Indicator	Status In 2024	Implications	Time Series*
Mean winter (Feb-Mar) bottom temperature (°C)	North: Below threshold South: Near long-term average	Cold winter temperatures may increase the mortality of young-of-the-year fish, resulting in smaller year classes. 2024 temperature in the northern subunit (north of Hudson Canyon) was colder than black sea bass's lower threshold of 8°C. Bottom temperature data comes from GLORYS, a modeled product [7].	North South South South
Shelf water volume (km ³)	No data for 2024	Shelf water volume [8] is a proxy for suitable winter habitat; higher shelf water volume indicates less suitable habitat, potentially leading to northern fish migrating into the southern subunit. The shelf water volume dataset is created from in situ data, and there has been no winter sampling since 2022, highlighting the need for additional indicators to inform stock subunit mixing.	3,000 - 2,000 - 3,000 - 2,000 - 2010 2015 2013 202
Black sea bass MRIP recreational trips (millions of annual trips)	Above long-term average	Recent trip numbers are near an all-time high, but have decreased from 2023. Catch (not shown) generally reflects trip patterns, while landings (not shown) have remained steady. High regulatory complexity may contribute to recreational fishing trends.	1.6 1.2 0.8 0.4 10.90 2000 2010 2020 2024
Number of active black sea bass commercial vessels (#)	Below long-term average	Active vessels were defined as the number of vessels with federal permits that landed at least one pound of black sea bass in a year. The number of active vessels has been decreasing since 2017, which could impact revenue distributions and fleet composition.	800 700 600 500 400 200 200 200 200 200
Commercial revenue per active black sea bass vessel (2024 USD)	Above long-term average	Commercial revenue per active black sea bass vessel follows an overall increasing trend most likely driven by the continued decline of active vessels and an overall increase in total commercial landed pounds over the past decade.	30,000 25,000 20,000 15,000 10,000 2000 2000 2000 2000 2000 200

^{*} The y-axis units are included in the "Indicator" column of the table. In all figures, the dashed line represents the time series mean, and the solid green lines indicate \pm 1 standard deviation. Commercial data were derived from the commercial dealer database hosted at the Greater Atlantic Regional Office. All dollar values have been adjusted to 2024 real dollars using the Gross Domestic Implicit Price Deflator. The code used to create this report can be viewed online: github.com/NEFSC/READ-EDAB/bsbESP

We welcome your observations! Please contact northeast.ecosystem.highlights@noaa.gov with any on-the-water insights or changes observed in the black sea bass fishery and nefsc.esp.leads@noaa.gov with questions or comments on the information presented in this report.

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