



## SWIFT CREEK LAKE 2011

Located in the heart of Pocahontas State Park in Chesterfield County, this 107-acre impoundment of Swift Creek provides an aesthetic angling resource for central Virginia. Because it gets relatively low fishing pressure, it is typically an enjoyable place to fish. The reservoir is very narrow for its size. It is open for fishing from dawn to dusk, virtually year-round. The park rents canoes, kayaks, rowboats and paddleboats from Memorial Day through Labor Day at the Lake. There is a boat ramp where private boats may be launched, but only electric motors may be used. There is a 15-inch minimum size limit and 2-per-day creel limit on largemouth bass.

Because it is fed by a relatively large creek and the reservoir itself is "creek-like", large populations of non-game fish (particularly gizzard shad and common carp) have always competed with the game fish populations. "Undesirable" fish constantly invade the reservoir. Largemouth bass and sunfish populations gained a leg up on non-game species after being stocked immediately following a draining of the reservoir to repair the dam in 1992. Although the quality of these populations for angling had declined when the lake was sampled in 1999, sampling in 2005 indicated a moderate rebound in game fish populations and it appears that things have stabilized since that time.

The reservoir was sampled using trap nets in late-March and early-April and electrofishing in April and May. Game fish abundance was moderate and dominated by bluegill, black crappie, largemouth bass, and redear sunfish. A few chain pickerel and a fair number of yellow perch were observed as well. Unfortunately, many gizzard shad were collected and common carp were still common.

The stock of largemouth bass between 8 and 12 inches had increased markedly since 2005, indicating good recruitment during recent years. Other than that, the abundance of the population was very similar to what it was in 2005. On a relative basis, this lake has an average density of bass. One disturbing sign was that bass weren't nearly as plump in 2010. Because adult bass abundance apparently hasn't changed much, it seems logical to assume that some significant change in food supply has occurred in recent years, possibly due to the summer droughts that have occurred. We recommend maintaining the 15-inch minimum size limit and the two per day creel limit on largemouth bass.

Overall, bluegill stock abundance had dropped about 33% since 2005. But, the size composition of the population remained virtually unchanged. Only three fish exceeded 6 inches in length. Thus, this is a poor resource for sunfish anglers.

Overall, based on the electrofishing sample, black crappie abundance hadn't changed much since 2005. However, the size-structure had shifted towards a much higher proportion of fish over 8 inches. Unfortunately, most of that shift occurred in the 8-10-inch range. Fish longer than 10 inches had dropped in abundance. Results from the trap net samples were similar, except that more large fish were collected (11 fish from 12-16 inches). This population is dominated by 7-10-inch fish. With the exception of the 11 fish that exceeded 12 inches, growth virtually stopped after age 6. Fish up to 16 years old were collected, but a high percentage of those that exceeded 8 years of age were only 8-10 inches long. Crappie were very thin on average. The slow growth and low body weights indicate over-abundance. Anglers should be encouraged to harvest all crappie less than 12 inches to reduce competition for food and improve growth.

Redear sunfish abundance almost doubled since 2005, but was still relatively low for a sunfish species. The size composition remained essentially the same as in 2005. None over 8 inches were collected.

As in 2005, a fair number of yellow perch were collected. But, none exceeded 8 inches, so they're not an important part of the fishery and that's unlikely to change.

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