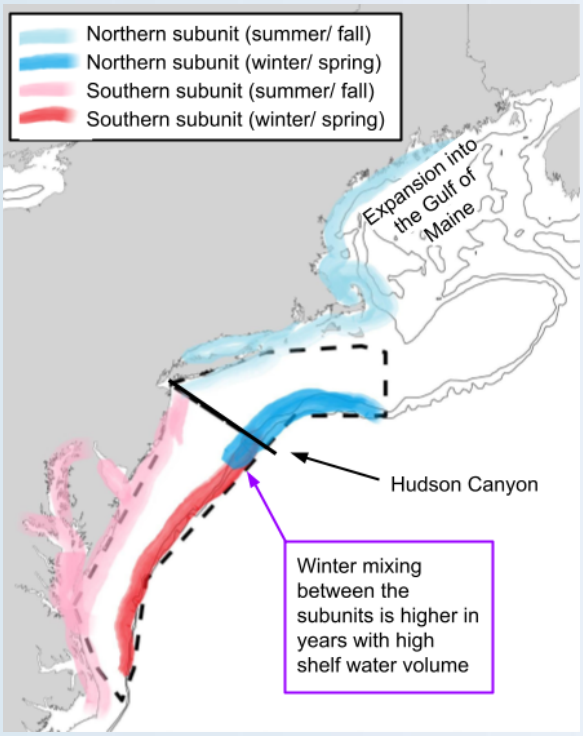
Black Sea Bass (*Centropristis striata*) Ecosystem & Socioeconomic Profile Report Card

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
- 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

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

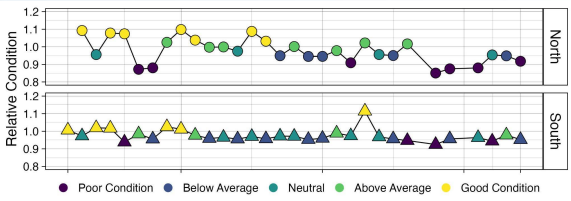
Ecosystem

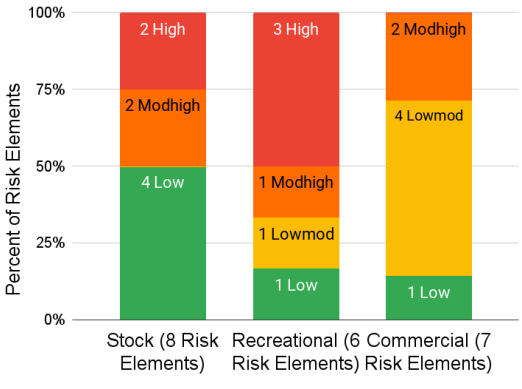
- Cold winter in the north but near average in the south
- Poor or below average fish condition in recent years

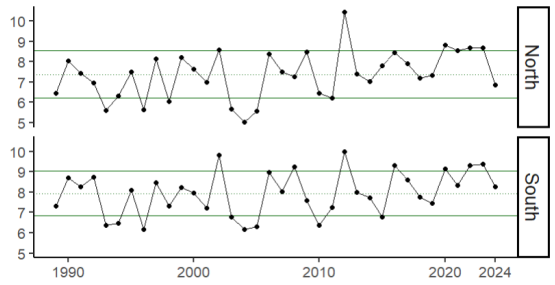
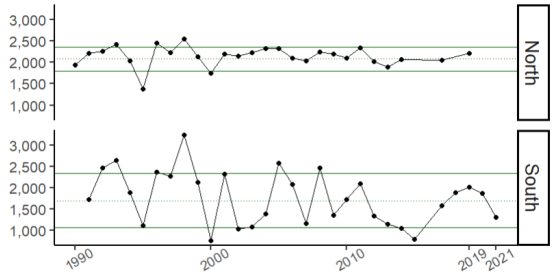
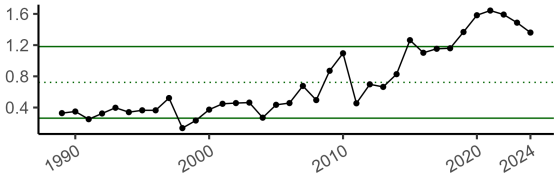
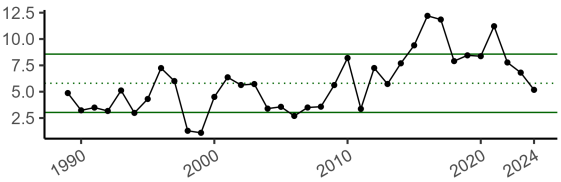
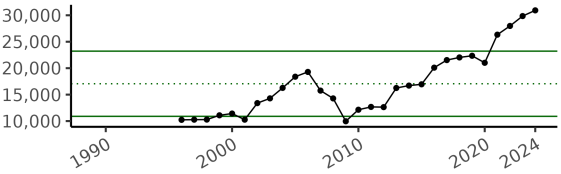
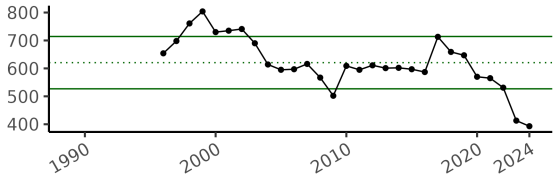
Key Points from the Mid-Atlantic Risk Assessment

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 Units	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 8C. Bottom temperature data comes from GLORYS, a modeled product.	
Shelf water volume (km3)	N/A (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.	
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. High regulatory complexity is likely contributing to recreational fishing trends.	
MRIP recreational landings (millions of lbs.)	Near long-term average	The recreational black sea bass fishery has a catch-and-release component, and management measures are being implemented to reduce recreational harvest.	
Commercial revenue per vessel (2024 USD)	Above long-term average	Commercial revenue per vessel has an overall increasing trend, despite decreases in both total landings and average price ($/lb.; not shown).	
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.	

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