

Retainer Update:
10-2022



Below is a rundown on the current status of the fisheries with an update of what we have been doing and what we plan to do moving forward. Please let me know if you have any questions or concerns.

Vegetation

2022 saw a large expansion in hydrilla coverage from 2021. This growth was a bit surprising since there was obvious impact on growth from grass carp, but clearly indicates that stocked grass carp numbers were insufficient to control this year's growth. Extensive vegetation treatments were conducted across the lake focused primarily on hydrilla but also on all growth in common areas near Redneck Point and Bikini Island. Treatment resulted in heavy reduction of net growth but yet, growth persisted in various areas of the lake as new outcroppings of hydrilla would appear seemingly at random around the lake. These new outgrowths were a result of detached material colonizing virgin shoreline. Additional grass carp should be stocked this winter to control growth in 2023. A total of 600 grass carp have been stocked over the last two years and so at least another 500 and perhaps even 1,000 grass carp should be stocked to control existing growth. While the exact number of carp needed to control growth is unknown, otter predation is wreaking havoc on stocked grass carp greatly reducing their control efficiency as compared to historic records. During our October fishery survey hydrilla growth was thick in a handful of areas including NP100 and ST9.

Cover

Cover consists mostly of aquatic vegetation at this time, but as vegetation is brought back under control, note that non-living cover will once again begin to become more important for the Lake Cherokee fishery. Encourage residents to add cover around their docks even as the fishing club works to provide fresh cover to various areas of the lake.

Forage

Forage Species Relative Abundance					
Species	Fry	Small	Medium	Large	Jumbo
Bluegill	Occasional	Common	Common	Occasional	Occasional
Redear Sunfish	Occasional	Occasional	Occasional	Occasional	Occasional
Redbreast Sunfish			Occasional	Occasional	Occasional
Warmouth			Occasional	Occasional	
Gizzard Shad			Occasional	Occasional	
Threadfin Shad			Occasional		
Silversides			Occasional		

LOCHOW RANCH POND AND LAKE MANAGEMENT

Other Species Chart

Other Species Relative Abundance					
Species	Fry	Small	Medium	Large	Jumbo
Crappie		Occasional	Occasional	Occasional	
Bowfin			Occasional	Occasional	Occasional
Chain Pickerel		Occasional	Occasional		
Spotted Gar		Occasional	Occasional	Occasional	
Grass Carp					Occasional
Common Carp			Occasional	Occasional	Occasional
Spotted Sucker			Occasional	Occasional	
Channel Catfish		Occasional	Occasional		

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Fish Populations



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Forage fish populations remain diverse with bluegill being the predominant sunfish species. While shad populations are significant, shad populations appeared a bit down since our last fishery survey. We continue to recommend that residents harvest Warmouth and Green Sunfish while releasing all but the largest individuals of the other species of sunfish. Of course any sunfish over eight inches in length can and should be harvested from the lake in order to promote high populations of small to medium sunfish. To promote optimal forage, residents should be encouraged to install feeders and to feed fish a high quality high protein feed as time and budget allow. Strong forage populations also benefit from good vegetation management as optimal cover allows a certain number of forage fish to survive and breed from year to year.

Bass populations were good with strong populations of bass between 13 and 18 inches being found in the lake. Bass weights averaged three percent above target when compared to average weights. Do note that bass over 18 inches were absent in our fall survey and indicate that otter predation may be on the rise. This is of course corroborated by the lack of impact from the stocked grass carp though other environmental factors could also be at play. Over time adding Florida Bass to the lake remains a priority for maintaining trophy genetic potential in Lake Cherokee. Special emphasis should be put on Florida Bass production, especially as otter predation depresses the number of large fish in the lake.

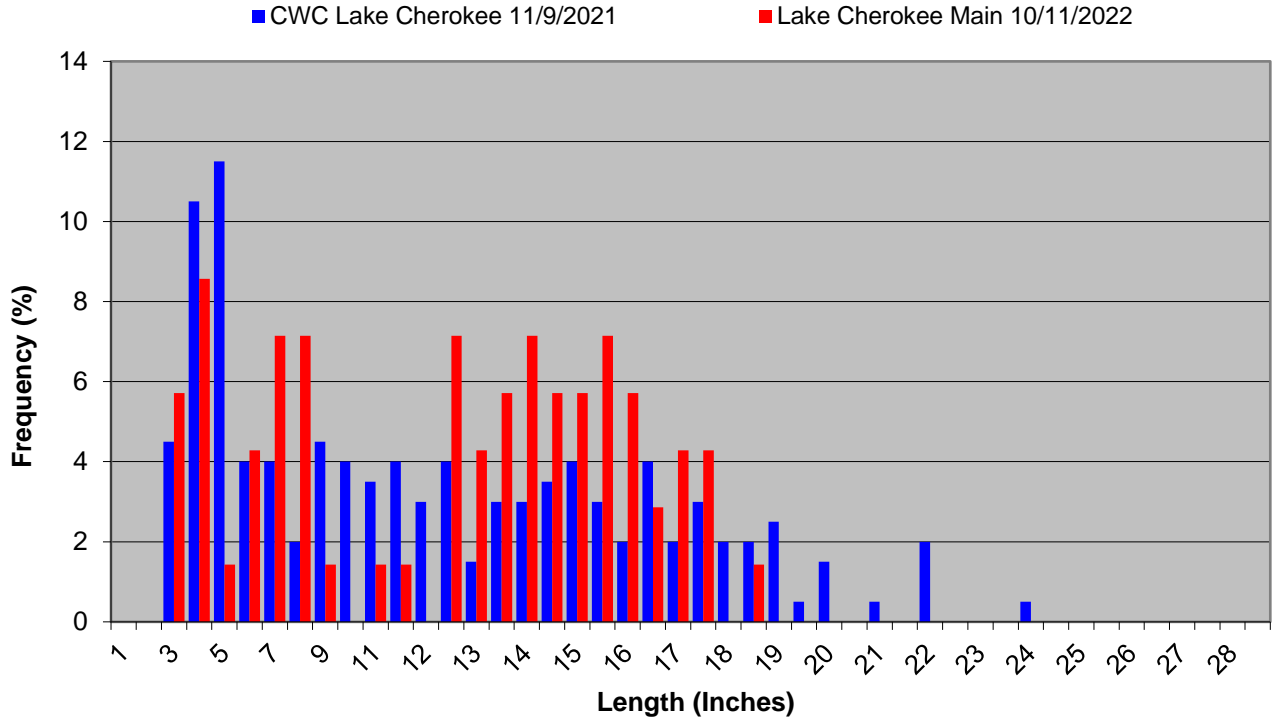
Electrofishing also revealed populations of bowfin, gar, and common carp which are culled during electrofishing. While a permanent part of the Lake Cherokee fishery, these fish can be harvested when caught as they do compete with bass for some of their preferred food sources. Black crappie were occasional in the survey with fish measuring from 6-10.5 inches. Crappie may be retained when fish hit 10 inches in length.





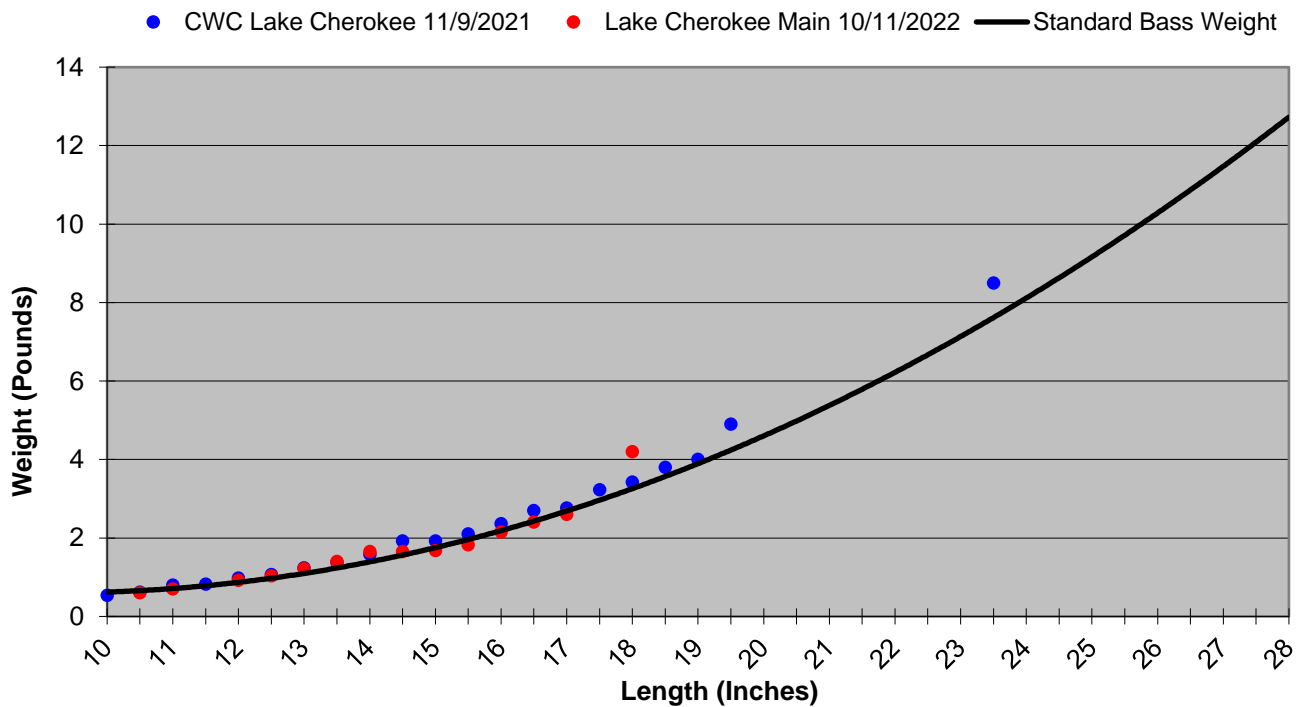
Length Distribution

Bass Distribution by Length



Relative Weight

Bass Relative Weight



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Electrofishing Summary

Date	No. Collected	Relative Weight Average	Noteworthy Observations/Big Fish
03.22-2021	113	1.10	6.7
11-09-2021	200	1.08	8.5
03-29-2022	109	1.02	6.1
10-11-2022	70	1.03	4.2

2023 Management Items and Recommendations

- Stock grass carp to reduce the submersed vegetation growth, especially below Silvey Bridge
- Electrofish the lake in fall and spring to monitor the fishery and cull rough fish
- Add feeders to docks to feed the fish
 - Encourage residents to use high quality feed which will allow sunfish to be grown as economically as possible
- Harvest sunfish over 8” in length
- Harvest bowfin, spotted gar, and common carp
- Post revised fishing regulations
- Treat vegetation as budget allows, prioritizing treatment of hydrilla and hyacinth over native vegetation
- Assess the impact of grass carp stockings
- Aquaculture Pond Priorities
 - Florida Bass
 - Black Crappie
 - Channel Catfish

Management Recommendations:

Lake	Harvest	Stock	Other Recommendations
Cherokee	Bass < 13”	Triploid Grass Carp	Treat Excess Vegetation
	Jumbo Sunfish	Florida Largemouth	Trap Otters
	Crappie > 10”	Black Crappie	Apply Quality Feed
	Rough Fish	Channel Catfish	Add Feeders
			Add Cover
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