From: KM Kinney

To: <u>Kinney, Michelle L CIV NG ILARNG (USA)</u>

Subject: [Non-DoD Source] Fwd: Country Lake Estates Recommendations 2022

Date: Tuesday, July 12, 2022 1:13:55 PM

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From: Austin Bennett abennett@hblakemanagement.com>

Date: Tue, Jul 12, 2022, 6:10 AM

Subject: Country Lake Estates Recommendations 2022
To: <u>Kinney7172@gmail.com</u> < <u>Kinney7172@gmail.com</u> >

Country Lake Estates

Country Lake Main lake:

- -25 acres
- -Looks the same has last time
- -Put aerator in 2019
- -I cleaned the filter in this while we were there. Service this system this winter or next winter. We can do it for about \$500 or less depending on what all is needed. The cooling fan is broken need knew one installed this winter as well. Or you can order directly from me and you guys can install. Also replace the aeration filter once per 6 months.
- -Possible winter kill killed big bass
- -Water was very green. Dense plankton bloom at time of survey.
- -Largemouth bass have been spawning at a very high rate the last few years. Extremely abundant numbers of 12 inch and under largemouth bass.
- -Tremendous bluegill and redear population. -Very similar to last times results on bluegill and redear
- -We collected a few very large adult Crappie as well.
- -Very high numbers of bullheads and green sunfish as well. These typically show up following a fish kill which makes me think at some point you had a minor winter kill. The winter (or potentially spring/fall) fish kill could also explain why your largemouth bass numbers have skyrocketed, because your adult largemouth bass seem to have died off and are now being replaced with a few very aggressively spawning younger classes.

Based on our observations and knowledge of the lake and it's history below are my recommendations:

- -Harvest 650-750 largemouth bass under 14" each year for the next two years
- -To combat the bass overpopulation, stock tiger musky at two per acre this fall (50 fish). \$25 per fish they are 10 to 14 inches long. These fish will help to reduce the bass spawn success and bring their numbers back into check. They will also help keep crappie from taking off sporadically. They will not cause any issues whatsoever at a low density and will only be a beneficial fish for the future of your lake! These apex predators have a place in your lake now more than ever.
- -Stock 25 grass carp 10-12" long for \$10.50 each to help keep up with vegetation growth.
- -Contact Jeff Hoffman at JR Hoffman pond mgmt to come and treat the duckweed with flumigard, diquat and Argos, if it becomes more of an increasing problem on main lake. Jeff Hoffman's number is: (309) 657-7258

-We definitely want to come back in a year or two to reevaluate. With the major changes occurring we need to stay on top of it. Let me know if you have any questions!

Country lake small lake:

- -12 acres
- -Very shallow coves are extremely shallow only 3 feet avg very hard bottom though. So there is not an organic muck or siltation issue here. It's simply that of a depth issue.
- -Max depth 8 feet
- -Water very green dense plankton bloom here as well.
- -No algae issues
- -Currently running aerators on half of lake
- -Consider adding 4 more diffusers on other side of lake. Especially if you do not dredge lake. This would cost about \$4,000-\$5,000 or so to get the remainder of the lake aerated.
- -Strongly consider what it would cost to dig coves out... Reach out to local earthmover contractors / pond builders etc to get quotes if desired. It's worth atleast looking into and making an informed decision from there. I'm happy to help evaluate any quotes/info you receive
- -If you can dig coves out, the need to run aerators in winter becomes much less and if you get good depth you could avoid aerating at all in winter months.
- -I believe digging out lake would help everything but understand it is a big cost to pay.
- -High abudendce of small bluegill, carpi and red-ear.
- -Very low numbers of bass did collect 2 bass over 4 pounds.
- -Collected multiple adult catfish were skinny.
- -Collected golden shiner just a forage fish.
- -Collected on Common Carp harvested out of lake.

Based on our observations and knowledge of the lake and it's history below are my recommendations:

- -Harvest up to 500 bluegill per year
- -Harvest all crappie as desired
- -Harvest catfish as desired
- -Restock catfish every year or two with 200 catfish 6-8" \$1.25 each.
- -This fall stock 350 large mouth bass 6-8" \$3.75 per bass
- -When you introduce the 350 newly stocked bass, stock 100 pounds of golden shiners to help bass population and help them grow.
- -In the winter times running the aerators attracts thousands of geese you can combat this by shutting of aerator in winter highly recommended digging out coves so there is more depth before shutting off aerators in winter.
- -Again, would be great to come and check back in on things in a year or two. If you guys ever have questions please don't hesitate to reach out!! If you would like to get these fish ordered for fall, please let me know!

Thanks!!

Austin Bennett - Fisheries Biologist

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