# LAKE FREDERICK

## **OVERVIEW**

Lake Frederick is a 117-acre impoundment owned by the Virginia Department of Game and Inland Fisheries. The department acquired the lake and a fifty foot buffer around the entire shoreline in 1981. Lake Frederick remains clear throughout the year and stratifies forming a thermocline during the summer months. The lake has a maximum depth of 50 feet and an average depth of 20 feet. Much of the shoreline and the upper ends of the two embayments contain standing submerged timber. Typically, the standing timber is located along the shoreline out to around twenty-five feet from the water's edge.

There is adequate bank fishing access along the breast of the dam and around the lower end of the lake. Boat anglers are welcome, but gasoline motors are prohibited. Only electric trolling motors are allowed.

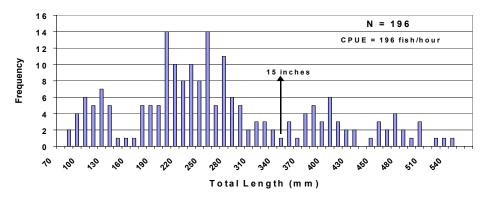
Some of the fish species that anglers might encounter while fishing Lake Frederick include: largemouth bass, bluegill, redear sunfish, black crappie, channel catfish, walleye, and northern pike. VDGIF annually stocks channel catfish, walleye and northern pike. The rest of the fish species in Lake Frederick reproduce naturally.

## **FISHING**

#### Largemouth Bass

The largemouth bass population is excellent with many fish in the 2-4 pound range available to anglers. Lake Frederick has historically produced the best quality largemouth bass fishery in the Shenandoah Valley. Anglers have wrestled largemouths up to 10 pounds from the lake in recent years. Some of these trophy bass have also been released back to fight another day. Electrofishing sampling in spring 2001 produced excellent densities of bass. Reproduction appears to be very stable, and good numbers of bass 12-18" representing the bulk of the fishery (see graph below). Compared to bass from more southern latitudes, largemouth in Lake Frederick exhibit slow growth rates. It takes around 6 growing seasons for a bass to reach 14" in Lake Frederick. The primary forage for largemouth bass are numerous small bluegill and black crappie. The fact that Frederick produces bass up to 10 lbs is proof that a pelagic forage species need not be present to grow large fish. The clear water of Lake Frederick often makes it difficult to catch bass. Bass often become suspended in the submerged standing timber that surrounds much of the shoreline. Anglers need to fish different depths until they locate fish. Night fishing during the summer months can also be productive. Some of the largest bass are caught during the pre-spawn in the months of March and April.

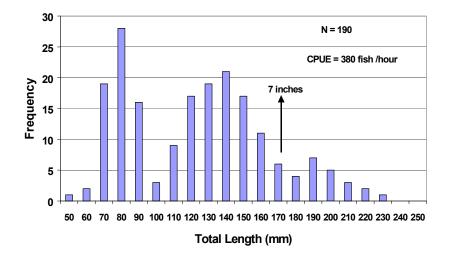




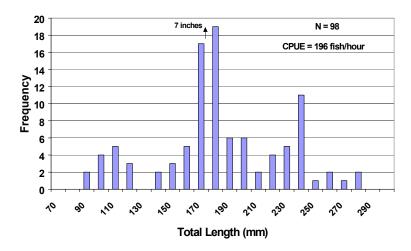
# Bluegill/Redear Sunfish

The quality largemouth bass population is beneficial to the sunfish population. By preying upon small sunfish and keeping their numbers low, bass help to produce "hand-sized" bluegill and redear sunfish. Spring 2001 sampling revealed an excellent population of these two sunfish species (see graphs below). If you are looking to catch a "citation" sized sunfish then head to Lake Frederick. It is the only lake in the region that produces good numbers of large sunfish. Anglers have been successful using live bait such as crickets and red worms to catch these "whopper" panfish.

# Lake Frederick Bluegill Spring 2002 Electrofishing Sample



# Lake Frederick Redear Sunfish Spring 2002 Electrofishing Sample



## Crappie

We have not done any specific sampling targeting crappie in recent years, but the population appears to be healthy. Crappie numbers are stable and fish of harvestable size (8-10") are available to anglers. Anglers should focus on the breast of the dam and around the fishing pier in the spring when water temperatures reach the mid 50's. Live minnows and small jigs should be the best baits.

## Catfish

Channel catfish fingerlings are stocked annually be the Department. Some bruisers up to 30lbs have been taken from Lake Frederick in recent years. Catfish anglers should use cut bait, nightcrawlers, or commercial catfish baits to entice these "whisker fish".

# Walleye

Department biologists conducted a walleye research project at Lake Frederick in the late 1990's. The goal of the project was to determine the size of the walleye population and to learn the habitat preferences of walleye in Lake Frederick. We discovered that the walleye population was not as large as we originally thought. Walleye do not naturally reproduce in Lake Frederick so the department must stock each year. To increase the walleye population, in 1999 we increased the number of walleye being stocked each May. It will be a few more years before we can evaluate the success of the stocking increase. Several walleye were implanted with radio transmitters to document movements and habitat preferences. We were able to determine what depths walleye occupied throughout the different seasons. We also mapped the areas of the lake that walleye frequented during different seasons. Detailed results of the walleye study can be found in the June 2001 issue of Virginia Wildlife magazine, or by contacting the Region IV DGIF office at 540-248-9360.

Lake Frederick contains a fair number of walleye and fish up to 9 lbs have been sampled by biologists. Most of the walleye caught by anglers range from 2-3 lbs. In early spring when the lake temperature reaches the mid 40's walleye move into the shallows attempting to spawn. One of the best places to catch walleye at this time of year is along the "rip-rap" on the breast of the dam. Other times of the year walleye can be associated with structure or suspended in open water. Look for walleye to be in the coolest water

with the highest concentration of dissolved oxygen during the summer months. Unlike warmwater fish species that slow down in the winter, walleye actively feed throughout the winter months. Fishing slow and deep is the key to catching walleye in the winter. Walleye are very light sensitive and like to feed in low light conditions. Anglers should fish for walleye after dark or during the dawn and dusk period. A dim cloudy day can also be a good time to go after walleye at Lake Frederick. Walleye can be caught on all kinds of live and artificial baits. A combination of a artificial lure trailed with a minnow or night crawler works well.

# **REGULATIONS**

## Largemouth bass

No bass between 12-18 inches can be harvested. The creel limit is five bass per day where only one bass longer than 18 inches may be harvested.

## Sunfish

There is no size limit on sunfish. Anglers can keep 50 sunfish per day (all species in aggregate).

## Crappie

There is no size limit on crappie. Anglers can keep 25 crappie per day.

## Walleye

There is no minimum size on walleye. Anglers can keep 8 walleye per day.

#### Catfish

There is no minimum size on catfish. Anglers can keep 20 catfish per day.

## Northern pike

There is a 20 inch minimum size limit on northern pike. Anglers can only harvest northern pike that are longer than 20 inches. Only 2 northern pike can be harvested per day.

# **General**

Gasoline motors, swimming, ice skating, hunting, trapping, camping, organized fishing tournaments, and alcoholic beverages are prohibited. Fishing is permitted 24-hours a day unless otherwise posted. All other activities shall be conducted only during daylight hours. Fishing regulations shall conform to general statewide regulations unless otherwise posted.

# **FACILITIES**

Lake Frederick has a paved entrance road, gravel parking lot, paved boat launch w/ courtesy dock, and a handicapped accessible fishing pier. A privately operated concessions, "The Minnow Bucket", offers rest room facilities, snacks/drinks, bait, tackle, and boat rentals. Contact The Minnow Bucket at 540-869-1104 for store hours and lake conditions.

## MORE INFORMATION

For more information on Lake Frederick, please contact:

Virginia Department of Game and Inland Fisheries 127 Lee Highway P.O. Box 996 Verona, VA 24482 (540) 248-9360

For more information on Frederick County, please contact:

Frederick County Chamber of Commerce (540) 662-4118