



Lake Burton 2007



Lake Burton is a 76-acre impoundment located in Pittsylvania County, Virginia. This reservoir is owned by the Virginia Department of Game and Inland Fisheries and is managed primarily for fisheries related activities. The only facilities available at this reservoir are a boat ramp and associated parking. Bank fishing is allowed and there is a narrow strip of land that extends around the entire shoreline that can be utilized by bank anglers. The lake is open to fishing 24 hours a day. Outboard motors are prohibited but electric motor use is permitted.

The reservoir was impounded in 1950 and was stocked with various species of sportfish such as largemouth bass, bluegill, and catfish. Lake Burton is an impoundment of Tomahawk Creek and contains a number of fish species that were not originally stocked. These species either were in Tomahawk Creek prior to impoundment or were stocked by anglers. Carp, suckers, and gizzard shad have dominated the fish population. Small impoundments such as Lake Burton typically do not benefit from these species because they cause the sport fish populations to become unbalanced. Carp and suckers tend to keep water muddy while gizzard shad contribute to stunted sunfish populations.

Largemouth bass abundance is low due to poor recruitment. The abundance of crappie, bluegill, carp, and suckers may be preventing adequate spawning success or fish survival of young largemouth bass. However the surviving largemouth bass are growing well from the abundance of forage. The average size of adult bass in 2006 was 14½ inches and the largest was approximately 8 pounds. These fish reach 17 inches at age 5. Largemouth bass were most abundant between the boat ramp and the dam where water depths are generally more favorable.

Lake Burton is regulated with a 'trophy' largemouth bass regulation. A new regulation for largemouth bass was initiated in February of 2007. The new regulations prohibit creeling any size largemouth bass. This regulation replaces the recent 22 inch minimum size limit that was initiated in 2006. The new regulation is an attempt to create a trophy bass lake by protecting the limited number of fast growing largemouth bass in the population. Recent increasing angler pressure and the sudden reduction in 22 inch largemouth bass were the primary reasons for the latest regulation change. Lake Burton has been stocked for several years with Florida x Northern strain of largemouth bass on an experimental basis since reproduction has been very poor for many years. Eliminating the harvest of largemouth bass is necessary to maintain this trophy fishery.

The population estimate for largemouth bass 15 inches or larger is only 146 fish for the entire lake. Estimates for largemouth 20 inches or larger is only 24 fish and 9 fish 21 inches or larger. There were four 22 inch bass collected in 2005 and only one in 2006. If anglers harvest even a small number of big fish from this reservoir it could easily prohibit this reservoir from ever achieving its potential.

White crappie are the dominant crappie species at Lake Burton. White crappie prefer turbid water for optimum reproduction and will usually outnumber black crappie in turbid lakes. Crappie in this lake are abundant but grow very poorly. For good growth, crappie must convert primarily to a fish diet by the time they reach 6-7 inches. Since these fish appear to be overabundant, their growth stops when they reach seven inches. It is very common for crappie to be overabundant and stop growing at this size. When this happens they do not die from lack of food, they just stop growing. There were only 2 crappie collected over 8 inches in the 2001 sample. Only a few black crappie were collected and the largest was 7 inches.

Bluegill are also very abundant. The overabundant bluegill population is likely a result of reduced predation from the lack of largemouth bass and the abundance of other small fish and gizzard shad. Adequate predation from largemouth bass is needed to maintain healthy sunfish populations. In addition, gizzard shad and carp can compete directly for the same forage as bluegill. Most bluegill at Lake Burton do not exceed 6 inches.

Turbid water and an abundance of undesirable fish species have resulted in an unbalanced fishery. The only highlight to this fishery is the size of the largemouth bass. However, these fish are not abundant and may be hard to catch due to the large quantity of forage.

This reservoir is located west of Chatham and can be accessed by taking one of two routes. From Rt. 40 turn left onto Rt. 799 then turn right onto 649 at Climax then turn then turn left onto Rt. 750 and then turn right onto Rt. 800 and the lake entrance will be on your left. Coming in on Rt. 57 from Climax turn right onto Rt. 750 and then turn left onto Rt. 800 and the lake entrance will be on your left.

	# of Tagged F1LMB	# of Untagged (Wild) Bass	F1LMB Length	Natural Length	F1LMB Weight	Wild Weight	% YOY F1LMB in Population
Fall 2004	13	147	126 mm	83 mm	22 g	6 g	8%
Spring 2005	10	29	158 mm	96 mm			25%
Fall 2005	18	112	132 mm	96 mm			14%
Spring 2006	5	38	159 mm	119 mm			12%

Table 1. Data collected from stocked and wild YOY largemouth bass collected at Lake Burton, 2004-2006.

Year	N	CPUE	Young (0-19)	Stock (20-29)	Quality (30-37)	Preferred (38-50)	Memorable (>50)	PSD	RSDp	RSDm
*2006	195	**64	49	34	35	67	10	77	53	6.8
2005	145	86	51	13	38	29	14	86	46	14.9
2004	58	49	5	19	14	18	2	64	38	3.8
2001	75	51	11	15	18	30	1	76	47	1.6
1997	29	14	0	8	5	12	4	72	55	13.4
1993	33	18	1	9	12	9	2	72	34	6.3

* data was combination of two dates but recaps were not counted

** CPUE was figured as the total captured for both days / total time for both days

Table 2. Largemouth bass proportional and relative stock indices and CPUE (hr) data collected from electrofishing samples at Lake Burton, 1993-2006.

Size Group	2006 Population Estimate
≥ 12"	224
≥ 15"	146
≥ 18"	47
≥ 20"	24
≥ 21"	9
≥ 22"	NA

Table 3. Lake Burton population estimate during the spring of 2006. The estimate was generated utilizing the Peterson Mark Recapture Method.

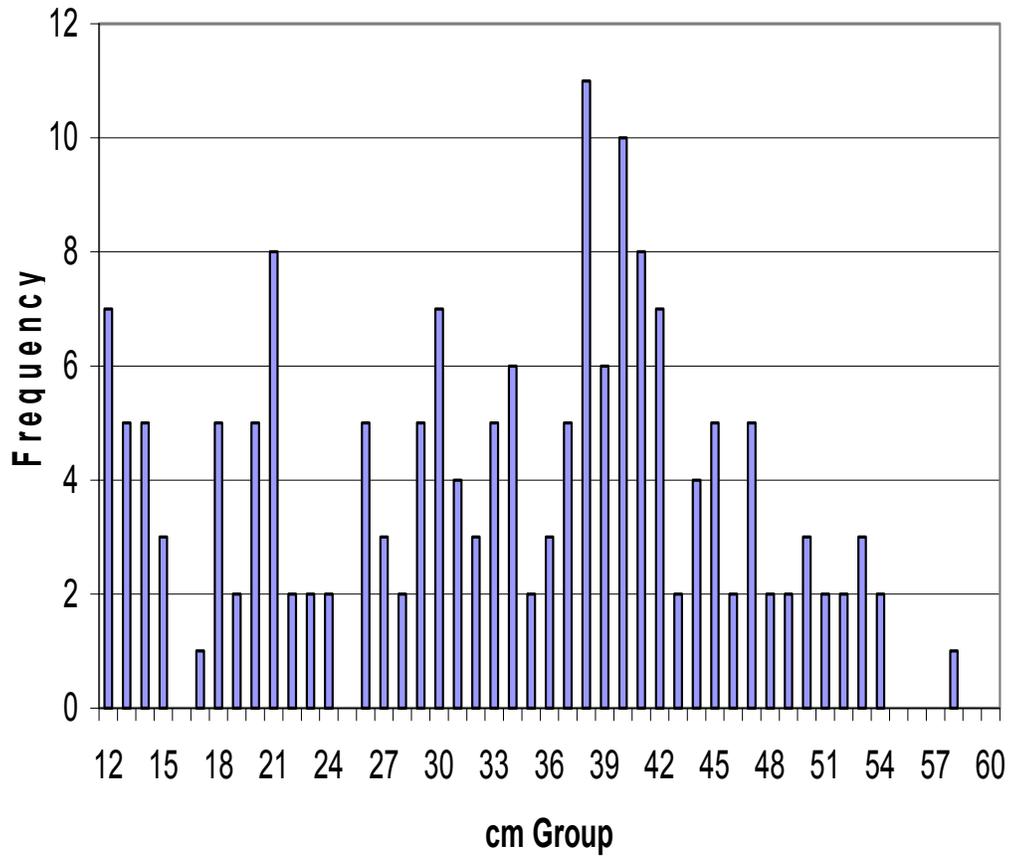


Figure 1. Length frequency distribution for largemouth bass collected with electrofishing gear at Lake Burton on 4/24/06 and 5/22/06.