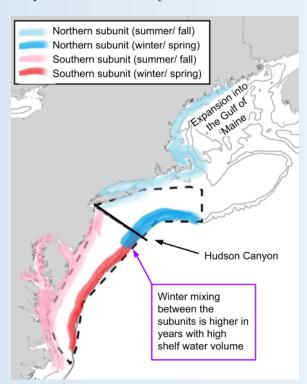




Black Sea Bass (*Centropristis striata*) Ecosystem & Socioeconomic Profile Report Card

Spring 2025

Black sea bass is an important Mid-Atlantic stock with high commercial value and recreational engagement. There are two stock subunits, divided at the Hudson Canyon. Overfishing is not occurring and the stock is not overfished. The stock assessment model uses winter bottom temperature as a recruitment covariate to incorporate the observed link between cold temperature and smaller year classes.



2024 in Review

Fishing Community Observations

- Steady or increasing availability
- Expanding distributions and changes in migration timing
- Local regulatory complexity affects fishing opportunities

Commercial Fishery

- Number of active vessels declined in 2024, but total landed pounds increased from 2023 and have been following an overall increasing trend over the last decade
- Total revenue decreased slightly along with average prices (\$/lb)
- Average revenue per vessel increased, following an upward trend over the past three years for vessels that remain in the fishery as the number of active vessels continues to decline

Recreational Fishery

- Number of targeted trips, catch, and landings all down from 2023
- But number of trips still above the historic average
- Not clear if catch per angler has continued to increase in 2024

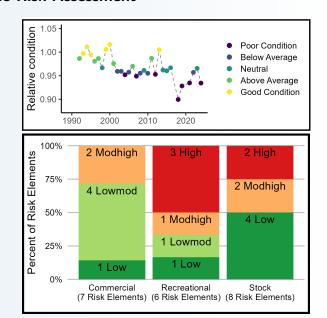
Ecosystem

- Cold winter in the north but near average in the south
- Poor or below average fish condition in recent years

Key Points from the Mid-Atlantic Risk Assessment

According to the Mid-Atlantic 2024 EAFM risk assessment update, Black Sea Bass scored high and/or moderately high risk in the following elements:

- Moderate-high to high risk to the stock due to:
 - -Very high exposure to changes in climate
 - -Observed and potential changes in distribution; northward shift into the Gulf of Maine
 - -Dependence on threatened estuarine habitat
 - -Decline in the biomass of benthic invertebrate prey
 - –Decline in black sea bass body condition in the Mid Atlantic Bight
- High risk to the recreational fishery due to:
 - -Catch exceeding harvest limits in several years
 - High regulatory complexity; frequent changes and varying interstate regulations; regulatory changes in allocations
- Moderate-high risk to the commercial fishery due to:
 - -Commercial revenue in wind development areas
 - -High discards & discard mortality



Indicator	Status In	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. The stock assessment models the stock as two separate subunits, separated approximately at Hudson Canyon. The 2024 average winter bottom temperature in the northern subunit was colder than black sea bass's lower threshold of 8C. Bottom temperature data comes from GLORYS, a modeled product. Winter bottom temperature is used in the model as a factor that influences recruitment.	North South 10-98877-
Shelf water volume (km3)	No data for 2024	Shelf water volume is a proxy for suitable winter habitat; higher shelf water volume indicates less suitable habitat, potentially leading to northern fish migrating into the southern subregion. The shelf water volume dataset is created from in situ data, and there has been no winter sampling since 2021, highlighting the need for additional indicators to inform stock subunit mixing.	3,000 2,500 2,000 1,500 1,000 2,500 2,000 1,500 1,000 1,500 1,000
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 is likely contributing to recreational fishing trends.	1.6 1.2 0.8 0.4 1.990 2000 2010 2020 2020
Commercial revenue per vessel (2024 USD)	Above long-term average	Commercial revenue per 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 - 20,
Number of commercial vessels (#)	Below long-term average	The number of active vessels has been decreasing since 2017, which could impact revenue distributions and fleet composition.	800 700 600 500 400 200 2010 2020 2020 2020

 $^{\ ^*}$ The y-axis units are included in the "Indicator" column of the table.

Please contact nefsc.esp.leads@noaa.gov with any questions or comments.

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.