



Ross Barnett Reservoir 2025

Reel Facts

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General Information: Ross Barnett Reservoir is a 33,000-acre impoundment of the Pearl River. It consists of approximately 24,000 acres of open-water lake habitat and 9,000 acres of riverine habitat north of Hwy 43. The reservoir is managed by the Pearl River Valley Water Supply District (PRVWSD).

Location: Ross Barnett Reservoir is located six miles northeast of Jackson, MS and extends through Hinds, Rankin, Madison, Scott, and Leake counties

Fishery Management: crappie, black bass, bream, and catfish.

Purchase a Fishing License: https://www.ms.gov/mdwfp/hunting_fishing/

Amenities

- 5 large campgrounds
- 5 marinas
- 16 parks
- 22 public boat launches
- 18 miles of walking trails
- Fishing piers
- Fish cleaning stations

Creel Limits

- 30 crappie per day
- 7 black bass per day, must be over 14 inches long
- 6 Striped/Hybrid Striped Bass per day, must be over 15 inches long
- 100 bream per day.
- No limit on catfish.

Regulations

The following areas are closed to trotlines, throw lines, set hooks, limblines, free floating fishing devices, jugs, and Yo-yos:

- Pelahatchie Bay and Pelahatchie Creek
- Area of the reservoir north of the main dam and south of a line between the point where Twin Harbors channel enters the main lake in Madison County and the Fannin Landing boat launch in Rankin County
- Within 100 yards of any sandbar or public boat launching facility within the main lake or river
- Marked navigational channel between State Highway 43 and Ratliff Ferry in Madison County.

Sportfishing Tips

Crappie

- In the spring, fish shoreline vegetation with jigs or minnows. In the summer and winter, troll river channel ledges or jig deep stump fields on main lake.

Largemouth Bass

- Target vegetation with frogs and other weedless plastics from the spring through the summer. Creek and channel ledges with submerged structure should be targeted in summer and fall.

Bream

- Use crickets or red worms in water 2 – 4 feet in depth. Also, target holes in the vegetation for beds.

Catfish

- Easily caught throughout the reservoir by tightlining cutbait, worms, liver, or stinkbait.

2024 Electrofishing Summary

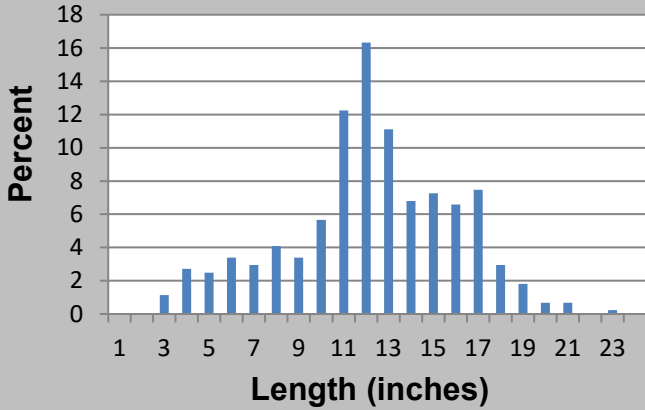
Species	# of fish collected	% of sample	Average Length (inches)	Maximum Length (inches)	Average Weight (pounds)	Catch Rate – Adult fish (fish/hour)
Gizzard Shad	428	16	6.0	13.8	-	11
Threadfin Shad	730	27	2.2	3.5	-	<1
Golden Shiner	2	<1	2.2	2.4	-	<1
Channel Catfish	14	1	11.7	13.5	0.5	1.0
Green Sunfish	1	<0.1	-	3.7	<0.1	<1
Warmouth	18	1	5.9	8.4	0.2	2
Orangespotted Sunfish	4	<1	2.5	2.7	-	<1
Bluegill	832	31	4.3	8.2	0.1	66
Longear Sunfish	25	1	4.5	5.8	0.1	2.4
Redear Sunfish	143	5	5.7	8.6	0.1	12
Spotted Bass	5	<1	10.9	14.1	0.7	<1
Largemouth Bass	441	16	12.7	23.7	1.4	40
White Crappie	32	1	10.6	15.1	0.7	3
Black Crappie	24	1	8.6	13.2	0.5	2

Above: Results from the 2024 electrofishing survey on Ross Barnett Reservoir. The reservoir is sampled by electrofishing every year during the fall. Catch rates of Bluegill, Threadfin Shad, and Gizzard Shad remain high providing a large forage base for black bass and crappie.

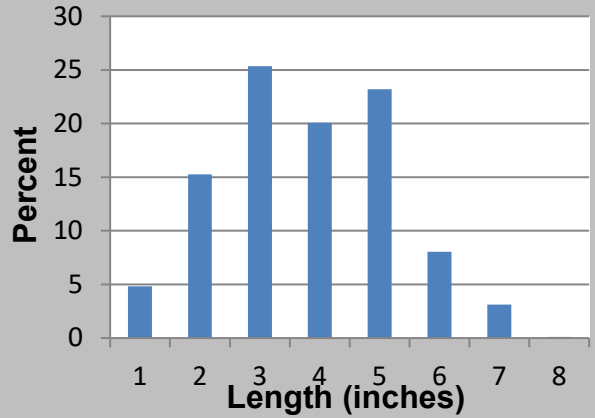
A total of 32 samples were done on Ross Barnett Reservoir for a total of 10.28 hours and 14.85 miles. Multiple samples were taken in Pelahatchie Bay, the main lake area, above highway 43 and upriver. The catch rate shows how many fish were collected over those 32 samples.

Below: Length distributions for sport fish from the 2024 electrofishing survey at Ross Barnett Reservoir. These figures indicate a wide size distribution of each species, high numbers of catchable sized fish, and successful reproduction, all of which are signs of healthy fish populations.

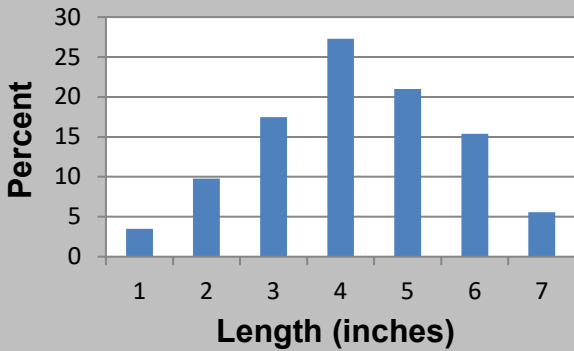
Largemouth Bass



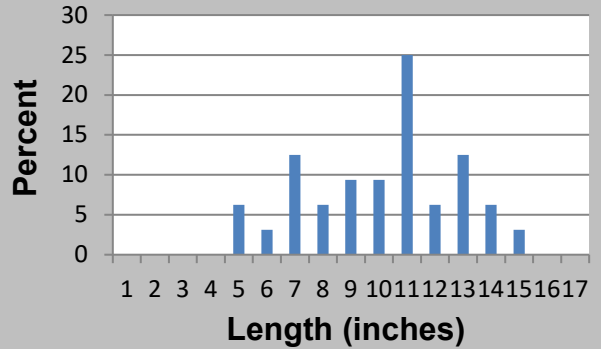
Bluegill



Redear Sunfish

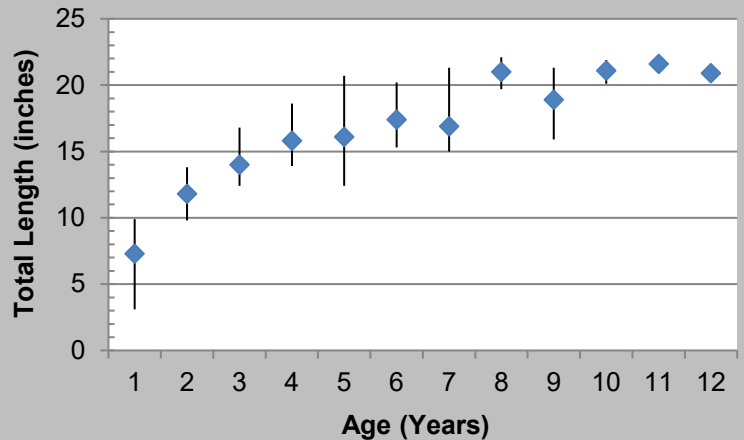


White Crappie



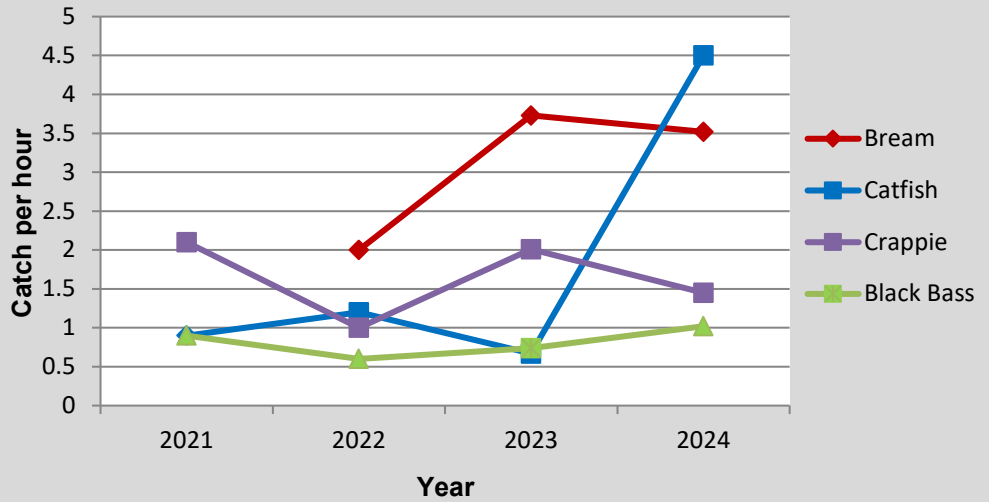
Right: Growth rates for Largemouth Bass in Ross Barnett Reservoir. The mean length at age values are indicated by the blue diamonds. The line through each diamond represents the range of lengths for each age group. For example, the average length of age 3 bass is 14 inches, and they range in size from 12.5 inches to 17 inches. Differences in growth rates for individual fish are due to genetic and environmental factors.

Largemouth Bass Growth Rates

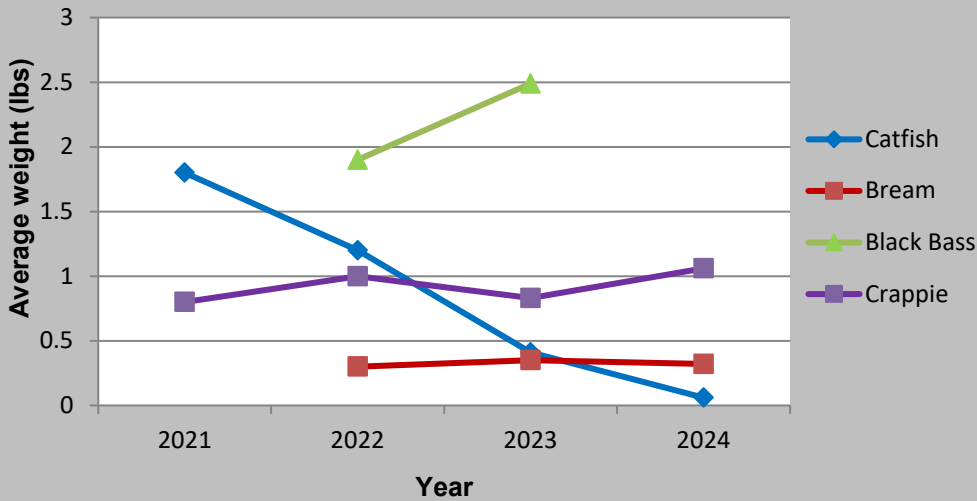


Below and Right:
 Results from spring angler creel surveys for the last four years. Crappie catch rate decreased slightly in 2024, while average weight increased from 0.8 to 1.1 pounds. Black bass catch rates increased slightly in 2024. No bass harvest was recorded during spring creels.

Angler Catch Rates



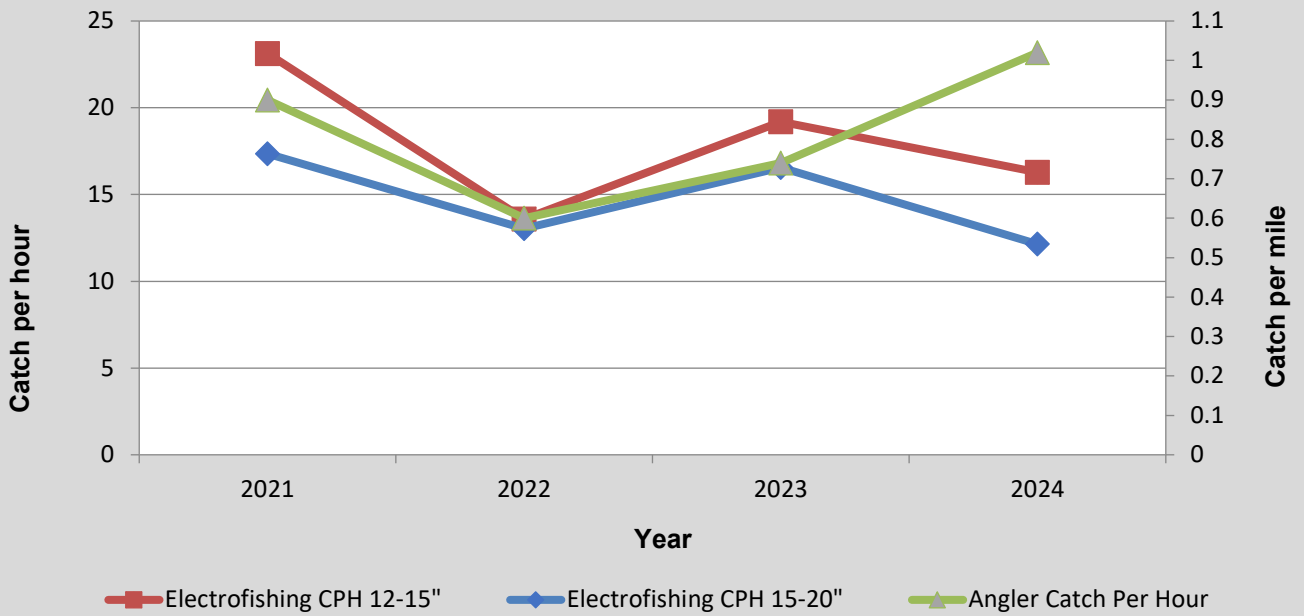
Average Weight of Harvested Fish



Below: Ross Barnett Reservoir contains many native aquatic vegetation species. Large stands of American lotus can be found in Pelahatchie Bay, the northeastern main lake, and upriver. These areas provide abundant fish habitat which are targeted by anglers year round.



Black Bass Catch per Unit Effort

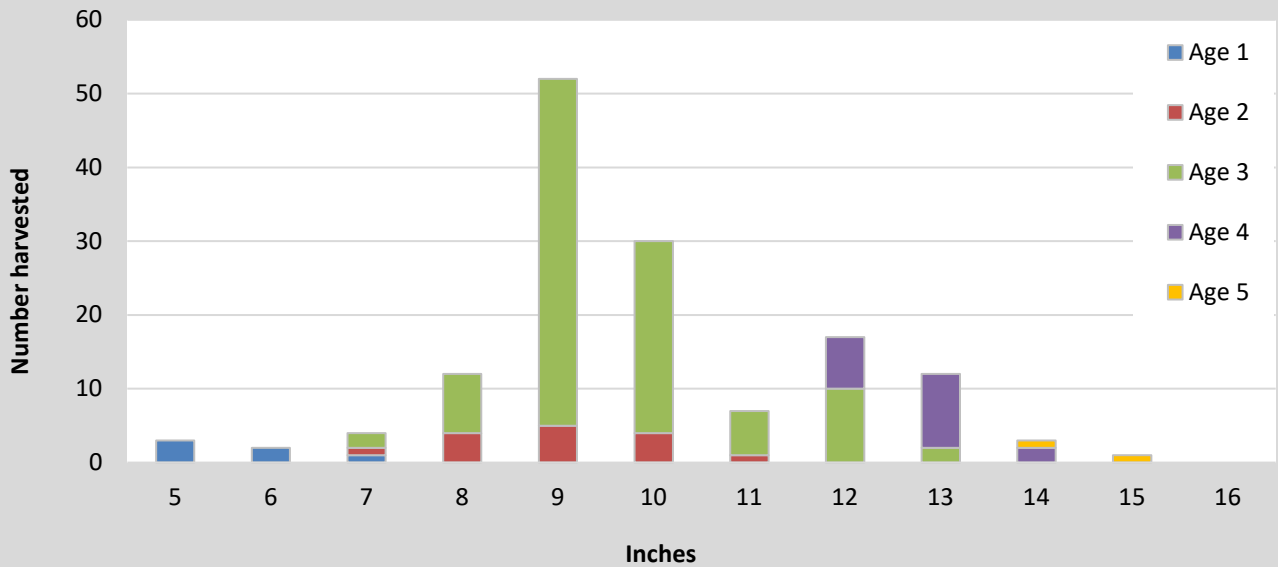


Above: Catch rate trends of Largemouth Bass from fall electrofishing (ELE) samples and spring angler surveys on Ross Barnett Reservoir. Electrofishing catch rates of Largemouth Bass fell slightly in 2024 for fish between 12"-14" and 15"-20" fish.

Right: Data from 36 bass tournaments held in 2024 included information from 1,610 anglers who weighed in 4,152 black bass. Winning weights averaged 17.92 pounds and average lunker was 6.31 pounds.



Age Composition of White Crappie



Above: Length frequency with age composition of White Crappie captured in lead nets on Ross Barnett Reservoir in 2023. A total of 152 White Crappie were measured and a subsample of 142 were aged.

Below: Anglers enjoy high catch rates during the spawning season on Ross Barnett Reservoir. Male White Crappie can be identified with dusky coloration during this time of the year.

