Snapper Grouper Advisory Panel Black Sea Bass Fishery Performance Report April 2022

SAFMC Snapper Grouper Advisory Panel

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South Atlantic Fishery Management Council Snapper Grouper Advisory Panel Black Sea Bass Fishery Performance Report Update April 2022

At their April 2022 meeting, the South Atlantic Fishery Management Council's (Council) Snapper Grouper Advisory Panel (AP) reviewed fishery information for black sea bass and updated the fishery performance report (FPR). The purpose of the FPR is to assemble information from AP members' experience and observations on the water and in the marketplace to complement scientific and landings data. The updated FPR for black sea bass will be provided to the Scientific and Statistical Committee (SSC) to complement material being used in the SEDAR 76 operational stock assessment and to inform future management.

Advisory Panel Members:

James Hull Jr., Chair (Commercial/Dealer/Retail)

Robert Lorenz, Vice Chair (Recreational)

Vincent Bonura (Commercial)
Richen "Dick" Brame (NGO)
Randall Beardsley* (Recreational)
Tony Constant (Charter/Recreational)

Jack Cox, Jr. (Commercial) Andrew Fish (Commercial) Robert Freeman (Charter) Richard Gomez (Charter) Lawton Howard* (Recreational)

Chris Kimrey (Charter) Selby Lewis (Commercial) Andrew Mahoney (Commercial)
Randy McKinley* (Commercial)
Thomas Meeks (Recreational)
Chris Militello (Recreational)
Harry Morales (Recreational)
David Moss (Recreational)
Paul Nelson (Commercial/Charter

Paul Nelson (Commercial/Charter) James Paskiewicz (Commercial)

Andy Piland (Charter)

Cameron Sebastian (Charter/Commercial)
David Snyder (Consumer Representative)

Todd Kellison (non-voting)

*not in attendance

Fishery Overview

Information on the black sea bass fishery in the South Atlantic region is presented in a Fishery Performance Report application intended to provide an overview of several aspects of the fishery including life history of the species, stock status, management overview, and trends in landings and fishery economics for both the commercial and recreational (for-hire and private) sectors. The information was provided as background to elicit the discussion presented in this Fishery Performance Report.

Stock Observations

Off Ponce Inlet, Florida, commercial fishermen have continued to see low numbers of black sea bass in recent years. Black sea bass have historically been abundant in nearshore waters during winter months or cold-water events. However, the water has remained warm in winter months and kept the fish from coming in. Additionally, black sea bass (and red porgy) abundance seems to decline in areas where red snapper are abundant. This has been noticed especially off Florida. Timing of the increase in red snapper abundance over the last decade also seems to coincide with the decline in black sea bass landings and abundance.

A commercial AP member previously reported potential increased abundance of black sea bass off East Florida after the 2017 hurricanes, which were followed by cooler waters closer to shore. A slight uptick in catch and landings was observed for both sectors in this year. However, increased abundance was not reflected in the fishery-independent indices and catch continued to trend downward in the following years. This may indicate that rather than increasing stock abundance, the colder waters following the storms caused the fish to move into more accessible areas.

The size of black sea bass does not seem to have changed overall, but larger black sea bass are less available due to overall warming of ocean waters. Larger black sea bass are found in colder water and feed mostly on invertebrates on live bottom areas. Therefore, they tend to be in deeper waters for most of the year and are less accessible to the fishery than smaller fish. Smaller black sea bass have previously been observed close to shore off East Florida and in some of the rivers. However, in the most recent years, red snapper have overwhelmed bottom habitats and are likely impacting black sea bass populations. On some level, this may be through predation on small black sea bass, but on a larger scale, these fish compete for common prey which may be limiting black sea bass in areas where red snapper are abundant.

Off Georgia, red snapper seem to have taken over artificial reefs where black sea bass were previously caught. If a black sea bass is caught in these areas, it tends to be larger, but black sea bass catches have been rarer.

Recreational representatives from South Carolina reported that keeper-size black sea bass have been caught in the spring. This may occur along with many releases of red snapper, but 3-pound or larger black sea bass are available at that time.

The black sea bass fishery off North Carolina has a shorter seasonality than in the past due to colder winter waters not persisting for as long as they used to. Recent positive stock assessments north of the South Atlantic Council's jurisdiction may indicate a shift in the population.

The requirement that the commercial pot fishery operate outside of designated inshore areas from November through April can affect the annual number of black sea bass caught using this gear. During that time of year, black sea bass off the Carolinas and Georgia are closer to shore so the fish are largely unavailable where the commercial pot fishery is allowed. This should be considered in evaluating landings trends. The movement of the trap fishery offshore allows for better recreational fishing in nearshore areas where black sea bass are available. There is some desire from the commercial pot fishery to be able to fish further inshore so they can access the stock where it is during the fall and winter months. The recreational sector feels that allowing commercial pot fishing further inshore could negatively impact the recreational fishery, which has a larger minimum size limit than the commercial fishery.

The AP discussed potential impacts of lionfish as predators on small black sea bass or competing for similar prey items. Some commercial representatives noted that lionfish derbies have greatly lowered numbers of lionfish, so they are less prevalent now than in the past, especially in shallower waters.

Commercial Observations

Fewer commercial fishermen seem to be fishing black sea bass pots. In Florida, the shortened time when black sea bass are available combined with reduced numbers (and increases in red snapper) make pot-fishing less worthwhile. In North Carolina, where management is split north and south of Cape Hatteras, an increase to the mid-Atlantic ACL allowed greater access for the trawl fishery, which reduced prices, making pot-fishing less worthwhile.

In North Carolina, the commercial price of black sea bass is greatly impacted by management and effort north of Cape Hatteras, NC. Management of the black sea bass fishery off North Carolina is split north (Mid-Atlantic Fishery Management Council) and south (South Atlantic Fishery Management Council) of Cape Hatteras, NC. In the Mid-Atlantic, more black sea bass are being caught than in previous years, and the annual catch limits have increased. Effort, especially in the northern areas of the Mid-Atlantic region and New England, can be impacted in the fall and winter by weather. When there is less effort and catch further north, the price increases in North Carolina. When northern effort and catch increases, the price decreases in North Carolina. Additionally, bluefin tuna fishing in November and December can sometimes draw commercial effort away from black sea bass during that time of year.

In the past, off South Carolina, there were some issues with compliance from the commercial pot fishery with fishing inside of the twenty-mile line. However, severe penalties were issued and now there are fewer pots in general for this area.

In Florida, black sea bass continue to be in high demand and sell for a good price. However, with local reductions in abundance and accessibility, catches are unable to support this demand. Therefore, it is common for Florida businesses to import black sea bass from North Carolina or further north.

In general, price and demand for black sea bass has continued to increase. Also, many of the pot fishery endorsements have been transferred, but some of the new holders are not using those endorsements in the winter due to requirements for pots to be offshore, limited pot catches relative to the effort and cost associated with that fishery in the winter, and greater efficiency by targeting other species or using other types of gear at that time.

A North Carolina commercial representative commented that commercial discard reports have been done as accurately as possible, with hopes that this information will help future stock assessments.

Recreational Observations

The recreational fishery was closed at times during the 2010s, and this should be considered when evaluating landings and discards data. Recreational AP members from North Carolina noted that during these closures, black sea bass were abundant but were small. Smaller black sea bass are more typical in warmer water.

In North Carolina, while charter clients do not typically book trips to specifically target black sea bass, they are an important part of the "grab bag" of bottom fish that attracts customers. North Carolina charter anglers have expressed some frustration with the current 13-inch minimum size

limit, as they more often catch fish that are just below the size limit at 12 or 11 inches. Some charter captains have adapted to these concerns by actively managing customer expectations, informing them ahead of the trip about the number of releases they will likely have. The primary objective for the recreational for-hire component is to keep fisheries open, even if limits for retainable fish need to be adjusted. There is some additional frustration from customers having to release large numbers of red snapper while fishing for black sea bass.

As noted for the commercial sector, black sea bass recreational management in North Carolina is split at Cape Hatteras, with more liberal regulations to the north.

Previous comments discussed a decline in recreational for-hire demand for black sea bass in Florida due to the minimum size limit being too large relative to the fish being caught. However, the fishery has since adjusted to catching other species instead of black sea bass and shown some recovery.

Previous comments for Georgia also noted that some charter vessels had switched from targeting black sea bass to sheepshead due to a larger minimum size limit and dissatisfaction with the current black sea bass bag limit.

For the recreational for-hire fishery off the Carolinas, discard levels have been about the same as in the past. There may be some slight underreporting or ballparking of discards for head boats due to large numbers of fish being caught, but effort is being put forward to estimate and report. For a 100-person head boat trip targeting black sea bass, the number of fish released could range up to 700 or 800 fish (including undersized black sea bass and other species that cannot be retained). A charter/head boat representative reported that most people are adhering to size and bag limits.

Observations on management measures

Over its management history, the black sea bass fishery (both sectors) has experienced many changes to seasonal opening times, closures, size limits, trip limits, effort, and bag limits. The regulatory history should be considered when evaluating effort, catch, and abundance trends. Given the ties of black sea bass to water temperature and differentiation by size, changes to the seasonality of the fishery can affect the number and size of fish available. Previously stated potential impacts of warming oceans and fish staying offshore longer should also be considered when evaluating effort, catch, and abundance trends.

AP members continued to agree that the current commercial minimum size limit of 11 inches is appropriate for the gear being used. Also, the AP continues to agree with the current mesh size specifications for the pot fishery, as long as the commercial minimum size limit does not change. The current mesh size results in few size-related discards from this fishery.

Some AP members previously stated that managers may want to re-consider apportioning the commercial annual catch limit by gear type (pots & hook-and-line). This has not been an issue recently as the commercial annual catch limit has not been met due to recent changes to regulations. However, if commercial catches increase in the future, there may be a need to reconsider allocating by gear.

Florida commercial members reiterated that the pot area restriction has moved them off their prime fishing grounds.

The AP continued to agree with current annual catch limits (commercial and recreational). It was reiterated that management typically responds to increases a stock's abundance by increasing the annual catch limit. Fishermen maintain that this situation played out with black sea bass after the last update to the stock assessment. Now, fishermen are concerned that since recent fishery-independent data show a declining trend in abundance, management will respond by reducing the annual catch limit. Fishermen are critical of this knee-jerk reaction and urge the Council to strive for more stable management, focus on better monitoring, and opt for less dramatic changes in catch levels. They note that fisheries respond to environmental factors that are independent of fishing activity and too often, under the current management approach, fishermen end up paying the price.

Differences in minimum size limits can be frustrating for the recreational sector and lead to more recreational releases. While reducing the recreational minimum size limit of 13 inches could have some support, it should not be done at the expense of the time that the fishery is open. Keeping the recreational fishery open is more important than a reduced size limit or other form of management change to increase retention.

A recreational AP member commented that managing for optimum yield should incorporate a large enough buffer to avoid any in-season recreational closures. A commercial fisherman commented that the pot fishery can operate on a shorter time frame, over the winter, and then close if it catches its ACL. They supported managing the hook and line component to be open year-round.

Circle hooks have been required north of 28 degrees N latitude since 2011. Effects of this change in management should be evaluated and included.

Environmental/ecological Observations

The AP noted that black sea bass seem to have a low discard mortality rate, so even though some times of year are largely catch and release, there should not be large numbers of dead discards estimated.

Off Ponce Inlet, Florida, fishermen continue to report a lack of cold water over several years. Black sea bass normally migrate inshore during winter months to prime fishing grounds, but this movement has not taken place in some time. Fishermen maintain that is also the reason for few observations of Right Whales in that area in recent years.

Warmer than normal water temperature was also cited as the reason for the decline in the numbers of large black sea bass inshore off North Carolina.

Off North Carolina, black sea bass are caught with triggerfish and vermilion snapper. Prior to the requirement of descending devices, there were observations of released fish floating at the surface. Increased use of descending devices may have improved survivorship of released fish since then.

Off South Carolina and southern North Carolina, black sea bass are caught with grunts, porgies, flounder, sharks, and other species between 8 and 12 miles offshore. From 10 to 18 miles, that assemblage includes red snapper as well. From 20 to 25 miles, much of the catch is red snapper.

Black sea bass seems to be a stock that is strongly impacted by climate change. The most recent discussions from the collaborative Climate Change Scenario Planning Work Group (being conducted through SAFMC, MAFMC, and Atlantic States Marine Fisheries Commission) about how climate change is affecting fish stocks should be considered in the assessment and future management.

The continued loss of inshore saltmarsh and estuarine habitat has a negative effect on black sea bass and other species

Off east Florida, commercial fishermen report black sea bass spawning primarily from January through March. Off North Carolina, fishermen report large females in spawning condition in March and April.

The habitat range of the black sea bass stock is so large that fishing mortality is a small factor in overall stock abundance. Off Florida, they are caught in crab traps inshore as well as out to 500-600 feet of water. Fishermen maintain that management actions such as minimum size limits have been ineffective in keeping the population healthy. Black sea bass are short-lived animals that become sexually mature at a young age and adapt to changing conditions. Environmental factors are in charge.

Shark depredation continues to be an issue for the snapper grouper fishery as a whole, including black sea bass.

The decline in black sea bass off east Florida seems to have correlated with the decline in flounder in the same area.

Research Recommendations

- Recruitment monitoring with small mesh traps.
- Importance of offshore habitats as nurseries. Scientific studies suggest that estuarine nurseries may be more important than offshore ones. However, these data are limited and more research is needed.
- Conduct analyses to establish the appropriate minimum size limit that would achieve optimum yield before considering minimum size limit changes.
 - Estimation of optimum yield should account for keeping recreational and commercial hook and line fisheries open year-round.
 - Optimum yield does not need to include year-round open season for the commercial pot fishery, as this largely occurs in the winter.
- Fishery independent sampling should be expanded to include winter months to inform year-round fisheries. This may also provide a better indicator of stock health, as black

- sea bass, especially larger individuals, are staying offshore and potentially out of the sampling area for longer periods due to inshore waters staying warmer longer.
- May be useful to look at interannual water temperature variability and how it may have affected black sea bass abundance, accounting for movement patterns.
- Outreach/education on best fishing practices such as descending devices and venting, including estimates of current usage, efforts to increase usage, and estimation of impacts on survival.

Other Observations

Fishermen agree that the fishery-independent index of abundance is very informative of the status of the black sea bass population as Chevron traps are very effective at catching this species in particular. The index shows a recent increase in the abundance of black sea bass and fishermen find this encouraging. However, they note that even though the index showed a large recruitment event around 2011 and now shows abundance to be back down to 1993 levels, this does not necessarily mean the South Atlantic black sea bass stock is in trouble. It may simply mean that recruitment has slowed down (at least in areas where the survey operates). Further, as recruitment success is based on environmental factors, it is worth considering that the current overabundance of red snapper may be impacting black sea bass recruitment.

In North Carolina, there is substantial black sea bass fishing in state waters by private recreational boats and charter boats without federal permits that is not well-sampled through MRIP due to little to no intercept sampling of the sites these boats leave from and return to.