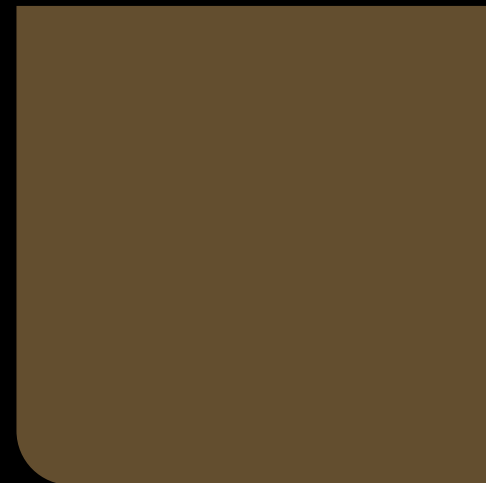


# Reunion Property Owner's Association: 2021 FISHERY STATUS REPORT

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Electrofishing Assessment of  
Reunion Lakes June 14, 2021.



# ANNUAL ELECTROFISHING OBJECTIVES



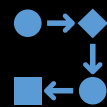
Assess overall water quality



Evaluate aquatic vegetation density and composition



Evaluate the condition and density of fish populations



Where appropriate, make recommendations for improvement



# WATER QUALITY

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- At the time of our visit, water column visibility in North Lake was approximately 42 inches. South Lake water column visibility was measured at 30 inches. Both lakes had a slight phytoplankton bloom that seemed to increase in density with increasing light intensity.
- Total alkalinity of both North and South Lakes water averaged 62 ppm. Keep in mind that the minimum recommended value of total alkalinity that effectively buffers pH and allows natural and/or artificial fertilization to be effective at producing and promoting a phytoplankton bloom is 20 ppm. Both North and South Lake are operating well above the minimum threshold and alkalinity function is not currently a limiting factor relative to fertility and/or fishery health.
- Considering the currently high alkalinity function and combined aesthetic and recreational uses/values, artificial fertilization is not currently recommended.

# AQUATIC VEGETATION

- No problematic aquatic vegetation; emergent, floating or submerged was noted in either of the lakes sampled.





For Management Purposes, The  
Electrofishing Effort Provided a  
Suitable Platform for Species Sampled

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largemouth  
bass

bluegill

shellcracker

threadfin  
shad

gizzard  
shad

shiners

crappie

catfish

# Largemouth Bass

- A sufficient bass sample was collected from both North and South Lakes. Population density recorded in South Lake was slightly higher than was recorded in North Lake. Considering the acreage of the combined fishery, both lakes could and should sustain a higher bass density than is currently present.
- Low numbers of fingerling bass were observed during the sampling process; indicating that catfish predation is very likely having a negative impact on bass spawning and reproduction.
- North Lake bass collected ranged from seven (7) inches to twenty-one (21) inches while South Lake bass, though more abundant, ranged from seven (7) inches to seventeen (17) inches.
- Irrespective of location sampled, the average length of bass in North and South Lakes was 13 inches.
- The average relative weight of bass across all sizes was 85, meaning that the bass are, overall, in average condition (optimal condition is 100). Some variation in the condition of the fish sampled was noted, and some of the larger fish tended to be on the thinner side.
- Bass forage in North and South Lakes consists primarily of bluegill, shellcracker, threadfin shad, gizzard shad and golden shiners. While present in good numbers in both North and South Lake, the greatest abundance of shad were found in South Lake.
- Larger bass need larger food items in good abundance, if they are to grow and be maintained in good condition i.e., available food should be present in the one (1) inch to seven (7) inch size classes. ***Bluegill fit this description of the ideal bass food and should be the backbone of the forage population because of their size, range and spawning capability. Other food sources like shad and shiners, while important, are secondary in importance to bluegill as forage.***

# Bluegill and Shellcracker

- Adequate samples of bluegill and shellcracker were obtained during the electrofishing effort.
- Bluegill density and size distribution were better in South Lake than in North Lake. Spawning success was likewise better in South Lake, likely the result of there being limited sea wall protection along the South Lake shoreline.
- The largest bluegill we sampled was eight (8) inches in length, while the largest shellcracker sampled was nine (9) inches.
- Excessive predation coupled with unregulated removal of larger adult bluegill during bedding/spawning are likely causes of reduced bluegill numbers within the Reunion Fishery.



# CRAPPIE

- Crappie, while a popular sportfish, can and do have a dramatic negative impact on the Reunion Lakes fishery.
- Crappie compete heavily with resident bass, bluegill and shellcracker for the same food resources.
- As with any native habitat, aquatic or terrestrial, there is just so much food and growing space available to ensure that the species that inhabit that space continue to exist, coexist, reproduce and thrive without inhibition.





# CATFISH

- The abundant nature of catfish (predominately channel catfish, though yellow bullheads were also sampled) in the Reunion Lakes electrofishing sample was profound.
- Population density and average size of individual specimens (1.5 to 2.5 pounds), make catfish the most prevalent and formidable predator within the Reunion Lakes Fishery.
- It is probable that the catfish population density in the Reunion Fishery is a primary cause of low reproductive success in bass, bluegill and shellcracker populations and is a major contributor in limiting population progression into the larger size classes.
- Fifty-six catfish (1/2# to 4#) were removed from the Reunion Fishery during the June electrofishing effort.

# RECOMMENDATIONS

CATCH AND RELEASE	CATCH AND RELEASE ALL BASS UNTIL FUTURE SAMPLING EFFORTS INDICATE OTHERWISE.
CATCH AND RELEASE	CATCH AND RELEASE ALL BLUEGILL AND SHELLCRACKER, AS THE FISHERY IS IN NEED OF THE ADDED FORAGE BASE THAT THESE VALUABLE SPORTFISH CAN PROVIDE.
HARVEST	HARVEST CRAPPIE FREELY.
HARVEST	HARVEST CATFISH AGRESSIVELY: <ul style="list-style-type: none"><li>• WITH HOOK AND LINE</li><li>• CATFISH RODEO</li><li>• IMPLEMENT TRAPPING EFFORTS (RECRUIT FROM REPUTABLE TRAPPERS) AS AN ADDITIONAL RESOURCE FOR REDUCING CATFISH NUMBERS.</li></ul>
CONSIDER	CONSIDER STOCKING ADDITIONAL BLUEGILL AND LARGEMEOUTH BASS INTO THE REUNION FISHERY IN SPRING AND FALL 2022.
DELAY	IF ADDITIONAL STOCKING IS SELECTED AS A MANAGEMENT TOOL, DELAY ANY SUBSEQUENT ELECTROFISHING EFFORT UNTIL FALL 2022.