



Spring Lake 2025

REEL FACTS

Keith Meals – Fisheries Biologist

Keith.Meals@wfp.ms.gov

General Information: Spring Lake is a clear, shallow 40-acre spring-fed impoundment in Wall Doxey State Park. Nearly half the lake is filled with large cypress trees.

Location: Approximately 7 miles south of Holly Springs.

Fishery Management: Largemouth Bass, bream, crappie, catfish, and Gulf Coast strain Walleye.

Park/Lake information: <https://www.mdwfp.com/parks-destinations/park/wall-doxey-state-park>

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

Amenities

- 1 public boat ramp.
- 2 wooden fishing piers, 1 courtesy pier by ramp.

Creel and Size Limits

- Largemouth Bass: 10 bass per day per angler.
- Crappie: 30 crappie per day per angler.
- Bream: 100 bream per day per angler.
- Catfish: no limit.
- Walleye: No harvest allowed.
- No size limits on any species.

Regulations

- Rod and reel or pole fishing is allowed. No trotlines, FFFD's, jugs, yo-yo's, limblines, throwlines, or set hooks are allowed.
- MS sportfishing licenses and fishing permits are required except by individuals otherwise exempt or on designated days during National Fishing and Boating Week.
- No water skiing allowed.
- Boating is no wake only.

Stocking

- 2022 - 1,000 triploid (sterile) grass carp
- 2022 - 2,400 channel catfish.

Fishing Tips

Largemouth Bass

- Despite the clear water, heavier line may be needed to punch lures through surface weed mats and hoist fish out. Spinnerbaits, weedless jigs, and soft plastics are less likely to hang up fishing around cypresses and weeds.

Bream

- Try crickets and worms for bream around cypresses. Bream bed over sand or gravel bottoms.

Catfish

- Channel Catfish can be caught with cut bait, liver, worms, etc.

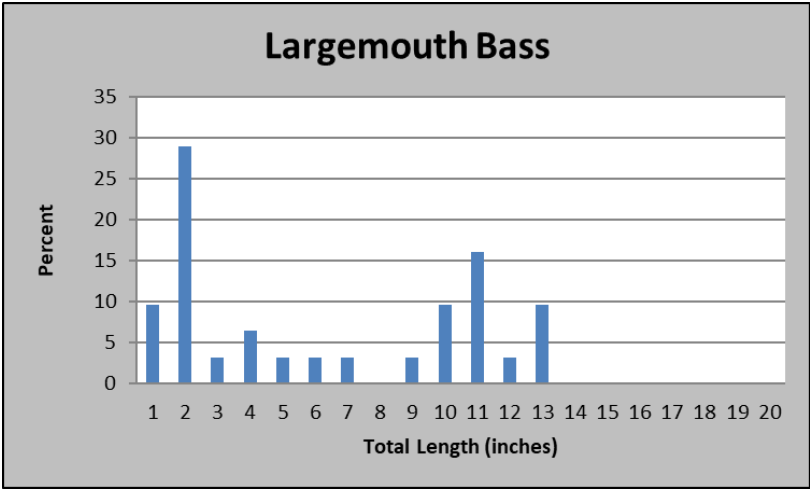
Crappie

- Crappie can be caught with jigs and/or minnows around cypresses or fallen trees.

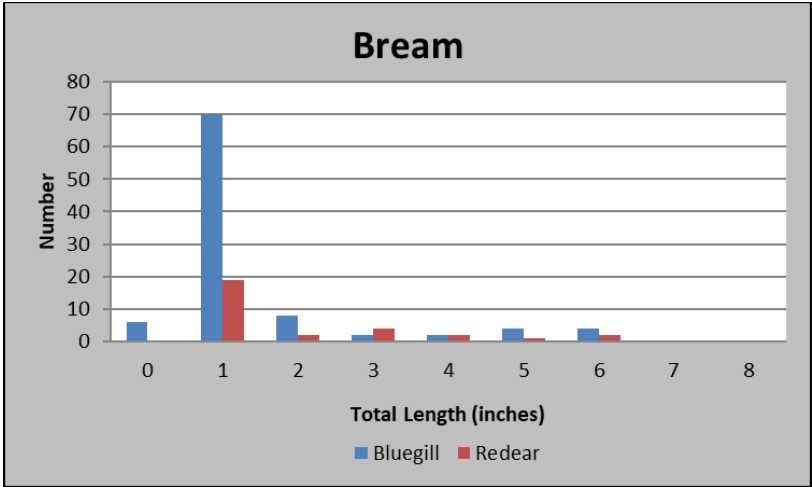
Below: Results from 2024 fall electrofishing surveys conducted at Spring Lake. The sport fishery is dominated by Largemouth Bass and bream (Bluegill and Redear Sunfish). Spring Lake has other species (Warmouth Sunfish, Spotted Gar, Bowfin, Pirate Perch, Spotted Suckers, Brook Silversides, etc.) in small numbers. Lake Chubsuckers are collected as an indicator of vegetation abundance; they become more numerous as submerged vegetation increases. Only four were captured in 2018 before vegetation became abundant.

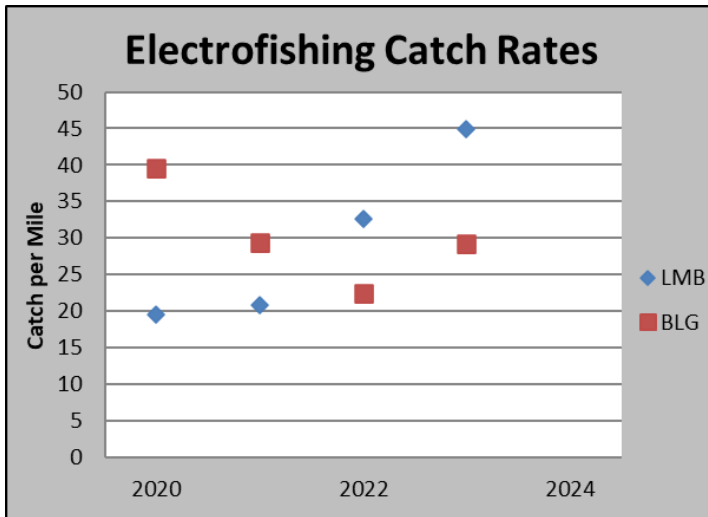
Species	# of fish collected	% of sample	Average Length (inches)	Maximum Length (inches)	Average Weight (pounds)	Catch Rate – Adult fish (fish/mile)
Bluegill	96	54	1.9	6.7	0.1	19
Largemouth Bass	31	18	6.7	13.4	0.6	22
Redear Sunfish	30	17	2.4	6.8	0.1	10
Lake Chubsucker	16	9	7.9	13.3	0.5	0
Black Crappie	3	2	3.5	14.1	0.1	2
Hybrid Catfish	1	1	31.6	31.6	12.8	2

Right: Length distributions of Largemouth Bass and Bluegill collected during 2024 fall electrofishing. The size ranges of bass (mostly less than 14 inches) and bream (mostly small adults and young-of-year) suggested a shift to a more balanced state of predators to prey. Weedy conditions prevented bass from foraging efficiently on small bream.



Redear Sunfish were less numerous, but larger, than Bluegill. Redear Sunfish normally average larger than Bluegill in Spring Lake with some “shellcrackers” weighing over a pound. Low fertility (very clear water) and a high flow of water through the lake limits the average sizes of all fish.





Above: Electrofishing catch rate trends (left) for Largemouth Bass (LMB) and Bluegill (BLG) vary year-to-year based on vegetative cover, spawning success, angler harvest, etc. Bluegill numbers have fallen since 2020 (except for an increase in 2023) as weed control measures have allowed bass to feed on them more efficiently. Bass numbers have increased lately with less angler harvest due to abundant weeds. Fishing (and electrofishing) in this very clear lake is difficult; fish can easily see both boat and bank anglers (right).



Above: Gulf Coast strain Walleye (left) are native to the Tombigbee River system. Walleye are the largest species in the perch family. MDWFP's Bob Tyler Fish Hatchery (BTFH) personnel have stocked Gulf Coast strain Walleye in Spring Lake. Walleye are cool water fish, and the lake rarely exceeds 80° F. Some of these fish are recaptured for brood stock for the BTFH at Enid. Walleye harvest is prohibited in Spring Lake.

As their name suggests, Grass Pickerel (right) have flourished with the weedy conditions; they (and other uncommon species) are not recorded while electrofishing. One of the smallest members of the pike family, they rarely exceed 15 inches. Their natural camouflage lets them hide in vegetation from which they ambush prey with a unique S-shaped strike motion. There are no size or creel limits on pickerel.

Walleye and Grass Pickerel will strike lures intended for bass or other species. Anglers are warned not to "lip land" either of these fish due to their toothy mouths.



Above: The vegetation that has expanded since 2019 is Eurasian watermilfoil that likely came in on a boat trailer. Although aquatic vegetation provides habitat for fish and their insect prey, too much vegetation prevents bass and other predators from controlling the numbers of bream and other small fish. Thick weeds also make fishing challenging (left) and can be spread to other waters. Triploid (sterile) Grass Carp (right) eat aquatic vegetation; they were stocked in 2019, 2020, and 2022. Parrotfeather, which has been in the lake for decades, and Eurasian watermilfoil are both invasive watermilfoils originally from South America. Eurasian watermilfoil is faster growing and can grow in deeper water.



Left: A winter drawdown has been done annually since 2020 to reduce weeds as dewatered areas dried out and froze. Over the winter, Triploid Grass Carp eat weeds while bass feed on abundant small fish in the remaining pool. During the 2020/2021 drawdown, MDWFP extended the boat ramp and replaced the courtesy pier (top). A winter 2024/2025 drawdown is planned. Repairs to the outlet structures are also planned in 2025.



Since 2020, MDWFP fisheries biologists have treated high use areas around the boat ramp and fishing piers (bottom) with a granular aquatic herbicide. In 2025, a new, fast-acting liquid herbicide will be trialed. It is supposed to target watermilfoils while minimizing damage to scenic cypress trees that provide habitat and shade for fish and people.