



Lake Ramsey Homeowners
dcossich@yahoo.com

June 27, 2018

Lake Ramsey Lake Committee,

We completed an electrofishing assessment of Lake Ramsey located near Covington, Louisiana on June 22, 2018. Our goal was to evaluate the condition of the fish population, water quality, and aquatic vegetation density and composition. During this assessment, we observed a population that was less abundant than we have seen in the past. The bass and bream density appeared to be lower than we've seen in other surveys that we have done here. The overall condition of the bass was poor, which is a sign of reduced forage availability. The density of catfish in the lake is heavy compared to your other fish. They are predators like your bass and crappie and are therefore competing for the same food items such as bluegill and shad. There are a few recommendations we suggest to improve the situation.

We appreciate you continuing to allow us to work with you on your lake. Please let us know if you have any questions about the report, recommendations, or the lake.

Sincerely,

Robby Mays
Certified Fisheries Biologist/Co-Owner
American Sport Fish Hatchery
334-799-8863

Site Description

Lake Ramsey is approximately 350-acres in surface area. It is surrounded by both wooded and developed shoreline. The lake collects rain runoff from the watershed and is fed by an artesian well. There are several piers and boathouses on the lake, some with automatic fish feeders. There is some structure in the lake that has been added over time but it is difficult to find. The fishing would greatly benefit from the addition of structure.

Management Goals

The main goal for Lake Ramsey is to maintain a balanced fish population in order to produce quality fishing opportunities for bass, crappie, and bluegill. In order to achieve this goal, you must provide adequate forage to all species of fish, and at the proper sizes. Predators normally need to be harvested in a controlled way to limit their numbers. This will allow remaining fish to exhibit better growth, condition, and size. At this time, the predation from the catfish is having a negative effect on the other species in the lake. The overall fish density of other species is reduced because of their presence.

Aquatic Vegetation

We did not observe any unwanted vegetation during our assessment. Grass carp were stocked a few years ago to control the vegetation. The carp are not interfering with your other fish. The problem we are seeing is being caused by the catfish density.

Water Quality

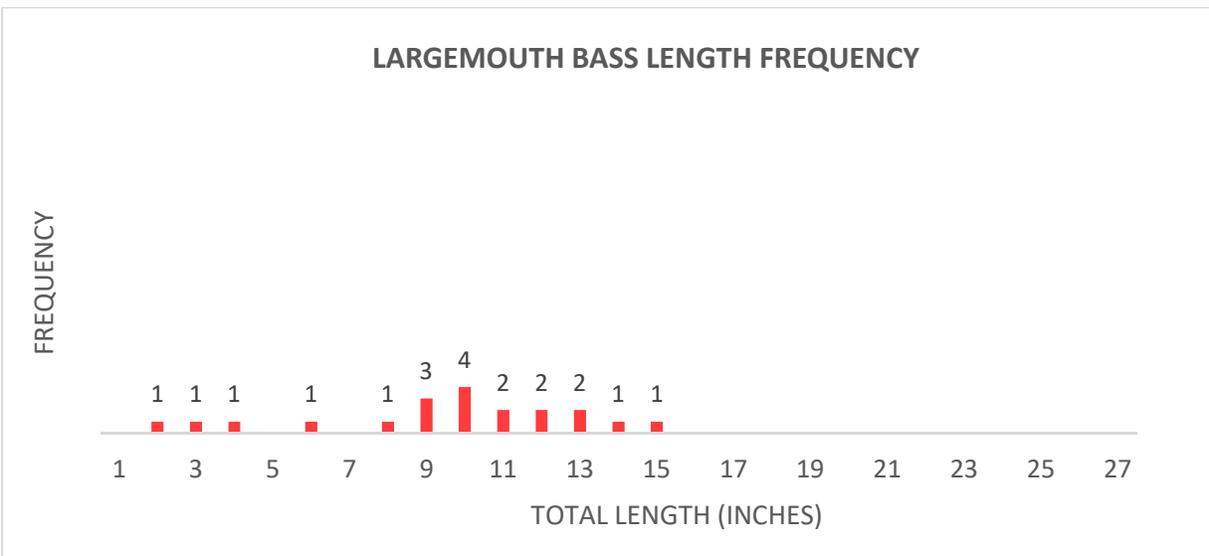
The visibility of the lake was approximately 24 inches at the time of our visit. In fertilized systems, we want the visibility to be around 18-24 inches and the water a green color. This indicates a moderate phytoplankton bloom, which is the base of the food chain. This is the case here, even though the lake is not intentionally fertilized. Because of this natural fertility, we expect to see a higher density of fish in the lake. However, we did not see decent fish density which is due to predation.

The total alkalinity of the lake water was 60 ppm. The minimum recommended value of total alkalinity that maintains a healthy pH is 20 ppm. The hardness was about 17 ppm and the pH was 8. The hardness was a little low, but the other values are within healthy limits for fish growth and reproduction.

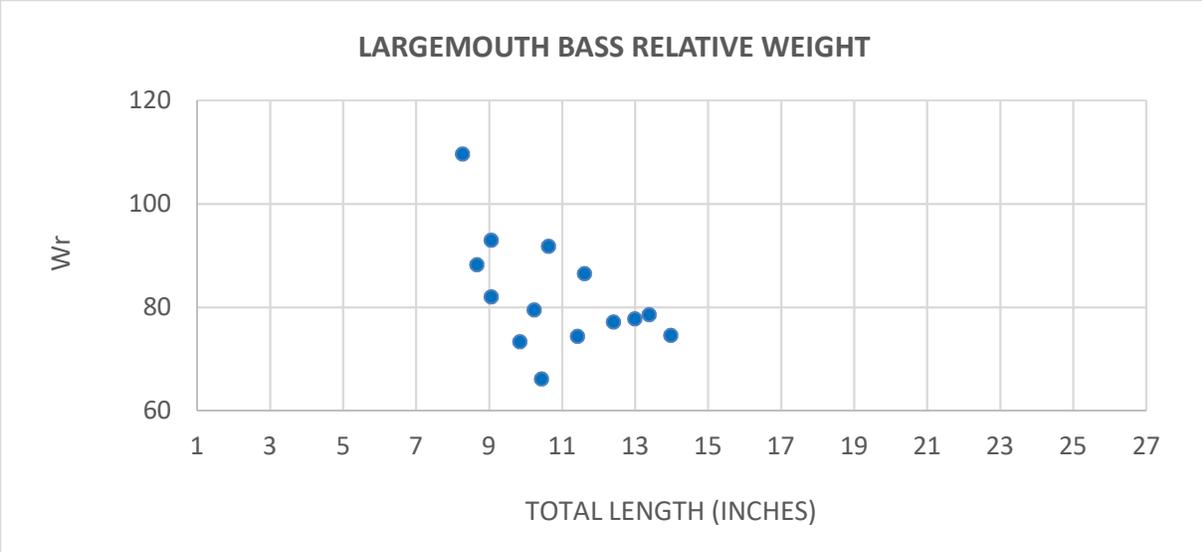
Fish Population

During our visit, we collected largemouth bass, bluegill, shellcracker, threadfin shad, gizzard shad, longear, and catfish. The crappie were too deep for our boat to sample. The overall number of fish that were captured was less than I expected to see. It was good to see recent threadfin shad reproduction, which is a major food source for your desirable predators. We saw several catfish that were 1-3 lbs. These fish, along with other unwanted predators such as otters and cormorants, have reduced the numbers of your desirable fish.

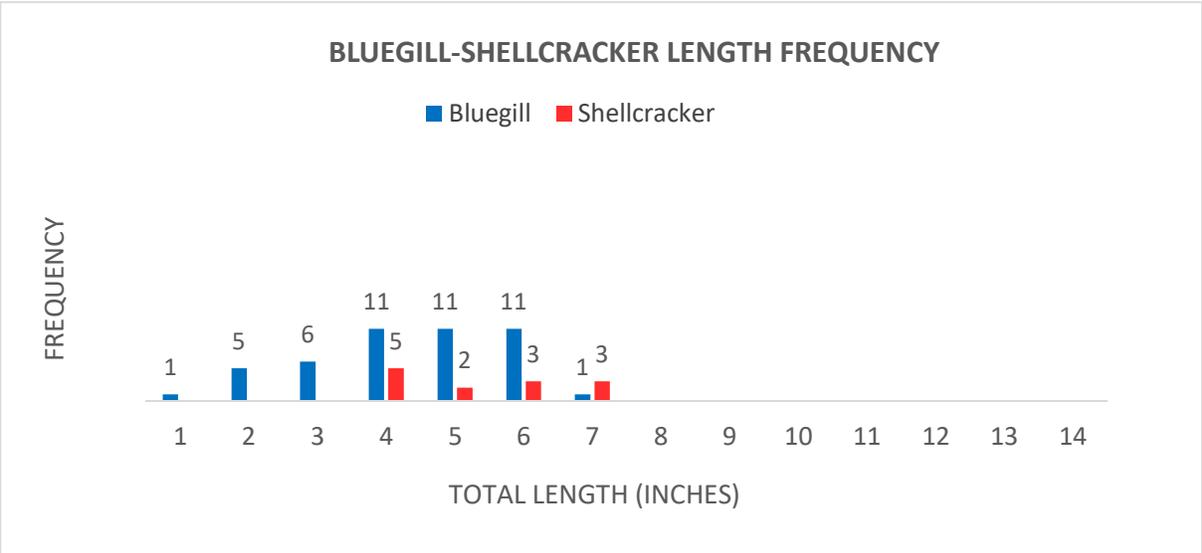
The first graph, which is Bass Length Frequency, illustrates the distribution of the various sizes of bass that we collected. We captured bass ranging from 2 to 15 inches in length. The most abundant size in the sample was 10 inches. In a balanced fish population, the most abundant size will be at 15 inches or greater. We normally recommend harvesting some of the small bass each year in order to limit the number of mouths to feed. This prevents the forage from becoming depleted by an overabundance of predators. However, the standing crop of bass in the lake is low, so we recommend continuing to practice catch and release.



The second graph is the Relative Weight (W_r) of each bass in our sample. This is an indication of how plump your bass are and how they compare to an ideal bass of the same length. W_r values of 90 are good, 100 or above are excellent, and those of 80 or below indicate thin or poor condition. The overall average W_r across the sizes is 80, which means that the bass were in poor condition.



The size distribution of the bluegill and shellcracker is shown in the attached Bluegill-Shellcracker Length Frequency graph. We observed bluegill across the range of sizes with a gap in the larger sizes. We like to see bluegill in all size categories with the most abundant size being 3-5 inches. These are the sizes that the predators rely upon for good growth. In addition to the bluegill and shellcracker, we saw several longear, threadfin shad, and gizzard shad. The threadfin shad were about 1" in size, which were spawned this spring. The gizzard shad were fairly large at 8"+, therefore they weren't contributing to the forage base much at this time.



Recommendations

The recommendations focus on correcting the imbalance in the population. Efforts need to be made to remove some of the feeding pressure that is on the forage fish. The lake is predator heavy and the catfish are causing your issues.

1. Do not allow the harvest of bass for the near future. Once their numbers have improved, we will adjust the harvest recommendation.
2. If possible, reduce the harvest of the bluegill and shellcracker. We need them to remain in the lake to contribute to the spawning activity. We also want more of them to reach larger sizes.
3. Harvest all crappie, regardless of size.
4. Harvest all catfish from the lake. Use whatever methods you can. These fish are eliminating a lot of your forage fish and likely bass and crappie as well.
5. Consider stocking additional bluegill into the lake to bolster their numbers.

Bluegill	1-2"	100 fish/acre	35,000 fish	\$8,750
----------	------	---------------	-------------	---------

Delivery fee				\$150
--------------	--	--	--	-------

6. Continue feeding the bluegill from your feeders or by hand. The feed is helping to promote the growth and reproduction of the bluegill.
7. Add structure to the lake for fish habitat. We recommend cedar trees and Christmas trees since they make excellent structure and will give the young forage fish more cover to improve their survival. The structure can be placed along the shoreline or in deep water so that it does not interfere with swimming or boating. You can also use artificial structure such as Mossback fish habitat. www.mossbackfishhabitat.com
8. Electrofish the lake again in a year or so to evaluate the progress of the fish population.