

Sheepshead Fishery Overview
South Atlantic State/Federal Management Board
May 2014

Introduction

The Atlantic States Marine Fisheries Commission (ASMFC) does not currently manage sheepshead (*Archosargus probatocephalus*) through the Interstate Fisheries Management Program. The following is an overview of the life history, commercial landings and recreational harvest, and current state level management.

Life History

Sheepshead are a common marine fish found from Nova Scotia to Rio de Janeiro, Brazil. The population that ranges from Nova Scotia to Cedar Key is regarded as a subspecies, *A. p. probatocephalus* (Murdy and Musick, 2013). They can be found near jetties, wharves, pilings, and shipwrecks in waters warmer than 15.5 °C (60 °F). Adults mature between 2-5 years of age, with approximate size at maturity for males between 7-14 inches and 9-14 inches for females (SC DNR, 2013). They can grow up to 35.4 inches (2.95 ft) TL with a weight exceeding 9.6 kg (>22 lb), and average size and weight varying along the Atlantic coast. Sheepshead can live up to 35 years (Liao et al., 2009).

Sheepshead spawn in both near and offshore waters within proximity to wrecks and reefs during late winter and early spring, with juveniles inhabiting grassy flats and dispersing to high relief, hard bottom-areas as they mature. Sheepshead are omnivorous, but feed mostly on crustaceans (FWC, 2013) using their strong molars and incisors to crush shell. Studies have shown that prey type (crustaceans vs. small fish) may correlate to relative jaw strength in sheepshead (Crew, 2013).

It is unclear whether sheepshead are a true migratory species. Evidence suggests in both the Gulf and Atlantic regions that sheepshead migrate from nearshore to offshore areas, where as in some instances they inhabit state waters year-round (SC DNR, 2013).

Landings

Sheepshead are sought after in both commercial and recreational fisheries, but are primarily a recreational caught species (figure 1). Over the last 30 years, recreational harvest has made up approximately 74% of the total harvest of sheepshead.

Commercial

Commercial landings for sheepshead have averaged approximately 550,000 pounds annually over the last 30 years, reaching a high of approximately 1.09 million pounds in 1992, and low of approximately 357,641 pounds in 2006. During this time commercial landings have predominately been in Florida, with an increasing proportion of landings in North Carolina (Figure 2). In 2012, commercial landings coastwide in the Atlantic totaled approximately \$397,363.

Recreational

Recreationally, sheepshead on the Atlantic coast are primarily caught in the southern states. Over the last 5 years, Florida has landed over 50% of the harvested sheepshead (figure 3), while also

accounting for the largest percentage of harvest over the last 30 years (68%). The second two highest harvest of sheepshead over the same time period have been in South Carolina (11%) and North Carolina (10%); North Carolina had the seconded highest harvest in 2012 at 32 percent.

Fishery Management

Sheepshead along the Atlantic coast are currently managed at the state level, primarily among the southern states. Current regulations and management measures vary state-to-state (table 1), with a few states within the population range having no management measures for both the commercial and recreational fishery.

Table1. Sheepshead Recreational and Commercial Management Measures

State	Recreational	Commercial
New Jersey	none	none
Delaware	none	none
Maryland	none	none
Virginia	4 fish possession limit	500 lbs trip limit
North Carolina	none	none
South Carolina	14" TL; 10 fish possession limit, not to exceed 30 per boat per day	none; bycatch allowance
Georgia	10" FL; 15 fish possession limit	10" FL; 15 fish possession limit
Florida	12"; 15 fish possession limit	12"; restricted species endorsement required; multiple hook restriction; must remain in whole condition until landed ashore; allowable incidental bycatch up to 50 lbs in shrimp trawls

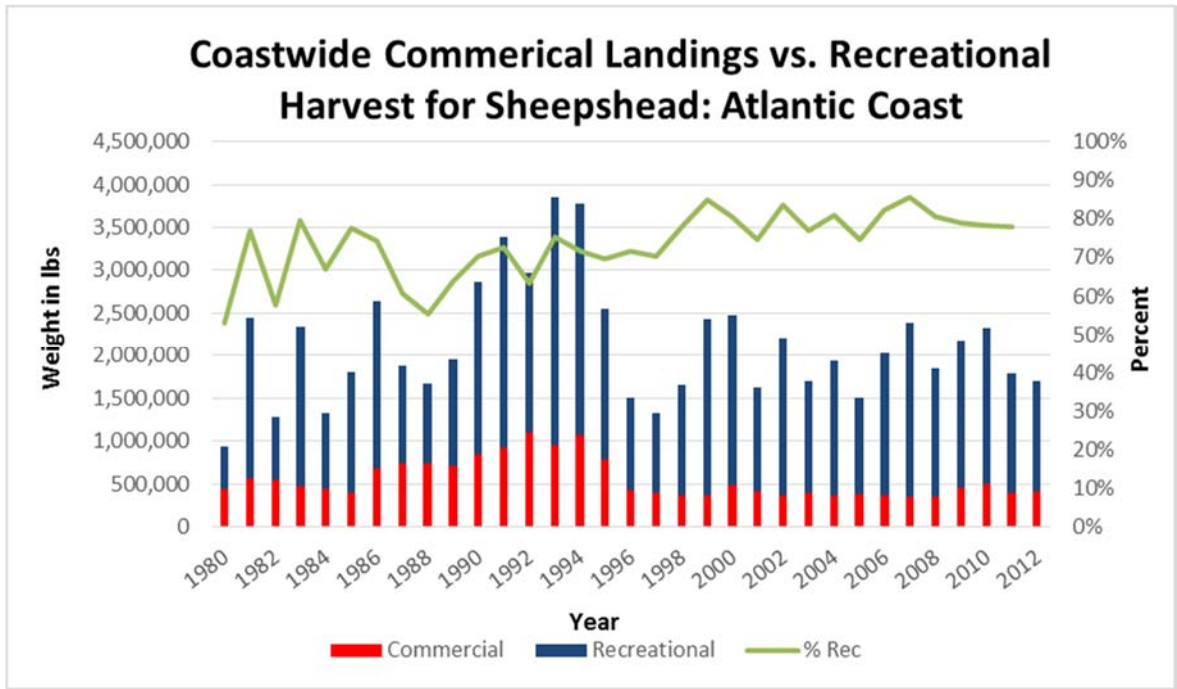


Figure 1. Comparison of Commercial Landings and Recreational Harvest of Sheepshead in the Atlantic Region. *Source ACCSP Data Warehouse, April 2014*

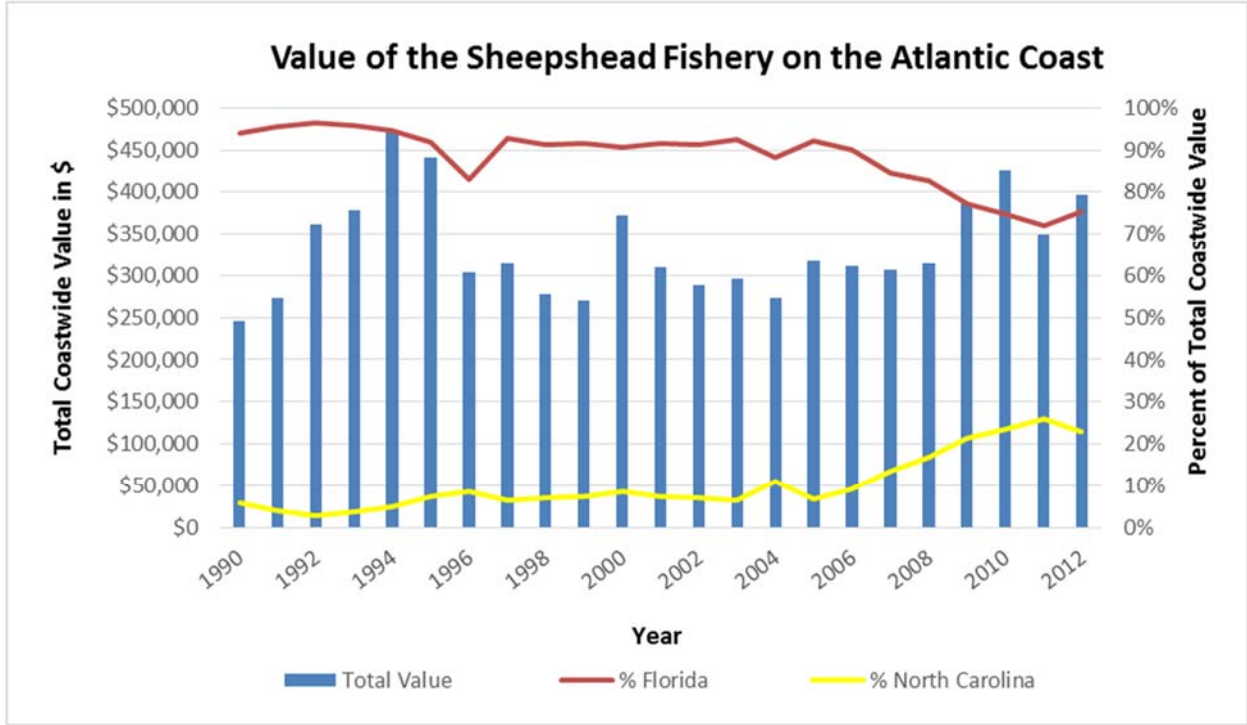


Figure 2. Value of Landings of Sheepshead in the Atlantic Region. *Source ACCSP Data Warehouse, April 2014*

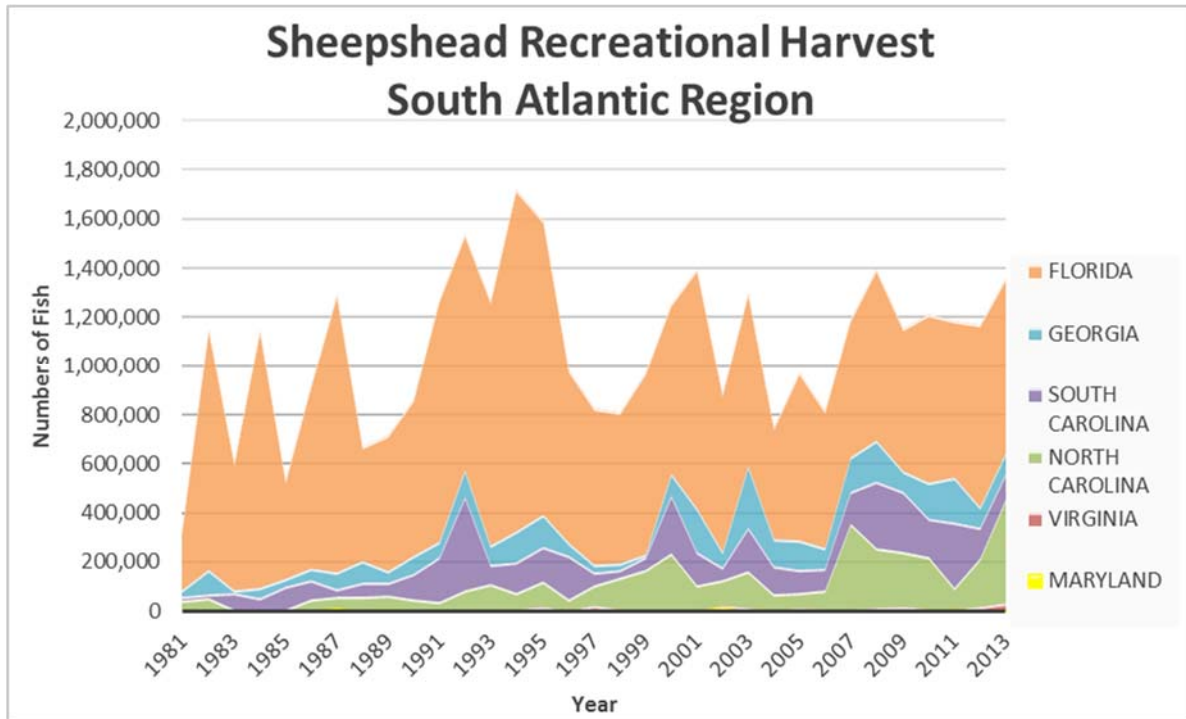


Figure 3. Recreational Harvest of Sheepshead in the South Atlantic Region. *Source: Personal communication from National Marine Fisheries Service, Fisheries Statistics Division. April 2014*

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Liao, H., C.M. Jones, and T. Morgan. 2009. Final Report for 2008 Virginia – Chesapeake Bay Finfish Ageing.

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Kingfish Fishery Overview
South Atlantic State/Federal Management Board
May 2014

Introduction

The Atlantic States Marine Fisheries Commission (ASMFC) does not currently manage any of the kingfish species (southern kingfish, *Menticirrhus americanus*; Gulf kingfish, *Menticirrhus littoralis*; northern kingfish, *Menticirrhus saxatilis*) through the Interstate Fisheries Management Program. The following is an overview of the life history, commercial landings and recreational harvest, and brief history of management consideration.

Life History

Southern kingfish are a short-lived sciaenid. Some kingfish begin spawning during their first summer with most kingfish maturing by age 1. The spawning season extends from May to October (Bearden 1963; Smith and Wenner 1985). Most kingfish landed in commercial catches are age 3. The maximum observed age is 8 years (C Collier, personal observation).

Southern kingfish stock abundance has not been assessed due to a lack of biological and landings data. Problems with the data include: aggregated commercial landings for the three *Menticirrhus* species, the lack of a time series (especially biological data), no or limited measurements from dominant commercial fisheries, questionable identification and landings estimation (high PSE) in the recreational fisheries, and little data on the southern kingfish migration patterns (stock identification). A source of abundance and population trends for southern kingfish is the Southeast Area Monitoring and Assessment Program (SEAMAP; 1990-current). This program was initiated in 1986 to inventory species diversity, richness, and abundance in the nearshore ocean along the southeastern Atlantic coastline. The survey design was replicated after the National Marine Fisheries Service Groundfish Fish Survey and is conducted in the spring, summer, and fall of each year from Cape Hatteras, North Carolina to Cape Canaveral, Florida.

Landings

Southern kingfish are sought after in both commercial and recreational fisheries. Commercial fisheries generally target southern kingfish in the nearshore ocean (<10 miles) using gillnets and trawls. The recreational fishery targets kingfish from piers, beach banks, and boats (in the same general areas as the commercial fishery). Since 2000, recreational harvest has made up at least 50% of the total harvest of kingfish each year (figure 1).

Commercial

Commercial landings for southern kingfish averaged above 2 million pounds from 1950 through the early 1970s. Landings declined to under 2 million pounds through the 1980s, reaching a peak of 2 million pounds in 1985. Commercial landings decreased from 1990 to 2000, but have since then remained fairly stable at approximately 1.14 million pounds annually. The states of North Carolina and Florida have held the highest proportion of commercial landings during this time.

Recreational

Recreational harvest estimates for southern kingfish peaked in 1983 at 2.6 million pounds, reached a low of 577,508 pounds in 1998 but have maintained an average of 1.5 million pounds over the time series. Over this time period, states in the south Atlantic region (figure 2) constituted the highest proportion of catch, with three states accounting for nearly 75% of the catch; Florida (34.7%), Georgia (21%), and South Carolina (20.8%). In 2013, South Carolina had the largest estimated harvest at 550,324 pounds followed by Florida at 238,019 pounds.

Fishery Management History

There are currently no regulations for southern kingfish, Gulf kingfish, or northern kingfish among the Atlantic states. The ASMFC South Atlantic State/Federal Management Board (SAB) have reviewed and considered southern kingfish in previous years. Below is a brief timetable of events.

May 2008 SAB Meeting

The Kingfish Technical Committee (TC) presented a memo outlining available data on southern kingfish as well as impediments to conducting a coastwide stock assessment. Impediments to conducting the stock assessment included:

- Species identification among the three species found in the Atlantic Ocean
- Lack of age data
- Lack of discard Estimates
- Lack of tagging data

Based on the TC's review of the available data, the TC recommended a stock assessment not be completed. The Board requested the TC develop a list of research priorities and conduct a trend analysis of available data from SEAMAP.

October 2008 SAB Annual Meeting

The TC presented the trend analysis of SEAMAP data as well as the prioritized research and data needs for Kingfish. The TC highlight several research needs, including: good time series for commercial data, port sampling, species identification improvements (southern, northern, Gulf); length samples, discard estimates, no information on stock structure, and components of reproductive biology including fecundity.

No timetable or schedule for completing the listed research priorities was determined.

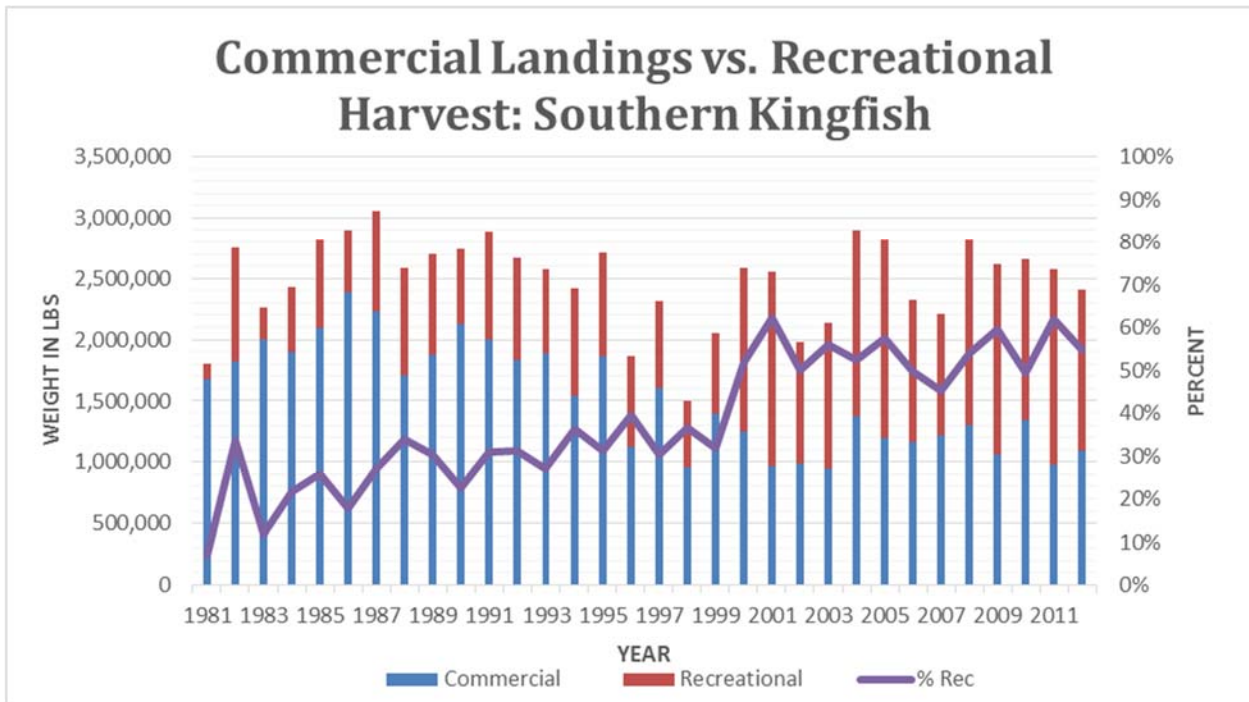


Figure 1. Comparison of Commercial Landings and Recreational Harvest of Southern Kingfish in the Atlantic Region. Sources: ACCSP Data Warehouse and NOAA Fisheries Statistics Division, April 2014

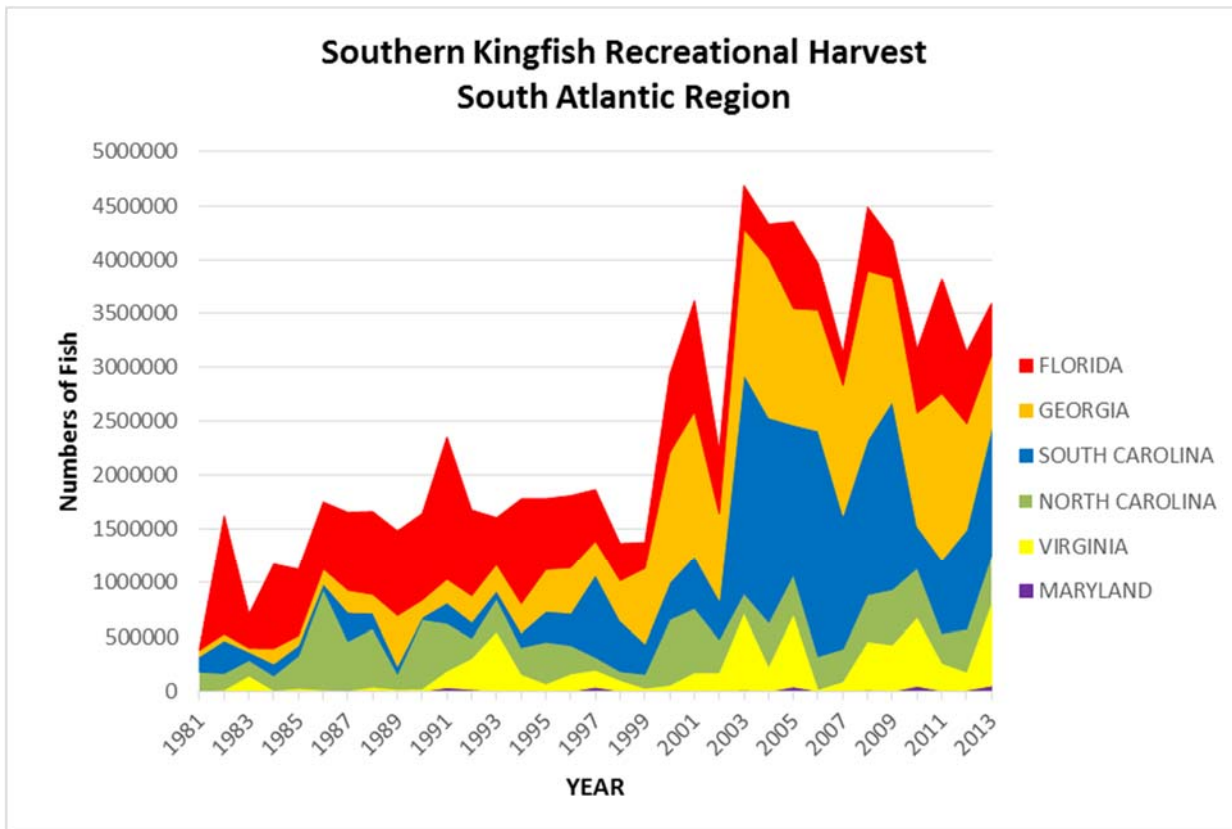


Figure 2. Recreational Harvest of Southern Kingfish in the South Atlantic Region. Source: Personal communication from National Marine Fisheries Service, Fisheries Statistics Division. April 2014

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