PYRAMID STATE PARK – BOULDER LAKE



2023 FISHERIES STATUS SUMMARY

LOCATION: Pyramid State Park is located south of Pinckneyville in Perry County. To reach Boulder Lake, head west past the park office after entering Pyramid State Park

DESCRIPTION: Boulder Lake is a 40-acre strip mine lake that has existed since the 1950s. There is a concrete boat launch and dock at this lake. Water clarity is very high and submerged aquatic vegetation is dense throughout the lake.

STATUS OF THE SPORT FISHERY – The following is a summary of the major sport fish species based on fish population surveys conducted by the Illinois Department of Natural Resources. Fisheries surveys conducted during 2022 consisted of a nocturnal spring electrofishing survey and fall netting survey.

Largemouth Bass – The Largemouth Bass fishery in Boulder Lake is poor and contains very few larger fish. Out of 57 bass collected during the electrofishing survey, only one quality-size bass was collected, which was about 19 inches. All other bass in the sample were under 10.5 inches and demonstrated stunted growth and poor relative weight (plumpness). All 57 bass were retained for otolith extraction and aging; stunted growth was evident. In this case, poor bass growth is likely a consequence of extremely low fertility and dense aquatic vegetation. Intensive herbicide treatments and lake fertilization would likely be necessary to improve bass growth.

Bluegill and Redear Sunfish – Size structure and relative weights were also poor for Bluegill and Redear. None were over 8 inches and mean relative weights were poor at 81 (Bluegill) and 86 (Redear). Similar to bass, poor growth is likely a consequence of extremely low fertility and dense aquatic vegetation.

Black Crappie – Only one Black Crappie was collected in a gill net. However, crappie abundance is likely much higher than survey results would suggest. During the summer of 2020, multiple Black Crappie were collected in trap nets set to collect fish for contaminant analysis. However, trap net catches are notoriously inconsistent in strip mine lakes due to their unnatural bathymetry.

Channel Catfish – A small number of Channel Catfish were collected during the 2022 survey. Catfish ranged in size from 11-27 inches, the largest weighing nearly 6 lbs. Mean relative weight of fall-sampled catfish was decent at 88, although below the goal of 90. Given that Channel Catfish exhibit a moderate level of growth potential, non-vulnerable size catfish should be stocked annually to maintain adequate recruitment and maintain the fishery. Natural recruitment may not be adequate to maintain the population in such a small lake.

Fishing regulations:

Species	Creel Limit	Minimum Length Limit
Largemouth Bass	5 under 14" and 1 over 18"	14-18 inch protected slot (no possession)
Channel Catfish	6	None
All Fish	2 Pole and Line Fishing Only	

RECREATIONAL USE RESTRICTIONS—There are no boat motor restrictions at this lake but the entire lake is a "NO WAKE ZONE" and all sizes of boat motors must operate at no-wake speed.

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