



DEPARTMENT OF
**GAME & INLAND
FISHERIES**
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Virginia Department of Game and Inland Fisheries 2018 Youngs Pond Management Report

Youngs Pond, located within Bryan Park along the northern edge of Richmond, is managed by the City of Richmond Department of Parks & Recreation. Bryan Park provides numerous recreational activities for visitors. The park has two ponds of roughly 6 acres each that were created by the construction of dams on Upham Brook. Youngs Pond is also referred to as Lower Bryan Park Pond. Both ponds have had issues in the past with fish kills occurring due to degraded water quality. The majority of the shoreline is open to allow shore bound anglers to fish. The pond is relatively shallow with an average depth of roughly 4 to 5 feet.

On September 20th, 2017, the fish community of Youngs Pond was sampled by boat electrofishing. A 14 foot electrofishing boat was used to conduct the survey. Two shoreline runs were conducted with the total electrofishing effort of 1,576 seconds (0.437 hr). Encountered fish were collected by dip nets and placed in a live well tank. Length and weight measurements were taken on fish to assess their overall health and the health of the current fishery. The fishery revealed high species diversity with the collection of 11 fish species. The five most abundant fish species were bluegill, creek chubsucker, pumpkinseed sunfish, common carp, and largemouth bass. The survey provided a snapshot photo of the fish assemblage collected along the shoreline. The majority of the shoreline was sampled during the survey. Some stretches of shoreline had significant mud and silt accumulations that made sampling difficult. Anglers that frequently fish the pond may have a better idea where some of the larger fish typically hold.

Table 1. CPUE values of all fish collected from Youngs Pond electrofishing survey, September 20, 2017

| Species | N | CPUE (#/hr) | % of total |
|---------------------|-----|-------------|------------|
| Bluegill | 364 | 831 | 77.61 |
| Creek Chubsucker | 57 | 130 | 12.15 |
| Pumpkinseed Sunfish | 16 | 36 | 3.41 |
| Common Carp | 12 | 27 | 2.56 |
| Largemouth Bass | 7 | 16 | 1.49 |
| American Eel | 4 | 9 | 0.85 |
| Warmouth Sunfish | 4 | 9 | 0.85 |
| Brown Bullhead | 2 | 4 | 0.43 |

| | | | |
|----------------------|-----|---|------|
| Bowfin | 1 | 2 | 0.21 |
| Golden Shiner | 1 | 2 | 0.21 |
| Redbreast Sunfish | 1 | 2 | 0.21 |
| Total fish collected | 469 | | |

Largemouth Bass

The largemouth bass population within Youngs Pond appears to be extremely limited. The survey collected only 7 largemouth bass for a CPUE (Catch Per Unit of Effort) of 16 bass/hr. This catch rate fell well below the 2015 survey which revealed 20 bass for a CPUE of 52 fish/hr. The average-sized bass from this limited sample set was 9.96 inches in total length; down from the 2015 mean length of 10.94 inches. Two juvenile bass of 2.44 and 5 inches were collected. The remaining five bass measured from 11.46 and 13.86 inches. The largest bass measured 13.86 inches and weighed 1.25 pounds.

The fishing regulation for the bass population is a minimum size of 15 inches with a creel limit of 2 bass/person/day. The full level of harvest by anglers is not known at this time. The limited standing stock of bass collected in the survey may be from a combination of poor recruitment and harvest of the limited abundance of brood stock. Our sampling efforts are just a representative picture of the fish community collected along the shoreline on the survey day. From initial observations, it appears that anglers have managed to crop out the majority of the bass greater than 15 inches in length. No preferred size bass were collected during the survey.

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. The higher the value, the better the condition of the fish in terms of overall body mass. The relative weight values for stock ($\geq 8''$) and quality ($\geq 12''$) bass were 100 and 97 respectively. These relative weight values of the limited number of bass show the fish to be in good shape and finding plenty of forage in the appropriate size.

Bluegill and Pumpkinseed Sunfish

The survey revealed the presence of 364 bluegill for a CPUE (Catch Per Unit of Effort) of 831 fish/hr. This catch rate showed an increase from the 2015 survey (CPUE = 770 fish/hr). The bluegill length distribution ranged from 2 to 16 centimeters (1 to 6 inches) with the majority of fish in the 6 to 10 centimeter range (2 to 4 inch range). The average size for the collected bluegill was 3.66 inches, which was actually a slight increase from 2015 (mean total length of 3.52 inches). The two largest bluegill measured exactly 6.37 inches. 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 220 stock-sized bluegills revealed a favorable value of 115. The relative weight value of the 10 quality-sized bluegill revealed a value of 98. The bluegill population within Youngs Pond may be entertaining to some young anglers that are just happy to catch a bunch of small fish. Trophy sunfish anglers should not expect too much action.

The survey revealed the limited presence of pumpkinseed sunfish (N = 16; CPUE = 36 fish/hr). The pumpkinseed sunfish showed a higher proportion of fish in the 5 to 6 inch range than the bluegill. Relative weight data from the collected pumpkinseed sunfish showed the fish to be in great shape (Wr stock = 118, Wr quality = 101). These fish will add some diversity to the catch and may surprise an angler from time to time.

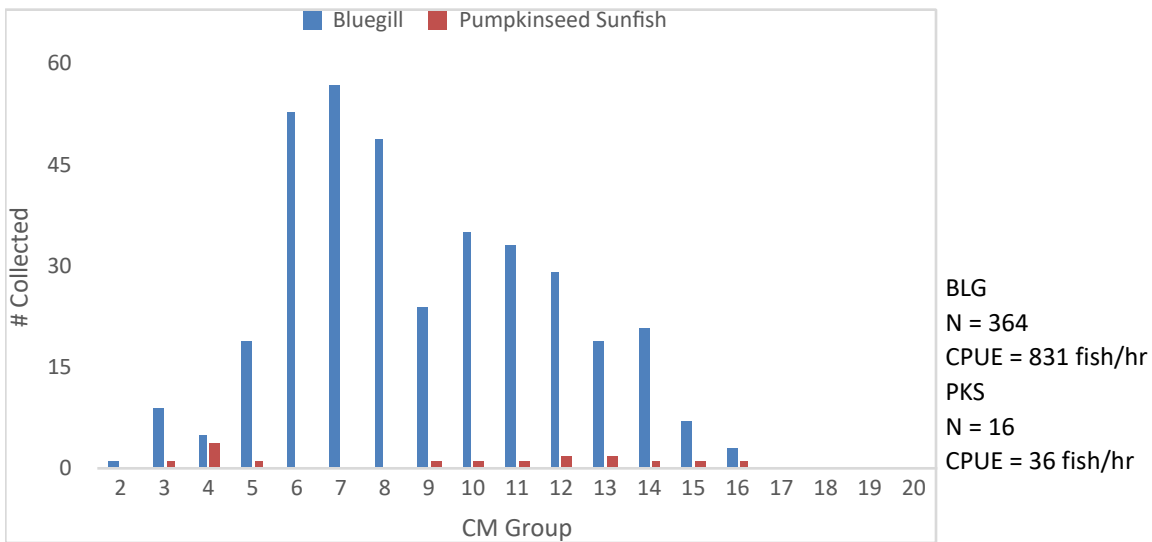


Figure 1. Length frequency distribution for bluegill and pumpkinseed sunfish collected from Youngs Pond on September 20, 2017

Additional Species

The electrofishing survey was successful in catching 469 fish. The majority of these fish were found along the northern shoreline which has more terrestrial vegetation overhanging the shoreline. Of that total, the bluegill made up for 77.61% of the catch. This proportion showed an increase when compared to the 2015 survey (Bluegill = 69.25% of the catch). The remaining fish diversity consisted of a limited abundance of bowfin, brown bullhead, common carp, redbreast sunfish, warmouth sunfish, American eels, and golden shiner. The survey revealed a rather large stock of creek chubsuckers present with 57 collected. These fish were in the 6 to 9 inch range and they will provide additional forage for any larger bass that might be present. The survey did not reveal any holdover channel catfish from past DGIF stockings.

The survey collected 12 common carp. The majority of the carp were holding tight to the tree that fell into the pond on the south shoreline. The collected carp ranged in size from 25 to 29 inches. The largest carp measured 29.61 inches and weighed an impressive 15.66 pounds. Anglers fishing for channel catfish might catch a few of these hard fighting carp.

Youngs Pond receives a stocking of channel catfish each fall. The stocking rate of 50 catfish/acre (total of 300) will provide some additional fishing action for anglers that visit Youngs Pond. Catfish regulation signs were posted at the pond to reflect the new regulation of a minimum size limit of 15 inches and a creel limit of 5 catfish/person/day. This regulation will match the majority of DGIF stocked small impoundments in an attempt to keep these catfish in the system long enough for them to achieve a respectable size before harvest. Limited fishing pressure along with the practice of catch and release will allow these 11 to 12 inch catfish to eventually grow a few more inches. Without this protective regulation, it would not take very long for an experienced catfish angler to clean out the population of stocked fish.

The fishery within Youngs Pond has some potential with a variety of fish species present. The bluegill population appears to be stockpiled with juvenile fish which might have had an influence on bass recruitment over the last few years. The level of bass harvest over the protective 15 inch minimum size limit is not known at this time. An increase presence of preferred-sized bass (≥ 15 inches) would possibly allow for increased predation on the stunted bluegill population, with the hope of achieving a more balanced sunfish population. The change in the catfish regulations will hopefully create a better fishing opportunities over the next couple of years.

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