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Virginia Department of Game and Inland Fisheries
2019 Ferndale Park Pond Management Report

Ferndale Park Pond is located within Ferndale Park situated alongside the canal on the southern shore of the Appomattox River. The park is owned by the City of Petersburg even though it is actually located in Dinwiddie County. Members of FOLAR (Friends of the Lower Appomattox River) have be taking good care of the park to make needed improvements along with basic maintenance. The pond is roughly 2 acres in size and it attaches to the old canal that runs parallel to the Appomattox River. The park provides a secluded area to enjoy the natural surroundings of the Appomattox River. The canal trail provides hikers and walkers a great place to explore. A few access areas are also present for people wanting to check out the Appomattox River. The fishing pier platform provides anglers a place to access the pond. Additional shoreline areas can be reached to the left hand side of the pier. The western side of the pond is private property.

The Virginia Department of Game and Inland Fisheries sampled Ferndale Park Pond on April 19th, 2018. There is no record of any other DGIF survey being conducted on the pond. A full community sample was conducted to observe the present fishery and to attain as much baseline data as possible. The electrofishing effort of 656 seconds (0.182 hour) was used to attain a representative sample of the present fishery. A complete circuit of the shoreline was conducted with the water temperature being an ideal 17.0 °C (62.6 °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 3 foot depth range. Efforts were made to hold tight to the bank and shoreline brush as close as possible. A total of 10 fish species were collected with the majority of the sample comprised of bluegill, redear sunfish, and largemouth bass. The remaining fish assemblage was brown bullhead, black crappie, American eel, yellow perch, chain pickerel, gizzard shad, and bluespotted sunfish.

Largemouth Bass

The electrofishing survey provided a total of 11 largemouth bass which yielded a CPUE (Catch Per Unit of Effort) of 60 fish/hr. The limited sample size of the collected bass provides some insight into the population. One of the most glaring results from the collection was the limited presence of juvenile bass. Only 3 bass less than 11 inches in

length were collected. The accumulation of excessive silt on the pond's substrate does not provide ideal spawning habitat whatsoever. With the pond being connected to the canal, the turbidity can become extremely poor during high water events. The survey did yield a surprising density of bass in the 12 to 17 inch range. The survey showed weak recruitment from several year classes with the limited abundance of bass greater than 12 inches in total length. The assortment of stock-sized bass set the average bass length at 12.03 inches. The survey produced 3 preferred-sized bass (CPUE-P = 16.5 fish/hr). The sampling efforts are a representative picture of the fish community collected along the shoreline on April 19th, 2018. An additional electrofishing survey of the canal was conducted (0.24 hr). This survey yielded 8 additional bass that were concentrated in the slack water just along the vegetation clumps at the exit of the pond where water recedes back into the canal.

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. One must consider the relatively small sample size of bass collected when assessing the PSD and RSD-P values. The survey collected a total of 8 stocked-size bass (≥ 8") in which 6 of those bass were of quality size (≥ 12"). The PSD value of 75 is well above the desired range of 40-60 that would represent a balanced population. The RSD-P value of 37 is based upon the collection of 3 preferred-sized bass. A balanced fishery has a population that is composed of various year classes that are represented by distribution peaks. The weak assemblage of bass in the 8 to 11 inch range assisted in raising the PSD value.

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 values for the 8 stock-sized bass (≥ 8") was 94 and the 6 quality-sized bass (≥ 15") was 92. The largest bass collected from the pond measured 20.16 inches and weighed 4.33 pounds. The largest bass collected from the canal measured 20.94 inches and weighed 4.93 pounds. A couple of the other bass weighed in the 2.5 to 2.8 pound range.

Bluegill and Redear Sunfish

The bluegill population within Ferndale Park Pond appears to be primarily comprised of juvenile fish. The survey collected 89 bluegill for a CPUE of 488 fish/hr. The bluegill size distribution ranged from 1.1 to 6.77 inches with the majority of fish in the 1.5 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 10 is a reflection of the 3 quality-sized bluegill from the 30 stock-sized bluegill that were collected. The PSD value falls well below the desired range of 20-40 that was represent a more balanced population. The average size bluegill measured in at a less than impressive 2.66 inches. The high flow through nature of this pond might place severe limitations on the density of the zooplankton. The largest bluegill measured in at 6.77 inches in length. The relative weight value of the stock-sized bluegill was an impressive 101. This value showed the fish to be in good physical shape and finding adequate food resources. The bluegill may be turning to the macroinvertebrates for their prime forage base. Anglers that fish Ferndale Park Pond on a regular basis might have some better luck finding fish, but should not expect to catch too many large bluegill.

The survey collected a limited abundance of redear sunfish with only 15 collected (CPUE = 82 fish/hr). The size distribution was from 1.65 to 9.33 inches. Five of the fish were in the 8.5 to 9.33 inch range. These fish might have been some of the holdover fish that were stocked in 2017 by DGIF staff. The average length for the redear sunfish was 5.5 inches, which was much greater than the bluegill collection. The redear sunfish will provide some diversity for anglers that fish the pond.

Additional Species

The survey revealed diversity with the collection of 10 fish species. The remaining species collected in limited abundance were brown bullhead (n = 2), black crappie (n = 1), American eel (n = 1), yellow perch (n = 1), chain pickerel (n = 2), gizzard shad (n = 1), and Bluespotted sunfish (n = 1). The two brown bullhead measured 10.1 and 11.1 inches. The black crappie measured 7.32 inches. The American eel measured 8.86 inches. The juvenile yellow perch measured 4.45 inches. The two chain pickerel measured 12.28 and 13.46 inches. The gizzard shad measured 13.7 inches with a healthy weight of 1.05 pounds (relative weight = 100). The Bluespotted sunfish measured 2.28 inches. These fish species collected in limited abundance will provide some level of excitement to anglers that are lucky enough to find them, but comprise a very small percentage of the overall fishery.

The electrofishing run conducted in the canal provided additional diversity in the form of redbreast sunfish, warmouth sunfish, golden shiner, pumpkinseed sunfish, and green sunfish. It is quite possible that these fish species can migrate from the quick

moving canal into Ferndale Park Pond if their little hearts and fins desire a slower pace to life.

Sample Summary

The electrofishing survey of Ferndale Park Pond revealed a better than expected species diversity with 10 species collected. The fishery, for the most part, is the classic largemouth bass and bluegill water with a few other species present in a limited capacity. The largemouth bass population has the potential to produce a few respectable fish. Recruitment of juvenile fish from the last few years has been less than ideal with a limited standing stock of fish less than 11 inches in length. The largest bass collected from the pond weighed 4.33 pounds and the largest bass collected from the canal was 4.93 pounds. Catch and release should be practiced by anglers fishing for bass on the pond.

The bluegill population appears to be comprised of a large proportion of juvenile fish. The significant presence of bluegill in the 1.5 to 3.5 inch range shows that the predator species density (largemouth bass and black crappie) is not out of balance. The level of bluegill harvest from the pond is not known at this time. The bluegill size distribution showed some potential with the largest bluegill measured at 6.77 inches. The redear sunfish population, although not as abundant as the bluegill population, showed better promise with larger fish up to 9.33 inches in length. A handful of other fish species mentioned above will provide some limited action for anglers.

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