



Leesville Lake 2019 Management Report



Leesville Lake is a 3,400-acre impoundment located near Altavista, Virginia. This reservoir straddles the Pittsylvania and Bedford County border. Leesville Reservoir is owned by American Electric Power and is managed primarily for hydroelectric power generation and to pump back stored water to Smith Mountain Lake for additional hydroelectric power generation. There is limited development along the shoreline, but residential development is increasing. Facilities are limited primarily to two Marinas, two public boat launching facilities, and two day use areas near the Leesville and Smith Mountain Lake dams.

This reservoir experiences major water level fluctuations of 1 to 10 feet per day. Dramatic water fluctuations are a result of power generation and pump back storage for Smith Mountain Lake. The headwaters of Leesville Lake is a very harsh environment for most fish species due to the cold water temperatures, fast water currents, and poor forage. Consequently, fishing is generally poor from Smith Mountain dam to mile marker 6. While most fishing should be concentrated downstream of mile marker 6, there are seasonal movements into the upper reaches for some species such as striped bass and walleye during spawning and summer refuge periods.

Largemouth bass are the most sought after species by anglers at Leesville Lake. Smallmouth bass are also present at Leesville Lake but do not contribute significantly to the black bass fishery due to their very low abundance. According to Department of Game and Inland Fisheries (DGIF) electrofishing samples, largemouth bass densities in the lower half of this reservoir rival nearby Smith Mountain Lake and Philpott Reservoir. The highest numbers of bass are found from Leesville dam to approximately mile marker 6. Most fish are between 13 and 16 inches but there is a fair number of fish up to 21 inches.

Leesville Lake is stocked with additional predators - striped bass and walleye. The stocking of striped bass and walleye is a way to utilize available open water forage (shad) and provide additional angling opportunities for predator species that do not reproduce successfully or have very poor reproduction.

The current state record striped bass was caught from Leesville Reservoir in 2000. This reservoir has historically supported a fair striped bass population that has fluctuated in both numbers and sizes due to variable recruitment. However, the current population is good due to a record year class in 2010. These 9 year old fish averaged 34 inches and 15 pounds in the fall of 2018. The striped bass population has been declining in numbers due to limited recruitment since 2010. The 2017 year class was very good, so there are strong numbers of smaller fish entering the fishery and will average 20 inches in 2019. Striped bass occasionally utilize the cooler water in the upper reaches of the reservoir during the summer months for thermal refuge. However, forage is very limited in this area of the reservoir and most striped bass move downstream to utilize additional forage when water temperatures are cooler in the fall through early summer.

Leesville Lake has historically produced a marginal walleye population with occasional fish up to seven or eight pounds. The walleye population has fluctuated but remained fairly low in comparison to other Virginia walleye waters, due to limited stockings and loss of fish through the Leesville dam. Experimental saugeye stockings were initiated in 2013 and produced better survival in 2013-2015 than any of the previous walleye stockings. Consequently, the walleye (walleye and saugeye) numbers were higher in 2017 than ever before and decreased slightly in 2018. These data indicate walleye fishing has improved and will continue to be good in the near future. However, recent stockings have been walleye only, and the population is beginning to decline due to lower stocking success from the walleye and the continued loss of saugeye through the dam and into the Staunton River. Saugeye are a cross between walleye and sauger but look almost identical to walleye in both appearance and behavior. The best concentrations of walleye are between mile marker 7 and Leesville Dam. Walleye fishing in mountain reservoirs is typically challenging and successful walleye anglers spend considerable time with specialized gear pursuing this species in order to be consistently successful. Walleye are predominantly nocturnal feeders so daytime anglers must be very patient and deliberate in their fishing techniques. There is no or very limited natural reproduction of walleye so the population is sustained with stocking.

White bass at Leesville Reservoir have historically produced a good fishery. However, the increasing white perch population in the last 15 years has nearly eliminated the white bass population to the extent there are very few, if any, white bass remaining. White bass populations across the state have failed after white perch are established. Although white perch are not as desirable as white bass because of their smaller size and slow growth, they have produced a good fishery due to the high numbers and catch rates.

Catfish are abundant at this reservoir with the most common species being channel and white catfish. There are limited numbers of blue and flathead catfish available but these species make up a smaller portion of the catfish population.

Additional species of interest include black crappie, yellow perch, bluegill, and redbreast sunfish. The crappie fishery is fair, the best crappie fishing months are April through August and the average size harvested is 10 inches. Leesville Lake has traditionally been one of the few good yellow perch fisheries in Virginia but has recently declined to very low numbers but there are still decent numbers in the upper end near the Smith Mountain Lake dam. Sunfish species are abundant but sizes are generally small.

There are two public ramps and two marinas at Leesville Lake. The public ramps are located near the Leesville dam and in the upper end of the reservoir (both in Pittsylvania County). The only amenities available at these access sites are the boat ramp, associated parking, and toilet facilities. The two private marinas have recently had ownership changes and may or may not be open. American Electric Power seasonally maintains two public picnic facilities, one near each dam. Car-only access for the one just below the Smith Mountain Lake dam and by water or land for the other, next the Leesville dam public ramp.

Leesville Lake can be a pleasant change from most busy reservoirs especially if you are looking for less competition with other anglers and boaters. Keep in mind,

frequent water level fluctuations can make patterning fish more difficult. Boaters also need to watch for floating debris that is a routine occurrence on this reservoir.

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