

Eagle Lake 2024 REEL FACTS

Buford Lessley – Fisheries Biologist Buford.Lessley@wfp.ms.gov (601) 859-3421

General Information: Eagle Lake is a 4,700-acre oxbow formed by the Mississippi River and is cutoff from the river by the mainline levee system. Water levels are controlled via the Muddy Bayou control structure operated by U.S. Army Corps of Engineers. Eagle Lake is one of the largest oxbows in Mississippi and is a popular destination for bream and crappie anglers.

Location: Approximately 20 miles north of Vicksburg off Hwy 465. Fishery Management: Largemouth Bass, bream, crappie, and catfish. Purchase a Fishing License: <u>https://www.ms.gov/mdwfp/hunting_fishing/</u> Lake Depth Map: <u>http://www.mdwfp.com/media/5416/eagle-lake.pdf</u>

Amenities

- 1 public ramp with courtesy piers, parking lot, and public restroom
- Multiple pay-to-use ramps
- Bait shops and store with gas

Creel and Size Limits

The following apply to both sides of the lake, including the channel to the Muddy Bayou control structure.

- Crappie: 11-inch minimum length limit and 30 crappie per day per angler
- Largemouth Bass: 16- inch minimum length limit and 10 bass per day per angler
- Hybrid Striped Bass: 15inch minimum length limit and 6 bass per day per angler
- No limit on bream or catfish

Regulations

Eagle Lake is a state boundary water and the following regulations apply to the Mississippi side of the lake.

Yo-Yo's and Jugs

- No more than 25 jugs and no more than 25 yo-yos may be fished per person. No more than 2 hooks are allowed on each device.
- Each jug or yo-yo must be tagged or marked with angler's name and address.
- Anglers must attend jugs and yo-yos when fished during daylight hours.

Handgrabbing

- Hand grabbing season for catfish is open May 1 to July 15 each year.
- Only wooden containers may be placed in the lake.

Fishing Tips

<u>Crappie</u>

• Target shallow areas along the shoreline or islands during spring. In fall and winter, target piers in deep water on the eastern side of the lake.

Largemouth Bass

 Target piers and rocks along the eastern shoreline. Also target Cypress trees around the islands.

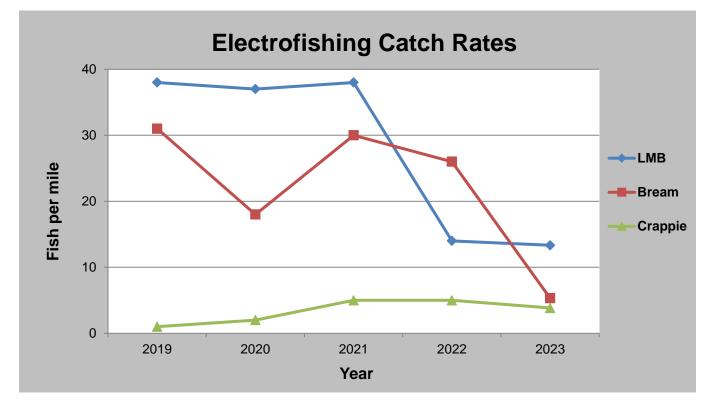
<u>Bream</u>

• Try crickets in shallow areas during late spring and summer. Big bluegill are often caught during winter around piers on the eastern side of the lake.

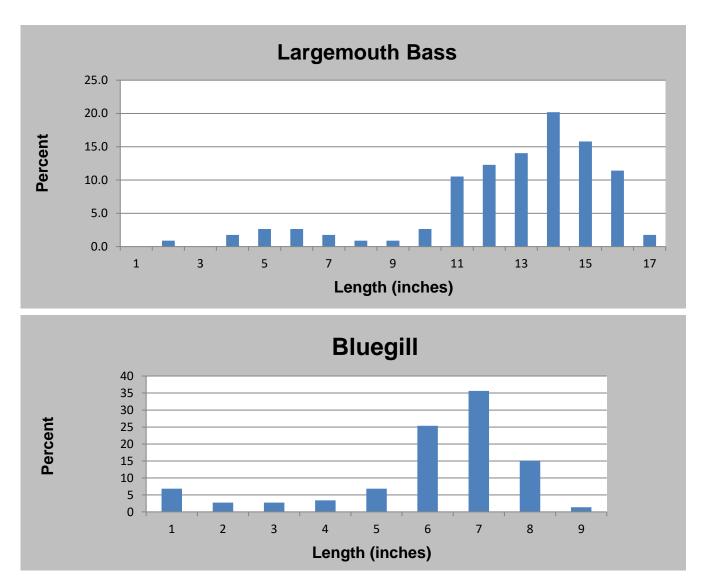
<u>Catfish</u>

• Target flats and islands on the western side of the lake with liver, worms, or cutbait. **Below:** Results from 2023 fall electrofishing surveys conducted at Eagle Lake. Largemouth Bass, White Crappie, and Redear Sunfish are stocked periodically by MDWFP to help maintain a quality fishery.

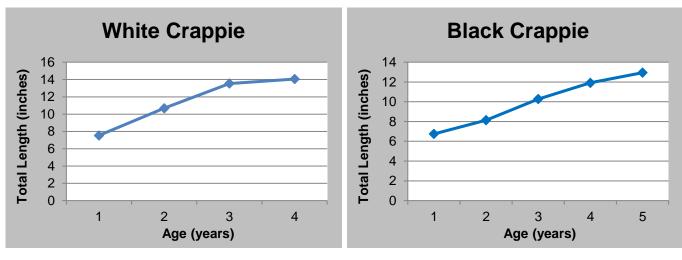
Species	# of fish collected	% of sample	Average Length (inches)	Maximum Length (inches)	Average Weight (pounds)	Catch Rate – Adult fish (fish/hour)
Gizzard shad	106	14	3.35	15.35	-	2.62
Threadfin shad	263	34	1.18	3.15	-	0
Channel catfish	24	3	15.55	20.55	1.94	4.5
White bass	134	18	15.06	17.13	1.55	24.75
Yellow Bass	57	7	4.5	10.12	0.06	5.62
Bluegill	33	4	6.87	9.21	0.44	5.25
Largemouth bass	114	15	15.2	19.45	2.09	20.25
White crappie	15	2	11.65	13.66	0.92	2.62
Black crappie	17	2	12.47	14.37	1.24	3



Above: Changes in catch rates during fall electrofishing from 2019 through 2023 at Eagle Lake. Catch rates are calculated by dividing total number of fish species by total number of miles traveled. Sixteen samples were taken at Eagle Lake with each sample lasting 20 minutes. A total of 5.3 hours and 8.11 miles was traveled over the 16 samples.

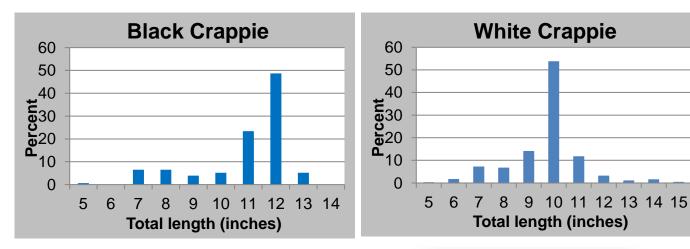


Above: Length distributions for Largemouth Bass and Bluegill collected during 2023 fall electrofishing at Eagle Lake. **Below:** Growth rates for black and white crappie at Eagle Lake. This lake promotes some of the fastest growing fish in the state due to high fertility and an abundance of forage, primarily shad. Ages are shown in half year or whole year increments due to the time of year that sampling occurred.



Below: Results from February 2023 lead net sampling at Eagle Lake. These nets are primarily used for sampling crappie and bream. Crappie dominated the sample with average lengths of 10.2 inches for white crappie and 11.43 inches for black crappie.

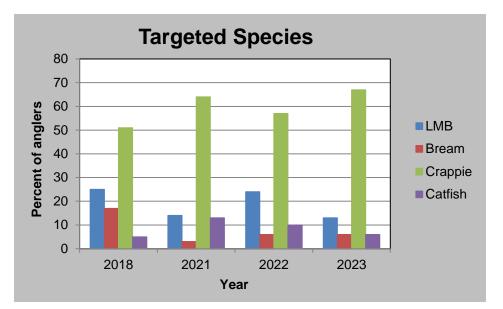
Species	# of fish collected	% of sample	Average Length (inches)	Maximum Length (inches)	Average Weight (pounds)	Catch Rate – Adult fish (fish/night)
Bluegill	40	4	7.06	8.66	0.31	1.67
Black crappie	154	14	11.43	13.54	0.89	6.42
Yellow Bass	89	8	8.61	14.53	0.45	3.71
Channel catfish	27	2	15.32	19.88	1.98	0.96
Common carp	5	<1	19.96	25.08	-	0.21
White Crappie	769	68	10.20	15.12	0.72	32
Gizzard shad	2	<1	17.01	18.31	-	0.08
White bass	39	3	13.28	16.30	1.98	1.62
Yellow bullhead	6	1	14.23	15.35	-	0.25

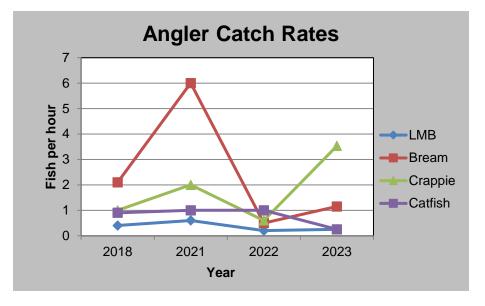


Above: Lengths of white crappie collected during 2023 lead net sampling at Eagle Lake. The majority of White crappie ranged from 9 to 10 inches. The majority of black crappie ranged from 11 to 12 inches.

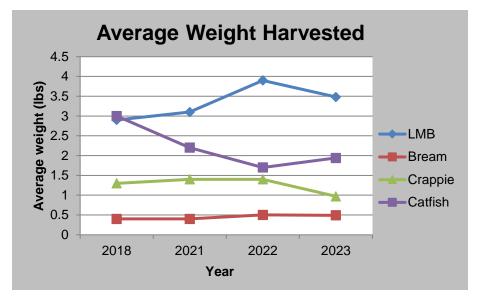


Right: Percentage of anglers targeting Largemouth Bass (LMB), bream, crappie, and catfish at Eagle Lake. Crappie anglers continue to be the largest angler group at Eagle Lake.





Left top: Angler catch rates for Largemouth Bass (LMB), bream, crappie, and catfish at Eagle Lake based on spring creel surveys.



Left bottom: Average weight of harvested fish at Eagle Lake. The average weight of largemouth bass increased to 3.48 pounds and crappie weights decreased to 0.98 pounds.



Above: Numerous Largemouth Bass over four pounds were collected during 2022 fall electrofishing.

