

LAKE MANAGEMENT STATUS REPORT

Date of Report: 12/30/2024	Fisheries Manager: Brennan Caputo	District: 1
Lake Name: Belvidere City Pond North	County: Boone	Water No: 11033
Ownership (STATE, PUBC, PUBO): Public Co-op City of Belvidere		Acreage: 3.5

LM STATUS REPORTS WILL INCLUDE THE FOLLOWING SECTIONS:

1. List of the Sport Fish Regulations in Effect
2. Listing of Stocked Fish
3. Fish Surveys
4. Lake Management Plan Progress Table
5. Recommendations for Observed Problem Trends

1. SPORT FISH REGULATIONS IN EFFECT:

Large or Smallmouth Bass 1 Fish Daily Creel Limit (14" Minimum Length Limit)

2. FISH STOCKING:

2024:

10/04/2024	Bluegill	1350	2.1"	LaSalle Hatchery
09/10/2024	Channel Catfish	88	4.1"	Little Grassy Hatchery
08/28/2024	Largemouth Bass	100	4.5"	LaSalle Hatchery
08/08/2024	Largemouth Bass	133	4.1"	LaSalle Hatchery

2023:

09/21/2023	Bluegill	2352	1.2"	LaSalle Hatchery
07/21/2023	Largemouth Bass	144	4.0"	LaSalle Hatchery

2022:

09/28/2022	Bluegill	1460	1.2"	LaSalle Hatchery
08/30/2022	Channel Catfish	80	8.0"	Jake Wolf Hatchery
08/25/2022	Largemouth Bass	117	4.0"	LaSalle Hatchery
07/29/2022	Largemouth Bass	132	4.0"	LaSalle Hatchery

3. FISH SURVEYS:

09/12/2024: Fall Community Sample

Tri-annual electrofishing survey using one DC electrofishing boat for 1 run, 10 minutes of total electrofishing time utilizing 1 dipper. Water temp was 70.7 F. A total of 56 fish were sampled from 2 species.

4. LAKE MANAGEMENT PROGRESS TABLES:

Largemouth Bass:

A total of 17 Largemouth Bass were collected ranging from 105 – 491 mm (4.1 – 19.3 in), with 16 \geq Stock size (200 mm [7.9 in]). Average length was 280 mm (11.0 in). This survey did not meet the minimum required number of fish $>$ Stock size ($n = 30$) to accurately quantify population demographics as set forth in the Lake Management Plan (LMP). However, I believed 16 fish $>$ Stock size sufficient to continue with the analysis. While the PSD fell within its respected range, the RSD-14 fell well below its target range. A lower PSD and RSD-14 value could indicate a growth bottleneck due to an overabundance of Stock and Quality-sized Largemouth Bass. This is to be expected with the supplemental stocking program. The stocking does look to be improving the overall population of the bass in the lake. This program will be reevaluated in 2027 to see if it is still needed.

<u>Lake Management Plan:</u>	<u>Goal</u>	<u>2021</u>	<u>2024</u>
# Stock (200mm)	>100	5	16
PSD	40-60	N/A	44
RSD 14	30-40	N/A	6
Wr	90-100	N/A	90

Fall diurnal DC electrofishing CPUE (fish/hr.) of each length group of Largemouth bass collected.

<u>Year</u>	<u><7.9"</u>	<u>7.9-11.8"</u>	<u>11.8-15"</u>	<u>15.1-20.1"</u>	<u>> 20.1"</u>	<u>Total</u>
2021	30	12	24	6	0	72
2024	6	54	36	6	0	102

Bluegill:

A total of 39 Bluegills were collected ranging from 70 – 181 mm (2.8 – 7.1 in), with 35 \geq Stock size (80 mm [3.1 in]). Average length was 103 mm (4.1 in.). This survey met the minimum required number of fish \geq Stock size ($n = 30$) to quantify population demographics as set forth in the Lake Management Plan (LMP). Both the PSD and RSD-14 fell below their respective target ranges. A lower PSD and RSD-14 value could indicate a growth bottleneck due to an overabundance of Stock and Quality-sized Bluegill. This is to be expected with the supplemental stocking program. This program will be reevaluated in 2027 to see if it is still needed.

<u>Lake Management Plan:</u>	<u>Goal</u>	<u>2021</u>	<u>2024</u>
#Stock(80mm)	>100	29	35
PSD	20-40	0	3
RSD 7	15-30	0	0
Wr	90-100	99	94

Fall diurnal DC electrofishing CPUE (fish/hr.) of each length group of Bluegill collected.

<u>Year</u>	<u><3.1"</u>	<u>3.1-5.9"</u>	<u>5.9-7.9"</u>	<u>7.9-9.8"</u>	<u>Total</u>
2021	84	174	0	0	258
2024	24	204	6	0	234

5. RECOMMENDATIONS FOR OBSERVED PROBLEM TRENDS:

1. Bacteria application for the large organic material in the lake.
2. Aquatic vegetation is needed to absorb nutrients in the lake and aid in fish spawning.
3. Aquatic algaecide is needed to reduce the overall coverage on the lake.
4. Supplemental stocking of Bluegill and Largemouth bass.
5. Continue fish population surveys on a routine basis