



HERMAN BROTHERS LAKE AND LAND MANAGEMENT

Electrofishing Survey Results/Data/Recommendations

Country Lake Estates

Big Lake (Main Lake)

General Information

- Country lake estates HOA lake
- 5/22/19
- 9am, Sunny and 65 degrees air temperature
- Water temperature was 62 degrees
- 25 acres
- Not growing much rooted vegetation
- Overflow is leaking, slowly but steadily
- A lot of farm runoff feeds into the lake
- Homeowners are happy with the lack of vegetation
- This lake is not known for major fish kills of any kind. Plenty of depth throughout.

Current Management Strategies & Goals

- Main goal is to create and maintain a well-balanced fishery while incorporating aesthetically pleasing shorelines/swimming areas.
- Bass and crappie are popular species to fish for in this lake.
- Not much management has been done in past years.

Fish Species Present

- Bluegill (*Lepomis macrochirus*)
 - Bluegill population was abundant
 - All size classes were represented which is a great sign.
 - Seeing all size classes means that the population is already in check and reproduction has been successful in the past.
 - At the time of the survey, the spawning beds were completely full of bluegill. The average of all bluegill collected was 7.5 inches. This is a great average size across the board!!
- Redear Sunfish (*Lepomis microlophus*)
 - Redear were almost identical in size classes, and overall health, but some adult redear were slightly larger in comparison to the bluegill.
- Largemouth Bass (*Micropterus salmoides*)
 - All of your largemouth bass met or exceeded my standard relative weight chart. This chart of relative weight describes the overall fitness and health of the bass. All of your bass were above the standard desired size. This means that your bass are growing exceptionally well in this lake. I am thrilled to see them doing so well. I recommend keeping an eye on the bass though, because it is very possible for them to get a very abundant spawn off one year and become too abundant.

- The average size bass was 14 inches which is actually very high. We also collected a very high number of bass over 17”.
- Very exciting lake to fish for bass in!!
- Black Crappie (*Poxomis nigromaculatus*)
 - These fish were extremely abundant and need to be harvested. Harvesting more crappie will help increase the overall size of fish in the lake.
 - I will recommend increasing your harvest limit of these fish (Focus on harvesting crappie under 8”)
- Channel Catfish (*Ictalurus punctatus*)
 - All of the catfish we collected were in the same general size class. They were around 22” long which is a very exciting fish to catch, but we did not see any catfish that looked younger than these. If you want to continue the catfish population in the lake you must continue stocking them occasionally.

Recommendations

- Begin by looking into aerating certain coves to get things moving in the shallow water where problems will begin. I would try to set up aeration in one to two coves at a time. We can discuss this further when you are able to narrow down where you guys would like to start. Some of the larger coves do not need aeration, but there are small coves all throughout this lake that would benefit from moving water (lake bottom aeration).

- Get back with me on this aspect and I will get you a design for a system.
- You could also add habitat to different areas on the lake. There are a handful of very good areas where habitat is plentiful, but there are some very barren areas that would benefit from additional habitat
 - Add shrubby brush, Christmas trees, etc.
- Increase harvest of black crappie. Focus on harvesting crappie at 8 inches and under when you do this.
 - Doing this will decrease the competition and will increase the average size of the crappie in the lake!
- Monitor each bass spawn. The population is thriving right now, but without active management, things can change very quickly.

Small Lake

General Information

- Country lake estates HOA lake
- 5/22/19
- 11 am, Sunny and 73 degrees air temperature
- Water temperature was 65 degrees
- 12 acre lake

- Very shallow lake, has a great deal of water that is less than 4' deep.
- A lot of farm runoff feeds into the lake as well
- Homeowners are happy with the lack of vegetation, but the color of the water is slightly murky.
- This particular lake has had many fish kills in the past few years. Not complete fish kills, but it is common to see fish die in the summer/winter times of high stress.
- Very fertile water
- This lake flows into the big lake

Current Management Strategies & Goals

- Aerating some of the open water to keep things moving during the heat of the summer and cold winter months.

Fish Species Present

- Bluegill (*Lepomis macrochirus*)
 - Exceptional numbers of healthy adults in this lake.
 - Average size is still close to 7.5 inches, but numbers were even higher in this lake due to all the littoral (spawning) zones.
- Redear Sunfish (*Lepomis microlophus*)

- The redear in this lake were beyond exceptional in terms of size and abundance. The average size of adult redear was 9.5 inches. This particular lake is producing some of the nicest panfish around the area. They are benefitting from the highly fertile body of water they're living in!
- Largemouth Bass (*Micropterus salmoides*)
 - Many largemouth bass are under weight in lakes across the Midwest, but in this lake, we did not find a single bass that was under weight.
 - This is very uncommon, but in your lake, the bluegill are spawning so successfully that they are able to keep the bass fed up each and every year.
 - Also, the fact that there are occasional fish kills help keep the numbers from overpopulating.
 - This bass population is actually most abundant in the 17" size class which is extremely uncommon. But these 17" bass are doing so well because of the high abundance of 7 inch bluegill that are available for them to eat.
 - All size classes were represented in the survey and were doing very well across the board.
- Black Crappie (*Poxomis nigromaculatus*)
 - Only collected one black crappie that was 12".
 - The rest of the crappie we collected were white crappie that were 3-5"

■ I recommend harvesting all the white crappie you can. You don't need them in here. They are stunted and not benefitting the lake.

- Grass Carp
 - One grass carp collected. It was 15 lbs. Still a fairly young fish that is very actively eating vegetation in the lake.

Recommendations

- Harvest all white crappie from this lake.
- If you want to grow trophy bass, you want selectively harvest bass through the year. I recommend harvesting any bass that is under 100% relative weight.
 - You have to get serious about measuring and weighing fish to do this. Educate the fishermen on relative weights of fish and why they are important in managing for trophy bass.
 - Relative Weights 101 Lesson: What this means is that in order for a fish to grow any longer, it has to be at or above 100%. Trophy sized fish will spend most of their lives with relative weights at or well above 100%. Regular sized fish will typically only be over 100% for a few short months during the year, and stunted/skinny fish will rarely reach the 100% mark.

For example, a 15 inch largemouth bass must weigh 1 lb 13 oz in order to reach 15 inches. If that 15 inch LMB weighs less than 1 lb 13 oz, that means that fish actually has lost weight, and will not ever make it to 16 inches long unless it reaches and surpasses 1 lb 13 oz! Many lakes and ponds have abundant forage for bass for only a few short months and the bass will grow during those times. The rest of the year, the bass simply will not grow any longer unless they are at or above 100%.

I keep track of the relative weights of all my fish several times per year to make sure they are well fed and actively growing at all times! Using this science in selectively harvesting bass in your lake will take you guys to the next level. This is the most important thing you could do moving forward for the fishery here!

- After you harvest around 100 largemouth bass (no rush) in the next year or two, let me know and we will come stock 100 new bass with fresh genetics to enhance the genetic pool of this lake!
- Add habitat to the lake. This lake is lacking in good woody habitat especially compared to the big lake.
- Add lake dye to the water to enhance the aesthetics of the lake. I recommend adding ½ quart of HB ultra blue lake dye and ½ quart of HB ultra black lake dye PER ACRE to the lake in the spring and once again around 4th of July. The color will not only be

aesthetically pleasing, it will also keep algae growth to a minimum. The lake dye is around \$18 per quart.

- Continue running your aerators in this pond. Keep moving this water all year long!

Overall, you guys have some of the most fantastic fishing in the area. I am very excited to see where things go in each of these lakes. You will be able to enhance each lake on an annual basis by using very little financial resources (with the exception to aeration in the big lake coves) and see some huge results! Please let me know if you have any questions at all!

Thanks,

Austin