

WISCONSIN DEPARTMENT OF NATURAL RESOURCES Fisheries Information Sheet

LAKE: LOWER SPRING COUNTY: JEFFERSON YEAR: 2025

Introduction

Lower Spring Lake is a 104-acre, shallow, eutrophic drainage lake located in southeastern Jefferson County (Figure 1). It lies within the town of Palmyra. The village of Palmyra is located along the western shoreline and includes a public swimming beach and the Scuppernong River outlets of the lake. The lake is formed by an impoundment of the Scuppernong River which is the major inlet that flows from Upper Spring Lake southwesterly to the eastern shallow marsh portion of Lower Spring Lake. The Scuppernong River exits the lake and eventually flows into the Bark River upstream of Prince's Point Wildlife Area. The lake has a maximum depth of 11 feet with an average depth of 4 feet. The bottom substrate is mainly muck.

Documented invasive species include common carp (*Cyprinus carpio*), banded mystery snail (*Viviparus georgianus*), curly-leaf pondweed (*Potamogeton crispus*), Eurasian water-milfoil (*Myriophyllum spicatum*), and purple loosestrife (*Lythrum salicaria*). The lake supports an endangered fish species, the state special concern lake chubsucker (*Erimyzon sucetta*). The state endangered slender madtom (*Noturus exilis*) has been documented in the Scuppernong River upstream of the lake.

One measure of a lake's health is the trophic state, which relates to the amount of algae in the water. Lower Spring Lake's average summer trophic state for the last 5 years was 57 (eutrophic) and was determined using chlorophyll data. For a shallow reservoir drainage lake, this is considered good. Trophic state indices over 50 are considered eutrophic, from 40 to 50 would be mesotrophic, and under 40 would be oligotrophic.

There is one public boat launch on the lake. The Lower Spring Lake Public Access boat launch owned and operated by the Department of Natural Resources (DNR) is directly off of Hwy 59 on the north side of the lake, just east of the village of Palmyra. There are ample shore fishing opportunities along the northern shore off of Hwy 59. The lake includes 3.1 miles of shoreline that is mostly wooded and wetland complex. The western portion of the lake is primarily residential. Adequate public access provides recreational opportunities for both anglers and recreational boaters. Recreational use is heavy year-round, especially during summer weekends and winter during safe ice conditions. Current fishing regulations follow the general statewide inland regulations (Table 1).

Spring electrofishing (SEII) was conducted on Lower Spring Lake using a standard pulsed direct current (PDC) electrofishing boat on May 19, 2025. One 0.55-mile transect along the north shore targeted all fish species. One 1.80-mile transect along the western and southern shore targeted only gamefish. A similar SEII survey was conducted in 2021. The lake is classified as a simple, warm, dark waterbody, and catch rates were compared to other lakes with similar characteristics and the 2021 survey.

BLACK CRAPPIE



One black crappie was sampled during the all species run for a catch rate of 1.8 per mile. It measured 6.8 inches.

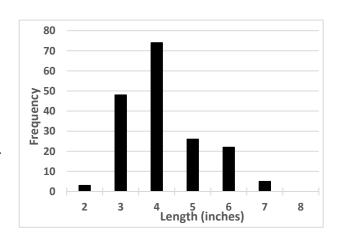
# Sampled Per Mile = 1.8	
Quality Size ≥ 8 inches	-
Preferred Size ≥ 10 inches	-

BLUEGILL



A total of 178 bluegill were sampled during the all species run for a catch rate of 323.6 per mile. The catch rate is in the 93rd percentile for lakes with similar characteristics. The average length was 4.6 inches.

# Sampled Per Mile = 323.6		
Quality Size ≥ 6 inches	15%	
Preferred Size ≥ 8 inches	-	



14 12 10 10 8 8 4 2 0 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Length (inches)

LARGEMOUTH BASS



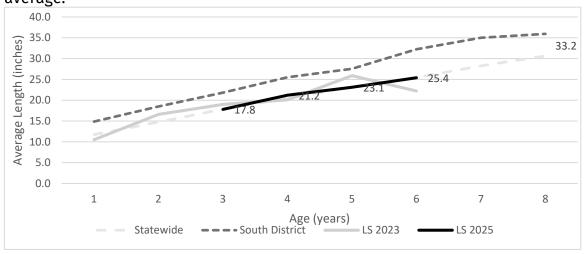
A total of 59 largemouth bass were sampled for a catch rate of 25.1 per mile. This catch rate is in the 42nd percentile for lakes with similar characteristics. The average length was 13.4 inches.

# Sampled Per Mile = 25.1	
Quality Size ≥ 12 inches	69%
Preferred Size ≥ 15 inches	32%

NORTHERN PIKE



A total of 11 northern pike were sampled for a catch rate of 4.7 per mile. The average length was 23.5 inches. The largest fish was 33.2 inches. The small sample size was low however the growth rate was similar to the 2023 Spring netting (SNI). It closely resembled the statewide average but was below the South District average.



# Sampled Per Mile = 4.7	
Quality Size ≥ 21 inches	73%
Preferred Size ≥ 28 inches	9%

PUMPKINSEED



A total of three pumpkinseed were sampled during the all species run for a catch rate of 5.5 per mile. This catch rate is in the 37th percentile for lakes with similar characteristics. The average length was 6.1 inches.

# Sampled Per Mile = 5.5	
Quality Size ≥ 6 inches	67%
Preferred Size ≥ 8 inches	-

COMMON CARP



A total of four common carp were sampled during the all species run for a catch rate of 7.3 per mile. The catch rate is in the 43rd percentile for lakes with similar characteristics

Summary

One-night electrofishing surveys are a snapshot of the fishery in time. Weather conditions, water clarity, and water temperature are a few factors that can affect catch rates. Northern pike average length during the 2025 SEII survey increased by three inches since the 2021 SEII survey, while catch rate declined slightly. Largemouth bass average length during the 2025 SEII survey remained similar to the 2021 survey, while catch rate declined slightly. Bluegill average length during the 2025 SEII survey declined slightly from the 2021 survey, while catch rate increased dramatically. If Lower Spring Lake is drawn down for aquatic plant management purposes, another SEII survey will be conducted the following spring to look for changes to the fishery.

Table 1. General fishing regulations for Lower Spring Lake, in Jefferson County, Wisconsin.

SPECIES	SEASON DATES	DAILY BAG LIMIT	SIZE LIMIT
Northern Pike	May 3, 2025 - March 1, 2026	2	26 inches
Largemouth Bass	May 3, 2025 - March 1, 2026	5	14 inches
Panfish	Continuous	25	None

Acknowledgements

For answers to questions about fisheries management activities on Lower Spring Lake, contact:

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