



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Joseph P. Gill, Secretary
Frank W. Dawson III, Deputy Secretary

November 18, 2014

The Honorable Thomas V. Mike Miller, Jr.
President, The Senate of Maryland
State House, H 107
Annapolis, Maryland 21401-1991

The Honorable Michael E. Busch
Speaker, Maryland House of Delegates
State House, H 101
Annapolis, Maryland 21401-1991

Re: Submission of Report on Chesapeake Bay Finfish Investigations (Summary of Maryland Striped Bass Juvenile and Adult Surveys for 2014)

Agency: Maryland Department of Natural Resources

Report Authority: § 4-746 of the Natural Resources Article

Dear President Miller and Speaker Busch:

Enclosed is a report entitled *Chesapeake Bay Finfish Investigations* which provides a Summary of the Maryland Striped Bass Juvenile and Adult Surveys for 2014. The information was prepared in accordance with §4-746 of the State Government Article, which provides that the Department of Natural Resources shall conduct annually a scientific survey to determine the relative abundance of striped bass or rockfish of approximately 18 inches in length and shall be conducted in areas that are used by the Department to determine the young of the year index.

Should you have any questions or comments regarding this report, please feel free to contact DNR's Legislative Director, Rich Norling, directly at 410-260-8112, or by email at rnorling@dnr.state.md.us.

Sincerely,

Joseph P. Gill
Secretary

cc: Sarah Albert (5 copies)



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Chesapeake Bay Finfish Investigations Summary of 2014 Maryland Striped Bass Stock Assessment Surveys Natural Resources Article § 4-746

The primary objective of the Striped Bass Program of the Maryland Department of Natural Resources (MD DNR) is to monitor and biologically characterize the striped bass population in the Maryland portion of the Chesapeake Bay and to assess the status of Maryland's striped bass spawning stock. Striped Bass Program surveys provide information regarding: recruitment, relative abundance, harvest, age structure and growth, mortality, and migration. The data generated are utilized in both intrastate and interstate management processes and provides a reference point for future Atlantic coast striped bass management considerations.

The spring 2014 spawning stock survey indicated that there were 19 age-classes of striped bass present on the Potomac River and Upper Bay spawning grounds. These fish ranged in age from 2 to 20 years old. Male striped bass ranged in age from 2 to 18 years old, with age 10 and age 11 fish (2004 and 2003 year-classes) being the most abundant component of the male striped bass spawning stock. The majority of females were ages 6 to 15, with most female striped bass collected being age 11 (2003 year-class).

The 2014 striped bass juvenile index, a measure of striped bass spawning success in Chesapeake Bay, was 11.0 as determined by the MD DNR Young-of-Year Survey. This is nearly equal to the 61-year average of 11.7, indicating a healthy level of striped bass reproduction. Striped bass, Maryland's state fish, spawn in Chesapeake Bay and its tributaries each spring. When environmental conditions such as water temperature and flow rates are optimal, egg and larval survival are high and reproduction can be very successful. The Young-of-Year Survey has been conducted since 1954 to track the reproductive success of striped bass, which can vary greatly from year to year, and help predict future adult abundance.

During the 2014 survey, biologists collected over 60,000 fish of 56 species, including 1,454 young-of-year striped bass, at 22 survey sites in the four major spawning systems--the Choptank, Nanticoke, and Potomac rivers, and the Upper Bay. MD DNR biologists visit each survey site three times during the summer, collecting two samples with a 100-foot beach seine. Juvenile indices are calculated as the average catch of young-of-year fish per sample. Survey data are also used to assess spawning success of other important species. In addition to striped bass, American shad, blueback herring, and white perch experienced successful reproduction in 2014.

During the 2014 spring recreational trophy season, biologists examined 211 harvested striped bass. The average total length of striped bass sampled was 37.2 inches total length (TL)

and the length of fish sampled ranged from 28.6 to 46.7 inches TL. The average weight was 20.1 pounds. Striped bass sampled from the trophy fishery ranged in age from 5 to 20 years old. The 2003 (age 11) and 2004 (age 10) year-classes were the most frequently observed cohorts sampled from the spring fishery.

In summary, Maryland's commercial and recreational striped bass fisheries have been concurrently managed by the MD DNR as part of the Atlantic coastal stock under the auspices of the Atlantic States Marine Fisheries Commission (ASMFC). Data collected by MD DNR biologists are used in the management of both the commercial and recreational fisheries. ASMFC and MD DNR scientists conducted the bi-annual Atlantic striped bass coast-wide assessment in 2013, utilizing data collected and provided by MD DNR. The 2013 assessment identified changes in female spawning stock abundance, and striped bass fisheries will be subject to harvest reductions beginning in 2015 in order to maintain spawning stocks at high levels. The 2013 ASMFC striped bass coast-wide assessment also indicated that the Atlantic coast striped bass resource is not overfished or experiencing overfishing relative to reference points defined in the assessment.