

Mammoth Lake

Westmoreland County

April 2019 Trap Net and Night Electrofishing Survey

Mammoth Lake is a 25-acre impoundment located within Mammoth Park in Mount Pleasant Township, Westmoreland County. The lake is owned and operated by Westmoreland County and is managed for fishing by the Pennsylvania Fish and Boat Commission. The lake is easily accessible from two public entrance points. Recreational canoeing and kayaking are permitted from May 1 to October 31. Only non-motorized kayak and canoes up to 16 feet in length are permitted and must be appropriately registered. Mammoth Lake offers year-round fishing, including ice fishing along with handicap docks for access use.

With an average depth of about 3 feet, the lake has faced sedimentation problems, circumstance that lead to an abundance of summer aquatic vegetation. Coldwater fishing opportunities are afforded through seasonal stockings of rainbow and golden rainbow trout. Previous surveys were conducted in 1997 and 2010. The 1997 survey revealed the lake contained an abundant population of Bluegill and White Crappie, along with a moderate Brown Bullhead population. A dense population of Largemouth Bass was also present, but the number of legal-size bass made up only a small percentage of the total. For this reason, [Big Bass Regulations](#) were applied at Mammoth Lake in 1999.

Our 2010 assessment trap net catch rates were very low, which was likely due to an abundance of aquatic vegetation. Presence of large amounts of aquatic vegetation are known to reduce the effectiveness of fish captures in trap nets. Based on a 2010, night electrofishing survey, the Largemouth Bass population was dense with numerous quality-sized fish present.

Fisheries staff from the Area 8 Fisheries Management Office in Somerset, PA surveyed the lake in April 2019 using trap nets to assess the panfish population and night electrofishing to assess the Largemouth Bass population. A total of 12 species were captured in trap nets with Bluegill and Black Crappie being the two most abundant species (Table 1).

Table 1. Length and frequency distribution of sampled fish.

Species	Number caught	Size range (inches)	Notes
Black Crappie	187	4 – 11 inches	20% over 9 inches
White Crappie	70	7 – 15 inches	89% over 9 inches
Bluegill	551	2 – 7 inches	1% over 7 inches
Pumpkinseed	11	3 – 7 inches	18% of 7 inches
Largemouth Bass	2	4 and 23 inches	
Yellow Perch	5	7 - 11 inches	
Brown Bullhead	25	10 – 15 inches	
Yellow Bullhead	35	6 – 11 inches	
Common Carp	3	Not Measured	
Golden Shiner	13	Not Measured	
White Sucker	35	Not Measured	
Rainbow Trout	65	Not Measured	

The amount of aquatic vegetation during the April 2019 survey was limited, thus the 2019 trap net survey was more effective at capturing fish than the 2010 survey. Bluegill were the most abundant species. Bluegill catch rates in 2019 well surpassed the 2010 survey and were even better than the 1997 survey (Figure 1). The bulk of the Bluegill catch were comprised of fish just shy of 6 inches. Total catch rates of Black Crappie and White Crappie combined were undoubtedly much higher than the previous survey and just below the 1997 survey (Figure 2). The abundance of White Crappie was much lower than Black Crappie in 2019. However, the majority of the White Crappie were over 9 inches. Catch rate of quality-sized crappie (fish > 9 inches) was highest in 2019. Our trap nets also managed to catch the largest Largemouth Bass (23 inches) during our 2019 Mammoth Lake survey. Largemouth bass do not typically end up in the nets, therefore we conduct night electrofishing to assess their abundance.

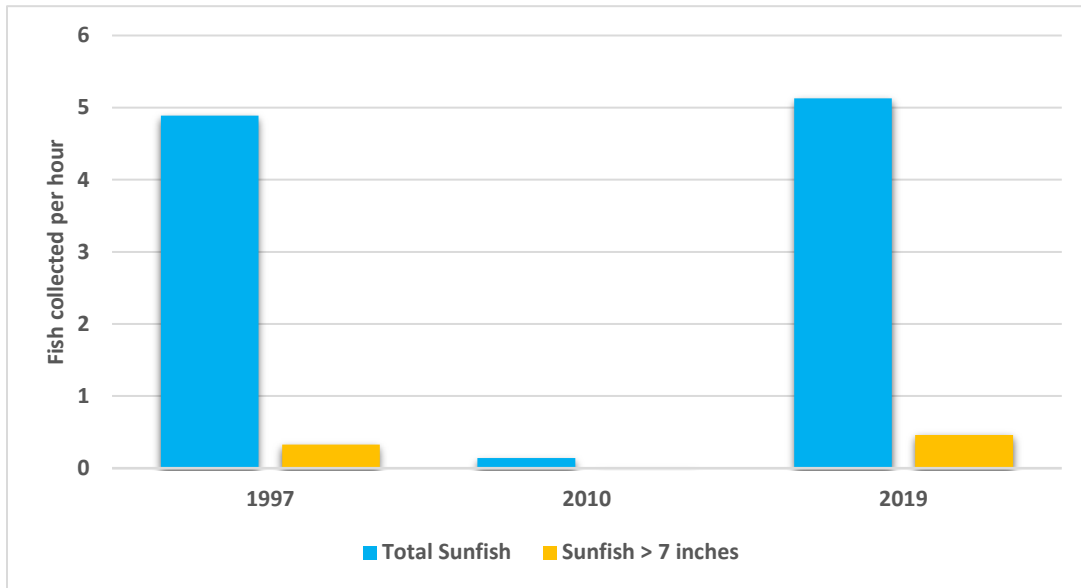


Figure 1. Trap net catch rates of Bluegill and Pumpkinseed at Mammoth Lake.



Nice sized White Crappie captured trap netting at Mammoth Lake.

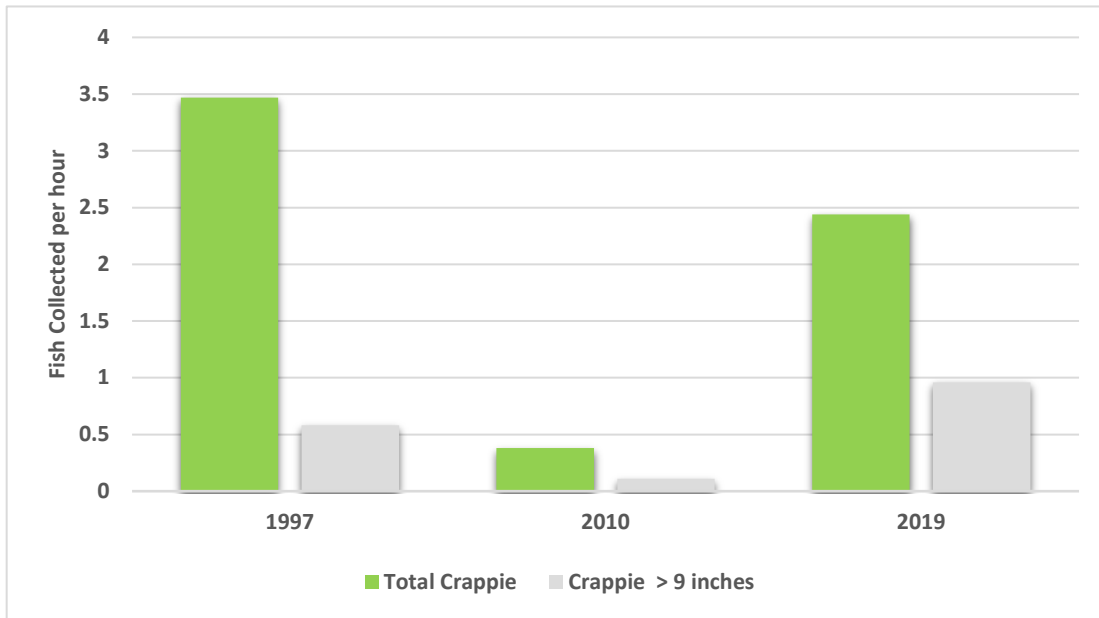


Figure 2. Trap net catch rates of Crappie spp. (Black Crappie and White Crappie) at Mammoth Lake.

Night electrofishing for 43 minutes yielded 192 Largemouth Bass ranging in size from 4 to 22 inches, with most of the fish being 9 to 11 inches (Table 2). The largest bass captured in the previous 2010 survey was 17 inches. The 2019 survey yielded ten Largemouth Bass over 20 inches! From the 1997 survey, only 6% of the Largemouth Bass caught were 12 inches or greater, and none reached 15 inches (Figure 3). In the 2010 survey, 79% of the catch was over 12 inches, and 15% were over 15 inches. In the 2019 survey, 32% of the catch was over 12 inches, and 12% were over 15 inches, suggesting the Big Bass regulations have been successful at improving the size structure of bass at Mammoth Lake.

Table 2. Length and frequency distribution of Largemouth Bass from night electrofishing.

Species	Number caught	Size range (inches)	Notes
Largemouth Bass	192	4 – 22 inches	32% over 12 inches 12% over 15 inches

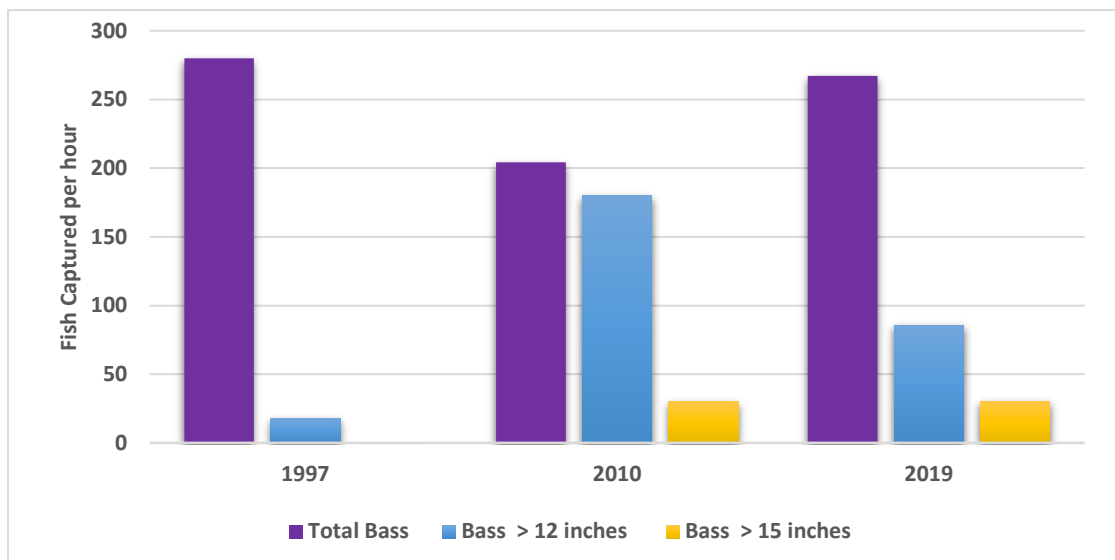


Figure 3. Night electrofishing catch rates of Largemouth Bass at Mammoth Lake.



A pair of big Largemouth Bass from night electrofishing at Mammoth Lake.



Largemouth Bass captured in a trap net at Mammoth Lake (23 inches, 10lbs).

Our 2019 survey indicated that Mammoth Lake provides good fishing opportunities for a variety of fish species. Mammoth Lake has an abundance of quality-sized crappie species and Largemouth Bass. Bluegill are very abundant at the lake, but quality-size Bluegill were present in low numbers. Stocked trout provide good fishing opportunities in the cooler months.

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