

Fisheries Research Fact Sheet

The Establishment of Hybrid Striped Bass in Hyco Lake July 2022



Hybrid Striped Bass (Bodie Bass), a cross between Striped Bass and White Bass, create unique fishing opportunities for anglers when stocked into reservoirs. Bodie Bass are suitable for stocking into reservoirs as they can withstand the warm summer water temperatures, a robustness gained from the White Bass genes, yet they grow fast and large because of their Striped Bass genes. These fish do not naturally hybridize in nature; thus, Bodie Bass are produced in the N.C. Wildlife Resources Commission's (Commission) hatcheries. The Commission has stocked 37,500 Bodie Bass fingerlings in Hyco Lake annually since the first stocking in summer of 2019. After several years of stocking, these fish had grown enough to evaluate using traditional sampling methods. Surveying newly introduced populations is necessary to evaluate stocking effort success and fishing regulations. Bodie Bass in Hyco Lake are currently regulated under a daily creel of four fish and a minimum size limit of 16 in.

Methods:

- In December 2021, Commission biologists surveyed Bodie Bass in Hyco Lake for the first time using gillnets.
- Gillnets can range in size of the overall net and include a variety of mesh sizes designed to catch different sized fish. For this survey, biologists used four different mesh sizes and set six to eight nets a night for three nights. Each end of the net is marked with an orange buoy and is labeled with the Commission's information.
- All fish were weighed and measured, and otoliths (or ear bones) were removed to assess age structure and growth.



A Bodie Bass collected from Hyco Lake



Bodie Bass are a cross between male White Bass and female Striped Bass.





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Results so far?

- A total of 127 Bodie Bass were captured and an average of six fish were caught per net, per night.
- The average total length was 469 mm (or 18.5 in) and 13% of the fish surveyed were over 508 mm (or 20 in; Figure 1). All fish surveyed were of harvestable size.
- On average, fish weighed 1,409 g (or 3.1 lbs) and the largest fish weighed 2,361 g (or 5.2 lbs).
- Of the fish surveyed, 69% were age 1 (fish stocked 2020) and 31% were age 2 (fish stocked in 2019). No age 0 fish were surveyed likely because they were too small to be caught in the gillnets used.
- Bodie Bass exhibited fast growth and reached harvestable size (406 mm or 16 in) between ages 0 and 1. Body condition values were excellent, and fish appeared to be in good health.
- Overall, Bodie Bass in Hyco Lake are healthy and thriving. Most of the fish caught were located near the heated effluent of the power plant in the main stem of the lake

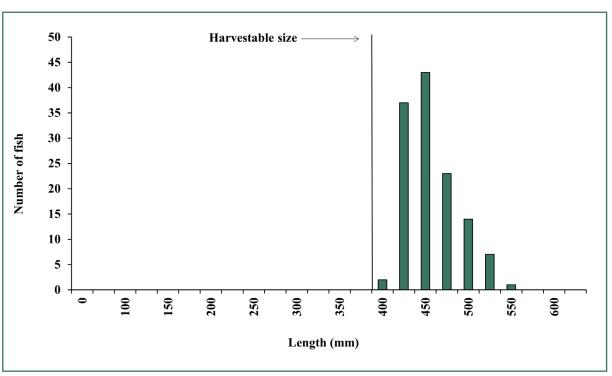


Figure 1: Shown here are the length distributions of Bodie Bass collected in Hyco Lake in December 2021, where the x-axis labels are length categories in increments of 25 mm (~1 inch). For example, fish in the column labeled 250 mm are fish in ranging in length from 250 (9.8 inches) to 275 mm (10.8 inches).

What's Next?

- Biologists will conduct additional surveys every few years to continue to monitor the population and assess the current regulation.
- <u>Stocking information</u> is available on the Commission's website and includes summaries of the numbers and types of fish stocked into specific waterbodies in North Carolina. <u>Short summaries</u>, or fact sheets, of projects and fisheries across the state can also be viewed on the Commission's website.

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