



## Swan Lake 2010

Swan Lake, located off the Boulevard in Richmond's Byrd Park, is owned and operated by the City of Richmond. The 13-acre lake is the largest of the Byrd Park lakes and as the name states is a popular lake for the city's waterfowl. The lake is managed under the Department's Community Lakes Improvement Program (CLIP) and is stocked annually with harvestable-sized channel catfish. The lake also has self-sustaining populations of largemouth bass and sunfish. No boats are allowed, but all areas of the lake can be accessed along the shoreline.

On April 22<sup>nd</sup>, 2009, the fish community of Swan Lake was sampled using boat electrofishing gear. A total of seven species of fish were collected with largemouth bass being the most abundant species collected, followed by brown bullhead, channel catfish, yellow perch, and bluegill (Table 1). Panfish (bluegill, green sunfish, and yellow perch) catch rates were dismal and indicate very poor fisheries. The poor panfish 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 panfish populations. Additionally, the panfish populations could be decreased by a large predator fish (blue catfish) collected in the lake.

Largemouth bass were extremely abundant during the sample, but the majority of bass collected (94%) were slow growing (< 4 inches) young of the year fish from 2008 (Figure 1). Even though largemouth bass reproduction appears to be great, the vast majority of bass are not recruiting to the adult population. Only 7 adult bass ( $\geq 8$  inches), were collected. These adult fish ranged in size from 12 to 20 inches (Figure 1) and are difficult to catch due to fishing pressure. To protect the adult 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.

Catfish anglers should wet their lines at Swan Lake. Numerous catfish were collected during the sample which is rare due to the ineffectiveness of electrofishing gear for catfish. Most of the catfish were large brown bullheads ( $N = 35$ ) ranging in size from 6 to 16 inches (Figure 2). These fish were very plump should be fairly easy to catch by anglers. Anglers can catch bullheads fishing with corn, worms, and other catfish baits. These are great fish to catch for young anglers. A number of channel catfish ( $N = 6$ ) were collected and these fish were fairly large (17 to 26 inches; Figure 2) for catfish in a small lake. Channel catfish continue to be stocked annually at high rates, so anglers always have a good chance of catching a few. Additionally, one large blue catfish measuring 40 inches and weighting approximately 40 lbs. was collected around the island in Swan Lake. This fish was most likely a relocated fish from the James River. If an angler hooks into a fish that they can not reel in, it is most likely this big brute.

No boats are allowed in Swan 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. There is a large population of resident ducks and geese at the lakes that anglers should avoid while fishing. Anglers need to be stewards of the resource and remove all fishing line, hooks, trash, and do not feed the waterfowl so these animals are not harmed.

For more information on Swan Lake, please contact:

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<b>Species</b>	<b>Number Collected</b>	<b>CPUE (fish/hour)</b>	<b>Percentage of Catch</b>
Blue Catfish	1	1	0.6
Bluegill	4	6	2.3
Brown Bullhead	35	48	20.0
Channel Catfish	6	8	3.4
Green Sunfish	1	1	0.6
Largemouth Bass	123	170	70.3
Yellow Perch	5	7	2.9

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

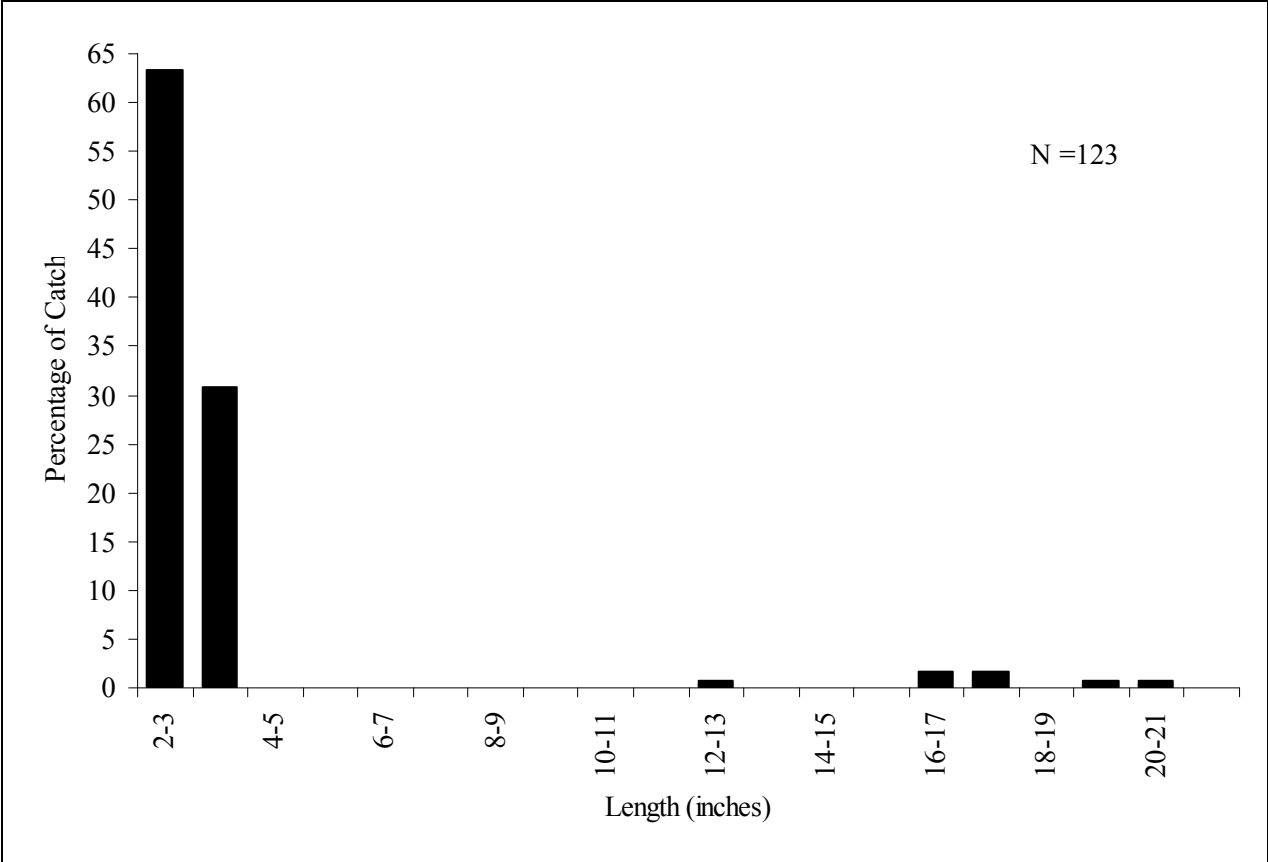


Figure 1. Length distribution of largemouth bass collected with electrofishing gear from Swan Lake in 2009.

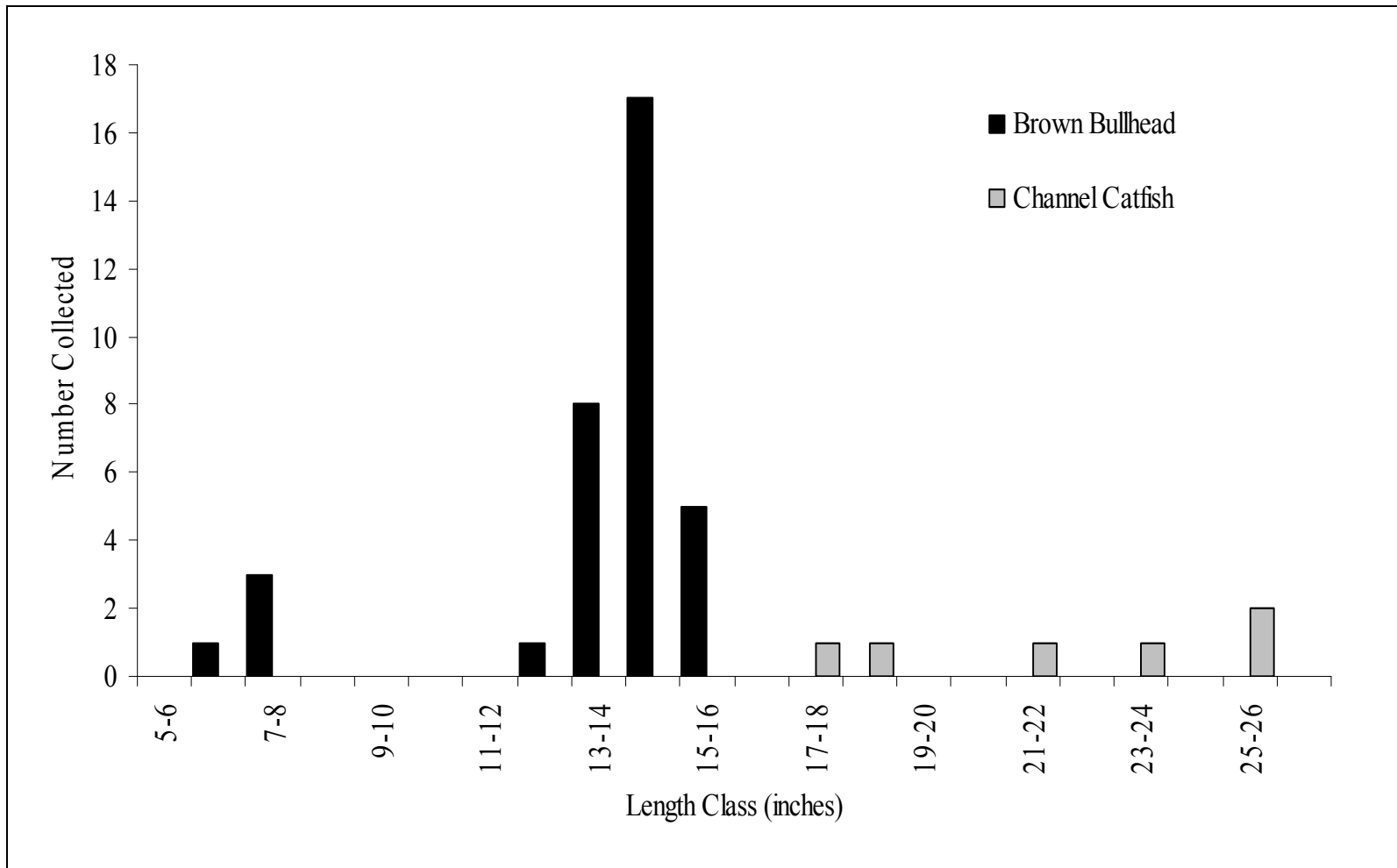


Figure 2. Length distribution of catfish collected with electrofishing gear from Swan Lake in 2009.