# Ross Barnett Reservoir 2022

**Reel Facts**  
Ryan Jones – Fisheries Biologist  
[Email](Ryan.Jones@wfp.ms.gov) (601) 859-3421

## 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/](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, limelines, 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.
**2021 Electrofishing Summary**

<table>
<thead>
<tr>
<th>Species</th>
<th># of fish collected</th>
<th>% of sample</th>
<th>Average Length (inches)</th>
<th>Maximum Length (inches)</th>
<th>Average Weight (pounds)</th>
<th>Catch Rate – Adult fish (fish/mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largemouth Bass</td>
<td>672</td>
<td>34</td>
<td>12.8</td>
<td>22.6</td>
<td>1.5</td>
<td>40</td>
</tr>
<tr>
<td>Bluegill</td>
<td>447</td>
<td>22</td>
<td>5.3</td>
<td>8.4</td>
<td>0.1</td>
<td>28</td>
</tr>
<tr>
<td>Threadfin Shad</td>
<td>319</td>
<td>16</td>
<td>2.9</td>
<td>4.1</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>Gizzard Shad</td>
<td>272</td>
<td>14</td>
<td>7.9</td>
<td>55.1</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Redear Sunfish</td>
<td>151</td>
<td>8</td>
<td>6.5</td>
<td>8.7</td>
<td>0.2</td>
<td>9</td>
</tr>
<tr>
<td>Black Crappie</td>
<td>53</td>
<td>3</td>
<td>9.6</td>
<td>15.6</td>
<td>0.7</td>
<td>3</td>
</tr>
<tr>
<td>White Crappie</td>
<td>32</td>
<td>2</td>
<td>10.7</td>
<td>15.6</td>
<td>0.9</td>
<td>2</td>
</tr>
<tr>
<td>Longear Sunfish</td>
<td>16</td>
<td>1</td>
<td>4.2</td>
<td>5.4</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Warmouth</td>
<td>13</td>
<td>1</td>
<td>6.4</td>
<td>8.7</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Spotted Bass</td>
<td>11</td>
<td>1</td>
<td>12.1</td>
<td>15.9</td>
<td>1.0</td>
<td>1</td>
</tr>
<tr>
<td>Green Sunfish</td>
<td>8</td>
<td>&lt;1</td>
<td>5.0</td>
<td>6.5</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Brown Bullhead</td>
<td>1</td>
<td>&lt;1</td>
<td>10.8</td>
<td>10.8</td>
<td>0.6</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

**Above:** Results from the 2021 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.

**Below:** Stump fields provide habitat for crappie in the Main Lake. These stumps were in the old Pearl River floodplain and oxbow lakes. Anglers often target crappie in the stump fields along channel ledges of the old river. Boaters should operate cautiously when under power outside the channel markers.
**Below:** Length distributions for sport fish from the 2021 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.

**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.
Below and Right: Results from spring angler creel surveys for the last five years. No black bass harvest was recorded during 2021 survey. The angler catch rate did increase. The angler catch rate for crappie increased while the average weight slightly decreased. No bream anglers were interviewed in 2021.

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.
**Above:** Catch rate trends of Largemouth Bass from fall electrofishing samples and spring angler surveys on Ross Barnett Reservoir for the last five years. Angler surveys were suspended in 2020 due to Covid-19. Electrofishing catch rates are represented by catch per mile (CPM). Largemouth Bass catch rates increased sharply in 2021.

**Right:** Data from 32 bass tournaments held in 2020 included information from 1,888 anglers who weighed in 2,914 fish. Winning weights averaged 15.9 pounds and average lunker was 5.8 pounds.
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.