



Glendale Lake, Cambria County

Black Bass Evaluation



Warmwater Unit Biologist Ben Frick with a 19-inch, 3.7-pound Largemouth Bass from Glendale Lake.

Introduction

Glendale Lake is a 1,600-acre reservoir constructed in 1960 and located in Chest and White townships, Cambria County. The lake is owned by the Commonwealth as part of the Department of Conservation and Natural Resources (DCNR), Bureau of State Parks, Prince Gallitzin State Park. Boating is restricted to unpowered boats and boats with motors 20 horsepower or less. It can be accessed by nine boat launches of varying size and levels of development. Black bass and panfish at Glendale Lake are managed under Commonwealth Inland Waters regulations.

Personnel from Division of Fisheries Management, Warm Water Unit completed nighttime boat electrofishing surveys during late May to estimate black bass abundance, length-frequency distribution, and age structure. The objective of these surveys was to evaluate a long-running effort of using young-of-year black bass survey data to develop a model to predict future year-class strength. Panfish were also collected at a portion of the sites to estimate length-frequency distribution following concerns expressed by local anglers.

Methods

Nighttime boat electrofishing was used to collect black bass and panfish during May 27-28, 2026 to assess relative abundance, length-frequency distribution, and age structure. Twelve randomly selected electrofishing transects were surveyed for a total of 121 minutes of effort; covering a representative portion of the lake. Relative abundance, or catch rate, of fish collected were expressed as catch-per-unit of effort (CPUE; fish/h). Panfish were targeted and collected, in conjunction with black bass, at five of the 12 electrofishing transects.

Results

A total of 988 fish were captured, including 245 Largemouth Bass and three Smallmouth Bass, during 121 minutes of electrofishing effort for a cumulative black bass catch rate of 123 fish/ h (Table 2). A total of 740 panfish were collected including Bowfin, Rock Bass, Green Sunfish, Pumpkinseed, Bluegill, Black Crappie, and Yellow Perch during 50 minutes of effort (Table 1).

Table 1. Species, number caught, and length range for the 2026 boat electrofishing survey at Glendale Lake, Cambria County.

Species	Number	Length (in.)
Bowfin	3	27-29
Rock Bass	33	3-9
Green Sunfish	31	2-6
Pumpkinseed	125	3-7
Bluegill	511	1-7
Smallmouth Bass	3	7-9
Largemouth Bass	245	3-20
Black Crappie	18	5-10
Yellow Perch	19	4-8

The Largemouth Bass netted ranged from three to 20 inches in length (Table 1, Table 2, and Figure 1). The length-frequency distribution shows multiple length classes well represented with a high abundance of seven- to nine-inch fish recruiting to the catchable portion of the population. Approximately 32% of the Largemouth Bass caught exceeded the legal length of 12 inches and more than 11% exceeded 15 inches. These values corresponded to catch rates of Largemouth Bass 12 inches long and longer of 39.2 fish/h and 15 inches long and longer of 11.4 fish/h.

Bluegills (n=511) and Pumpkinseeds (n=125) contributed to the bulk of panfish catch (Table 1). Of the Bluegills captured, only 45 of the Bluegills exceeded quality length of six inches. The size distribution of Pumpkinseeds was better with 33 (26%) of the 126 captured exceeding quality length of six inches. Although not as abundant, 23 (68%) of the Rock Bass captured exceeded quality length of seven inches.

Table 2. Length (inches) and catch of Largemouth Bass at Glendale Lake during spring 2026 boat electrofishing survey.

Length (inches)	Catch	Length (inches)	Catch
3	1	12	9
4	5	13	26
5	5	14	21
6	14	15	8
7	54	16	9
8	40	17	2
9	22	18	2
10	10	19	1
11	15	20	1

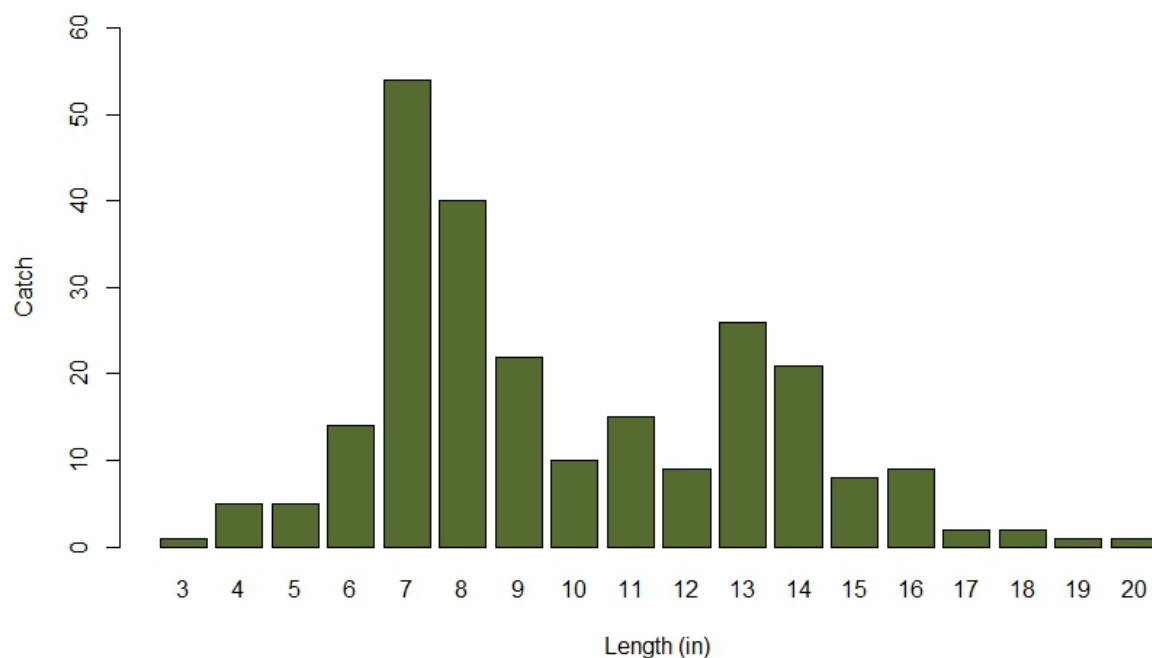


Figure 1. Length-frequency distribution of Largemouth Bass at Glendale Lake during spring 2026 boat electrofishing survey.

Discussion

Largemouth Bass at Glendale Lake are abundant with a considerable portion of the fish being of harvestable length. The future for the black bass fishery appears quite good as well with many juvenile fish recruiting to the catchable portion of the population by later summer or fall of this

year. Glendale Lake is one of the more popular lakes statewide for black bass tournaments and this may be due in part to the high abundance of legal-length fish in the population.

Bluegill and Pumpkinseed catch rates during our electrofishing survey were high; however, the size structure was not desirable. The catch rate of Black Crappie and Yellow Perch were both low during our electrofishing surveys and the low number of individuals prevented meaningful evaluation of the size structure. Nighttime boat electrofishing is not the preferred technique for surveying panfish populations in a lake setting but we opportunistically collected these fish to provide some preliminary data following angler concerns. A more directed effort using more appropriate timing and gear are planned either during the fall 2026 or spring 2027. This will more accurately characterize abundance and population characteristics of Bluegill, Pumpkinseed, Black Crappie, and Yellow Perch.

Gizzard Shad were abundant during our survey this spring which was in stark contrast to previous surveys. The larger bass may be benefiting from the recent unauthorized introduction of Gizzard Shad into the lake as many of the larger bass captured showed evidence of foraging on them. Unfortunately, Gizzard Shad introductions, like has occurred at Glendale Lake, typically negatively affect sunfish populations through competition. Future panfish-focused surveys should provide better insights into how these populations are coexisting.

Fisheries Management Warmwater Unit