



Occoquan Reservoir Report

Fisheries Management Report

2013

Occoquan Reservoir is a 2,100 acre water supply impoundment that forms the boundary between Fairfax and Prince William counties. The Fairfax County Water Authority operates the reservoir which serves the residents of Fairfax and the City of Alexandria. Three developed marinas on the reservoir provide rental boats, bait, tackle, snacks, and a boat launching facilities.

DGIF fisheries biologists sample the fishery approximately every 3-5 years. Most recently, an electrofishing sample was conducted in May 2012. 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 x 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 x 100.

Largemouth bass are the number one species pursued by anglers visiting Occoquan Reservoir. Electrofishing in May of 2012 yielded 106 bass/hr of sampling. Catch rates in 2012 were almost triple the 39 fish/hr collected in 2007, however; Occoquan Reservoir still ranked first in the district during 2007 for catch of "Preferred" size bass. Occoquan Reservoir's largemouth bass population in 2012 ranked third out of 20 impoundments managed in the district for Catch Per Effort (CPE) of preferred fish (greater than 15 inches) and is a top destination for anglers in Northern Virginia. Currently, the size structure of the population is excellent (PSD 71, RSD-P 48) with bass

available in all size classes up to 21 inches. Occoquan Reservoir has consistently ranked as one of the top resources in Northern Virginia for over a decade. Fisheries data has remained for the most part consistent over the years and anglers should expect good numbers of fish in the 4-6 pound range, with an occasional larger fish. A combination of heavy fishing pressure, excellent habitat, and an abundance of forage may make it more difficult to consistently catch the larger fish, however; patience is the key and anglers willing to try different techniques and lures to match the prevailing conditions should find success.

Occoquan Reservoir has a crappie population with excellent size structure (PSD 62, RSD-P 23) offering anglers the opportunity to catch crappie as large as 17 inches. Most impoundments in Virginia contain black crappie, however; Occoquan Reservoir is unique in that white crappie are also present. This is the only impoundment in the district where white crappie are found. White crappie typically run larger than black crappie and the two species can be easily distinguished by counting dorsal spines. Black crappie generally have 7-8 dorsal spines, whereas; white crappie have 5-6 dorsal spines. Anglers consistently catch fish around boat docks, fish attractors, or brush piles utilizing a variety of methods ranging from small jigs, spinners, or flies fished with ultra light spinning gear or more traditional tactics such as fishing small minnows with a cane pole and bobber. Remember that crappies are a schooling fish, and once a fish is caught it is likely that several more will be caught in close proximity.

The size structure of bluegill has decreased considerably since the early 1990's, with few bluegills found in the 5-7 inch range. Bluegill catch rates are high at 141 fish/hr, but size structure remains poor (PSD 17, RSD-P 0) and is consistent with a large robust largemouth bass population. Bream fishing does not have to be complicated. Anglers may use live bait such as worms or crickets with hopes of enticing a strike. Some anglers prefer to use ultra light spinning gear or fly fishing gear to present small lures or flies. Pound for pound, there's not a fish that fights any harder than a scrappy bluegill. Bream are easy to catch which makes them ideal for introducing young children to the sport of fishing.

Occoquan provides a good channel catfish fishery for anglers living close to the Beltway. Channel catfish were first stocked into Occoquan Reservoir in 1964 and were stocked annually afterwards until 1978. Stocking of channel catfish occurred on alternate years between 1981-1991. A good fishery has developed since those initial stockings and the channel catfish population is self-sustaining. Channel catfish are not currently stocked into the reservoir since there is adequate natural reproduction. Anglers can expect to catch fish in the 14-20 inch range, with most fish averaging about 2 pounds.

Twelve flathead catfish were stocked into Occoquan Reservoir in 1965. Since that initial introduction a small fishery has developed which produced the state record flathead catfish catch of 66 pounds 4 oz., caught and released by Mike Willems in May 1994. Anglers may want to concentrate their efforts in areas around rocky bluffs in close proximity to deep water. Live bream are the bait of choice and are often fished on the bottom with a slip sinker rig.

Several parks offer boat rentals and bait. Fountainhead Park (Fairfax County) is off of Route 123 near Woodbridge. Bull Run Marina Regional Park can be accessed off of Rt. 612 near the upper end of the reservoir. More information about Bull Run Marina Regional Park and Fountainhead Park is available from the Northern Virginia Regional Park Authority (703-352-5900). Lake Ridge Park is in Prince William County and is operated by the Prince William County Park Authority. Take Route 123 to Davis Ford Road/Old Bridge Road; turn left and go 5.5 miles to Hedges Run Road; turn right and go to the first hard surface road, and turn left into the park. For more information about Lake Ridge, call 703-792-7060.

More Information

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