

**CREEL SURVEY REPORT**  
**OKLAHOMA DEPARTMENT OF WILDLIFE**  
**CONSERVATION**



**CREEL SURVEY AND RECOMMENDATIONS**  
**FOR**  
**Ft. Gibson LAKE**  
**2024**

## **CREEL SURVEY REPORT**

**State:** Oklahoma

**Project Title:** Ft. Gibson Lake Creel Survey Report

**Period Covered:** 2023-2024

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**Date Prepared:** January 2025

### **Fort Gibson Lake**

#### **ABSTRACT**

A one-year creel survey began in March 2023 and was conducted until February 2024 to determine angling pressure and angler attitudes and opinions on sportfish management and fishing opportunities in Ft. Gibson Lake. Two pressure counts per creel day are also performed to help determine angling pressure on the lake. A total of 35 survey days were completed in throughout the creel divided up as approximately 9 days per quarter. A total of 229 interviews were conducted within 8 different sections or zones of the lake. Zones were created to facilitate pressure counts less than an hour in length and were randomly chosen. Angler attitudes towards bass harvest were low. Awareness of statewide bass regulation change was below 50%

## **INTRODUCTION**

Fort Gibson Lake is a 19,900-acre reservoir located in Wagoner, Mayes, and Cherokee counties in northeast Oklahoma. This reservoir impounds the Grand (Neosho) River approximately 7.7 miles above its confluence with the Arkansas River, and about 5 miles northwest of the town of Fort Gibson, Oklahoma. Fort Gibson Lake is owned and operated by the U.S. Army Corps of Engineers (USACE) and was authorized by the Flood Control Act approved August 18, 1941. Construction began in 1942. The project became fully operational in September 1953 for flood control and hydroelectric power. The watershed consists of approximately 12,492 square miles of runoff that originate in, and flow across multiple states including Arkansas, Kansas, Missouri, and Oklahoma. The eastern portion of the Fort Gibson Lake watershed is made up of the Ozark Plateau. The western portion of the watershed is indicative of the Prairie Plains.

Shoreline habitat in Fort Gibson Lake is primarily comprised of rock and gravel. Additional habitat includes man-made structures such as riprap, brush piles, and boat docks. Little aquatic vegetation or standing timber exists within the lake. Flooded brush can be found in some areas along the shoreline and most creek arms have some timber and stumps present. The ODWC has established brush piles on Fort Gibson Lake. These brush piles are marked with GPS coordinates and are refurbished on a rotational basis (Appendix I).

The major sportfish in Fort Gibson Lake include largemouth bass, spotted bass, white bass, white crappie, black crappie, blue catfish, channel catfish, flathead catfish, and paddlefish. The primary forage species include threadfin and gizzard shad. The fish stocking history for Fort Gibson Lake is included in (Appendix II). Special fishing regulations which apply to Fort Gibson Lake, including all tributaries and upstream to Markham Ferry dam include: 1) all Crappie have a minimum size limit of 10 inches and a creel limit of 15 per day, white and black crappie combined.

## RESULTS

### Creel Data

1. All creel data will be analyzed by the Oklahoma Creel Analysis Application once the creel analysis tool is completed. Data listed below is a summary of findings with no real statistical analysis completed.
2. Party size for anglers averaged at 1.8 anglers with the largest party size of six anglers and the smallest of one, and a total of 422 anglers recorded (Figure 1).
3. Tournament participation was very minimal with only 1.7% of anglers indicating they were participating in a tournament when interviewed (Figure 2).
4. Most anglers interviewed were fishing from a boat (Figure 3).
5. Bass was the species targeted the most with Crappie and Catfish coming in second and third respectively (Figure 4).
6. The statewide bass regulation was changed in the fall of 2022 and anglers were asked if they were aware of the change. 69% were not aware of the change (Figure 5).
7. 67 different zip codes were represented in the survey with the top five zip codes comprising 46%. These zip codes were local to the Ft. Gibson lake area (Figure 6).
8. A likert scale question concerning bass harvest showed minimal intent to harvest bass with 1 (least likely to harvest) comprising 70% of responses (Figure 7).

### Pressure Counts

1. Over 35 creel days, two pressure counts were conducted each day at random times to count the number of shoreline, dock, and boat anglers actively fishing, for a total of seventy pressure counts.
2. A total of 691 anglers were counted from pressure counts for all thirty five creel days combined, and an average of 9.9 anglers fishing per count and an average of 19.7 anglers per creel day (minimum anglers = 0, maximum anglers = 110;).
3. A majority of anglers counted were fishing from a boat, followed by shore anglers and then dock (Figure 8).

## **RECOMMENDATIONS**

### Fish Attractor Structures

1. Habitat structures should be refurbished in 2027 or 2028 as conditions allow.

### Fish Stockings

1. No new fish stockings are recommended.

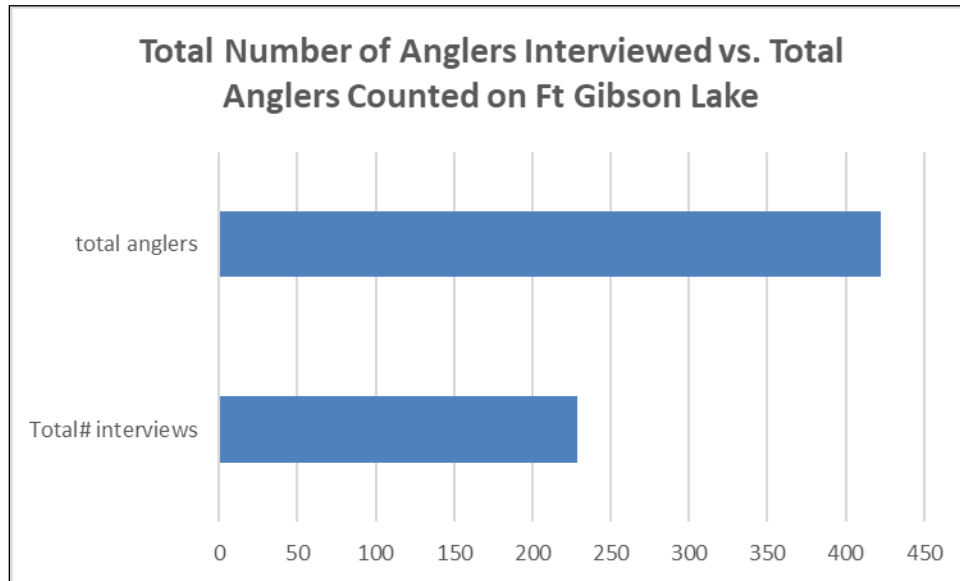
### Fish Surveys

1. Spring boat electrofishing surveys should be conducted in 2025 as conditions allow to continue monitoring changes in the overall black bass populations and to monitor impact of new statewide bass regulations that were passed in 2022.
2. Summer boat electrofishing surveys should be conducted in 2026 as conditions allow to continue monitoring changes in the overall Blue Catfish populations and establish trend data.
3. Fall experimental gill netting should be conducted in 2027 to continue monitoring sportfish populations trends and conditions.
4. Trap netting for White and Black Crappie should be conducted in 2027 to continue monitoring crappie populations, condition, and age and growth rates.

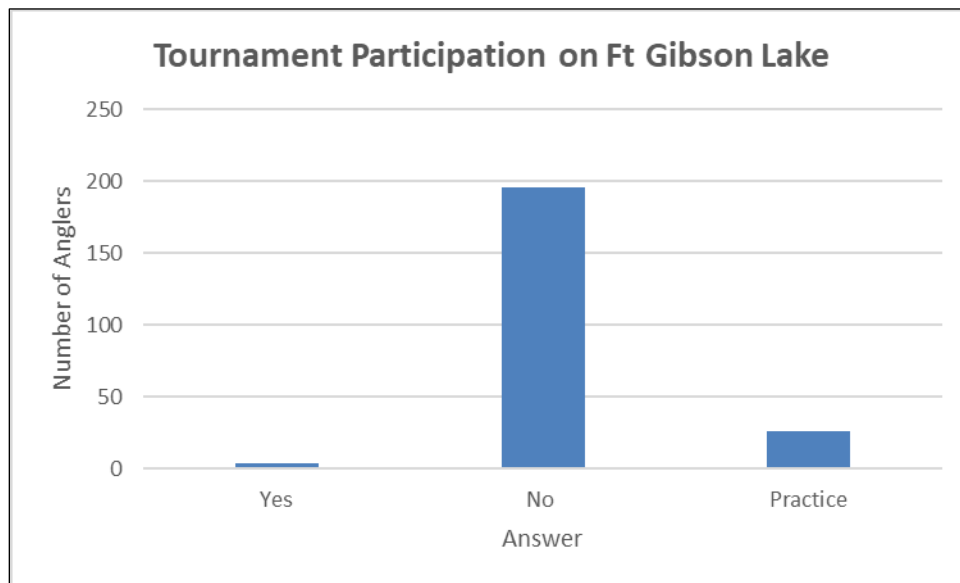
### Fishing Regulations

1. Fort Gibson Lake has 15 fish creel limit and a 10 inch minimum length limit for all White and Black Crappie.
2. Fort Gibson Lake follows statewide creel, size and method of take regulations for all other sportfish species.
3. No new regulation changes are recommended at this time.

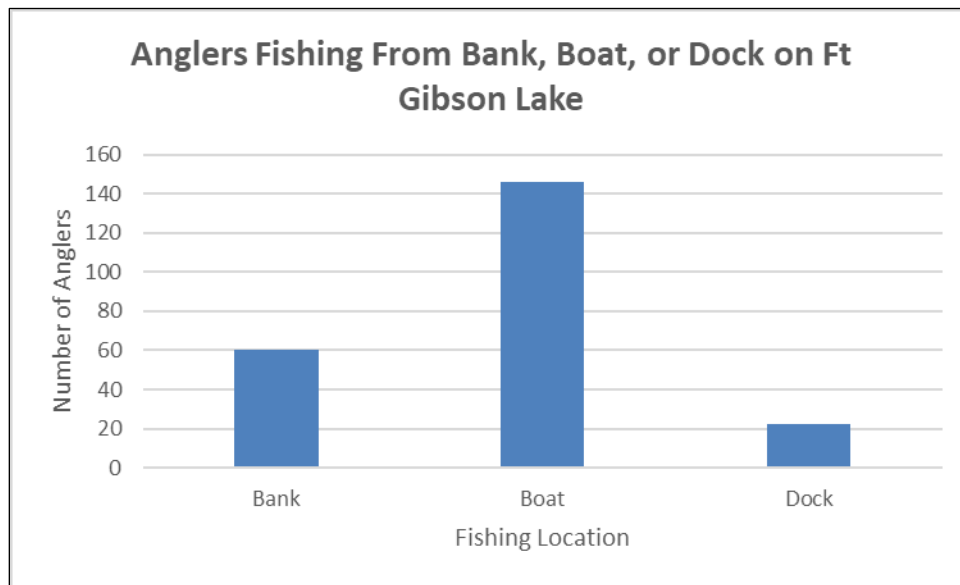
**Figure 1.** Total numbers of interviews and total number of anglers (party size avg 1.8)



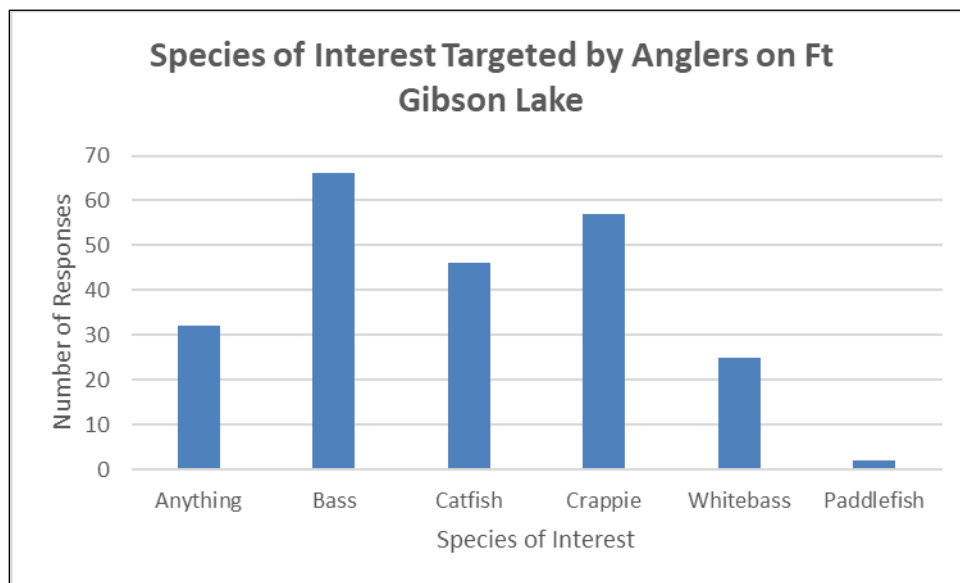
**Figure2.** Number of anglers who were asked if they were participating in or practicing for a tournament on Fort Gibson Lake, 2023-2024.



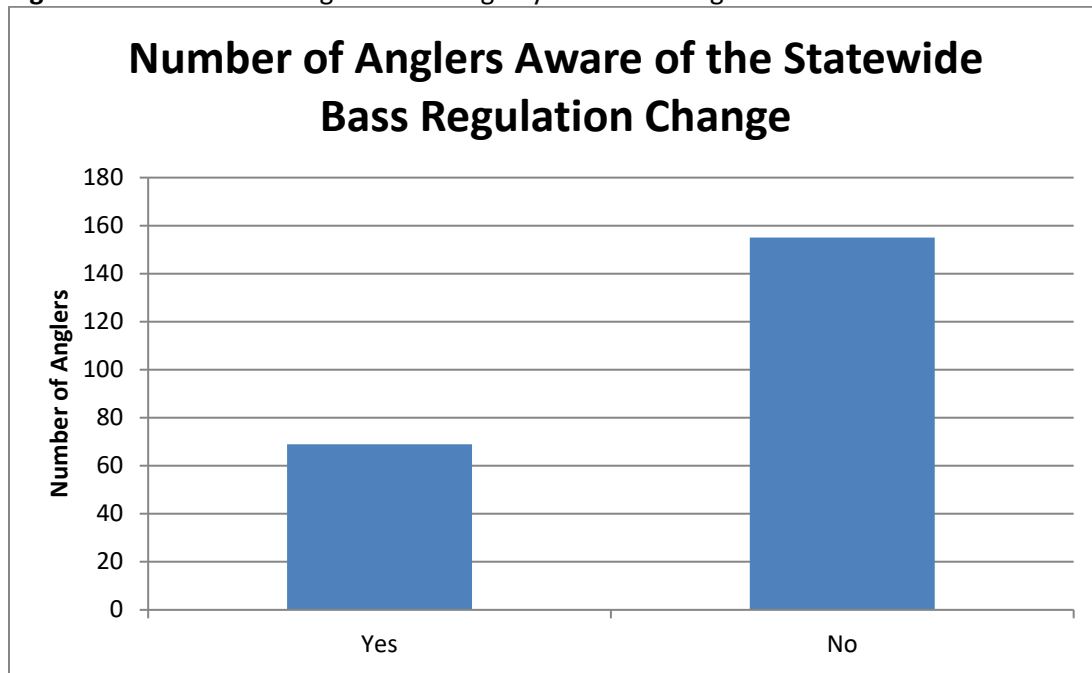
**Figure 3.** Number of interviewed anglers fishing from either the bank, a boat, or off a dock on Fort Gibson Lake, 2023-2024.



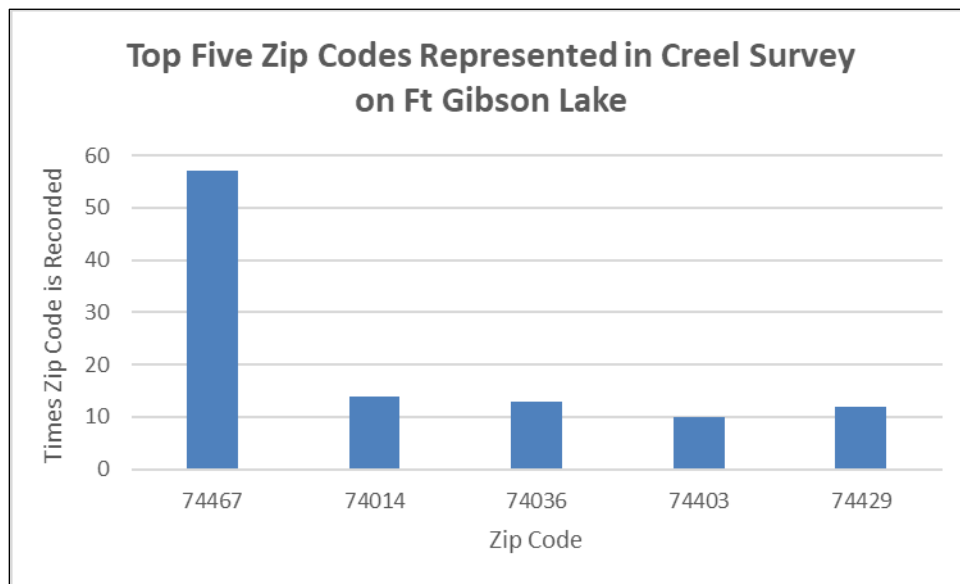
**Figure 4.** Specific species of interest targeted by anglers who were interviewed on Fort Gibson Lake, 2023-2024.



**Figure 5.** Awareness of regulation change by Ft. Gibson Anglers 2023-2024

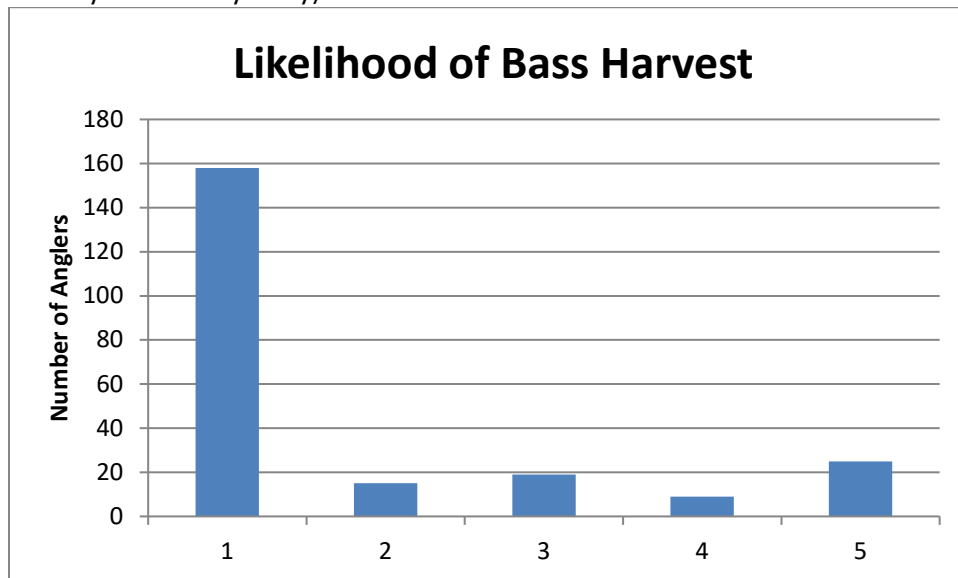


**Figure 6.** The top five zip codes out of 67 total zip codes represented by anglers on Fort Gibson Lake, 2023-2024.

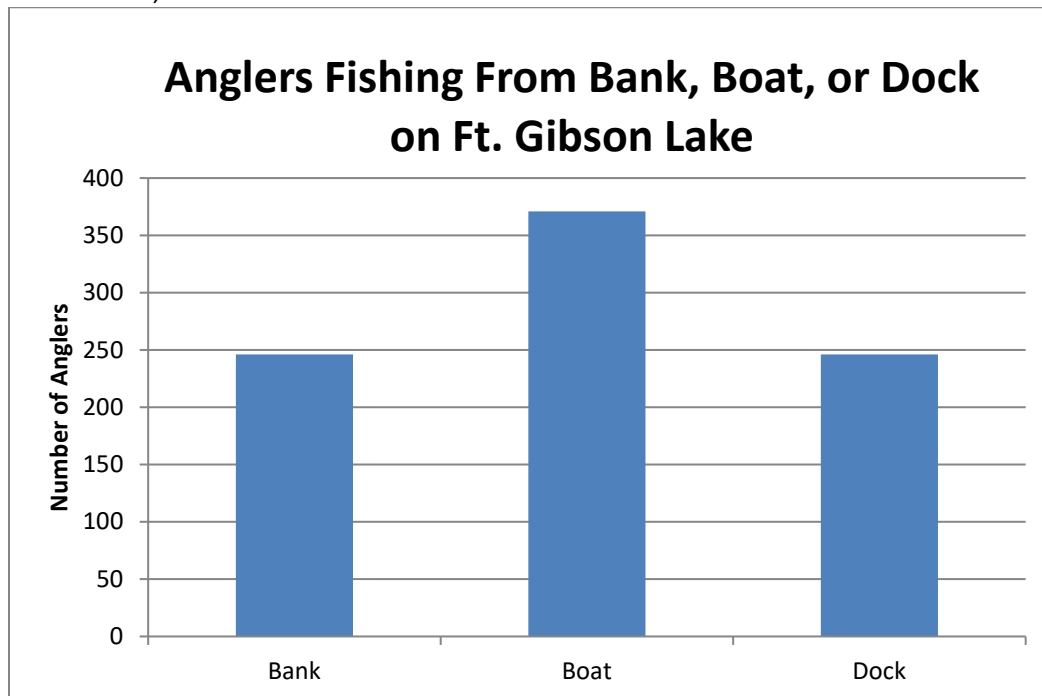




**Figure 7.** Likert scale depicting likelihood of bass harvest by Ft. Gibson anglers 2023-2024 (1=Very unlikely and 5=Very likely)



**Figure 8.** Number of pressure counted anglers fishing from either the bank, a boat, or off a dock on Fort Gibson Lake, 2023-2024.



**Appendix I. ODWC installed Ft. Gibson habitat sites**

Lake	Area	Structure	Latitude	Longitude	Year
Fort Gibson	Paradise Cove Ramp	6 large cedars	35.9212	95.266333	2019
Fort Gibson	Paradise Cove Ramp	4 large cedars	35.92033	95.26635	2019
Fort Gibson	Paradise Cove Ramp	6 large cedars	35.91913	95.266616	2019
Fort Gibson	Paradise Cove Ramp	3 large cedars	35.91815	95.266966	2019
Fort Gibson	Paradise Cove Ramp	18 cedar row	35.91713	95.266093	2019
Fort Gibson	Paradise Cove Ramp	1 large cedar	35.91727	95.26542	2019
Fort Gibson	14 mile arm	13 large cedars	35.90505	95.242	2020
Fort Gibson	14 mile arm	18 large cedars	35.90895	95.233833	2020
Fort Gibson	14 mile arm	23 cedar trees	35.91279	95.236165	2020
Fort Gibson	14 mile arm	8 large cedar trees	35.91363	95.234633	2020
Fort Gibson	Long Bay	4 large cedars	35.95327	-95.31501	2022
Fort Gibson	Long Bay	5 large cedars	35.95909	-95.30771	2022
Fort Gibson	Long Bay	8 large cedars	35.56559	-95.30264	2022
Fort Gibson	Long Bay Bluff	7 large cedars	35.96203	-95.28876	2022
Fort Gibson	Taylor Ferry Bluff	2 large cedars	35.95408	-95.28876	2022
Fort Gibson	Hickory Creek	5 large cedars	35.94978	-95.25702	2022
Fort Gibson	Hickory Creek	3 large cedars	35.94798	-95.26319	2022
Fort Gibson	Wahoo Bay	2 shelbyville cubes	35.87953	-95.27442	2023
Fort Gibson	Mallard bay bluff	2 shelbyville cubes	35.87338	-95.24654	2023
Fort Gibson	Mallard bay	2 shelbyville cubes	35.8677	-95.26811	2023
Fort Gibson	Mouth of Wahoo bay	2 shelbyville cubes	35.88274	-95.26626	2023
Fort Gibson	Sequoyah golf course	2 shelbyville cubes	35.89077	-95.24441	2023

**Appendix II. Ft. Gibson stocking history.**

YEAR	SPECIES	Number	Size (inches)
1985	Walleye	116,000	1.5"
1991	Smallmouth Bass (reservoir strain)	53,824	1.25"
1995	Walleye	196,542	1.25"
1998	Hybrid Striped Bass	292,500	fry
1998	Hybrid Striped Bass	3,780,000	fry
1998	Threadfin Shad	1,100	5"-7"
2017	Florida Bass	1,750	9"
2018	Florida Bass	900	9.25"
2019	Florida Bass	664	6"

