



Shields Lake 2010

Shields Lake, located off the Boulevard in Richmond's Byrd Park, is owned and operated by the City of Richmond. The 6-acre lake is managed under the Department's Urban Lake Program and is stocked with harvestable-sized trout and channel catfish. The lake is mostly shallow (< 6 ft deep) and contains a fish attractor that usually holds a few big largemouth bass.

On April 21st, 2009 the fish community of Shields Lake was sampled using boat electrofishing gear. A total of eight species of fish were collected with green sunfish being the most abundant species collected followed by yellow perch, largemouth bass, and bluegill (Table 1). The sunfish populations (bluegill, green sunfish, and pumpkinseed) are very limited and exhibited lower catch rates than expected. The sunfish populations are primarily comprised of fish less than 6 inches (87%); no sunfish were collected that measured 8 inches. The poor sunfish populations are likely due to the shallow featureless bottom and lack of suitable habitat. The Department will work with the City of Richmond to create and install additional fish habitat structures in the lake. Increasing fish habitat could help support larger sunfish populations.

The largemouth bass population appears to be supported by a small adult population, with only 11 adult bass (≥ 8 inches) collected. These adult fish ranged in size from 11 to 21 inches with two of bass collected measuring above 20 inches (Figure 1). Largemouth bass reproduction appears to be good; 56% of the bass collected were young fish (< 8 inches). Although reproduction is good, only a small portion of these young fish are recruiting to the adult population. Additionally, the adult bass are difficult to catch due to heavy fishing pressure. To protect the bass population, the bass will continue to be managed under the current regulation of only one bass per day over the minimum size limit of 18 inches.

One 10-inch trout was collected in the sample and was a holdover from the winter urban stockings. Only one channel catfish was collected with the electrofishing gear. The low catfish catch rate is not surprising because the lake was not scheduled to be stocked until the summer. Many of the catfish stocked in the previous years are caught and harvested by anglers. Channel catfish and trout continue to be stocked annually at high rates, so anglers have a good chance of catching their limit, especially after the stocking dates. Anglers must possess a trout license in addition to a fishing license between November 1 and April 30. A trout license is not required from May 1 through October 31 or for juveniles under age 16. A surprising number of yellow perch (N = 27) were collected during the sample but most were small (< 7.25 inches).

No boats are allowed in Shields Lake, but all of the lake can be accessed along the shoreline. The park has picnic areas, porta-a-jons, a running and activity trail, and is located adjacent to Maymont Park and the James River. Shields Lake is the last one in the series of three

and the urban program helps create a valuable fishery for anglers throughout the winter (trout) and in the summer (catfish).

For more information on Shields Lake, please contact:

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Species	Number Collected	CPUE (fish/hour)	Percentage of Catch
Bluegill	16	32	13.6
Brown Trout	1	2	0.8
Channel Catfish	1	2	0.8
Golden Shiner	2	4	1.7
Green Sunfish	45	90	38.1
Largemouth Bass	25	50	21.2
Pumpkinseed	1	2	0.8
Yellow Perch	27	54	22.9

Table 1. Species account and catch rates for fish collected throughout Shields Lake in 2009.

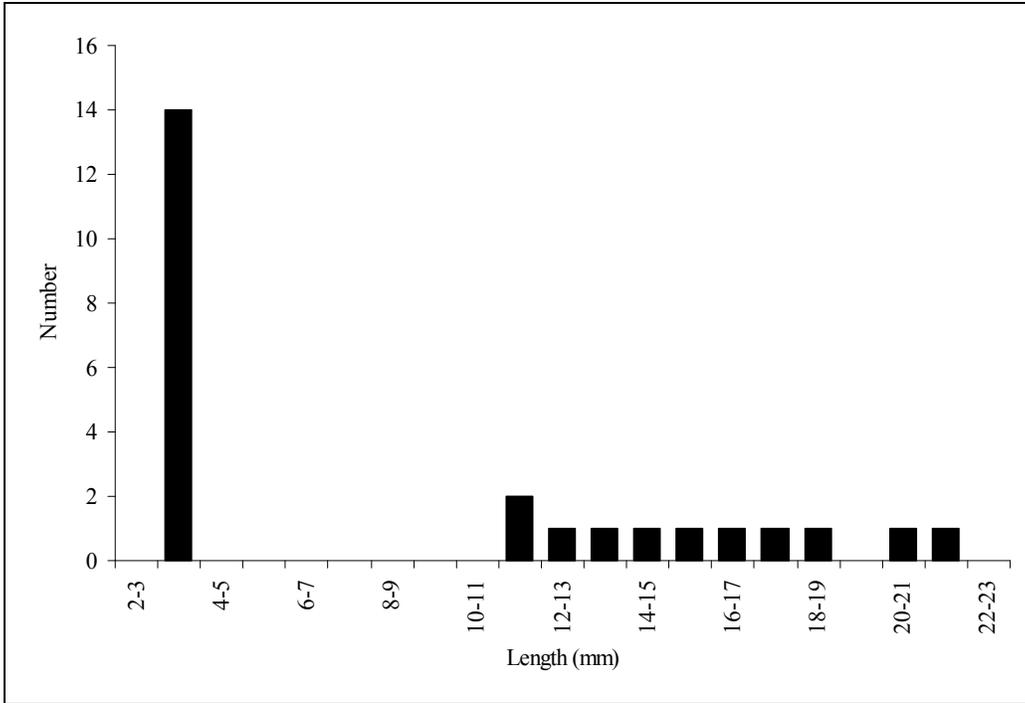


Figure 1. Length distribution of largemouth bass collected with electrofishing gear from Shields Lake in 2009.