



Ross Barnett Reservoir 2023

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, hybrid striped 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.

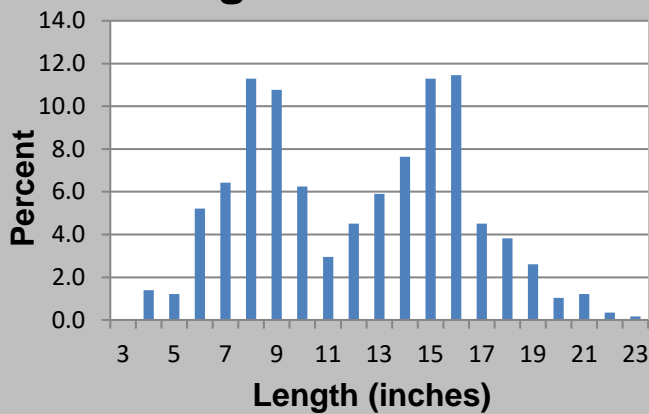
2022 Electrofishing Summary

Species	# of fish collected	% of sample	Average Length (inches)	Maximum Length (inches)	Average Weight (pounds)	Catch Rate – Adult fish (fish/mile)
Gizzard shad	607	10	6.8	13.4	0.7	18.84
Threadfin shad	2542	43	2.2	10.6	-	0
Chain pickerel	1	0	10.5	10.5	0.2	0.09
Golden shiner	37	1	4.3	8.3	-	0
Spotted sucker	5	0	12.9	35.5	0.7	0
Blue catfish	1	0	28.9	28.9	10.8	0.09
Channel catfish	34	1	13.2	21.9	0.7	2.81
Flathead catfish	5	0	17.2	23.5	2.2	0.38
Pirate perch	1	0	4.1	4.1	0.0	0
Green sunfish	5	0	3.9	5.3	0.1	0.38
Warmouth	26	0	5.6	8.9	0.2	2.25
Orangespotted sunfish	7	0	4.2	5.2	0.1	0.56
Bluegill	1448	25	4.3	9.6	0.1	99.75
Dollar sunfish	1	0	2.6	2.6	-	0
Longear sunfish	86	2	4.1	6.0	0.1	6.19
Redear sunfish	223	4	6.1	9.6	0.2	16.97
Spotted bass	73	1	10.3	16.7	0.7	5.53
Largemouth bass	576	10	11.7	22.5	1.2	40.5
White crappie	100	2	11.6	15.2	0.9	9.38
Black crappie	69	1	10.6	15.0	0.8	6.47

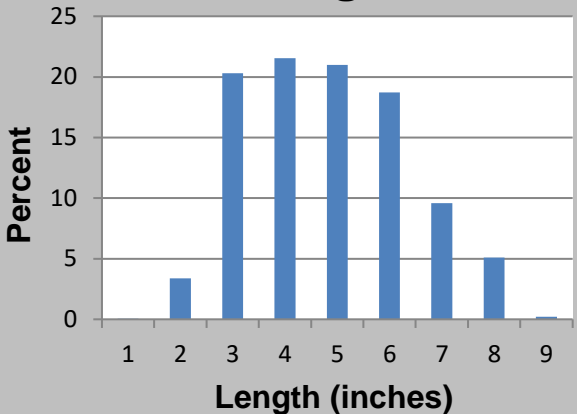
Above: Results from the 2022 electrofishing survey on Ross Barnett Reservoir. The reservoir is sampled by electrofishing every year during the fall. Catch rates of Bluegill, Threadfin Shad, and Gizzard Shad remain high providing a large forage base for black bass and crappie. A total of 32 samples covering 14.14 miles were done on Ross Barnett Reservoir. 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 2022 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.

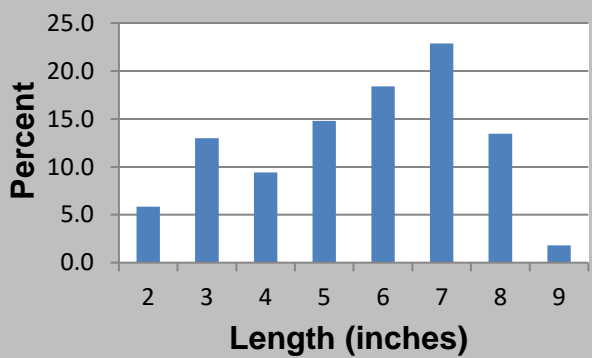
Largemouth Bass



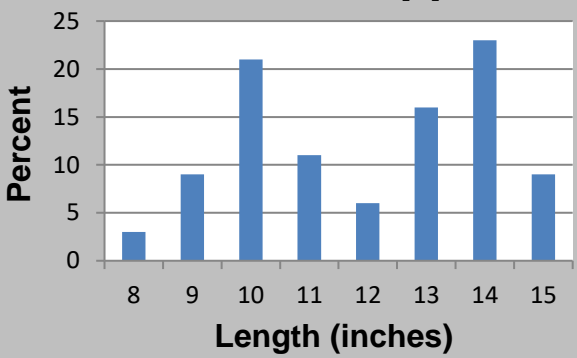
Bluegill



Redear Sunfish

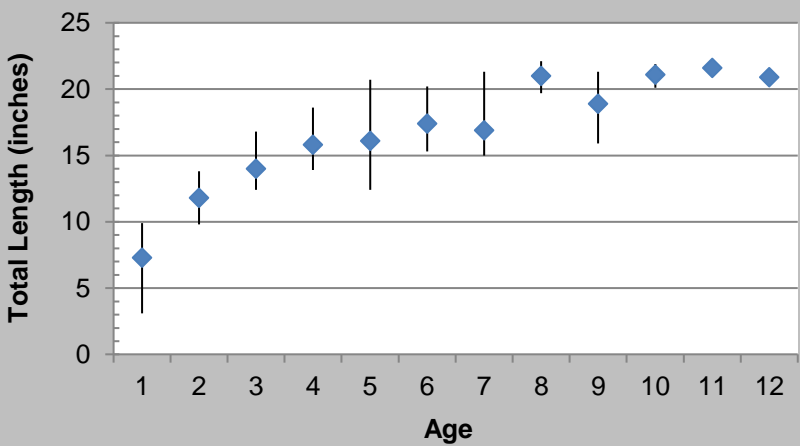


White Crappie

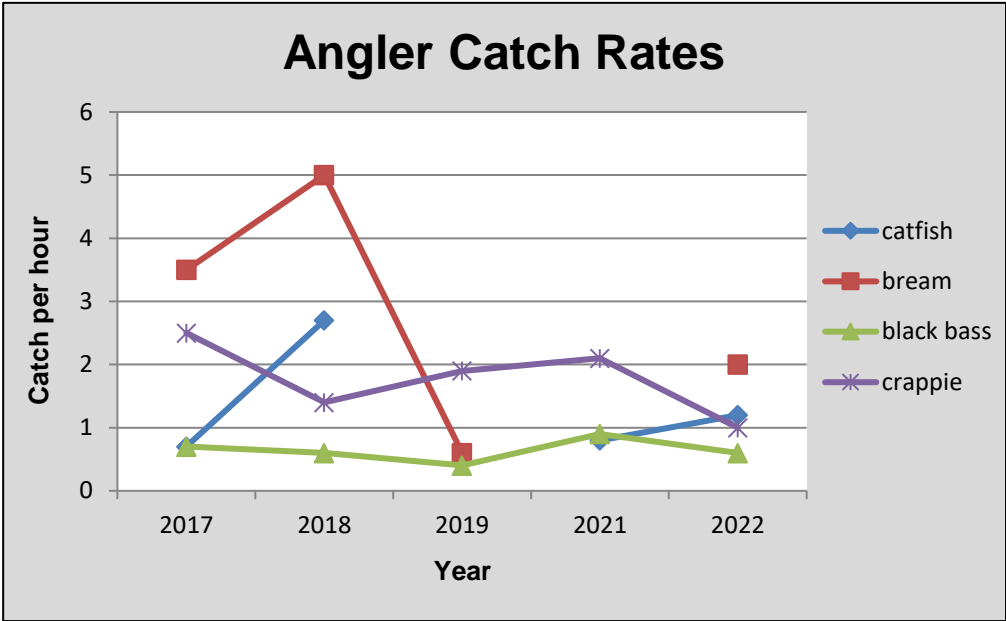


Right: Growth rates for Largemouth Bass in Ross Barnett Reservoir. The mean length at age values are indicated by the blue diamonds. The line through each diamond represents the range of lengths for each age group. For example, the average length of age 3 bass is 14 inches, and they range in size from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

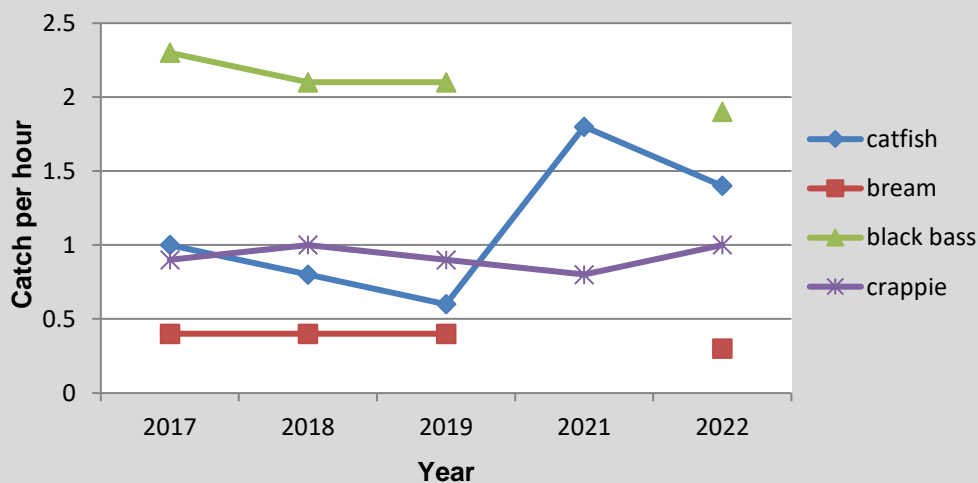
Largemouth Bass Growth Rates



Below and Right:
Results from spring angler creel surveys for the last five years. Crappie catch rate decreased slightly in 2022, while average weight improved from 0.8 to 1.0 pound. Black bass catch rates decreased slightly in 2022.



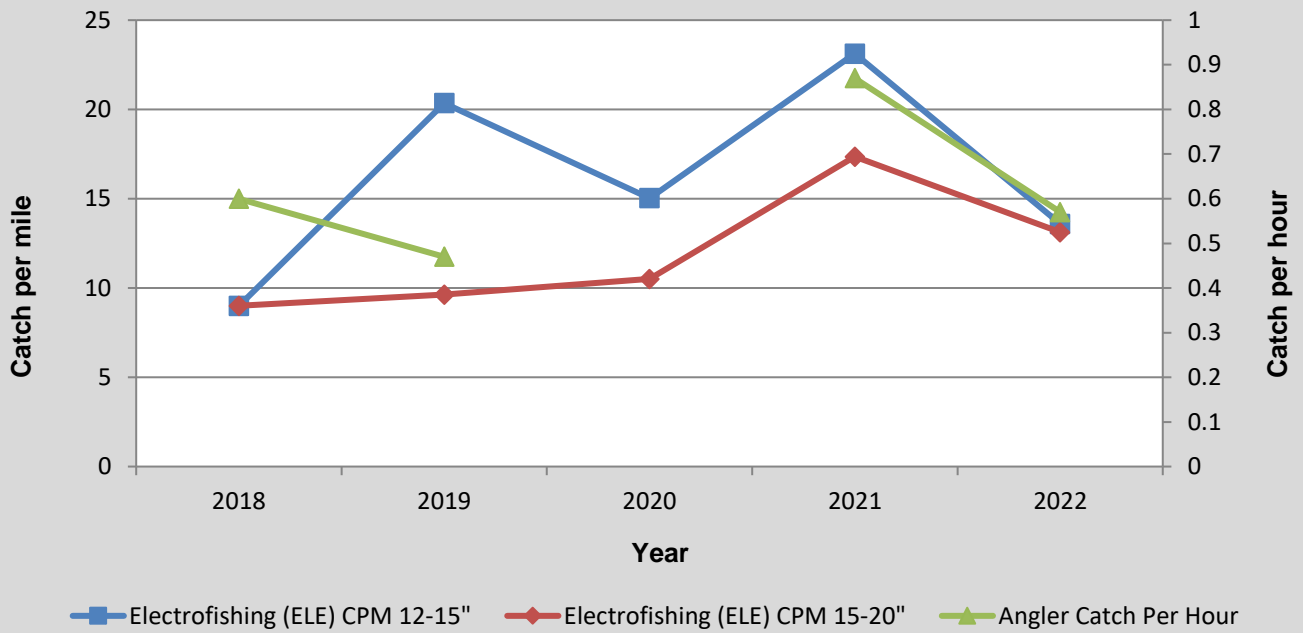
Average Weights of Harvest Fish



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



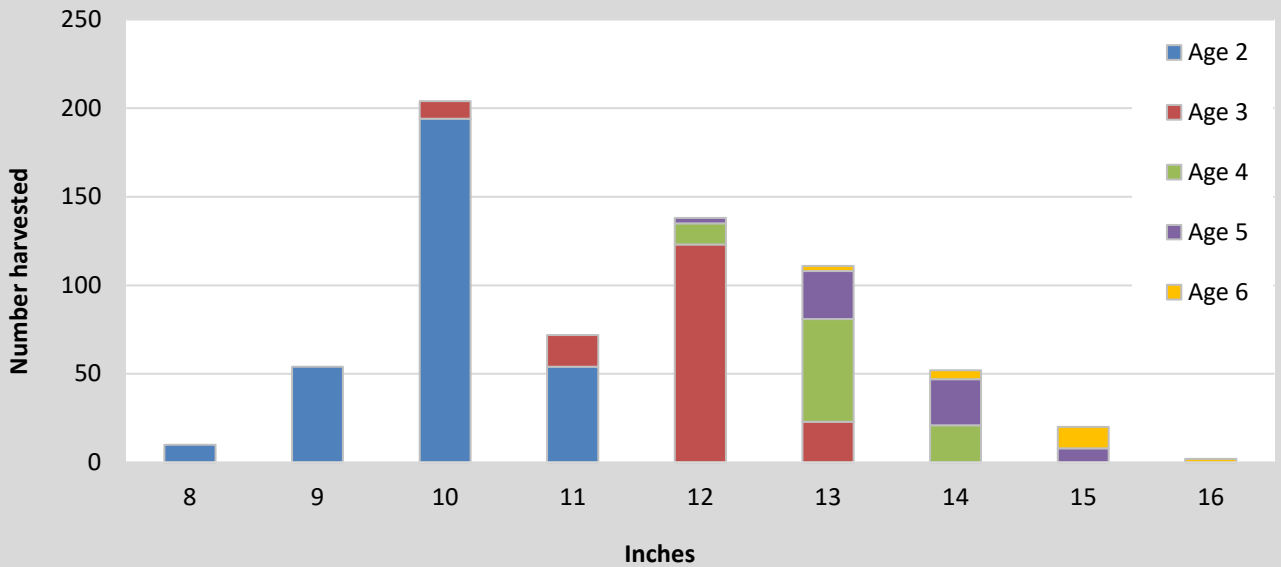
Above: Catch rate trends of Largemouth Bass from fall electrofishing (ELE) samples and spring angler surveys on Ross Barnett Reservoir.

Electrofishing catch rates of Largemouth Bass fell slightly in 2020 for fish between 12"-14" but continued to rise in 15"-20" fish. Angler surveys were suspended in 2020 due to Covid-19.

Right: Data from 36 bass tournaments held in 2022 included information from 2,622 anglers who weighed in 5,227 black bass. Winning weights averaged 17.7 pounds and average lunker was 6.2 pounds. The average weight for black bass was 2.4 pounds.



Age Composition of Angler-harvested White Crappie



Above: Length frequency with age composition of angler harvested White Crappie on Ross Barnett Reservoir in 2019. A total of 662 White Crappie were measured and a subsample of 141 were aged during the 2019 spring angler access creel survey. Two-year-old crappie represented the highest age group harvested at 47 percent of the total harvest followed by three-year-old crappie at 26 percent.

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.

