

# Glade Run Lake

## Butler County

### Spring 2019 Trapnet Survey



*Repair of the dam and spillway at Glade Run Lake in 2016 is now complete and the Lake is recently refilled.*

Glade Run Lake is a 52-acre reservoir in south central Butler County. The lake is owned by the Commonwealth of Pennsylvania and managed by the Pennsylvania Fish and Boat Commission (PFBC) for recreational fishing and boating. One launch is available for boaters who may launch non-powered boats or boats powered by electric motors. Boats may be moored at the lake with a valid launch permit or registration. There is good access for shore fishing and fishing is permitted from the dam.

Glade Run Lake was drained in 2011 to facilitate repairs to the dam and spillway. Repairs were completed in late 2016 and the lake was refilled by early 2017. Upon filling, the lake was immediately returned to the hatchery trout stocking program. To re-establish the warmwater fish populations we have stocked the following species since 2017; Largemouth Bass (adults and fingerlings), Bluegill fingerlings, adult Spottail Shiners, adult Golden Shiners, adult Bluntnose Minnows, adult White Crappie, and Channel Catfish fingerlings and yearlings. More stockings are planned over the next several years.

Before refilling, we sampled the stream that fills Glade Run Lake and found the following species; Blacknose Dace, Bluntnose Minnows, Creek Chubs, Johnny Darters, Silverjaw Minnows, Spottail Shiners and White Suckers.

Fisheries Management Area 1 performed several days of trap netting in Glade Run Lake to monitor the development of the warmwater fishery. We were most interested in observing the levels of natural reproduction occurring in the lake. We set 2 trap nets April 9 – 11, 2019, totaling 93.0 hours of effort. Table 1 presents all species captured in 2019, the number captured and their respective size ranges (if measured).

**Table 1. Species and size ranges captured by trap nets in Glade Run Lake in 2019.**

Species	Number caught	Size range (inches)
Bluegill	249	3 - 6
Pumpkinseed	12	3 - 5
Channel Catfish	17	6 - 13
White Sucker	732	10 - 17
Golden Shiner	37	Not Measured
Spottail Shiner	1	Not Measured
Largemouth Bass	28	10 - 17
Smallmouth Bass	1	14
Hatchery Rainbow Trout	201	Not Measured

The first obvious development was how quickly the White Suckers living in Glade Run were able to reproduce in the newly refilled lake. A total of 732 were captured ranging from 10 to 17 inches. This is a positive development because they will make a substantial contribution to the forage base without the negative side effects of Common Carp, which would occupy the same niche in this small impoundment. We've made a concerted effort to keep Common Carp out of Glade Run Lake, and so far, we have been successful.



*White Sucker from Glade Run Lake*

Another sign of success is the Channel Catfish we captured. The PFBC stocked Glade Run Lake with Channel Catfish fingerlings in 2017 and with Channel Catfish yearlings in 2018. In addition, Channel Catfish fingerlings raised by the Butler Junior High School Cooperative Nursery were stocked in 2018. The Cooperative Nursery fish received an adipose fin clip to identify them in future surveys. From the size distribution of our sample and fin clips on several fish it appears that our trap nets captured Channel Catfish from all three stockings. Another 225 Channel Catfish fingerlings raised by the Cooperative Nurseries at Butler Middle School and Butler Junior High School were stocked in April 2019. It appears that the Cooperative Nursery can raise and stock enough Channel Catfish fingerlings in Glade Run Lake so that the PFBC can eliminate its stocking program there.



*Channel Catfish stocked by Butler Jr. High Cooperative Nursery. Fish were marked by clipping the adipose fin. You can see the adipose fin is missing on the fish in the picture.*

Our attempts at establishing a more diverse forage base were only partially successful. We stocked Glade Run Lake with adult Golden Shiners, adult Spottail Shiners and adult Bluntnose Minnows to create reproducing populations. Our trap nets captured 37 large Golden Shiners that should spawn and maintain a modest population of this native shiner. We captured only a single Spottail Shiner, which is disappointing because we captured large numbers of them during our first night electrofishing survey in 2018. We will likely make a second stocking of Spottail Shiners to try to establish a self-sustaining population. We also stocked Glade Run Lake with adult Bluntnose Minnows. Even at adult size, Bluntnose Minnows aren't captured by trap nets, so we will monitor their abundance during future night electrofishing.



*An adult Golden Shiner*

It appears that Bluegills and Pumpkinseeds (collectively Sunfish) are reproducing in the lake and no further stockings of these species are anticipated.

We captured several of the large White Crappies that were stocked in early April. These were large pre-spawn adults that should spawn in Glade Run Lake and establish the species in the lake. In addition, we have requested White Crappie fingerlings to be stocked in 2019 and will request more in 2020.

Although Pennsylvania style trap nets aren't considered an effective sampling gear for Largemouth Bass, we captured a relatively large number (28) of them in 2019. Most were between 250 and 300 mm (10 – 11 inches), which gives us no indication of natural reproduction. We will monitor the Largemouth Bass population with a night electrofishing survey, which is scheduled for fall 2019.



*The only big Largemouth Bass captured. Likely an adult transferred during the fish salvage at Lake Somerset.*

A single adult Smallmouth Bass indicates that someone other than the PFBC is putting fish in Glade Run Lake, which is discouraged.

***Fisheries Management Area 1***