



Burke Lake 2011

Burke Lake is a 218-acre Department owned fishing lake located in southern Fairfax County within the boundaries of Burke Lake Park. The Department of Game and Inland Fisheries owns Burke Lake, but the surrounding 650-acre park is owned and operated by the Fairfax County Park Authority. The close proximity of this lake to Washington, D.C. contributes to it being one of the most heavily fished small impoundments in Virginia. Burke Lake offers anglers a typical warmwater fishery comprised of largemouth bass, bluegill, redear sunfish, black crappie, and channel catfish. In addition, walleye and muskellunge have been stocked annually for decades. Walleye have done well in this small impoundment and offer anglers a unique opportunity to catch a traditionally northern species. Muskellunge survival and growth has been very good at Burke Lake over the years which resulted in this site serving as the brood stock collection point for DGIF's musky program until 1999. Muskellunge numbers have been depressed over the last few years, prompting DGIF biologists to look for an explanation to this phenomenon.

DGIF fisheries biologists sample the fishery approximately every two to three years. Most recently, an electrofishing sample was conducted in May of 2010. Biologists employ numerical descriptors of length-frequency data such as Proportional Stock Density (PSD) and Relative Stock Density (RSD) when evaluating fish populations. Proportional Stock Density is calculated by dividing the number of fish \geq minimum quality length by the number of fish \geq minimum stock length \times 100. Quality length is defined as the minimum size of fish most anglers like to catch. Stock length is the minimum length at which a fish provides recreational value. Relative Stock Density (RSD) is simply the percentage of any designated length group found within a population. RSD is calculated by dividing the number of fish \geq specified length by the number of fish \geq minimum stock length \times 100.

The population structure of largemouth bass remained similar to findings in 2006, with Proportional Stock Density (PSD) values slightly decreasing (PSD 69) over the previous sample (PSD 72). Relative Stock Density of "Preferred" fish (RSD-P) greater than 15" decreased to 50 in 2010 but remained similar to the RSD-P value from 2006 (55). Catch per unit effort (CPUE) of largemouth bass increased to 143 fish/hour. Angler success should remain very good at Burke Lake with good numbers of bass larger than 15" available.

Bass fishing can be very good at Burke, but anglers must keep in mind that forage is plentiful, and as a result, fishing can be tough at times. Burke Lake has consistently ranked at or near the top of the list of 20 impoundments in Region V District 2 for Catch – Per – Effort of "preferred" bass (>15") collected during routine electrofishing samples. Currently, Burke is ranked third in the district for CPE-P.

Bluegill PSD values were 64, which is indicative of a slightly out of balanced population (balance 20-60). Both yellow and white perch fisheries were comprised of individuals generally less than 9". Panfish fisheries are typically considered "balanced" when PSD values fall in the range of 20 – 60. Ample opportunities exist for anglers to target panfish during the spring/summer when these fish tend to move in shallow shoreline areas that are easily accessible by anglers fishing either from the bank or a boat. Anglers just need to be mindful that most fish caught will be less than 8 inches. Natural baits such as worms or crickets tend to work best.

Black crappies generally are considered an undesirable species in small impoundments due to their ability to quickly overpopulate and stunt. Burke Lake is large enough that stunting is not as much of an issue, but large numbers of small crappies (<8") still dominate the population. Anglers are encouraged to fish for and harvest any crappie caught up to the 25-fish/day creel limit. Crappies are readily available lake-wide during the spring – early summer months, and some larger fish are available up to 14 inches. Anglers should concentrate on fishing structure-whether it is a natural downed tree or a marked fish attractor. Numerous fish attractors are located around the lake, which are marked with buoys for easy identification. Small jigs or minnows seem to work best on this prolific panfish.

Channel catfish are another popular fish species available to anglers. DGIF annually stocks channel catfish at a rate of 10 fish/acre to maintain a quality fishery. Muskellunge, more commonly referred to as "musky", are the top predators in this impoundment. Muskies are normally stocked annually at a rate of 2 fish/acre. The success of the musky introductions is evident during cursory fishery evaluations that produce fish pushing 30 pounds. Walleye are the only other species stocked annually (50 fish/acre). Muskellunge, walleye, and channel catfish generally do not successfully reproduce in small impoundments and are stocked on an annual basis to provide additional fishing opportunities. Channel catfish can be caught by a variety of methods, but chicken livers, commercial catfish baits, or minnows seem most effective. Walleye and musky on the other hand can be difficult to catch since they are not as susceptible to techniques tried and tested in the northern and midwestern U.S. Most successful anglers in pursuit of these tenacious predators utilize a combination of techniques that may include trolling or casting of both soft plastic baits and diving lures in an assortment of sizes. Musky fishermen generally adhere to the "bigger is better" rule for lure selection, while anglers in pursuit of walleye may opt for smaller lures. Walleye anglers should be aware of the statewide minimum 18" size limit.

General regulations are posted at the parking area at Burke Lake and on the DGIF website (www.dgif.virginia.gov). Fishing is permitted 24 hours a day, and a boat ramp is available for anglers to use free of charge. In addition to boat access, there is ample shoreline for bank anglers and a public fishing pier. Fairfax County Parks and Recreation operates a concession at the lake (open March – October) which offers boat rentals, live bait, fishing tackle, and snacks along with their own boat launch.

To get to Burke Lake: I-95 - take 123 West at Woodbridge. Burke Park will be on the right just before Burke Lake Road.

For more information about Lake Brittle, please contact:

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Or

Burke Lake Park

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