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2020 Crump Park Pond Management Report Virginia Department of Wildlife Resources

Crump Park Pond, located on Courtney Road in Glen Allen, is owned and operated by Henrico County. This 2-acre pond is managed by DWR and is stocked annually with channel catfish each fall along with supplemental largemouth bass stockings when fish are available. The pond has self-sustaining populations of bluegill and redear sunfish. No boats are permitted for the general public, but most areas of the pond can be accessed along the shoreline.

On November 10th, 2020, the fish community of Crump Park Pond was sampled by boat electrofishing using a 14-foot jon boat rigged with a generator and a Smith Root electrofishing box. A six-wire anode dropper was used to transfer 7.5 to 8 amps of electricity into the water column to temporarily stun fish. The previous survey was conducted on May 1st, 2019. A complete shoreline circuit of the pond was conducted with the total electrofishing effort of 500 seconds (0.139 hr). All encountered fish were collected by dip nets and placed in a live well tank. Length and weight measurements were taken on all fish to assess their overall health and the health of the current fishery. A total of seven fish species were collected. These fish species in order of overall abundance were bluegill, redear sunfish, largemouth bass, channel catfish, black crappie, grass carp and American eel. The fishery within Crump Park Pond has some potential, but there are severe limitations on the production of larger-sized fish in this shallow impoundment.

Largemouth Bass

The survey collected 19 largemouth bass for an expanded CPUE (Catch Per Unit of Effort) of 136 fish/hr. This catch rate showed some similarity when compared to the May 1st, 2019 survey (CPUE = 138 fish/hr). The size distribution of the bass ranged from 4 to 16 inches, with the majority of the fish less than 12 inches in total length. The overall catch rate for largemouth bass was about average for a Region 1 small impoundment, but the largemouth bass fishery in Crump Park Pond is limited. Only 3 of the 19 collected bass were mature (≥ 12 inches). Figure 1 reveals the length distribution of the collected bass and the easily observed gaps in the distribution. Taking into account the juvenile bass, the average size bass measured 8.83 inches, which was a minor increase from the 2019 survey (mean TL = 8.76 inches). Largemouth bass reproduction appears to be fair to decent with the visible signs of recruitment present from the 2020-year class. **To protect the majority of the adult bass within the pond, the bass regulation has been set at a minimum size limit of 18 inches with a harvest limit of one bass per day.** The largest bass measured 16.02 inches and weighed 2.05 pounds. The supplemental stocking of 600 juvenile largemouth in the 3 to 6 inch range in the fall of 2019 appears to have been unsuccessful in creating a banner year class of recruitment.

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 relative weight data of the largemouth bass revealed the eleven stock-sized bass to have a value of 93. The three quality-sized bass had a relative weight value of

89. The two preferred-sized bass had a relative weight value of 86. These relative weight values reveal a slight increase from the 2019 survey (stock = 86, quality = 85 and preferred = 83) and show that the bass are having some difficulties finding sufficient forage in a size range that they can utilize for optimal growth.

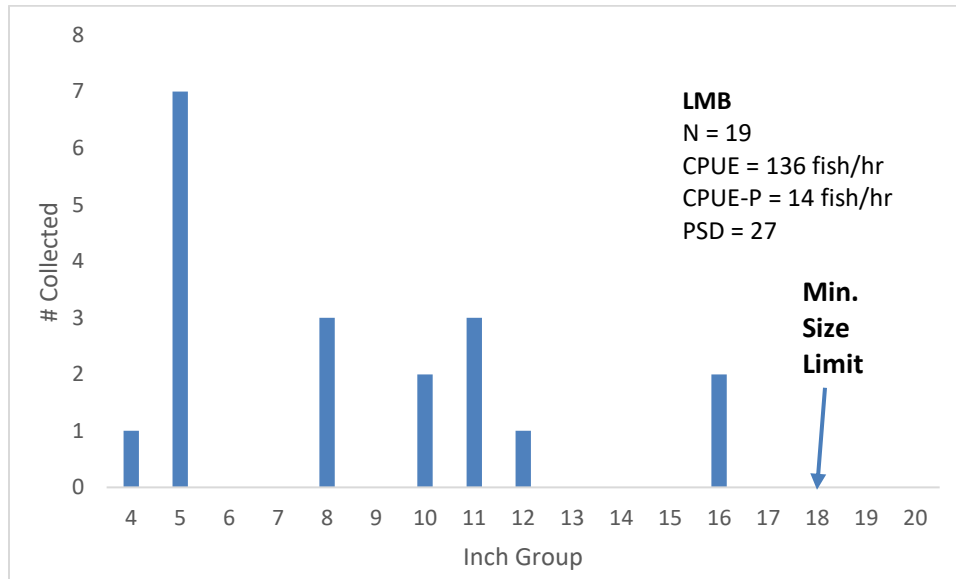


Figure 1. Length frequency distribution of largemouth bass collected from Crump Park Pond on November 10th, 2020

Bluegill and Redear Sunfish

The survey collected 114 bluegill for a CPUE of 820 fish/hr. This catch rate showed a decline when compared to the 2019 survey (CPUE = 972 fish/hr). The 2020 fall survey did not reveal an overwhelming abundance of juvenile bluegill that were collected in the past. The bluegill distribution ranged from 1.5 to 6.1 inches, with the majority of the collected fish in the 3.5 to 5 inch range. The average size bluegill measured 4.03 inches, which showed a slight decline from 2019 (mean TL = 4.17 inches). The largest bluegill measured 6.1 inches, which was a noticeable decline from 2019 (max TL = 7.36 inches). The accumulation of 3 to 4 inch bluegill would provide an ideal forage base for the larger bass in the 3 to 5 pound range if any of those fish were present. The collected bluegill were weighed and the relative weight value for the 98 stock-sized bluegill (≥ 8 cm) came back at a favorable value of 103. The relative weight value showed an increase from 2019 ($Wr = 99$), which might be attributed by the difference in sampling season. The bluegill were extremely healthy and finding plenty of available food. Anglers should set their expectations rather low when it comes to catching any large bluegill from Crump Park Pond. Additional stocking efforts at Crump Park Pond will be focused on creating a bass heavy fishery that will allow for higher catch rates of bass for younger anglers. This might eventually allow for a higher proportion of larger bluegill sunfish to be produced by cropping down the abundance of 3 to 4 inch fish.

The survey collected 41 redear sunfish for a CPUE of 295 fish/hr. This catch rate showed a favorable increase when compared to 2019 (CPUE = 156 fish/hr). Collected redear sunfish ranged in size from 1.9 to 8.5 inches. The average size redear sunfish measured 4.9 inches, which

was slightly less than 2019 (mean TL = 5.84 inches). The largest fish measured 8.5 inches with a weight of 0.4 pound. The relative weight values for the redear sunfish were not as impressive as the bluegill. The 21 stock-sized redear sunfish (≥ 10 cm) had a relative weight value of 90, while the 13 quality-sized fish (≥ 18 cm) had a value of 90. The 2020 relative weight values showed similarities to the 2019 collection (Wr stock = 91, Wr quality = 90). The redear sunfish population showed a more favorable PSD value of 62, while the bluegill PSD was a less than impressive value of 4. The overall health of the redear sunfish showed there are some limitations to finding adequate forage. Some of the larger redear sunfish may surprise an angler from time to time.

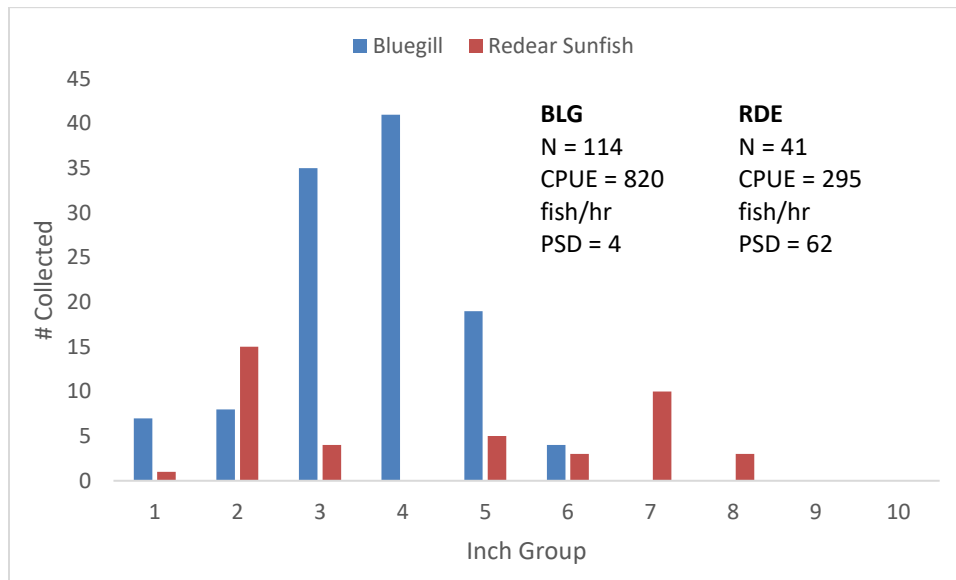


Figure 2. Length frequency distribution of bluegill and redear sunfish collected from Crump Park Pond on November 10th, 2020

Additional Species

Species diversity in Crump Park Pond is rather limited. The electrofishing survey yielded a few additional species not previously covered in this report. The survey collected five black crappie for an expanded CPUE of 36 fish/hr. This catch rate showed an increase when compared to 2019 (N = 1; CPUE = 6 fish/hr). The collected crappie ranged in size from 6.9 to 9.1 inches in total length. The crappie fishery appears to be rather limited with their overall abundance most likely kept in check by the largemouth bass population and/or angler harvest. The relative weight value for the collected crappie was 83, which is below the desired range of 95 to 100. Crappie, within a small impoundment the size of Crump Park Pond, can create some problems if they are able to fire off a few strong year classes of juvenile fish. If this occurs, the crappie population can become extremely crowded with hundreds of slow growing fish. Anglers that frequently visit the pond may catch a few larger crappie, but don't expect to be blown away by massive stringers of large crappie. The survey revealed the presence of one triploid grass carp that measured 20 inches and weighed 3.47 pounds. DWR staff stocked 10 grass carp into Crump Park Pond in June of 2020 in an attempt to cut back on some of filamentous algae clumps that typically grow along the shoreline. One American eel of 20.3 inches was also collected.

The survey collected eight channel catfish. These fish ranged in size from 9.5 to 15.2 inches with the largest fish weighed at 1.05 pound. Crump Park Pond is stocked each year with channel

catfish. A full allocation usually consists of 200 channel catfish that typically weigh in the ½-pound range. The majority of the past stockings have occurred during the month of October and sometimes as late as November. The 2020 stocking occurred on November 2nd. The catfish were in good health with a relative weight of 94. Many of the catfish stocked in previous years are generally caught and harvested by anglers, but there is a chance that a few of the larger fish were holdovers from a past stocking. Channel catfish continue to be stocked annually at high rates, so anglers should have a good chance of catching a few. The catfish regulations are set at a minimum size of 15 inches with a personal creel of 5 fish/day.

To fish Crump Park Pond, follow I-295 and exit onto Route 33 east. Turn left on Mountain Road, and watch for the park entrance signs on the left. The park does not have concessions, but bank fishing and picnicking are available. Anglers are encouraged to follow the posted regulations that are set in place in hopes of providing and maintaining a decent fishery for young anglers and their families.

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