One Natural Resources Way Springfield, Illinois 62702-1271 www.dnr.illinois.gov

JB Pritzker, Governor Colleen Callahan, Director

June 13, 2019

Sunset Lake Association 3505 East Lake Drive Girard, IL 62640

Dear Sunset Lake Association,

The purpose of this letter is to summarize the fish survey conducted on Sunset Lake (173 acres) at 10:00am on June 5, 2019. A pulsed-DC electrofishing survey was conducted by IDNR Fisheries for 30 minutes and a representative sample of the fish population was collected. The water temperature was 79F, pH was 8.9, conductivity was 301, and Secchi Disk reading (visibility) was 33". The following fish species were collected:

Largemouth Bass

The Largemouth Bass population should satisfy any bass angler. Eighty-Seven Largemouth Bass were sampled in 30 minutes of electrofishing which surpasses the goal of at least 1 bass/minute using electrofishing equipment. Fish collected ranged from 4-21". The largest fish measured 21", weighing 5.0lbs. Four of the Largemouth Bass collected exceeded 3.0lbs. Largemouth Bass growth appeared to be good. Various sizes of bass were collected suggesting that there is good recruitment.

Bluegill

38 Bluegill were collected. These fish ranged from 1-7". The abundant bass population should keep the bluegill fishery under control. Harvest bluegill as desired.

Redear Sunfish

38 Redear Sunfish were collected, ranging from 6-8". No harvest limits required.

Channel Catfish

One Channel Catfish was collected. It measured 24.0". In small lakes and ponds, Channel Catfish don't always recruit to the population due to predation by Largemouth Bass. Channel Catfish are cavity spawners, and in most small Central Illinois ponds this spawning habitat is lacking, further contributing to unsuccessful Channel Catfish recruitment. If Channel Catfish harvest is desired, then do a supplemental stocking every 2-3 years. Supplemental stockings should be based on the amount of Channel Catfish harvest anticipated.

Gizzard Shad

The Catch Per Unit Effort of Gizzard Shad for this survey was 92 fish per hour. Two major size classes of Gizzard Shad were sampled during the survey. Fish ranged from 5-12". Shad are an important forage species for many sportfish species, however they compete with Bluegill causing Bluegill to grow slower.

Other species sampled during this survey included Flathead Catfish (1), Yellow Bullhead (1), Green Sunfish (3), Golden Shiner (2), Hybrid Sunfish (4). One Common Carp was observed but not netted.

Fish Population Discussion:

The Largemouth Bass population has great size structure and most fish appeared to be in good body condition. No management action is warranted for the Largemouth Bass fishery. Bluegill and Redear Sunfish appear to be healthy. Occasional lake draw-downs can be used as a management tool for reducing panfish numbers and improving panfish quality. Continue to conduct draw-downs every couple of years if the HOA desires. The presence of Gizzard Shad explains why few Bluegill exceeded 7". Gizzard Shad compete for food resources that Bluegill rely on during the early stages of life. Black and White Crappies were not sampled; however, angler accounts and historical reports suggest that crappie species are present. Continue to harvest crappie species to ensure that they don't become overcrowded in the lake. Only one Channel Catfish was collected. Stock Channel Catfish as needed, based on angler harvest.

Aquatic Plants:

Currently there are no aquatic plant issues. Herbicide treatments and/or Grass Carp stocking are not warranted at this time. Filamentous algae, cattails, and water willow were the aquatic plant species observed during the survey. Coontail, southern naiad, and curlyleaf pondweed have been reported in the past. Triploid Grass Carp are an alternative option to herbicides; however, grass carp do not eat all plant types. Feel free to contact me if you need recommendations for treating aquatic plants or stocking Grass Carp. Application of herbicide should be conducted by a licensed pesticide applicator. Continue to maintain best management practices for septic water treatment and consider using lawn fertilizers with less or no P (phosphorus) to try to reduce the nutrient load entering the lake. Waterfowl droppings can contribute to the nutrient load if they are present in a high density. Refrain from feeding and attracting Canada Geese to the lake.

Overall Recommendations:

- Harvest Bluegill, Redear Sunfish, and crappie species.
- Harvest or remove all Common Carp caught.
- Do not stock Bluegill, sunfish, or crappie species.
- Stock 8-10" Channel Catfish at 10-25/acre every 2-3 years.
- Stock 6" Hybrid Striped Bass at 5/acre every other year if desired.
- Stock 8-10" Walleye at 10/acre every other year if desired.
- If aquatic vegetation treatments are warranted, have a licensed pesticide applicator treat aquatic vegetation as needed.
- Reduce lawn fertilizer use or chose fertilizer with no 'P' (phosphorus).
- Post fishing regulations signs if regulation changes are implemented.
- Fishing Regulations to consider:
 - o Bluegill: No harvest or length limits
 - o Black and White Crappies: No harvest or length limits
 - Largemouth Bass: 2 Fish Daily Harvest Limit / 15" Minimum Length Limit. A less restrictive alternative regulation would be <u>3 Fish Daily Harvest Limit</u> / 15" Minimum Length Limit. A 3 Fish Daily Harvest Limit would not hurt this bass fishery.
 - o Channel Catfish: 6 Fish Daily Harvest Limit / No Minimum Length Limit
 - Hybrid Striped Bass: 3 Fish Daily Harvest Limit / 17" Minimum Length Limit (Only needed if this hybrid is stocked)
 - Walleye: 3 Fish Daily Harvest Limit / 15" Minimum Length Limit. A less restrictive alternative would be 3 Fish Daily Harvest Limit / 14" Minimum Length Limit. The statewide Walleye length limit is 14".

If you have any further questions, please feel free to contact me.

Thanks,

Blake Ruebush District Fisheries Biologist

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