

# A Brief History of the Black Sea Bass Fishery in the Southeastern United States

By Lia Aleman Leon

## Introducing the Black Sea Bass

The black sea bass is a strange yet beloved fish of the South Atlantic. Also known as 'black fish' in local historical accounts, it has a documented history of at least 200 years. It is eagerly sought after by both residents and visitors of coastal North Carolina, South Carolina, Georgia, and Florida<sup>1</sup>. "Black sea bass sells out fast," says Betty, owner of St. Simons Seafood on St Simons Island, Georgia. "It's a limited catch. I have a list of locals who are always interested."

This white-meat fish, highly sought after for its mild-flavored, delicate taste, is traditionally easy to catch. However, it is strictly regulated and increasingly rare. "We haven't had it in over a year and a half," Betty acknowledged. "I've owned this place 27 years and we used to get them all the time, but my main guy hasn't been fishing commercially."



The limited availability of commercially sold black sea bass stems from a complex interplay of factors, including a rich historical context, fishing practices and innovations, regulatory measures, and environmental influences. This brief exploration hopefully clarifies the past and present challenges in sustaining the fish, the fishery, and the interest of new generations.

Image retrieved from: *National Oceanic and Atmospheric Administration (NOAA)*

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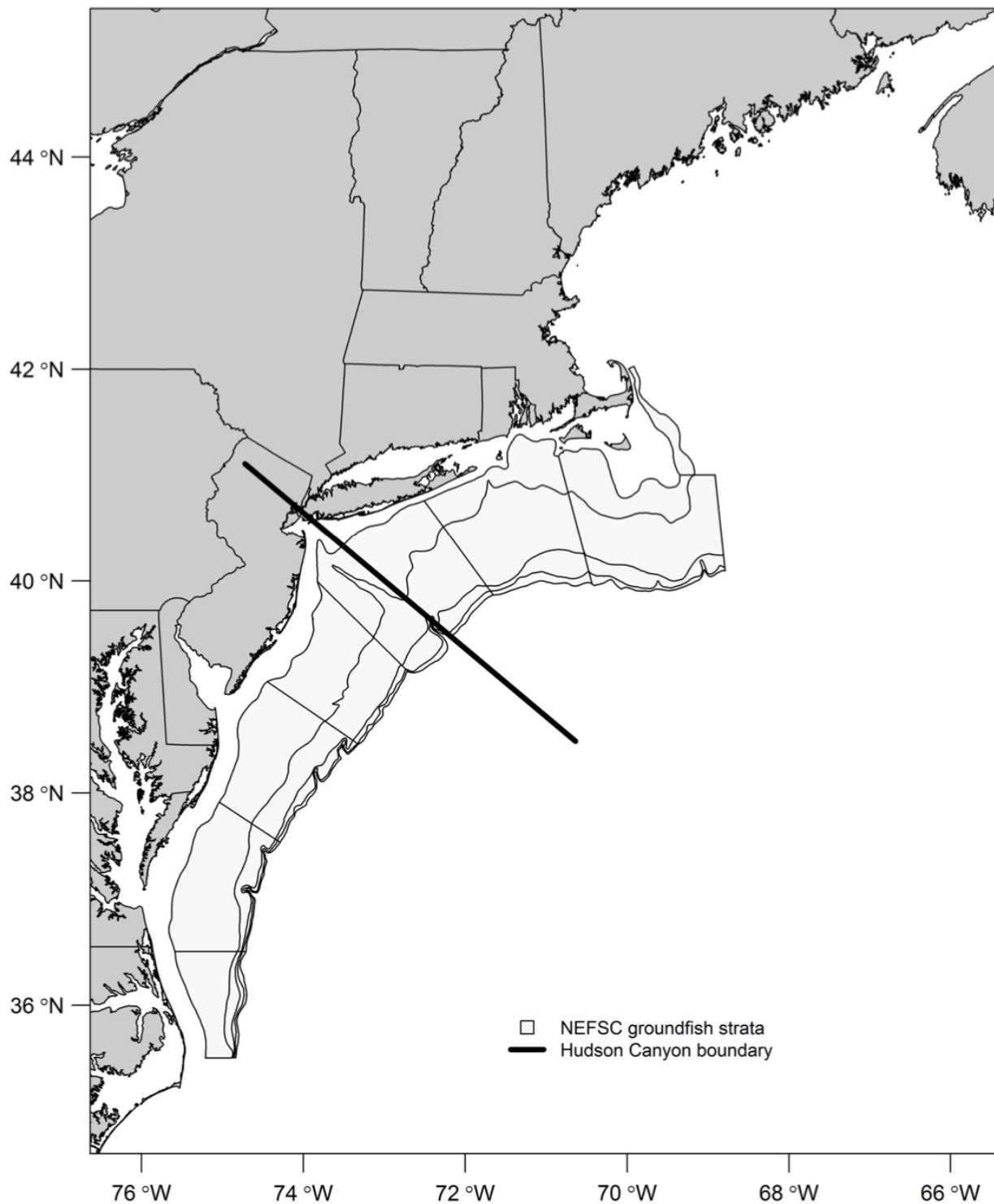
<sup>1</sup> Though conducted through a Georgia lens, the Georgia Conservancy is highly aware that the information in this document fits within a larger southeastern context. There are no state lines in the ocean.

## Description and Distribution

Black sea bass, *centropristis striata*, despite its name, come in a range of colors, from smoky gray to dusky brown to blueish black hues. The black sea bass has a striped body, fins that end in spines, a large head, a pointy snout, and an oblique mouth full of sharp teeth. They are a carnivorous, predatory species that typically inhabit reefs, wrecks, rocks and other man-made structures. Their diet includes small fish and crustaceans such as crabs and shrimp.

There are a couple of mysterious aspects to this fish. For one, it is a protogynous hermaphrodite species, which means that they are typically born female and transition to male as they increase in size and age (though this is not always the case, as large females are known to change sex when there is a shortage of males). Traditionally, black sea bass reach maturity around one to three years of age and weigh around nine pounds.

Fishermen claim that they also, at times, disappear from their usual haunts to places unknown. Black sea bass can be found all year round, but as a migratory fish, the abundance of the stocks changes. In the West-Atlantic coast, black sea bass are distributed from the Gulf of Mexico to the Gulf of Maine and are typically thought of as two distinct stocks, separated by Cape Hatteras. In Spring, these fish tend to move inshore and upward, and in Autumn, they tend to move offshore and southward (Mercer 1989). In the South-Atlantic, this migratory behavior means that the best time for fishing is Winter, and, historically, the fisheries of the region have delighted in this particular fish.



**Fig 1. Study area of the NEFSC annual bottom trawl survey with strata used in the black sea bass assessment highlighted.** The solid black line marks the Hudson Canyon boundary dividing the region into northern and southern MAB.

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# Fishing Black Sea Bass

## Historical Fishing

There are accounts in local newspapers, as far back as 1886, of the importance of the black sea bass. From Colonel Jake Dart in the *Atlanta Constitution*:

*“About Brunswick, the finest fishing in the world is to be had... and the best fun is catching black fish<sup>2</sup>. The blackfish is one of the gamest: and one of the best fish that swims our waters. They are found in great schools, and vary from half a pound to three pounds in weight. You ought to see how they bite. We fish them with a line which goes to the bottom of the sixty foot water where they are generally found. On this line hooks are set every foot or two. All you have to do is to bait the hooks, drop the line until it touches the bottom, and then draw it up. In the right season and the right place, it will come up with a fish on every hook. I have caught 500 black fish before noon several times.”*

In 1887, black sea bass and red snappers were sold in Georgia on the ten cents column advertisement in the *Macon Telegraph*. By 1947, the pound cost 37 cents, and according to a report by Elizabeth Leland (1988) in *The Beaufort Gazette*: “Locals call them blackfish and sell them for 50 cents a pound. They ship them up north and call them sea bass and sell for \$1.50 a pound.” 50 cents in Georgia is consistent with inflation, and with the previous numbers.

“We called it a Yankee fish. They go to New York, where the fish was more appreciated,” shares Michael “Chops” Cowdrey, a 42-year-old contemporary fisherman from Sneads Ferry, North Carolina, in an interview for this article.

In this case, appreciation was economic, as the further northwards and inland the fish was sold, the more profitable. It was advertised and sold together with red snappers, yellowtail, flounder, amberjack, mullet, oysters, and others. Though not shown in print, Chops shared that black sea bass, as with many of these fish, were sold in grades - small, medium, large, and jumbo. Due to regulations, the small grade no longer exists.

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<sup>2</sup> Not to be confused with whales, to whom the term has been attributed as well). In tales such as the one from Coronel Dart, it is easy to make the distinction, as he refers to the weight of his catch. This fish is also known as rock bass, black bass and tallywag.

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Left: *The Macon Telegraph*. Macon, Georgia. Fri, Jul 15, 1887, Page 4

Right: *The West Point News*. West Point, Georgia. Thu, Apr 10, 1947, Page 7

Bill McDonald, from Southport, North Carolina, in an article written in 1974, shared: "You are out 30 miles at sea on the good days, fishing 70' of the water searching for—and finding— black gold – another way of saying black sea bass, which the summer charterboat men, the shrimpers and commercial boats in general go after when the cold weather drops the seawater temp."

The late seventies were also a time for technological improvements in fishing.

"I was blessed to come into fishing at a certain time where fishing has changed along with technology," says Chops. "We had GPS now, a positioning system, and your machine that would read the bottom, it became more user-friendlier. So commercial fishing in the seventies had an explosion".

Chops' testimony is similar to that of DeWitt Myatt, a fisherman interviewed in 1980 by *The State*, a South Carolina newspaper. Among Myatt's tips on how to fish blackfish:

- *Use your depth finder to locate the bottom structures and fish around them for the best results. Anchor so that you're directly over the structure you want to fish*
- *Using a reef anchor can be effective. The small marker float serves as a reference that can help you keep up with the fish*
- *Don't tarry if you don't get immediate results. If the blackfish are there feeding, you should get strikes as soon as your bait hits bottom.*

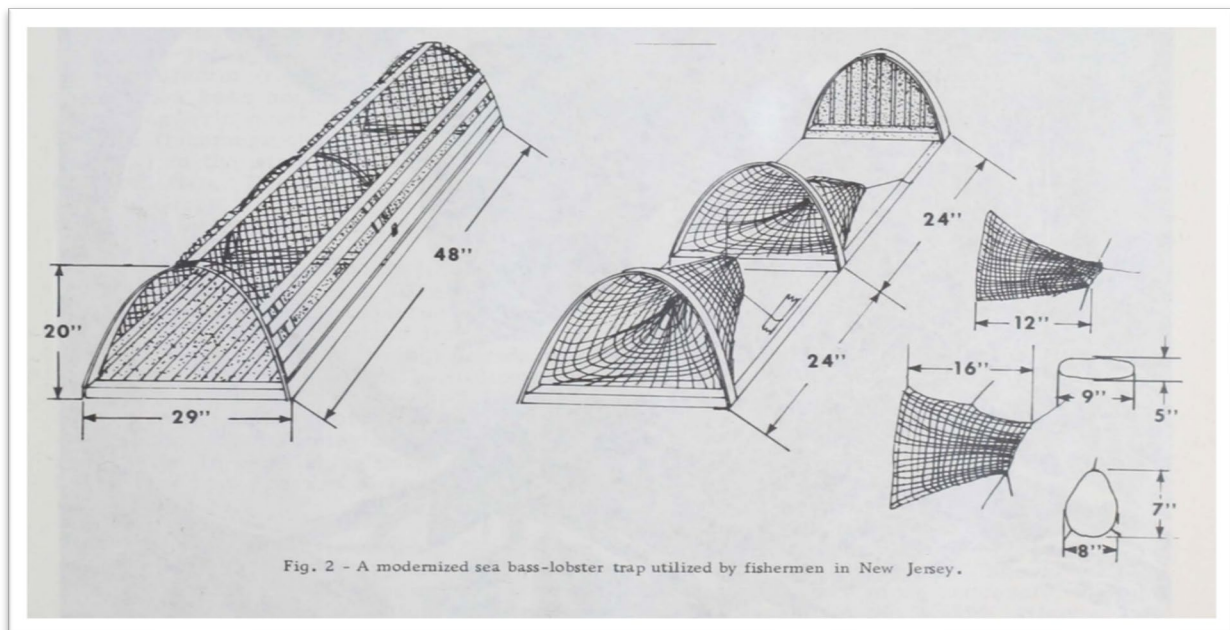
Myatt fished with 2 hook rings, baited with squid. But one of the technological advancements in black sea bass fishing specifically was the adoption of pot fishing.

## Pot Fishing

The traditional methods for black sea bass fishing are line and hook methods and net fishing, though these methods often result in bycatch, due to the indiscriminate nature of the gears. Pot fishing, also known as trawl fishing, is not only more discerning, both in species and size, it is a more effective method of capture.

“Traps are well suited for sampling reef fish because they can fish unattended, can be deployed in many different habitat types, are relatively inexpensive and robust, and catch fish alive so that bycatch individuals can be released” (Miller, 1990).

The pots were attached to buoys and weighted so that they might sink to the bottom of the sea reefs, where blackfish are found. Four small entrances let black sea bass inside the trap as they seek bait





(fish), found inside the pot. The trap is designed so that once fish are inside they have a hard time getting out.

According to Chops:

*"The first sea bass pots were crab pots. Fishermen started setting crab pots, and the crab pots would fill with fish. And pots are conducive for sea bass. Not all species go in pots like a sea bass does, sea bass will fill a pot. Then, our local pot company was Jones and Dixon, a married couple. They started modifying these pots and changing them a little bit."*

To follow are two accounts of successful black sea bass pot fishing, both from the early 1970s.

From Burlington, North Carolina in 1972, the 59-foot *Skipper*, manned by a three-man crew traveled to four different locations looking for black sea bass. Other blackfishing boats were in the area, which necessitated the various stops. Their bottom scanners

*And Sometimes Even That Fails*

## In Pot Fishing You Try, Try Again

SOUTHPORT — If you are here along the winter waterfront and the weather is rough, you will see an array of fishing boats flying several colorful flags. The flags are not attached to the boats — they are attached to ends of long, slender bamboo. The flags mean commercial blackfishing.

Recently the weather was right and the 59 foot "Skipper" went blackfishing. She was steaming toward good grounds offshore when the electronic bottom recorder indicated a school of fish below. Hopeful of a good catch without going the long trip offshore, the boat was stopped for a try. The three-man crew put out three pots. The long bamboo with flags are buoys for 24 inch cubes of chicken wire. Bait (fish) is placed inside the trap. The pot is weighted so it sinks to the bottom. Four small entrances let black sea bass inside the trap as they seek bait. The trap is designed so once fish are inside they have a hard time getting back out.

No fish, so the Skipper continued on until she was some 40 miles offshore. The water was 100 feet deep, blue in color, and 70 degrees at the surface. Other blackfishing boats were in the area. Pots were fished in four different locations. By late afternoon a crew member looked at the dozen blackfish scattered on the bottom of the big 3,000 pound capacity box on the deck and said, "The worst part does not come yet, we have to go back to dock with that."

Buoys, rope, and pots were brought in again and the Skipper started for shore. About an hour later the bottom scanner indicated fish. Pots were put over. The first pot pulled back had maybe 40 pounds of blackfish. The second a bit more. Nine pots were put overboard. The boat carries only 15. When fish are there, they fill up a pot so fast the crew keeps busy with 15, putting an empty pot overboard as soon as a full one is retrieved.

Within an hour about 400 pounds were caught in an area the size of a city block. It saved the day but did not fill the box deep enough. The captain considered anything more than 1,000 pounds a good day.

On the way in they hit fog and the going was slow. The Skipper made it to dock a bit before 10:00 p.m. Fish were unloaded and the boat readied for the next day. If the weather was right, she would leave dock again before light.

**ROYALS IN NEW PARK**

KANSAS CITY, Mo. (AP) — The baseball part of the new \$43,000,000 Harry S. Truman Sports Complex in Kansas City will open next April 10. That's when the Kansas City Royals will open their American League home season with a night game against the Texas Rangers.

The complex provides 41,000 seats for baseball. The football part of the facility opened last August.

OPEN DAILY 10-10; SUNDAY 1-6



eventually helped the crew know when fish were in the area, and they began to pull in the 15 pots they carried on the boat. Within an hour they had caught about 400 pounds. The ship had a 3,000-pound capacity box on deck, and the captain considered anything over 1,000 pounds a good day.

Another article, which followed Captain Tom McGlamery and Mate Randolph of the commercial boat *Blue Claw* in 1974, completes the picture. The *Blue Claw* traveled with 32 wire-mesh traps during winter and fished for fifteen hours. On a good day in winter they could fill 50 boxes of black bass, each box with 100 lbs. of fish. These then could be moved into storage bins filled with ice on the boat, for a total of 5,500 lbs. The average selling price at the time was 25 cents, so pot fishing was very lucrative, though due to weather, irregular.

The business of black sea bass was booming.

## Permits and Restrictions

Historically, black sea bass fishing in the South Atlantic has been self-regulated by fishermen seeking to ensure lasting, sustained success and health in the fish stock.

“In the beginning, it was unlimited, there was no size limit,” says Chops. “You could keep small sea bass if you wanted to, but that wasn’t necessarily lucrative for the fishermen.”

Myatt, already mentioned previously, similarly recommended that anything below nine inches was returned to the ocean.

But there became a divide among fishermen at some point. Chops again:

*“Fishermen that didn’t self-regulate weren’t really vested in the fishery, didn’t really need it next year, if it got shut down, they made the majority of their money doing something else. So it got to where people started leaving pots in the ocean long term. If you leave a pot in the ocean and it goes through big swells for several days, it kills the fish in the pot, then those fish turn into bait.”*



In the 1990s the first regulations on size limits came about. It began with an eight-inch size limit, then quickly went up to 10 inches. With pot fishing, adapting to this change meant changing the mesh size. But there was a sizeable disparity in catch as well.

GUIDE TO SALTWATER LIMITS		
Species	Minimum size limit	Daily bag limit
African pompano	24 inches (fork)	Two a person or boat
Amberjack	28 inches (fork)	One
Black drum	14-24 in. slot limit	Five, one over 24 (total) inches
Black mullet	11 inches (fork)	50
Bluefish	12 inches (fork)	10
Blue marlin	96 inches (jaw-fork)	One (see notes)
Cobia	33 inches (fork)	Two
Dolphin	None	10
Flounder	12 inches (total)	10
Grouper	(See notes)	(see notes)
King mackerel	24 inches (fork)	Two
Northern weakfish	12 inches (total)	Four
Sharks	None	One a person two per boat
Spanish mackerel	12 inches (fork)	15
Pompano-Permit	10-20 in. slot limit (fork)	10 aggregate
Redfish	18-27-inch slot limit (total)	One over 20 inches
Sailfish	27 inches (jaw-fork)	One (see notes)
Seabass	10 inches (total)	20
Sheepshead	12 inches (fork)	15
Snapper	(See notes)	(See notes)
Snook	(See notes)	Closed
Spotted seatrout	15-20 inch slot (total)	Four, one over 20 inches
Tarpon	None	Special permit only
Tripletail	15 inches (total)	Two
White marlin	66 inches (jaw-fork)	One (see notes)
Yellowfin tuna	27 inches (fork)	Three, permit required

**NOTES:** Snapper length limits (TL), Atlantic waters: red snapper, 20 inches; mutton snapper, 16 inches; blackfin, cubera, dog, mahogany, queen and silk, 12 inches; mangrove, 12 inches in federal, 10 inches in state; lane, 8 inches; vermilion, 11 inches; red porgy, 14 inches.

**Snapper bag limits:** 10, for any aggregate combination of those with bag limits. No more than 5 mangrove, and no more than 2 red snapper; lane included in 10-snapper aggregate; vermilion, 10 in federal.

**Grouper size, bag limits:** Black and gag grouper minimum, 24 inches (total length); minimum for all other grouper 20 inches (total length). Bag limit 5, any combination, including 1 Warsaw, 1 sneeked hind, 2 black and gag grouper. Black sea bass minimum, 16 inches, 20 bag limit. No sale of Warsaw, speckled hind.

**Other snapper-grouper limit:** Aggregate of 20 for species not covered under other bag limits, excluding tomatoes, blue runners.

**Billfish bag limits:** One (sailfish, blue marlin, white marlin) a person, aggregate of all species.

**SEASONS:** Snook closed Dec. 15-Jan. 31 and June 1-Aug. 31. Seatrout closed Nov. 1-Dec. 31 on east coast south of Flagler County, and on Gulf coast north to Fred Howard County Park, 1½ miles south of Pinellas-Pasco county line. Seatrout closed in remainder of state Feb. 1-29.

**SPECIAL REGULATIONS:** Only hook and line gear for taking tripletail; only hook and line, cast net, and beach and haul seine gear for taking Florida pompano and permit. Only hook and line, gigs, cast net, and beach and haul seine gear for taking flounder and sheepshead. Pompano and permit sold must be 10-20 inches; Seatrout daily bag limit is 4 a person on east coast south of Flagler County and on Gulf coast north to Fred Howard County Park, 1½ miles south of Pinellas-Pasco county line. Seatrout daily bag limit in remainder of state is 5 a person. A 15- to 20-inch slot limit, with one trout exceeding the 20-inch maximum allowed, applies statewide for seatrout.

“There were some fishermen in some places that were using a lot of pots, and they were leaving them in the ocean for the entire year,” Chops shares. “I fished 40 pots a day, but another guy would fish 200 pots.”

Overfishing can disrupt the delicate balance of marine ecosystems, and have far-reaching consequences for both the species in question and the broader marine environment. Eventually, regulation demanded a maximum of 20 pots per boat. These regulations made pot fishing no longer as lucrative as it had been, so catching fish and being successful financially no longer came hand in hand, and so many of the historical families sold their fishing licenses.

“When my dad started fishing, you bought a six-dollar North Carolina fishing license

and you were allowed to fish for anything,” says Chops. “And then as time went on and things got more technical some of the older historical fishermen didn’t want to get the permits, do the paperwork. Things started getting more technical and some people wound up not having permits. So those predominant fishing families, the Jones, the Edens, and the Davises, aren't able to fish for sea bass anymore.”

The current sea bass restrictions include not only size and catch limit but seasonal fishing as well. The annual closing is from November 1 through April 30 inside 90 feet of water during winter months and a prohibition on the use of black sea bass pot gear. This effectively meant losing 15,000 square miles of prime habitat for fishermen during the most abundant time of year for fishing. Older fishermen sold their permits, and now, in some areas such as Georgia, there are no longer any sea bass fishermen. In 2012, the fishery was basically shut down.

## Relationship with North Atlantic Right Whales

Chops' personal account tells us that "after a few years of closure, we supposedly had rebuilt the stock, and the fiscal year rolled over we were still closed because of whale migration. And us, as fishermen, we didn't even know. This was pushed through in a package deal where they just made all these new rules for the fishery... on November 1st, the fishery was closing down due to whale migration."

North Atlantic right whales are Georgia's state marine mammal. They are baleen whales, feed on tiny crustaceans, and can achieve a weight of up to 140,000 pounds, and live as long as 70 years. Unfortunately, this is a critically-endangered species with a high risk of extinction in the wild. There are only about 350 North Atlantic right whales left, only 70 of which are reproductively active females.

One of the most alarming trends is the decline in the number of mothers and calves within the population, indicating that the reproductive success of these whales is seriously impeded. The North Atlantic right whale calving season occurs during winter months along the coasts of South Carolina, Georgia, and North Florida, which happens to coincide with the migratory period of black sea bass, and therefore, black sea bass pot fishing season. Right whales face a multitude of threats, and rope entanglement is among the most pressing concerns. While not as instantly fatal as collisions with boats, these entanglements often lead to severe injuries, causing suffering and compromising the survival prospects of these creatures. Since 2007, there have been nine recorded deaths and 30 serious injuries as a result of entanglement.

The National Oceanic and Atmospheric Administration's (NOAA) Atlantic Large Whale Take Reduction Plan (ALWTRP) was one of the conservation efforts put into place to mitigate the entanglement threat. This plan, created in 1997, is an evolving plan, reviewed and amended as more knowledge on entanglement becomes available. One of the key aspects of the plan is restrictions on fishing gear--where, how, and when they can be used, including a prohibition on the use of black sea bass pot gear.

As per *The Tallahassee Democrat*: "Traps may not be used for recreational purposes for stone crab, blue crab, shrimp, pinfish, and black sea bass pursuant to the appropriate regulations" (Dec 2, 1997).

The ALWTRP was not the only regulatory restriction, as overfishing concerns from the government imposed catch limits and size limitations, both commercially and recreationally. NOAA has made several attempts to educate and explain the requirements of the ALWTRP in the Mid-Atlantic, such as training sessions on how to respond in the event of a large whale entanglement, and workshops on how to bring

fishing gear into compliance (Jan 22, 2004. *The News and Observer*, Raleigh, North Carolina).

## Opportunities and Challenges Moving Forward

### Amendments and Innovation

More than twenty-six years after the restrictions on commercial fishing on black sea bass were established, new opportunities and challenges continue to arise. In January 2017, there was a regulatory amendment to the snapper-grouper permit and changes made to the seasonal closure for the black sea bass pot sector. The amendment's goal is: "to reduce the adverse socioeconomic impacts from the current seasonal black sea bass pot gear prohibition while continuing to protect Endangered Species Act (ESA) listed whales in the South Atlantic."

### Whale Safe Gear

This amendment opened the gate to innovation and some of the biggest developments in South Atlantic pot fishing. In 2022 came an Exempted Fishing Permit (EFP) by the National Marine Fisheries Service (NMFS) and an alliance with Sustainable Seas Technology, a nonprofit organization that collaborates with commercial fishermen to develop and deploy whale-safe fishing gear, also known as ropeless gear.

Rope lines are an entanglement risk for whales, turtles, and other marine mammals. Ropeless gear employs Subsurface Buoy Retrieval Systems (SBRs) to retrieve traps on demand. The location of the traps is recorded using GPS instead of marked by the roped buoy, as in traditional pot fishing, and a retrieval apparatus can be activated remotely from a signal on the fishing vessel, essentially creating a timed-release or on-demand method of harvesting traps.

The gear has been tested by fishermen in the South Atlantic with overwhelming success. Though there is a learning curve as to how to use the adapted gear, fishermen who did trial runs believed that the system was easy to use and achieved its set out goals.

The EFP, valid until August 2024, provides an opportunity for continued testing and refinement of ropeless gear, along with an economic effectiveness study. The innovative approach has the potential to serve as a model for other pot fisheries

grappling with entanglement issues. Ropeless gear reduces the risk posed to endangered marine life significantly and can improve the stability of fisheries suffering from heavy restrictions. Though each fishery has a unique dynamic that must be considered when applying such solutions, early testing suggests that ropeless gear is as effective or potentially even more effective than conventional roped traps and pots.

## Challenges

Opportunities always come hand in hand with expected and unexpected obstacles. For the black sea bass fishery one of the biggest concerns is recent NOAA survey data which shows concerning indicators for the black sea bass population along the southeast's Atlantic coast. The projections have raised alarms about the black sea bass' long-term sustainability, and overfishing is thought to be the principal reason.

There are also concerns about warming waters. Black sea bass are migratory fish, and the fact that there have been historically low numbers since 2017 in South Atlantic waters, but unprecedented abundance as far north as Maine, where black sea bass have never been seen before, might be related to the low stock numbers seen in the census. SEADAR, the process used to conduct the stock assessment, though used because of its transparency, does not take environmental considerations such as this into account.

## Conclusion

“Most of the people that were fishing black sea bass 20 years ago are no longer fishing, says Charles McMillan, past Coastal Director of the Georgia Conservancy. “Some of them are no longer on this Earth.”

Much of the information about the South Atlantic black sea bass fishery has been passed on, from fisherman to fisherman. With almost 20 years of closure of the fishery, a lot of information has been lost.

“Historical captains were, you know, the pioneers of everything,” says Chops. “But, a lot of that, a lot of heritage has died out. Most of the fishing fleet now are people that were not fishing when I first started.”

Fishermen have a powerful connection with the ocean and can act as dedicated stewards of the sea, respecting its delicate ecosystems and working to ensure its long-term health and sustainability. In the South Atlantic, their historical and responsible

practices towards conservation and sustained practice have safeguarded the oceans for future generations. Despite the complex issues faced, those involved continue to embrace the challenges and uncertainties of their beautiful yet unpredictable trade, and within the black sea bass fishery, there exists a potential to breathe new life into a historically and culturally significant industry across the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida, thereby revitalizing a vital artisanal fishery that plays a pivotal role in the economic prosperity of Southern ports.