.374-20.384 95% CI) with a SE of 0.768 (Table 1). The RSE was 7.23 (Table 1). No substock, or trophy sized fish were caught. Quality, preferred, and memorable sized fish had mean CPUEs of 0.57, 0.12 and 0.35, respectively; and SE's ranged 0.12-0.77 (Table 1). Each size class of fish had a RSE > 25, with the exception of stock size fish (RSE of 4.07, Table 1). The overall Wr was 96.25. Stock, quality, preferred, and memorable size fish had a Wr of 96.89, 80.81, 86.87 and 90.09 respectively. The maximum weight for an individual in this sample was 635 g (1.40 lbs).

## RECOMENDATIONS

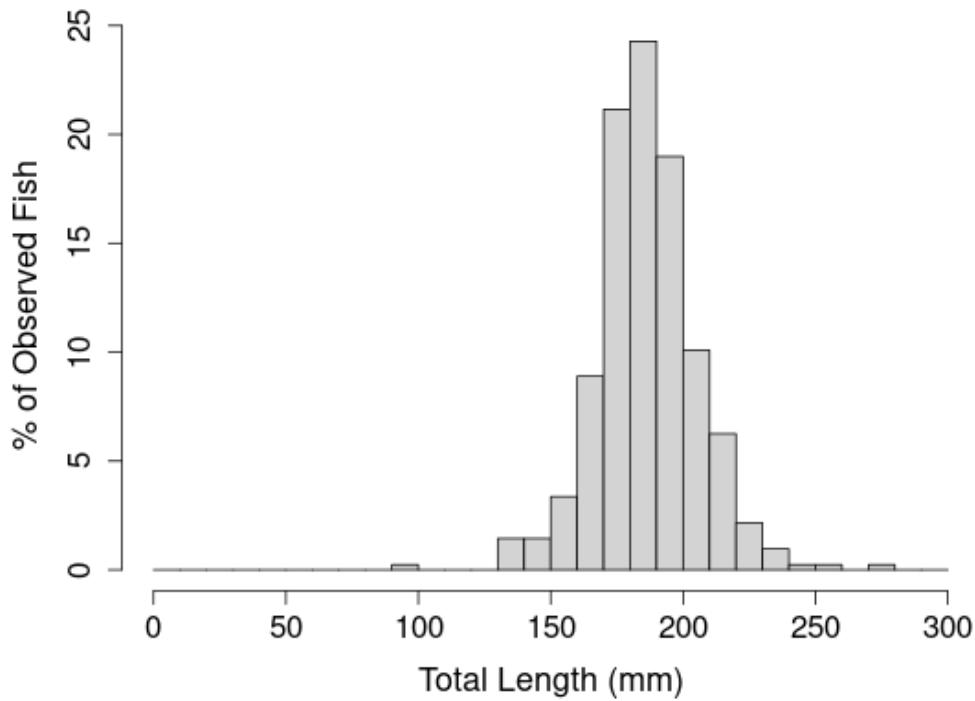
1. Continue to monitor population dynamics for sportfish species (White Crappie, Sunfish spp., Catfish spp.).
2. Stocking of Largemouth Bass and Bluegill are recommended.

**Table 1.** Catch per unit effort in Little River Park Ponds by size category.

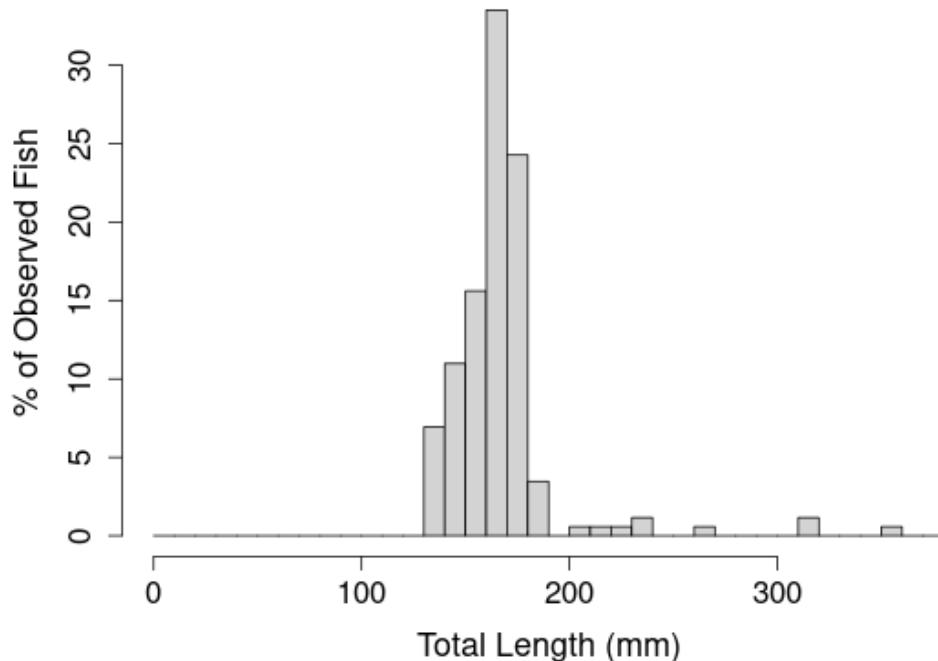
Species	Size Category	Mean	RSE	SE	L 95% CI	U 95% CI	N RSE = 12.5 (25% range)	N RSE = 20 (40% range)
Black Bullhead	substock	1.50	55.82	0.84	-0.141	3.144	60	23
Black Bullhead	stock	45.18	30.55	13.80	18.127	72.229	18	7
Black Bullhead	quality	1.27	39.86	0.51	0.277	2.259	31	12
Bluegill Sunfish	stock	2.98	44.03	1.31	0.408	5.556	37	15
Channel Catfish	stock	0.11	100.00	0.11	-0.110	0.338	192	75
Channel Catfish	quality	0.92	54.72	0.50	-0.067	1.912	57	22
Green Sunfish	stock	0.11	100.00	0.11	-0.110	0.338	192	75
White Crappie	stock	18.88	4.07	0.77	17.374	20.384	0	0
White Crappie	quality	0.57	53.01	0.30	-0.022	1.170	54	21
White Crappie	preferred	0.12	100.00	0.12	-0.111	0.341	192	75
White Crappie	memorable	0.35	100.00	0.35	-0.332	1.022	192	75



**Figure 2.** Length-frequency distribution of electrofished Orangespotted Sunfish in Little River Park Pond.



**Figure 2.** Length-frequency distribution for hoop netting of Black Bullhead in Little River Park Pond.



**Figure 3.** Length-frequency distribution for hoop netting of White Crappie in Little River Park Pond.

**Appendix 1.** Species, number, and size of fish stocked in North Little River Park Pond since 2013.

Date	Species	Number	Size (inches)
5/1/2013	Hybrid Sunfish	250	-
2/26/2014	Bluegill	540	2
6/13/2014	Hybrid Sunfish	100	5.5
7/24/2014	Channel Catfish	102	11
7/30/2015	Channel Catfish	750	14
7/12/2016	Channel Catfish	200	9.3
7/28/2016	Channel Catfish	200	15
6/30/2021	Hybrid Sunfish	200	5
5/24/2022	Hybrid Sunfish	517	6.4
9/20/2022	Hybrid Sunfish	150	6 to 9
5/30/2024	Hybrid Sunfish	125	7
6/6/2024	Channel Catfish	30	17
10/23/2024	Channel Catfish	100	12

**Appendix 2.** Species, number, and size of fish stocked in South Little River Park Pond since 2013.

Date	Species	Number	Size (inches)
2/26/2014	Bluegill	720	2
6/13/2014	Hybrid Sunfish	300	5.5
7/24/2014	Channel Catfish	201	11
7/12/2016	Channel Catfish	300	9.3
7/28/2016	Channel Catfish	300	15
6/30/2021	Hybrid Sunfish	200	5
5/24/2022	Hybrid Sunfish	500	6.75
9/20/2022	Hybrid Sunfish	150	6 to 9
5/30/2024	Hybrid Sunfish	125	7
6/6/2024	Channel Catfish	59	17