



## **Sandy Bottom Pond 2010**

Sandy Bottom Nature Park consists of 465 acres of land that provides a sanctuary from the development of the Hampton area. The park was established in the early 1990s. It provides various activities for the outdoor enthusiast. There are trails for biking, hiking, and horse riding. Facilities include boat rental, a fishing pier, picnic areas, nature center, wildlife center, primitive camping areas, and tent cabins. The park is home for the 12-acre Sandy Bottom Pond. The pond was formed from an old borrow pit that was originally excavated for construction of Interstate 64. Sandy Bottom Pond provides fishing opportunities for park visitors.

The Virginia Department of Game and Inland Fisheries sampled Sandy Bottom Pond on May 5, 2009. A full community sample was conducted to observe the present fishery. Sandy Bottom Pond was last sampled on May 27, 2008. The electrofishing effort of 1,400 seconds (0.39 hours) was used to attain a representative sample of the present fishery. A complete circuit of the shoreline was conducted with the water temperature being quite warm at 21.7°C (71°F). Electrofishing efforts consisted of shocking along the shoreline habitat as close as possible, with the majority of the effort concentrated in the 2 to 5 foot depth range. Being that the pond was constructed from an old borrow pit, the shoreline drops off pretty quickly. Efforts were made to stick to the bank and shoreline brush as close as possible. A total of 8 fish species were collected with the majority of the sample consisting of bluegills, American eels and largemouth bass.

### **Largemouth Bass**

Sandy Bottom Pond provides a limited bass fishery. A total of 23 largemouth bass were collected to provide an expanded CPUE (Catch Per Unit of Effort) of 59.1 bass/hr. The catch rate showed a slight increase from the 2008 sample (CPUE: 54.5 bass/hr). The size distribution of the collected bass can be seen on the enclosed length frequency graph. The 2009 survey reflects some improvements in bass recruitment with a concentration of 2 to 5 inch fish from the 2008 year class. The fishery will hopefully benefit from a series of good spawning seasons to provide a consistent number of bass for the future. The survey continues to show a low abundance of bass in the 6 to 12 inch range. The combination of smaller bass and larger bass yielded an average length of 11.3 inches. Our sampling efforts are just a representative picture of the fish community collected along the shoreline on May 5, 2009. The bass collected during the survey were holding tight to the cover of the shoreline brush.

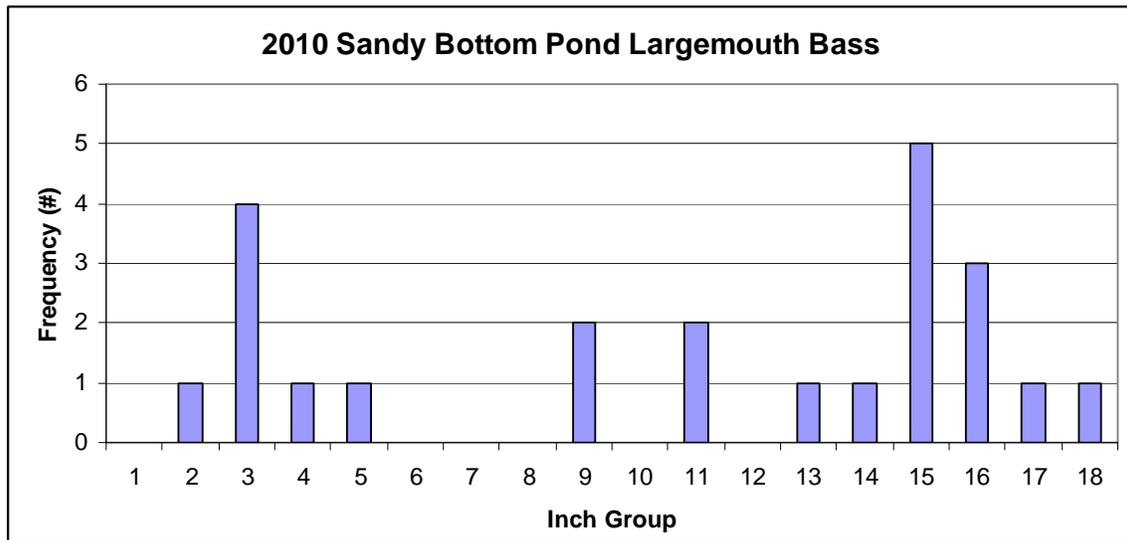


Figure 1. Length frequency of largemouth bass collected from Sandy Bottom Pond on May 5, 2009 (N = 23, CPUE 59.1/hr)

With largemouth bass being the most popular game fish in this country, it has been considered that a “quality” bass is one that is 12 inches or larger. A “preferred” bass is one that is 15 inches or larger in length. These size classifications help to describe the present dynamics of the population. The PSD (Proportional Stock Density) is the proportion of bass in the population over 8 inches (stock size) that are also at least 12 inches. Due to the relatively small sample size of bass collected, not much attention will be placed on this year’s PSD and RSD-P values. The survey collected a total of 16 stocked-size bass (8” or larger) in which 12 of those bass were of quality size (> 12 inches). A balanced fishery has a population that is composed of various year classes that are represented by distribution peaks. Your typical length frequency graph from Sandy Bottom Pond has some major gaps in the distribution where very few bass in the 6 to 12 inch range are found.

Weights were taken on largemouth bass to calculate relative weight values. Relative weight values are an indication of body condition. A value from 95 to 100 represents a fish that is in the healthy range and finding a decent amount of food. A higher relative weight value indicates fish with a better body condition. The overall relative weight value was 95. The relative weight values for stock, quality, and preferred bass (>8”, >12”, and >15”) were 95, 94 and 94 respectively. These relative weight values show some similarities to the 2008 survey (stock (95), quality (94) and preferred (96). The largest bass measured 18.54 inches and weighed 3.1 pounds.

### Bluegills

The 2009 survey was similar to past surveys as it showed the bluegill fishery in Sandy Bottom Pond to be dominated by fish less than 5 inches in length. Our electrofishing effort collected 76 bluegills. The expanded CPUE of 195.4 bluegills/hr showed a less abundant population when compared to the 2008 survey (CPUE: 260.5 bluegills/hr). The size distribution can be seen on the attached length frequency graph. The majority of the bluegills were within the 2 to 4 inch range. The PSD for bluegill is the proportion of bluegill over 8 cm (stock size) that are also at least 15 cm (quality size). The bluegill PSD of 3 is a reflection of only 1 quality-size bluegill (5.94 inches). The

PSD value showed a decline from the 2008 value of 15. A total of only 38 stock-sized bluegills were collected. Anglers that fish Sandy Bottom Pond should not expect to catch too many large bluegills.

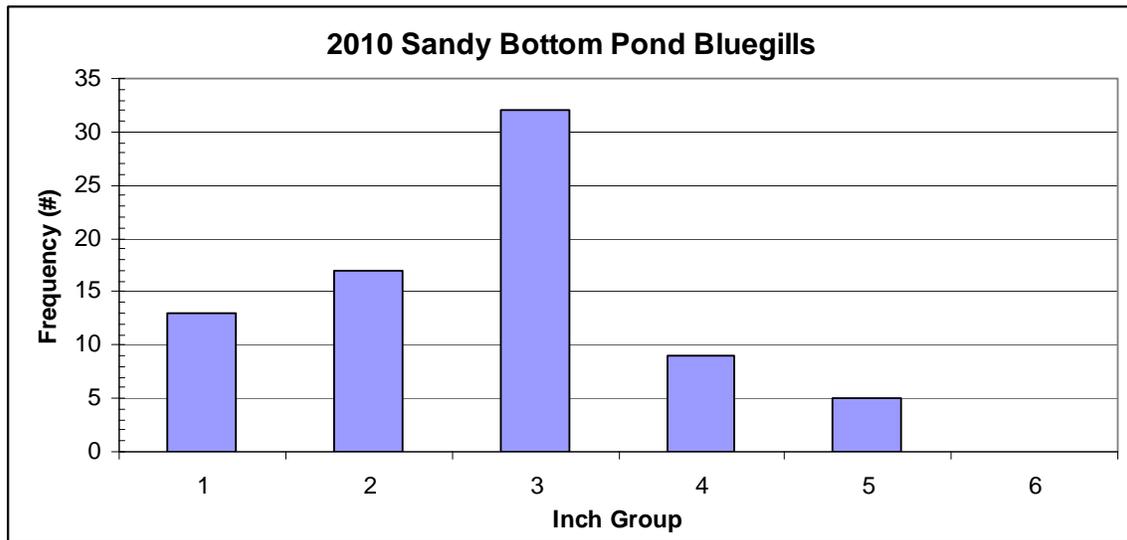


Figure 2. Length frequency of bluegills collected from Sandy Bottom Pond on May 5, 2009. (N = 76, CPUE = 195.4/hr)

### Other Species

The pond's fishery has a little more species diversity in the form of warmouth, pumpkinseed sunfish, American eel, eastern mudminnow, redear sunfish and yellow bullhead. A total of 8 warmouths were collected along the shoreline survey. The warmouths were relatively small and ranged in size from 3.7 to 4.8 inches. A total of 8 pumpkinseed sunfish were collected. They ranged in size from 3 to 7.4 inches. A total of 30 American eels were collected and measured. The average sized eel measured 14 inches in length. The eels ranged in size from 10 to 20.7 inches. Numerous additional eels were seen along the shoreline while we sampled. The survey collected only 1 eastern mudminnow that measured 2.6 inches. One juvenile redear sunfish of 3.15 inches was collected. One yellow bullhead of 9.76 inches was also collected.

### Sample Summary

The electrofishing sample of Sandy Bottom Pond collected 8 fish species. The largemouth bass population appears to be out of balance with limited numbers of bass in the 6 to 12 inch range. The survey revealed a decent number of bass greater than 15 inches in length. The overall catch of only 23 largemouth bass from a complete shoreline electrofishing run is rather low. The 2008 year class has been able to provide some fish for the future. This is a good sign and successful spawns will hopefully continue to strengthen the bass population. I would recommend that anglers continue to release all largemouth bass to protect the current population. The bluegill population appears to be in fair shape with very few bluegills greater than 5 inches in size. The limited abundance of young bluegills could be a factor of poor spawning success and/or the result of predation by largemouth bass and American eels. The fishery provides some species diversity in the way of warmouth, pumpkinseed sunfish, American eel, eastern mudminnow, redear sunfish and yellow bullhead. DGIF staff conducted a supplemental

stocking of bass into Sandy Bottom Pond in October 2009. All bass were marked with a floy tag which has a specific number for each fish. Bass ranged in size from 8 to 14.7 inches. Additional stocking during the fall of 2009 consisted of black crappie fingerlings from the DGIF King & Queen Hatchery as well as some adult black crappies from Beaverdam Swamp Reservoir.

The park is open from sunrise to sunset every day except for Christmas; however the fishing pier is open to pedestrians for fishing 24 hours a day. The park is located at 1255 Big Bethel Road, a few minutes from I-64 by way of the Hampton Roads Center Parkway West exit. Please call the park office at (757) 825-4657 or try their website at [www.hampton.va.us/sandybottom](http://www.hampton.va.us/sandybottom) for additional information.

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