

## Lower Savage River - August 2022

On August 26th, Freshwater Fisheries and Hatcheries Division (FFHD) staff completed multiple-pass electrofishing surveys at two established sampling locations on the Lower Savage River. The following is a brief summary of trout data collected. This report is being generated to present basic size distribution and abundance information for the fishery in order to help anglers plan their fishing trip on the Lower Savage River. More specific questions about the fishery or the management of individual fish species should be directed to the regional manager by emailing him at [matt.sell@maryland.gov](mailto:matt.sell@maryland.gov).



### Key Terms:

Proportional Size Distribution (PSD) - A measure of the proportion of quality size and larger fish to the total fish in a population. Generally speaking, a higher PSD means that larger fish make up a higher percentage of the population and a lower PSD means that the fishery is dominated by smaller fish. Each species has a range of values that represent a balanced size structure.

Trout per Kilometer - A unit of density representing the number of trout that reside in one kilometer of stream.

Adult Trout - Adult trout are fish that have made it to age one and are classified as 100 millimeters (~4 inch) and larger.

Young-of-Year Trout (YOY) - Young-of-year trout are trout that were hatched within the year and have not made it to age one. Trout that are under 100 millimeters (~4 inch) are classified as YOY.

**Survey Results:**

*Numbers and Size Distribution, Combined Sites*

|                        | Brook trout | Brown trout        | Rainbow trout  |
|------------------------|-------------|--------------------|----------------|
| Total Number           | 94          | 224                | None Collected |
| Mean Total Length (mm) | 199(65-230) | 299(60-431)        | -              |
| PSD                    | 0           | 77.24(70.42-84.07) | -              |
| PSD-Preferred          | 0           | 54.48(46.38-62.59) | -              |
| PSD-Memorable          | 0           | 4.72(6.49-16.96)   | -              |
| PSD-Trophy             | 0           | 0                  | -              |

*Adult Trout Density (Trout per Kilometer)*

| Station          | Combined species | Brook trout  | Brown trout  |
|------------------|------------------|--------------|--------------|
| Fly Fishing Only | 533+/-2.06       | 16+/-100     | 516+/-2.13   |
| Aarons Run       | 330+/-5          | 33+/-16.67   | 299+/-5.56   |
| Mean             | 431.5+/-4.56     | 24.5+/-58.33 | 407.5+/-3.84 |

*Young-of-Year Trout Density (Trout per Kilometer)*

| Station          | Combined species | Brook trout | Brown trout |
|------------------|------------------|-------------|-------------|
| Fly Fishing Only | 330+/-18.3       | 187+/-20.6  | 137+/-56    |
| Aarons Run       | 670+/-11.5       | 313+/-12.3  | 357+/-21.5  |
| Mean             | 500+/-14.9       | 250+/-16.45 | 247+/-38.75 |

*Brown Trout*

Brown trout continue to make up the majority of the trout fishery within the Savage River tailwater. The average size is almost twelve inches, providing anglers with good numbers of quality trout throughout the river. The brown trout PSD is indicative of a population dominated by larger fish and majority of those are within the preferred to memorable size increment (~12 to 15 inches).



*Brook Trout*

Brook trout persist in the Savage River tailwater but at a lower abundance than brown trout. The average total length for brook trout was just under eight inches and a maximum length of 230mm (9 inches) was recorded. When using standard PSD values (Quality = 300 millimeter/~12 inch), the population appears to be dominated by smaller fish. However, when compared to regional brook trout fisheries, the size distribution in the lower Savage River provides anglers with the opportunity for relatively large brook trout.



*Rainbow Trout*

No rainbow trout were collected during the 2022 survey.

*Recruitment*

The year class of combined trout species in 2022 was on the high end of the moderate range for reproductive success and is sufficient to support good trout fishing in the future.