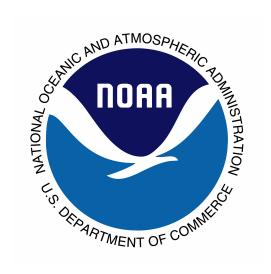
# Southeast Region Headboat Survey-2020 South Atlantic Annual Report<sup>1</sup>



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<sup>&</sup>lt;sup>1</sup>DISCLAIMER: These data are under frequent review to ensure both accuracy and integrity and are subject to change without notice.

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## 1 Introduction

The Southeast Region Headboat Survey (SRHS) is administered by the National Marine Fisheries Service (NMFS) Southeast Fisheries Science Center (SEFSC) at the Beaufort, NC National Oceanic Atmospheric Administration (NOAA) Laboratory and has operated along the southeast coast of the United States (hereafter South Atlantic) since 1972 and in the Gulf of Mexico since 1986. The survey is the longest continuous time series of recreational fisheries data from federal waters on the U.S. east coast, and the second longest time series for the U.S. Gulf of Mexico coast. The SRHS data consists of self-reported logbook records for each trip and biological samples from fish intercepted dockside.

Lengths, weights, otoliths, spines, and scales (for ages), and gonads (for maturity and reproductive parameters) collected from headboat trips by SRHS port agents are used as inputs to stock assessment models and in life history studies. Many of the common reef-associated and pelagic species managed by the South Atlantic and Gulf of Mexico Fishery Management Councils are captured and sampled by the SRHS. For many stocks in the South Atlantic, the index of relative abundance computed from SRHS data is the only source of abundance information prior to 1992, covering a critical time period in the exploitation history of those species. The following document describes general trends for 2020 from various data sources within the headboat fleet as well as summaries for various species of management interest.

#### 1.0.1 Hurricane Season

Tropical Storm Bertha formed off the coast of South Carolina and made landfall near Charleston, South Carolina on May 27, 2020 (SRHS area 5). On August 3, 2020 Hurricane Isaias (Category 1) made landfall on August 3, 2020 near Ocean Isle Beach, North Carolina (SRHS area 3). Impacts from Hurricane Isaias were minimal. The SRHS fleet was not significantly impacted by hurricane activity in the South Atlantic in 2020.

#### 1.0.2 COVID-19

On March 16, 2020 NOAA port agents were instructed to cease sampling operations at the dock. Sampling did not resume for the remainder of 2020. Port Agents contracted through FWC were instructed to follow agency guidelines, and ceased sampling shortly after. All port agents were provided with data entry or QA/QC tasks for telework purposes. Vessel operations varied throughout the fleet in March. Some continued to operate at full capacity, others limited capacity to maintain 6ft social distancing, still others took a maximum of 6-8 anglers per trip. Most vessels ceased operations entirely through April due to mandatory stay-at-home orders. By mid-May most vessels were operating at least at partial capacity as stay-at-home orders were lifted, however the overall number of trips run was roughly 40 percent less than 2019. Fishing did not resume in SRHS Area 12 until June. By June most vessels had resumed operations but running fewer trips and carrying fewer anglers per trip. By July most vessels had resumed operations, with some carrying fewer anglers per trip but others operating at full capacity.

## 2 Data Collection

The SRHS is divided into discrete geographical/statistical areas to which headboat trips and associated catches are assigned. SRHS port agents are responsible for sampling headboats operating in single or multiple statistical areas. The main components of the survey include the dockside intercept sampling

program (DISP), the headboat activity report (HAR), and the logbook (commonly called the trip report or catch record (CR)).

The DISP is used to obtain length and weight data from landings to determine the size distribution and mean size of species landed in the headboat fishery. Port agents also collect otoliths, spines, scales and occasionally gonads to characterize the age distributions, sex ratios, and reproductive parameters of species landed in the fishery. Port agents may collect other biological samples (e.g., stomachs, fin clips) in support of research or management needs (e.g., trophic interactions and stock structure studies). The SRHS has been a primary source of fishery-dependent data for age and growth studies that are used as inputs for stock assessments in the southeast U.S. During 1972-1991 the SRHS was the only fishery-dependent source of age and growth samples for life history studies in the South Atlantic (sampling of the commercial sector began in 1992). The data collected from the DISP is referred to as the bioprofile (BP) dataset.

The survey design for the DISP can be described as a systematic opportunistic sampling design. Each port agent assigned to a particular area is required to sample all headboats within their area of responsibility in a systematic rotation, ideally sampling each vessel at least once each month during periods of operation. There is considerable variation in the operational schedules of individual vessels and it is rare that agents are able to sample vessels in an exact and repeatable rotation. Consequently, SRHS port agents can adjust their sampling schedules to ensure sampling of all vessels approximately the same number of times each month during periods of operation.

When conducting dockside intercept sampling, port agents are instructed to identify themselves as NMFS port agents conducting a survey of headboat fishing. They are further instructed to identify and select anglers with unusual, uncommon or rare fishes in their catches (on stringers, in coolers, etc.). The rationale for this approach is that if catches with uncommon fishes are selected, sufficient numbers of more common species will likely be obtained as well.

Upon obtaining an angler's catch for sampling, the port agent measures and weighs individual fish using an electronic fish measuring board connected to an electronic balance. All measurements are recorded into computer memory for later download and editing. While sampling, the port agent often performs education and outreach functions by answering bystanders' questions about the SRHS, fish biology and ecology, and fisheries regulations and management. Other than several technological improvements, there have been no significant changes to the dockside sampling protocols since the inception of the survey.

Another component of the SRHS is the headboat activity report (HAR). Port agents record all known information about a vessel's activity (e.g., trip date, trip type, and number of anglers) on the HAR, regardless of whether a trip was sampled under the DISP. These observations are used to track compliance and to correct for non-reporting. The HAR observations are collected by multiple methods, including direct observation, contacting the ticket office to confirm activity, observations made by samplers from other surveys (e.g., MRIP samplers), and in recent years by checking websites for fishing trips.

An important component of the SRHS is the logbook report, commonly called the catch record (CR) or trip report. The CR component was originally designed to be a census, but fluctuations in reporting cooperation have resulted in changes in methodology over time. The survey has always asked or required vessel personnel to complete self-reported trip reports of catch and effort for each trip. From 1972-2012, the mechanism used by captains and crew to report catch and effort was a single-page, paper logbook form.

In 2013, the SRHS electronic logbook (SRHS eLog) was implemented. Since implementation the SRHS eLog has been updated several times, and most updates have been minor adjustments that did not affect the user. The most significant update that did impact the user was in August 2014, when four socioeconomic fields were added: number of paying passengers, number of crew, amount of fuel used, and price per gallon of fuel. Currently the SRHS eLog requires the following fields to be completed for each trip: date(s) and duration of the fishing trip; vessel and captain's name; number of anglers and number of paying passengers;

number of crew, number of gallons of fuel used, and price per gallon of fuel; geographic location of fishing activity in latitude and longitude degrees and minutes (optional point and click maps); minimum, maximum and primary depths fished; number of individuals of each caught species that were kept; and number of individuals of each caught species that were released.

# 3 Landings

Species with landings > 1,000 lbs in the South Atlantic headboat fishery for 2020 are presented in Table  $1^2$ . The table includes the species composition ranked by landings (lb), landings in number, and the percent difference relative to the five- and ten-year averages. In 2020 the top ten species landed in the South Atlantic headboat fishery were vermilion snapper, white grunt, king mackerel, yellowtail snapper, gray triggerfish, mutton snapper, Atlantic sharpnose shark, gray snapper, greater amberjack and little tunny.

 $<sup>^2 \</sup>text{Confidential data were replaced with asterisks} \; (***)$ 

Table 1: Species landed (>1,000lbs) from headboats in the South Atlantic U.S. The 5yr and 10yr column names represent the positive or negative percent difference compared to the five or ten year average for the given species.

species	Landings.lbs	5yr.lbs	10yr.lbs	Landings.n	5yr.n	10yr.n
vermilion snapper	120,227	-15.9	-18.2	112,951	-10.9	-9.9
white grunt	81,297	-22.7	-28.7	113,883	-17.5	-22.7
king mackerel	67,784	-15.8	-20.1	7,506	-23.3	-21.8
yellowtail snapper	66,680	-38.9	-43.4	77,341	-33.3	-36.7
gray triggerfish	59,817	-16.3	-36.6	28,141	-21.9	-35.8
mutton snapper	46,470	-24.8	-28.7	10,387	-25.2	-25.5
Atlantic sharpnose shark	45,632	3.3	-31.8	7,072	-5.1	-34.2
gray snapper	40,967	-39.6	-46.0	38,831	-22.7	-27.6
greater amberjack	39,964	-26.9	-35.2	2,770	-13.3	-19.3
little tunny	39,140	-25.7	-49.6	5,166	-31.6	-51.2
almaco jack	32,381	-21.2	0.8	11,976	28.0	69.7
black sea bass	31,882	-37.8	-65.4	25,519	-37.2	-65.9
blackfin tuna	21,089	-45.0	-26.4	3,293	-19.8	13.9
tomtate	20,995	21.6	12.7	32,378	-21.1	-32.1
spottail pinfish	19,257	-14.4	-15.1	24,267	-18.0	-19.3
red snapper	18,304	-2.7	20.7	3,224	9.1	37.3
banded rudderfish	17,959	-35.4	-49.0	6,469	-37.8	-46.6
red grouper	16,959	-15.5	4.8	2,923	3.9	34.0
lane snapper	14,990	-34.0	-25.6	23,267	-27.2	-15.9
blue runner	14,195	-39.8	-53.9	10,037	-40.7	-56.7
scup	12,336	8.1	25.8	12,413	11.2	15.2
jolthead porgy	10,862	-13.9	-16.1	7,667	20.6	21.1
Spanish mackerel	10,132	24.0	9.6	5,422	-15.7	-25.5
cobia	9,784	-35.7	-59.9	597	-25.0	-47.8
great barracuda	8,433	-3.2	1.2	716	-9.2	5.3
yellowfin tuna	***	-32.6	25.2	***	11.5	110.9
littlehead porgy	7,136	15.1	33.4	9,022	18.4	40.1
scamp	7,056	-26.8	-44.2	878	-31.9	-46.2
whitebone porgy	6,975	11.3	2.2	4,752	-2.8	-7.6
dolphin	6,495	-63.2	-68.4	1,394	-47.7	-55.1
ocean triggerfish	6,238	-11.1	-10.2	1,332	-35.1	-36.8
gag	6,045	-9.6	-50.3	497	-17.8	-55.0
red porgy	4,886	-71.0	-80.8	6,014	-41.0	-58.7
croaker atlantic	3,920	206.5	341.9	5,130	134.2	251.0
blacktip shark	3,592	10.6	-1.3	125	35.9	-22.5
graysby	3,454	50.4	85.2	3,115	30.4	50.0
knobbed porgy	3,433	-18.3	-33.6	3,849	-6.6	-25.7
pigfish	3,160	36.1	20.3	5,223	0.0	-10.9
wahoo	2,883	-5.0	-15.3	95	-12.4	-31.2
rock hind	2,677	-27.6	-18.8	837		-45.4
black grouper	2,530	-40.9	-48.4	210	-25.2	-39.2
cero	2,154	19.2	22.5	646	-0.8	-4.0
rainbow runner	2,091	-8.4	-24.5	1,270	-14.4	-29.2
queen snapper	***	-49.4	-18.3	***	-28.1	6.1
bigeye	1,794	-58.9	-65.2	1,527	-65.1	-67.1
bank sea bass	1,773	-20.5	-21.7	3,754	-24.0	-25.2
spinner shark	1,742	237.3	438.4	18	164.7	100.0
yellow jack	1,722	57.7	145.9	282	42.4	106.0
margate	1,676	4.8	-28.1	375	-8.3	-45.6
African pompano	1,558	-45.9	-35.8	325	30.7	60.2
bluestriped grunt	1,103	-28.7	-49.9	1,952	-29.2	-48.0

## 4 Discards

Species with discards > 1,000 fish in the South Atlantic headboat fishery for 2020 are presented in Table  $2^3$ . The table includes the species composition ranked by discards and the percent difference relative to the five-and ten-year averages. In 2020 the top ten species discarded in the South Atlantic headboat fishery were black sea bass, vermilion snapper, white grunt, red snapper, tomtate, yellowtail snapper, Atlantic sharpnose shark, gray triggerfish, mutton snapper and gray snapper.

Table 2: Species discarded (> 1,000 fish) from headboats in the South Atlantic U.S. The 5yr and 10yr column names represent the positive or negative percent difference compared to the five or ten year average for the given species.

species	Discards.n	5yr.n	10yr.n
black sea bass	242,899	-37.4	-55.4
vermilion snapper	62,729	-26.1	-22.4
white grunt	56,775	-0.6	5.9
red snapper	53,042	3.3	7.4
tomtate	$45,\!644$	-19.4	-23.6
yellowtail snapper	$43,\!675$	-12.1	-7.1
Atlantic sharpnose shark	15,390	-24.4	-33.1
gray triggerfish	$14,\!518$	-54.8	-38.5
mutton snapper	$13,\!359$	-14.5	23.4
gray snapper	10,288	16.3	9.8
lane snapper	10,214	1.1	61.1
blue runner	9,001	-52.6	-55.6
graysby	5,647	37.1	55.8
red grouper	5,004	-38.3	-36.0
remora	4,817	-19.3	-6.6
red porgy	4,323	-55.8	-67.1
littlehead porgy	3,629	128.4	320.3
spottail pinfish	3,135	-40.8	-38.9
croaker atlantic	3,070	25.3	112.4
blacktip shark	2,188	31.0	50.5
greater amberjack	2,177	-14.2	-26.6
pigfish	2,127	-4.5	5.7
squirrelfish	1,954	-53.6	-53.0
little tunny	1,818	-46.9	-65.2
bank sea bass	1,587	-45.5	-43.8
cobia	1,372	17.1	12.9
king mackerel	1,132	-18.4	-17.5
almaco jack	1,104	-39.5	3.6
scup	1,039	-29.7	-45.4

 $<sup>^3</sup>$ Confidential data were replaced with asterisks (\*\*\*)

# 5 Dockside Intercept Sampling Program

Species with > 30 fish sampled annually in the South Atlantic headboat fishery for 2020 are presented in Table  $3^4$ . In 2020 the top ten species sampled in the South Atlantic headboat fishery were yellowtail snapper, white grunt, lane snapper, littlehead porgy, gray snapper, black sea bass, jolthead porgy, blue runner, vermilion snapper and knobbed porgy.

Table 3: Species sampled dockside from headboats in South Atlantic U.S. including distribution by region. The 5yr and 10yr column names represent the positive or negative percent difference compared to the five or ten year average for the given species.

species	Fish(n)	Carolinas(%)	Ga-N.Fl(%)	S.Fl(%)	5yr(%)	10yr(%)
yellowtail snapper	623	NA	1.0	99.0	-79.3	-80.7
white grunt	502	4.4	2.6	93.0	-77.4	-82.0
lane snapper	487	NA	32.9	67.1	-55.2	-51.9
littlehead porgy	378	NA	NA	100.0	-21.5	-8.1
gray snapper	254	NA	54.7	45.3	-77.6	-80.9
black sea bass	143	74.1	25.2	0.7	-82.2	-88.9
jolthead porgy	123	NA	0.8	99.2	-45.1	-45.0
blue runner	122	NA	14.8	85.2	-72.5	-80.2
vermilion snapper	115	27.8	67.8	4.3	-91.3	-92.4
knobbed porgy	84	8.3	NA	91.7	-57.1	-64.5
gray triggerfish	61	6.6	60.7	32.8	-87.0	-92.7
sailors choice	47	NA	NA	100.0	-21.4	-28.5
tomtate	46	NA	91.3	8.7	-87.0	-89.3
mutton snapper	45	NA	48.9	51.1	-91.1	-91.7
whitebone porgy	44	11.4	68.2	20.5	-73.4	-81.1
bigeye	40	NA	2.5	97.5	-61.5	-64.6
Atlantic sharpnose shark	33	30.3	57.6	12.1	-87.5	-92.0

# 6 Headboat Effort

Estimated angler days by year and region are presented in in Table 4.

 $<sup>^4</sup>$ Confidential data were replaced with asterisks (\*\*\*)

Table 4: Estimated annual effort (angler days) of headboats by region in South Atlantic U.S.

1981         78,404         72,427         226,456           1982         94,478         66,961         226,172           1983         89,563         83,499         194,364           1984         96,179         95,234         193,760           1985         97,385         94,449         186,396           1986         98,414         113,101         203,957           1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103	Year	Carolinas	Ga-N.Fl	S.Fl
1982         94,478         66,961         226,172           1983         89,563         83,499         194,364           1984         96,179         95,234         193,760           1985         97,385         94,449         186,396           1986         98,414         113,101         203,957           1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107				
1983       89,563       83,499       194,364         1984       96,179       95,234       193,760         1985       97,385       94,449       186,396         1986       98,414       113,101       203,957         1987       114,067       114,144       218,897         1988       118,889       109,156       192,619         1989       101,386       102,920       213,944         1990       100,391       98,234       224,661         1991       108,918       85,111       194,911         1992       102,966       90,810       173,713         1993       107,243       74,494       162,479         1994       99,922       65,745       177,036         1995       102,034       59,106       151,608         1996       90,071       47,239       152,618         1997       97,339       52,764       120,509         1998       98,741       51,790       103,551         1999       87,095       57,010       107,042         2000       71,642       59,771       122,478         2001       81,044       55,797       107,592		,	*	
1984         96,179         95,234         193,760           1985         97,385         94,449         186,396           1986         98,414         113,101         203,957           1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2001         81,044         55,797         107,592           2002         70,068         48,911         102			,	
1985         97,385         94,449         186,396           1986         98,414         113,101         203,957           1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102				
1986         98,414         113,101         203,957           1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,				
1987         114,067         114,144         218,897           1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,3				
1988         118,889         109,156         192,619           1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300				
1989         101,386         102,920         213,944           1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614 </td <td></td> <td>*</td> <td>*</td> <td>*</td>		*	*	*
1990         100,391         98,234         224,661           1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388 <td></td> <td>,</td> <td>,</td> <td>,</td>		,	,	,
1991         108,918         85,111         194,911           1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598				
1992         102,966         90,810         173,713           1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973				
1993         107,243         74,494         162,479           1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986			,	,
1994         99,922         65,745         177,036           1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785 </td <td></td> <td></td> <td></td> <td></td>				
1995         102,034         59,106         151,608           1996         90,071         47,239         152,618           1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798 <td></td> <td></td> <td></td> <td></td>				
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1997         97,339         52,764         120,509           1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798           2013         61,510         66,587         99,092           2014         64,716         60,752         135,138           2015         62,418         54,480         140,499 <td></td> <td>,</td> <td></td> <td></td>		,		
1998         98,741         51,790         103,551           1999         87,095         57,010         107,042           2000         71,642         59,771         122,478           2001         81,044         55,797         107,592           2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798           2013         61,510         66,587         99,092           2014         64,716         60,752         135,138           2015         62,418         54,480         140,499				,
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2002         70,068         48,911         102,635           2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798           2013         61,510         66,587         99,092           2014         64,716         60,752         135,138           2015         62,418         54,480         140,499           2016         63,772         53,387         143,273           2017         57,084         48,304         77,822	2001	,		
2003         59,554         52,795         92,216           2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798           2013         61,510         66,587         99,092           2014         64,716         60,752         135,138           2015         62,418         54,480         140,499           2016         63,772         53,387         143,273           2017         57,084         48,304         77,822	2002		,	
2004         76,018         52,243         123,157           2005         65,609         49,539         123,300           2006         81,810         48,908         126,614           2007         89,731         53,762         103,388           2008         64,445         52,345         71,598           2009         60,387         66,447         69,973           2010         66,022         53,676         69,986           2011         63,102         54,707         77,785           2012         61,769         58,901         88,798           2013         61,510         66,587         99,092           2014         64,716         60,752         135,138           2015         62,418         54,480         140,499           2016         63,772         53,387         143,273           2017         57,084         48,304         77,822	2003			
2006     81,810     48,908     126,614       2007     89,731     53,762     103,388       2008     64,445     52,345     71,598       2009     60,387     66,447     69,973       2010     66,022     53,676     69,986       2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2004			
2006     81,810     48,908     126,614       2007     89,731     53,762     103,388       2008     64,445     52,345     71,598       2009     60,387     66,447     69,973       2010     66,022     53,676     69,986       2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2005	65,609		
2008     64,445     52,345     71,598       2009     60,387     66,447     69,973       2010     66,022     53,676     69,986       2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2006	81,810		126,614
2009     60,387     66,447     69,973       2010     66,022     53,676     69,986       2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2007	89,731	53,762	103,388
2010     66,022     53,676     69,986       2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2008	64,445	52,345	71,598
2011     63,102     54,707     77,785       2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2009	60,387	66,447	69,973
2012     61,769     58,901     88,798       2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2010	66,022	$53,\!676$	69,986
2013     61,510     66,587     99,092       2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2011	$63,\!102$	54,707	77,785
2014     64,716     60,752     135,138       2015     62,418     54,480     140,499       2016     63,772     53,387     143,273       2017     57,084     48,304     77,822	2012	61,769	58,901	88,798
2015       62,418       54,480       140,499         2016       63,772       53,387       143,273         2017       57,084       48,304       77,822	2013	$61,\!510$	$66,\!587$	99,092
2016 63,772 53,387 143,273 2017 57,084 48,304 77,822	2014	64,716	60,752	$135,\!138$
2017 57,084 48,304 77,822	2015	$62,\!418$	$54,\!480$	
	2016	63,772	$53,\!387$	$143,\!273$
2018 54 424 43 586 76 974	2017	57,084	$48,\!304$	$77,\!822$
2010 04,424 40,000 10,314	2018	$54,\!424$	$43,\!586$	76,974
2019 57,022 43,139 76,573	2019	$57,\!022$		$76,\!573$
2020 48,234 30,750 53,255	2020	48,234	30,750	$53,\!255$

# 7 Catch-per-unit-effort

This report presents catch-per-unit-effort (CPUE) calculated as the simple ratio of raw catch divided by raw effort (angler days). For CPUE to reflect true population abundance several factors must exist, which can be summed up in the term catchability. Catchability is best described as a measure of the overall efficiency of the fishery. Catchability can be affected by many factors including species targeting, management restrictions, gear changes, technology improvements, etc. All of these factors combine to affect the relationship between CPUE and true population abundance. Only under very strict, static conditions through time will CPUE reflect true population abundance. Therefore, the CPUE data presented in this report should be interpreted with an understanding of the factors that can affect catchability in the fishery. The CPUE values in this report are not the values that get used in the abundance index for stock assessments. The stock assessment process (e.g. SEDAR) typically employs statistical modelling techniques (e.g. GLM analysis) to account for co-varying factors that may affect catchability.

# 8 Species Overview

The following section provides species-specific summaries of landings, discards, dockside sampling, effort, and the nominal catch per unit effort time series<sup>5</sup>. Species included in the following summaries were chosen from the SAFMC snapper/grouper complex along with additional pelagic species that are encountered frequently in the survey and are typically of interest to the Council. Data from several species (black snapper, misty grouper, Nassau grouper, etc.) were limited or confidential and therefore filtered from these summaries.

<sup>&</sup>lt;sup>5</sup>Confidential data were replaced with asterisks (\* \* \*)

# 8.1 Almaco jack<sup>6</sup>



Figure 1: Almaco jack, Seriola rivoliana.

#### 8.1.1 Landings

Table 5: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	2,907	13,461
2012	5,699	19,691
2013	3,622	$23,\!271$
2014	4,658	32,067
2015	6,938	27,406
2016	6,638	32,928
2017	6,822	38,298
2018	8,327	$46,\!457$
2019	13,001	55,348
2020	11,976	32,381

#### 8.1.2 Discards

Table 6: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	10	16	67
2012	108	55	153
2013	248	9	132
2014	90	156	100
2015	146	133	109
2016	1,421	1,269	168
2017	295	39	45
2018	350	241	203
2019	3,058	645	287
2020	839	146	119

Table 7: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	10	10	17.6	2.0
GA.N.Florida	9	9	19.0	3.4
S. Atl.(10 yr)	1,889	1,798	18.3	3.4
S. Atl.(5 yr)	936	904	18.8	3.6
S.Florida	8	7	16.4	1.7

#### 8.1.4 Effort

Table 8: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	112	85	447
2012	244	243	652
2013	224	196	388
2014	301	184	684
2015	378	432	870
2016	457	447	623
2017	468	291	496
2018	346	390	578
2019	444	567	599
2020	589	308	262

## 8.1.5 Catch per Unit Effort (CPUE)<sup>7</sup>

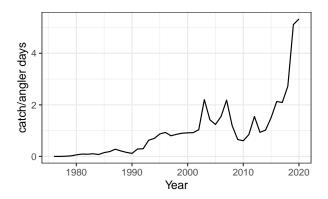


Figure 2: Nominal index (catch/angler days) from headboat logbooks.

## 8.1.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 7.

<sup>&</sup>lt;sup>6</sup>Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>7</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.2 Atlantic spadefish<sup>8</sup>



Figure 3: Atlantic spadefish, Chaetodipterus faber.

#### 8.2.1 Landings

Table 9: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	57	156
2012	37	208
2013	153	295
2014	120	299
2015	194	829
2016	545	1,703
2017	159	923
2018	141	275
2019	351	839
2020	236	678

## 8.2.2 Discards

Table 10: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***		12
2012	18		14
2013	35		8
2014	34	2	7
2015	***	1	31
2016	***	20	188
2017		1	5
2018	***	1	6
2019	***		13
2020	***	5	15

Table 11: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	91	88	15.5	4.3
S. Atl.(5 yr)	49	46	16.4	4.9

#### 8.2.4 Effort

Table 12: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	26	4
2012	6	13	4
2013	28	44	5
2014	9	52	8
2015	***	61	19
2016	***	77	24
2017		51	6
2018	***	19	7
2019	***	55	13
2020	***	84	5

## 8.2.5 Catch per Unit Effort (CPUE)<sup>9</sup>

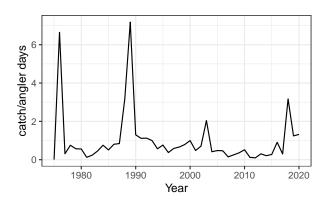


Figure 4: Nominal index (catch/angler days) from headboat logbooks.

## 8.2.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 11.

<sup>&</sup>lt;sup>8</sup>Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>9</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.3 Banded rudderfish<sup>10</sup>



Figure 5: Banded rudderfish, Seriola zonanta.

## 8.3.1 Landings

Table 13: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	19,840	51,025
2012	15,678	48,674
2013	14,266	52,461
2014	10,878	42,193
2015	8,415	18,693
2016	6,071	26,616
2017	9,043	17,375
2018	13,324	31,443
2019	17,118	45,657
2020	6,469	17,960

#### 8.3.2 Discards

Table 14: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	714	471	3,961
2012	175	210	807
2013	1,243	326	1,924
2014	454	32	1,710
2015	238	189	712
2016	1,129	71	1,073
2017	986	47	424
2018	1,724	157	600
2019	3,737	1,191	459
2020	182	191	72

Table 15: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	11	11	18.5	2.7
GA.N.Florida	5	5	16.4	1.8
S. Atl.(10 yr)	1,706	1,621	19.2	3.0
S. Atl.(5 yr)	804	751	19.3	3.0
S.Florida	9	9	22.2	4.2

#### 8.3.4 Effort

Table 16: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	320	142	491
2012	207	163	439
2013	339	63	446
2014	307	37	577
2015	282	96	542
2016	255	58	542
2017	362	58	323
2018	262	154	521
2019	336	226	379
2020	323	145	109

## 8.3.5 Catch per Unit Effort (CPUE)<sup>11</sup>

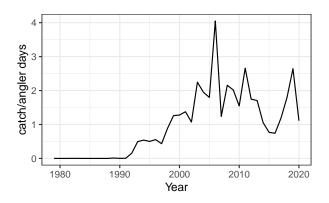


Figure 6: Nominal index (catch/angler days) from headboat logbooks.

## 8.3.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 15.

 $<sup>\</sup>overline{}^{10}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>11</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.4 Bank sea bass<sup>12</sup>



Figure 7: Bank sea bass, Centropristis ocyurus.

## 8.4.1 Landings

Table 17: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	6,203	2,775
2012	4,004	1,548
2013	$5,\!268$	2,626
2014	4,546	2,241
2015	5,460	2,308
2016	5,779	2,296
2017	6,623	3,055
2018	3,373	1,569
2019	5,158	2,459
2020	3,754	1,774

#### 8.4.2 Discards

Table 18: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,763	1,187	***
2012	2,215	191	***
2013	1,815	121	28
2014	1,762	409	8
2015	3,878	293	***
2016	1,834	280	***
2017	2,141	228	***
2018	3,491	125	***
2019	4,396	481	
2020	1,585	***	***

Table 19: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	3	3	9.6	0.4
S. Atl.(10 yr)	665	658	10.1	0.4
S. Atl.(5 yr)	354	354	10.1	0.4

#### 8.4.4 Effort

Table 20: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	431	251	***
2012	426	63	***
2013	486	46	15
2014	433	73	15
2015	472	74	***
2016	559	83	***
2017	730	46	***
2018	432	65	***
2019	794	78	
2020	648	***	***

# 8.4.5 Catch per Unit Effort (CPUE)<sup>13</sup>

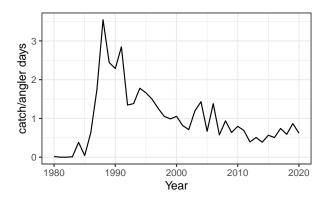


Figure 8: Nominal index (catch/angler days) from headboat logbooks.

## 8.4.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 19.

 $<sup>\</sup>overline{}^{12}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>13</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.5 Bar jack<sup>14</sup>



Figure 9: Bar jack, Caranx ruber.

## 8.5.1 Landings

Table 21: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	306	629
2012	432	899
2013	616	919
2014	694	1,031
2015	611	534
2016	176	156
2017	209	348
2018	148	287
2019	55	63
2020	72	83

#### 8.5.2 Discards

Table 22: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			165
2012			72
2013	***		25
2014		3	49
2015	***	1	16
2016		***	133
2017		***	4
2018	***	***	4
2019	***	***	10
2020	28		28

Table 23: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	67	63	14.4	1.2
S. Atl.(5 yr)	43	40	14.9	1.3
S.Florida	4	4	14.1	1.2

#### 8.5.4 Effort

Table 24: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			117
2012			156
2013	***	31	161
2014		59	213
2015	***	20	173
2016		***	122
2017	3	***	99
2018	***	***	52
2019	***	***	12
2020	10	15	19

## 8.5.5 Catch per Unit Effort (CPUE)<sup>15</sup>

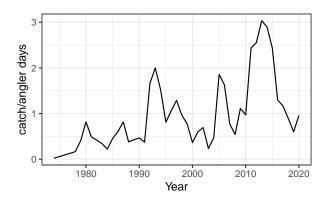


Figure 10: Nominal index (catch/angler days) from headboat logbooks.

## 8.5.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 23.

 $<sup>\</sup>overline{\ }^{14}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>15</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.6 Black grouper<sup>16</sup>

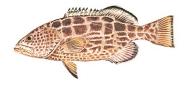


Figure 11: Black grouper, Mycteroperca bonaci.

## 8.6.1 Landings

Table 25: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	387	3,730
2012	333	4,940
2013	491	6,857
2014	378	5,315
2015	461	6,809
2016	391	6,405
2017	307	5,236
2018	287	4,246
2019	208	2,981
2020	210	2,531

### 8.6.2 Discards

Table 26: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		***	1,744
2012			1,807
2013	***	12	950
2014	2	***	1,104
2015			602
2016	***	***	366
2017	***		645
2018		***	1,161
2019	***	***	566
2020			403

Table 27: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	425	412	30.4	15.8
S. Atl.(5 yr)	143	139	31.0	17.0

#### 8.6.4 Effort

Table 28: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		***	667
2012			982
2013	***	4	745
2014	3	***	801
2015			540
2016	***	***	394
2017	***		526
2018		***	794
2019	***	***	465
2020			340

## 8.6.5 Catch per Unit Effort (CPUE)<sup>17</sup>

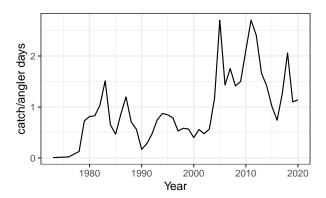


Figure 12: Nominal index (catch/angler days) from headboat logbooks.

## 8.6.3 Dockside Intercept Sampling Program

Sample sizes, average length (in.) and weight (lb) are available in Table 27.

 $<sup>\</sup>overline{\ }^{16}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>17</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.7 Black sea bass<sup>18</sup>



Figure 13: Black sea bass, Centropristis striata.

## 8.7.1 Landings

Table 29: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	206,972	232,569
2012	$107,\!460$	$128,\!369$
2013	88,722	117,913
2014	79,603	104,870
2015	62,957	80,771
2016	50,918	66,698
2017	43,062	54,377
2018	$46,\!551$	57,649
2019	36,986	45,611
2020	25,519	31,883

#### 8.7.2 Discards

Table 30: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	323,850	246,798	49,291
2012	541,079	237,495	40,774
2013	601,402	105,742	$41,\!565$
2014	$536,\!836$	$79,\!877$	37,945
2015	574,970	71,756	12,810
2016	493,343	49,996	9,501
2017	$364,\!571$	$22,\!671$	10,678
2018	$341,\!560$	18,620	7,161
2019	356,133	17,309	5,362
2020	228,103	$11,\!654$	3,142

Table 31: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	106	106	13.8	1.2
GA.N.Florida	36	36	14.8	1.1
S. Atl.(10 yr)	12,792	12,494	13.6	1.2
S. Atl.(5 yr)	4,006	3,957	13.8	1.3
S.Florida	1	1	12.7	1.2

#### 8.7.4 Effort

Table 32: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	2,531	1,805	690
2012	2,653	1,628	711
2013	2,505	1,692	747
2014	2,685	1,631	740
2015	2,694	1,485	550
2016	2,798	1,364	542
2017	$2,\!425$	1,144	641
2018	2,139	926	480
2019	$2,\!296$	808	369
2020	2,129	460	247

## 8.7.5 Catch per Unit Effort (CPUE)<sup>19</sup>

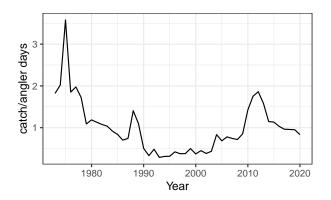


Figure 14: Nominal index (catch/angler days) from headboat logbooks.

## 8.7.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 31.

 $<sup>\</sup>overline{\ }^{18}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>19</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.8 Blackfin snapper<sup>20</sup>



Figure 15: Blackfin snapper, Lutjanus buccanella.

#### 8.8.1 Landings

Table 33: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	83	137
2012	11	18
2013	186	555
2014	692	2,105
2015	811	3,540
2016	929	1,891
2017	957	2,872
2018	***	***
2019	2,021	6,077
2020	1,126	446

#### 8.8.2 Discards

Table 34: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			159
2012			41
2013		***	26
2014			65
2015			109
2016			105
2017			41
2018			***
2019			362
2020	***		69

Table 35: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	229	217	16.4	2.8
S. Atl.(5 yr)	146	142	15.8	2.5
S.Florida	30	30	9.4	0.4

#### 8.8.4 Effort

Table 36: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			12
2012			7
2013		***	33
2014			40
2015			42
2016			53
2017			37
2018			***
2019			49
2020	***		56

## 8.8.5 Catch per Unit Effort (CPUE)<sup>21</sup>

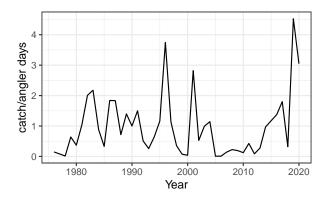


Figure 16: Nominal index (catch/angler days) from headboat logbooks.

### 8.8.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 35.

 $<sup>\</sup>overline{^{20}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>21</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.9 Blueline tilefish<sup>22</sup>



Figure 17: Blueline tilefish, Caulolatilus microps.

## 8.9.1 Landings

Table 37: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	3,955	6,375
2012	6,619	18,462
2013	5,709	14,101
2014	7,540	18,352
2015	3,791	15,886
2016	2,074	10,418
2017	2,187	10,222
2018	1,248	5,829
2019	***	***
2020	***	***

## 8.9.2 Discards

Table 38: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	***	26
2012	***	***	95
2013	***		8
2014	***		2
2015	***		
2016	***		***
2017	***		***
2018	***		***
2019	***		***
2020	***		***

Table 39: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	1,237	1,001	19.3	3.1
S. Atl.(5 yr)	169	151	21.9	3.8

#### 8.9.4 Effort

Table 40: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	***	77
2012	***	***	44
2013	***		30
2014	***		60
2015	***		35
2016	***		***
2017	***		***
2018	***		***
2019	***		***
2020	***		***

# 8.9.5 Catch per Unit Effort (CPUE)<sup>23</sup>

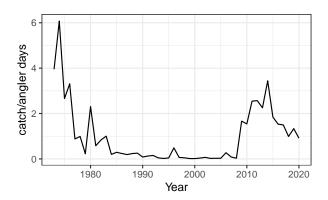


Figure 18: Nominal index (catch/angler days) from headboat logbooks.

## 8.9.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 39.

 $<sup>\</sup>overline{^{22}}$ Confidential data were replaced with asterisks (\*\*\*)

 $<sup>^{23}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.10 Cobia<sup>24</sup>



Figure 19: Cobia, Scomberomorus maculatus.

## 8.10.1 Landings

Table 41: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	1,288	31,409
2012	1,574	33,743
2013	1,537	35,948
2014	1,786	41,813
2015	1,261	24,892
2016	1,233	22,217
2017	660	15,699
2018	694	13,319
2019	797	15,045
2020	597	9,784

#### 8.10.2 Discards

Table 42: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	28	184	337
2012	50	733	697
2013	64	376	674
2014	86	558	1,096
2015	67	858	485
2016	92	556	575
2017	114	397	353
2018	115	593	453
2019	273	615	351
2020	75	960	337

Table 43: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	13	13	41.9	18.7
S. Atl.(10 yr)	650	637	42.0	21.6
S. Atl.(5 yr)	267	254	41.7	20.0

#### 8.10.4 Effort

Table 44: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	99	461	385
2012	140	557	616
2013	167	469	742
2014	179	470	1,070
2015	88	613	662
2016	90	552	562
2017	57	400	372
2018	70	416	384
2019	97	371	409
2020	96	412	263

## 8.10.5 Catch per Unit Effort (CPUE)<sup>25</sup>

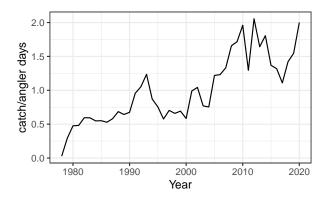


Figure 20: Nominal index (catch/angler days) from headboat logbooks.

# 8.10.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 43.

 $<sup>\</sup>overline{^{24}}$ Confidential data were replaced with asterisks (\*\*\*)

 $<sup>^{25}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.11 $Coney^{26}$



Figure 21: Coney, Cephalopholis fulva.

## 8.11.1 Landings

Table 45: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	28	19
2012	28	20
2013	39	26
2014	158	103
2015	242	263
2016	154	138
2017	64	59
2018	10	13
2019	8	7
2020	***	***

#### 8.11.2 Discards

Table 46: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			36
2012			57
2013			74
2014			139
2015			189
2016	***	***	295
2017			86
2018		***	34
2019			1
2020			***

Table 47: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	50	47	11.2	0.9
S. Atl.(5 yr)	21	19	11.4	1.0

#### 8.11.4 Effort

Table 48: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			46
2012			62
2013			81
2014			208
2015			293
2016	***	***	252
2017			111
2018		***	25
2019			7
2020			***

# 8.11.5 Catch per Unit Effort (CPUE)<sup>27</sup>

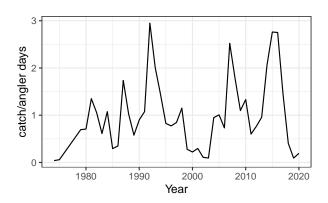


Figure 22: Nominal index (catch/angler days) from headboat logbooks.

# 8.11.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 47.

 $<sup>\</sup>overline{^{26}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>27</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.12 Cottonwick<sup>28</sup>



Figure 23: Cottonwick, Haemulon melanurum.

## 8.12.1 Landings

Table 49: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2012	***	***
2013	32	21
2014	12	7
2015	81	55
2016	436	274
2017	275	156
2018	***	***
2019	***	***
2020	***	***

## 8.12.2 Discards

Table 50: Annual discards in number by region.

Carolinas	GA.N.Fl.	S.Fl
		***
		***
		17
		23
		812
		1,237
		350
		***
		***
		***

Table 51: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	118	107	10.1	0.5
S. Atl.(5 yr)	87	77	10.0	0.5
S.Florida	***	***	***	***

#### 8.12.4 Effort

Table 52: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			***
2012			***
2013			9
2014			8
2015			110
2016			124
2017			45
2018			***
2019			***
2020			***

## 8.12.5 Catch per Unit Effort (CPUE)<sup>29</sup>

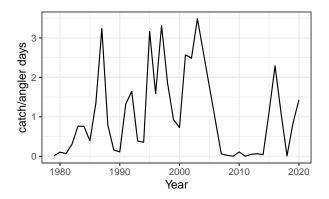


Figure 24: Nominal index (catch/angler days) from headboat logbooks.

# 8.12.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 51.

 $<sup>\</sup>overline{\ ^{28}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>29</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.13 Cubera snapper<sup>30</sup>



Figure 25: Cubera snapper, Lutjanus cyanopterus.

## 8.13.1 Landings

Table 53: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	315	4,999
2012	809	13,067
2013	277	2,794
2014	10	101
2015	40	576
2016	11	206
2017	***	***
2018	8	139
2019	5	103
2020	29	641

## 8.13.2 Discards

Table 54: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	2	12
2012	***		45
2013	***	***	21
2014	***		1
2015	***		
2016	***	***	***
2017		***	***
2018	***		3
2019		***	
2020			1

Table 55: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	11	10	31.2	19.5
S. Atl.(5 yr)	5	5	34.4	24.3

#### 8.13.4 Effort

Table 56: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	34	29
2012	***	71	33
2013	***	***	18
2014	***		9
2015	***		30
2016	***	***	***
2017		***	***
2018	***		8
2019		***	4
2020	4		13

## 8.13.5 Catch per Unit Effort (CPUE)<sup>31</sup>

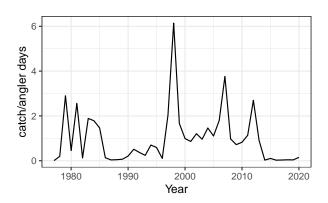


Figure 26: Nominal index (catch/angler days) from headboat logbooks.

# 8.13.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 55.

 $<sup>\</sup>overline{^{30}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>31</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.14 $\operatorname{Dog\ snapper}^{32}$



Figure 27: Dog snapper, Lutjanus jocu.

## 8.14.1 Landings

Table 57: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	34	136
2012	45	127
2013	51	148
2014	24	73
2015	65	418
2016	74	414
2017	50	277
2018	75	169
2019	48	175
2020	61	198

#### 8.14.2 Discards

Table 58: Annual discards in number by region.

3.7	Q 11	C A N EI	C DI
Year	Carolinas	GA.N.Fl.	S.Fl
2011			2
2012			1
2013			4
2014	***	***	5
2015			1
2016	***	***	
2017			3
2018		***	22
2019			2
2020		***	5

Table 59: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	***	***	***	***
S. Atl.(10 yr)	47	44	17.7	4.6
S. Atl.(5 yr)	31	29	16.0	3.4
S.Florida	2	2	13.1	1.1

### 8.14.4 Effort

Table 60: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			23
2012			35
2013			39
2014	***	***	23
2015			41
2016	***	***	43
2017			46
2018		***	36
2019			38
2020		***	34

## 8.14.5 Catch per Unit Effort (CPUE)<sup>33</sup>

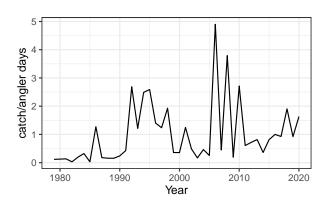


Figure 28: Nominal index (catch/angler days) from headboat logbooks.

# 8.14.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 59.

 $<sup>\</sup>overline{^{32}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>33</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.15 Dolphin $fish^{34}$



Figure 29: Dolphin fish, Coryphaena hippurus.

## 8.15.1 Landings

Table 61: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	3,575	20,128
2012	2,892	$20,\!437$
2013	2,977	21,159
2014	3,807	27,801
2015	4,446	28,019
2016	4,161	36,746
2017	2,713	15,330
2018	2,443	19,049
2019	2,627	10,631
2020	1,394	6,495

#### 8.15.2 Discards

Table 62: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	10	51	552
2012	7	18	190
2013	7	38	373
2014	9	46	673
2015	71	32	568
2016	12	8	281
2017	4	17	367
2018	1	18	335
2019	1	8	357
2020		23	400

Table 63: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	4	4	34.5	6.1
S. Atl.(10 yr)	930	907	31.6	6.8
S. Atl.(5 yr)	335	333	31.4	6.7

### 8.15.4 Effort

Table 64: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	224	165	510
2012	208	155	485
2013	174	73	665
2014	243	87	893
2015	168	98	1,025
2016	217	56	741
2017	153	79	487
2018	148	43	473
2019	101	59	367
2020	109	50	335

## 8.15.5 Catch per Unit Effort (CPUE)<sup>35</sup>

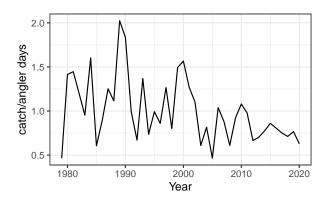


Figure 30: Nominal index (catch/angler days) from headboat logbooks.

# 8.15.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 63.

 $<sup>\</sup>overline{^{34}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>35</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.16 $Gag^{36}$



Figure 31: Gag, Mycteroperca microlepis.

## 8.16.1 Landings

Table 65: Annual landings in number and weight (lb).

3.7	T 1: / )	T 1: (11.)
Year	Landings(n)	Landings (lb)
2011	2,632	30,117
2012	2,100	19,904
2013	1,383	15,431
2014	1,042	11,602
2015	872	11,195
2016	637	8,211
2017	639	6,333
2018	786	7,705
2019	463	5,150
2020	497	6,046

#### **8.16.2** Discards

Table 66: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,205	1,520	1,139
2012	841	1,584	2,768
2013	801	489	694
2014	657	342	367
2015	528	286	313
2016	546	289	146
2017	463	159	69
2018	448	212	62
2019	245	183	53
2020	583	62	39

Table 67: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	611	591	28.2	11.1
S. Atl.(5 yr)	188	185	28.5	11.1

#### 8.16.4 Effort

Table 68: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

	- ·	~	~
Year	Carolinas	GA.N.Fl.	S.Fl
2011	610	767	616
2012	519	725	1,198
2013	470	356	527
2014	436	218	343
2015	369	231	259
2016	361	196	140
2017	288	163	95
2018	286	210	61
2019	245	142	54
2020	365	75	56

# 8.16.5 Catch per Unit Effort (CPUE)<sup>37</sup>

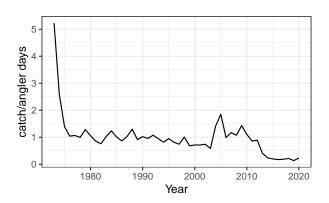


Figure 32: Nominal index (catch/angler days) from headboat logbooks.

# 8.16.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 67.

 $<sup>\</sup>overline{^{36}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>37</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.17 Gray snapper<sup>38</sup>



Figure 33: Gray snapper, Lutjanus griseus.

## 8.17.1 Landings

Table 69: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	42,858	$57,\!353$
2012	54,115	80,140
2013	47,019	66,938
2014	78,678	119,603
2015	62,259	95,589
2016	67,277	97,979
2017	47,014	71,994
2018	54,051	70,688
2019	44,108	57,405
2020	38,831	40,967

## 8.17.2 Discards

Table 70: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	7	7	8,799
2012	7	69	$7,\!489$
2013	***	297	$6,\!519$
2014	140	317	12,153
2015	***	573	13,084
2016		214	12,234
2017	25	48	5,661
2018	***	1,109	6,649
2019	***	508	7,482
2020	***	265	10,023

Table 71: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	137	139	15.4	1.9
S. Atl.(10 yr)	13,265	12,371	13.7	1.5
S. Atl.(5 yr)	5,647	$5{,}146$	13.8	1.5
S.Florida	115	111	12.2	0.9

#### 8.17.4 Effort

Table 72: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	21	619	1,854
2012	20	769	2,518
2013	***	774	2,902
2014	19	839	4,929
2015	***	812	4,789
2016		842	4,269
2017	6	804	3,301
2018	***	678	3,496
2019	***	732	3,176
2020	***	575	2,734

## 8.17.5 Catch per Unit Effort (CPUE)<sup>39</sup>

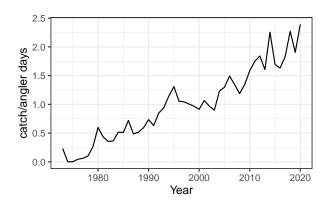


Figure 34: Nominal index (catch/angler days) from headboat logbooks.

# 8.17.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 71.

 $<sup>\</sup>overline{^{38}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>39</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.18 Gray triggerfish<sup>40</sup>



Figure 35: Gray triggerfish, Balistes capriscus.

## 8.18.1 Landings

Table 73: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	53,356	125,602
2012	49,096	116,409
2013	56,487	121,226
2014	$53,\!108$	113,273
2015	45,972	109,601
2016	37,840	80,414
2017	43,358	86,649
2018	35,091	72,444
2019	35,769	58,178
2020	28,141	59,817

#### 8.18.2 Discards

Table 74: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	313	479	10,760
2012	12	210	$12,\!463$
2013	574	207	7,980
2014	584	841	10,726
2015	934	1,853	27,478
2016	2,949	4,784	59,474
2017	3,170	2,717	22,679
2018	2,537	2,284	19,075
2019	7,581	2,782	16,123
2020	3,437	879	10,202

8.18.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 75.

Table 75: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	3	4	12.6	1.8
GA.N.Florida	37	37	15.8	3.1
S. Atl.(10 yr)	8,281	8,035	13.7	2.2
S. Atl.(5 yr)	2,259	2,280	13.7	2.2
S.Florida	20	19	13.2	2.0

#### 8.18.4 Effort

Table 76: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

		~	~
Year	Carolinas	GA.N.Fl.	S.Fl
2011	919	1,457	2,221
2012	792	1,362	2,692
2013	816	1,254	2,498
2014	825	1,244	3,618
2015	766	1,040	4,215
2016	770	1,068	$4,\!253$
2017	796	906	2,698
2018	535	787	2,088
2019	639	845	1,683
2020	622	649	1,123

## 8.18.5 Catch per Unit Effort (CPUE)<sup>41</sup>

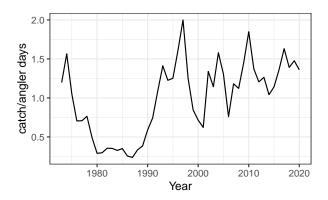


Figure 36: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>\</sup>overline{^{40}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>41</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.19 Graysby<sup>42</sup>

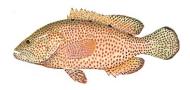


Figure 37: Graysby, Cephalopholis cruentata.

## 8.19.1 Landings

Table 77: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	1,224	1,238
2012	1,583	1,205
2013	1,117	831
2014	2,484	1,986
2015	2,420	1,905
2016	2,081	1,970
2017	2,260	2,118
2018	2,515	2,451
2019	1,969	1,495
2020	3,115	3,455

## 8.19.2 Discards

Table 78: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	228	2	744
2012	69	***	1,883
2013		15	2,602
2014	63	1	5,201
2015	15	20	4,791
2016	68	35	3,361
2017	63	10	2,858
2018	69	26	3,569
2019	20	111	4,762
2020	41	33	$5,\!573$

Table 79: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	1,081	1,019	10.2	0.7
S. Atl.(5 yr)	581	516	10.4	0.8

#### 8.19.4 Effort

Table 80: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	112	4	331
2012	62	***	718
2013	19	10	892
2014	74	9	1,574
2015	72	42	1,720
2016	81	49	1,284
2017	84	64	1,012
2018	82	85	978
2019	84	90	1,058
2020	219	69	920

## 8.19.5 Catch per Unit Effort (CPUE)<sup>43</sup>

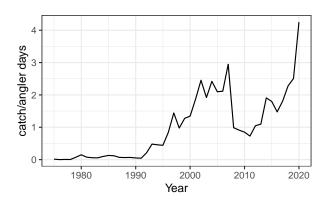


Figure 38: Nominal index (catch/angler days) from headboat logbooks.

# 8.19.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 79.

 $<sup>\</sup>overline{^{42}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>43</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.20 Greater amberjack<sup>44</sup>



Figure 39: Greater amberjack, Seriola dummerili.

## 8.20.1 Landings

Table 81: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	2,138	36,161
2012	2,545	44,931
2013	4,264	81,941
2014	3,834	73,786
2015	5,590	106,866
2016	5,845	106,599
2017	3,582	68,909
2018	1,618	26,607
2019	2,152	31,281
2020	2,770	39,964

#### 8.20.2 Discards

Table 82: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	907	163	488
2012	637	378	719
2013	1,363	1,019	289
2014	1,208	1,635	857
2015	1,036	5,009	1,275
2016	1,490	1,483	738
2017	1,287	310	582
2018	729	835	378
2019	1,127	757	793
2020	1,266	285	626

Table 83: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	6	6	27.3	8.4
S. Atl.(10 yr)	1,030	1,084	35.4	17.7
S. Atl.(5 yr)	450	450	35.3	16.8
S.Florida	1	1	54.7	51.3

#### 8.20.4 Effort

Table 84: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	307	180	262
2012	386	222	358
2013	442	388	203
2014	447	420	301
2015	467	664	401
2016	461	655	294
2017	427	403	169
2018	227	261	150
2019	279	274	215
2020	413	171	253

## 8.20.5 Catch per Unit Effort (CPUE)<sup>45</sup>

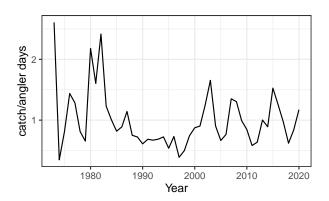


Figure 40: Nominal index (catch/angler days) from headboat logbooks.

# 8.20.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 83.

 $<sup>\</sup>overline{^{44}\text{Confidential data were replaced with asterisks (***)}}$ 

<sup>&</sup>lt;sup>45</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.21 Hogfish<sup>46</sup>



Figure 41: Hogfish, Lachnolaimus maximus.

#### 8.21.1 Landings

Table 85: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	107	837
2012	214	360
2013	127	259
2014	190	392
2015	287	743
2016	170	282
2017	88	179
2018	18	94
2019	8	36
2020	33	153

## 8.21.2 Discards

Table 86: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	2	***	32
2012	20		86
2013	754	***	104
2014	1,145		109
2015	116	***	153
2016	***		112
2017			149
2018	10		118
2019	***		66
2020			99

Table 87: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	165	159	13.6	1.9
S. Atl.(5 yr)	51	49	14.4	2.4

#### 8.21.4 Effort

Table 88: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	13	***	81
2012	10		130
2013	18	***	187
2014	24		220
2015	12	***	260
2016	***		159
2017	8		160
2018	7		93
2019	***		41
2020	10		54

## 8.21.5 Catch per Unit Effort (CPUE)<sup>47</sup>

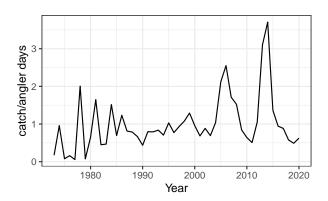


Figure 42: Nominal index (catch/angler days) from headboat logbooks.

# 8.21.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 87.

 $<sup>\</sup>overline{^{46}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>47</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.22 Jolthead porgy<sup>48</sup>



Figure 43: Jolthead porgy, Calamus bajonado.

## 8.22.1 Landings

Table 89: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	7,785	15,755
2012	6,588	11,614
2013	4,525	11,205
2014	5,902	13,911
2015	6,714	13,886
2016	6,075	20,849
2017	5,422	11,577
2018	5,689	10,289
2019	6,927	9,476
2020	7,667	10,862

#### 8.22.2 Discards

Table 90: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	30		152
2012	12	2	48
2013	70	3	83
2014	274	2	803
2015			189
2016	92		1,227
2017		1	24
2018	7	***	158
2019	22	3	121
2020	1	1	138

Table 91: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	1	1	14.8	1.6
S. Atl.(10 yr)	2,228	2,037	15.1	2.2
S. Atl.(5 yr)	1,115	985	14.8	2.1
S.Florida	122	107	13.9	1.6

#### 8.22.4 Effort

Table 92: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	238	66	721
2012	160	69	1,169
2013	147	25	1,011
2014	169	21	1,509
2015	171	26	2,055
2016	115	14	2,242
2017	110	8	1,882
2018	94	***	1,638
2019	87	21	1,558
2020	183	11	1,440

## 8.22.5 Catch per Unit Effort (CPUE)<sup>49</sup>

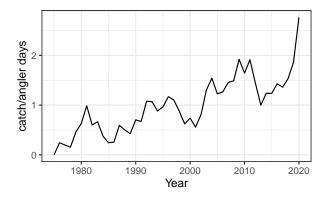


Figure 44: Nominal index (catch/angler days) from headboat logbooks.

# 8.22.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 91.

 $<sup>\</sup>overline{^{48}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>49</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.23 Knobbed porgy<sup>50</sup>



Figure 45: Knobbed porgy, Calamus nodosus.

## 8.23.1 Landings

Table 93: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	5,724	5,740
2012	7,188	7,496
2013	5,639	5,029
2014	5,960	5,582
2015	6,705	6,835
2016	4,209	4,647
2017	3,833	4,199
2018	4,562	4,116
2019	4,146	4,622
2020	3,849	3,434

## 8.23.2 Discards

Table 94: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	7		130
2012	10		304
2013	7	***	260
2014	1		1,195
2015	132	***	322
2016	145	1	591
2017		***	427
2018	64	***	328
2019	146		480
2020	3	***	442

Table 95: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	7	7	13.6	1.4
S. Atl.(10 yr)	2,363	2,232	11.7	1.0
S. Atl.(5 yr)	979	898	11.8	1.0
S.Florida	77	60	11.4	0.9

#### 8.23.4 Effort

Table 96: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	92	16	783
2012	71	12	933
2013	70	***	1,001
2014	61		1,205
2015	106	***	1,188
2016	98	10	1,091
2017	94	***	1,067
2018	67	***	1,025
2019	113	4	907
2020	97	***	734

## 8.23.5 Catch per Unit Effort (CPUE)<sup>51</sup>

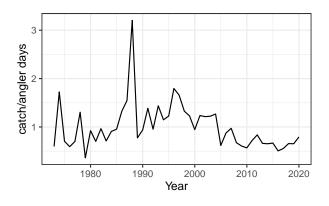


Figure 46: Nominal index (catch/angler days) from headboat logbooks.

# 8.23.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 95.

 $<sup>\</sup>overline{}^{50}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>51</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.24 King mackerel<sup>52</sup>



Figure 47: King mackerel, Scomberomorus cavalla.

Table 99: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	2	2	30.7	5.3
GA.N.Florida	8	9	27.0	5.6
S. Atl.(10 yr)	2,634	2,617	33.3	8.7
S. Atl.(5 yr)	1,278	1,252	33.2	8.3
S.Florida	15	12	37.0	11.1

## 8.24.1 Landings

Table 97: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	11,375	96,077
2012	8,744	85,076
2013	5,713	$66,\!895$
2014	9,308	101,289
2015	11,872	96,365
2016	10,862	98,412
2017	8,925	$62,\!278$
2018	9,908	75,645
2019	11,723	98,416
2020	7,506	67,784

#### 8.24.4 Effort

Table 100: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	271	228	1,979
2012	247	262	2,069
2013	221	170	1,980
2014	193	139	$3,\!357$
2015	196	182	3,710
2016	221	229	$3,\!255$
2017	270	212	2,143
2018	320	181	2,024
2019	396	273	1,997
2020	468	181	1,500

### 8.24.2 Discards

Table 98: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	66	8	1,526
2012	132	11	1,217
2013	174	18	729
2014	95	15	1,108
2015	121	20	1,535
2016	348	148	1,462
2017	522	65	693
2018	494	38	428
2019	500	43	1,065
2020	433	25	674

8.24.5 Catch per Unit Effort (CPUE)<sup>53</sup>

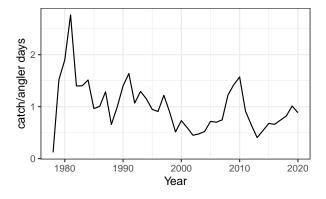


Figure 48: Nominal index (catch/angler days) from headboat logbooks.

# 8.24.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 99.

 $<sup>^{52}\</sup>mathrm{Confidential\ data\ were\ replaced\ with\ asterisks\ }(***)$ 

<sup>&</sup>lt;sup>53</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

# 8.25 Lane snapper $^{54}$



Figure 49: Lane snapper, Lutjanus synagris.

## 8.25.1 Landings

Table 101: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	12,421	9,833
2012	24,477	17,734
2013	19,734	14,027
2014	29,880	21,816
2015	30,335	24,493
2016	34,097	24,148
2017	29,064	22,873
2018	37,853	26,520
2019	35,486	25,117
2020	23,267	14,991

## 8.25.2 Discards

Table 102: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		28	965
2012		14	1,535
2013		97	1,937
2014	***	705	2,755
2015		692	4,175
2016		543	6,751
2017		113	4,324
2018		538	9,747
2019		236	18,030
2020		95	10,119

Table 103: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	159	160	13.1	1.1
S. Atl.(10 yr)	10,081	9,309	11.2	0.8
S. Atl.(5 yr)	5,414	5,041	11.3	0.8
S.Florida	327	302	10.1	0.6

#### 8.25.4 Effort

Table 104: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		371	867
2012		413	1,269
2013		602	1,504
2014	***	897	$2,\!597$
2015		781	2,552
2016		762	2,496
2017		867	2,151
2018		734	2,134
2019		791	2,044
2020		626	1,563

## 8.25.5 Catch per Unit Effort (CPUE)<sup>55</sup>

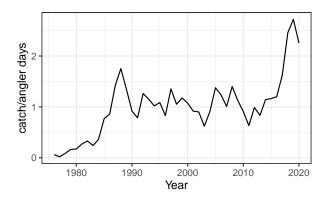


Figure 50: Nominal index (catch/angler days) from headboat logbooks.

# 8.25.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 103.

 $<sup>\</sup>overline{\ }^{54}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>55</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.26 Lesser amberjack<sup>56</sup>



Figure 51: Lesser amberjack, Seriola fasciata.

## **8.26.1** Landings

Table 105: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	27	216
2012	9	44
2013	975	4,693
2014	896	4,270
2015	336	728
2016	320	772
2017	120	244
2018	207	749
2019	290	1,127
2020	221	390

#### **8.26.2** Discards

Table 106: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	***	***
2012	***		3
2013	35	82	14
2014	77	27	153
2015	10	29	43
2016	2	***	165
2017		***	4
2018	***	12	5
2019	34		51
2020	15	***	68

Table 107: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	***	***	***	***
S. Atl.(10 yr)	35	30	19.9	3.6
S. Atl.(5 yr)	8	8	22.0	4.7

#### 8.26.4 Effort

Table 108: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	***	***
2012	***		3
2013	55	37	52
2014	35	29	116
2015	15	8	84
2016	7	***	158
2017	5	***	62
2018	***	9	39
2019	10		95
2020	5	***	124

## 8.26.5 Catch per Unit Effort (CPUE)<sup>57</sup>

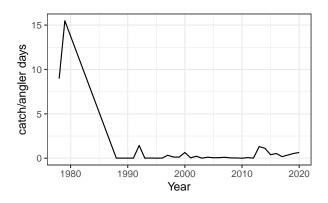


Figure 52: Nominal index (catch/angler days) from headboat logbooks.

# 8.26.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 107.

 $<sup>\</sup>overline{}^{56}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>57</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.27 Mahogany snapper<sup>58</sup>



Figure 53: Mahogany snapper, Lutjanus mahogoni.

### **8.27.1** Landings

Table 109: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	34	34
2012	29	30
2013	116	114
2014	176	181
2015	184	180
2016	203	183
2017	62	70
2018	118	123
2019	79	55
2020	63	41

### 8.27.2 Discards

Table 110: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			6
2012			2
2013			8
2014			24
2015			98
2016			177
2017			4
2018			
2019			5
2020			5

8.27.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 111.

Table 111: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	33	31	13.0	1.0
S. Atl.(5 yr)	17	17	12.7	1.0

#### 8.27.4 Effort

Table 112: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			19
2012			15
2013			52
2014			116
2015			124
2016			88
2017			33
2018			35
2019			21
2020			22

## 8.27.5 Catch per Unit Effort (CPUE)<sup>59</sup>

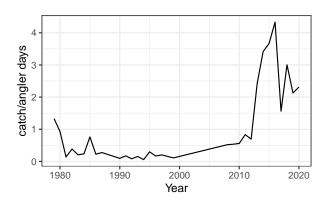


Figure 54: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>\</sup>overline{}^{58}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>59</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.28 Margate<sup>60</sup>



Figure 55: Margate, Haemulon album.

## 8.28.1 Landings

Table 113: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	446	507
2012	959	3,118
2013	1,259	4,855
2014	1,399	4,719
2015	780	2,129
2016	588	2,499
2017	404	1,184
2018	423	1,434
2019	255	1,206
2020	375	1,676

### 8.28.2 Discards

Table 114: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	28	5	11
2012	***		22
2013	613	13	30
2014	***		56
2015			96
2016		***	52
2017	***	***	7
2018	***	23	20
2019			57
2020	***	***	167

Table 115: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	445	415	19.8	4.4
S. Atl.(5 yr)	234	218	20.2	4.7
S.Florida	2	2	19.4	4.1

### 8.28.4 Effort

Table 116: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	12	12	149
2012	***	8	313
2013	11	5	247
2014	***	15	303
2015		10	320
2016		***	253
2017	***	***	159
2018	***	10	130
2019		4	112
2020	***	***	156

8.28.5 Catch per Unit Effort (CPUE)<sup>61</sup>

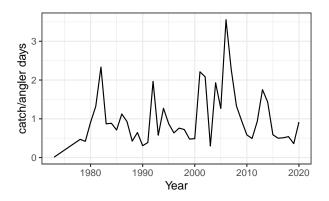


Figure 56: Nominal index (catch/angler days) from headboat logbooks.

# $\begin{array}{ccc} \textbf{8.28.3} & \textbf{Dockside} & \textbf{Intercept} & \textbf{Sampling} & \textbf{Program} \\ & & \textbf{gram} \end{array}$

Regional sample sizes, average length (in.) and weight (lb) are available in Table 115.

 $<sup>\</sup>overline{}^{60}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>61</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.29 Mutton snapper<sup>62</sup>



Figure 57: Mutton snapper, Lutjanus analis.

### **8.29.1** Landings

Table 117: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	11,422	53,172
2012	11,606	74,640
2013	9,340	51,972
2014	17,000	83,648
2015	20,636	79,554
2016	23,018	88,783
2017	13,206	60,609
2018	12,312	60,293
2019	10,528	52,703
2020	10,387	46,470

#### 8.29.2 Discards

Table 118: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	31	792
2012			2,061
2013	***	95	4,927
2014	20	547	10,401
2015	20	690	10,469
2016	***	272	20,719
2017	***	158	13,027
2018	***	1,247	16,296
2019	***	344	12,735
2020		490	12,869

Table 119: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	21	22	22.3	5.0
S. Atl.(10 yr)	5,375	$5,\!170$	20.9	5.0
S. Atl.(5 yr)	2,508	2,388	20.9	4.9
S.Florida	23	22	19.9	5.6

#### 8.29.4 Effort

Table 120: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	150	2,056
2012	3	100	2,581
2013	***	86	2,964
2014	11	252	5,832
2015	4	271	5,968
2016	***	349	5,522
2017	***	247	3,435
2018	***	253	3,322
2019	***	224	3,417
2020	12	233	2,920

## 8.29.5 Catch per Unit Effort (CPUE)<sup>63</sup>

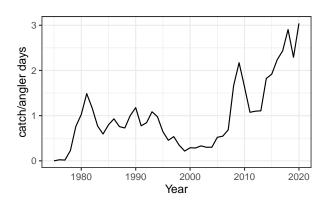


Figure 58: Nominal index (catch/angler days) from headboat logbooks.

# 8.29.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 119.

 $<sup>\</sup>overline{^{62}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>63</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.30 Ocean triggerfish<sup>64</sup>

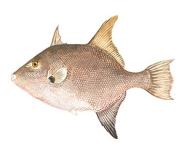


Figure 59: Ocean triggerfish,  $Canthidermis\ sufflamen.$ 

## 8.30.1 Landings

Table 121: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	390	1,114
2012	1,471	4,940
2013	1,446	4,561
2014	3,412	11,303
2015	4,083	12,432
2016	2,889	8,798
2017	2,593	8,137
2018	1,479	$5,\!379$
2019	1,968	6,537
2020	1,332	6,239

## 8.30.2 Discards

Table 122: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			11
2012			80
2013	***		552
2014		***	1,380
2015			191
2016			168
2017		***	74
2018		***	33
2019			17
2020			2

# 8.30.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 123.

Table 123: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	233	1,924	16.4	3.1
S. Atl.(5 yr)	36	845	16.6	3.1
S.Florida	4	14	17.7	3.6

#### 8.30.4 Effort

Table 124: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			118
2012			257
2013	***		493
2014		***	838
2015			643
2016			428
2017		***	350
2018		***	246
2019			328
2020			255

## 8.30.5 Catch per Unit Effort (CPUE)<sup>65</sup>

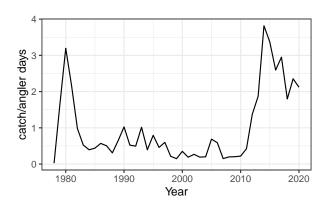


Figure 60: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>^{64}</sup>$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>65</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.31 Red grouper<sup>66</sup>



Figure 61: Red grouper, Epinephelus morio.

### 8.31.1 Landings

Table 125: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	1,558	10,163
2012	1,435	11,516
2013	1,162	11,043
2014	1,854	16,252
2015	1,735	12,527
2016	2,176	18,030
2017	2,385	18,650
2018	3,682	26,795
2019	2,906	19,871
2020	2,923	16,959

#### 8.31.2 Discards

Table 126: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	89	251	6,303
2012	17	164	9,614
2013	21	451	9,271
2014	25	102	4,907
2015	70	58	6,291
2016	23	24	11,845
2017	10	68	4,875
2018	18	47	8,868
2019	31	151	9,615
2020	6	59	4,939

Table 127: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	1,163	1,104	23.8	8.0
S. Atl.(5 yr)	575	526	24.2	8.4

#### 8.31.4 Effort

Table 128: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Carolinas	GA.N.Fl.	S.Fl
139	227	1,380
95	129	2,029
62	184	$2,\!434$
45	70	1,935
31	36	1,673
22	14	2,596
17	50	1,624
22	52	2,241
6	98	2,139
5	31	1,474
	139 95 62 45 31 22 17 22 6	139 227 95 129 62 184 45 70 31 36 22 14 17 50 22 52 6 98

## 8.31.5 Catch per Unit Effort (CPUE)<sup>67</sup>

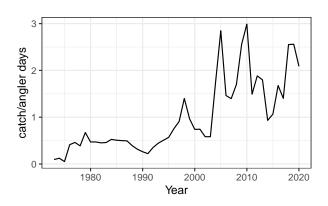


Figure 62: Nominal index (catch/angler days) from headboat logbooks.

## 8.31.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 127.

 $<sup>\</sup>overline{^{66}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>67</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.32 Red hind<sup>68</sup>



Figure 63: Red hind, Epinephelus guttatus.

### 8.32.1 Landings

Table 129: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	136	253
2012	104	212
2013	91	93
2014	192	225
2015	266	277
2016	206	239
2017	100	162
2018	241	341
2019	46	62
2020	11	14

#### 8.32.2 Discards

Table 130: Annual discards in number by region.

3.7	C 1:	CANDI	O EI
Year	Carolinas	GA.N.Fl.	S.Fl
2011	9	***	21
2012		***	63
2013		***	93
2014	8		126
2015		***	197
2016		***	294
2017	4	***	46
2018	8		53
2019	***		50
2020	***		14

Table 131: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	125	119	13.7	1.6
S. Atl.(5 yr)	28	26	14.1	1.6

#### 8.32.4 Effort

Table 132: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	15	***	27
2012	8	***	65
2013	4	***	99
2014	5		156
2015	6	***	235
2016	6	***	206
2017	14	***	67
2018	22		51
2019	***		39
2020	***		13

## 8.32.5 Catch per Unit Effort (CPUE)<sup>69</sup>

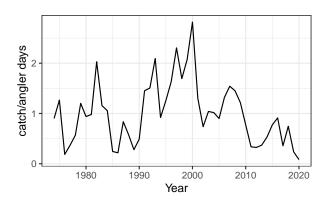


Figure 64: Nominal index (catch/angler days) from headboat logbooks.

# 8.32.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 131.

 $<sup>\</sup>overline{^{68}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>69</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.33 $Red porgy^{70}$



Figure 65: Red porgy, Pagrus pagrus.

## 8.33.1 Landings

Table 133: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	21,091	39,191
2012	23,220	41,086
2013	17,711	31,716
2014	17,173	30,042
2015	15,546	28,968
2016	15,315	25,717
2017	12,333	23,042
2018	9,904	17,205
2019	7,375	13,285
2020	6,014	4,886

#### 8.33.2 Discards

Table 134: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	14,255	80	759
2012	14,684	17	2,204
2013	$13,\!389$	29	490
2014	$17,\!461$	28	355
2015	18,541	102	139
2016	14,739	501	217
2017	10,665	214	323
2018	11,206	4	19
2019	6,726		***
2020	4,319	4	***

Table 135: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	8	8	15.0	1.6
S. Atl.(10 yr)	1,713	1,667	14.9	1.8
S. Atl.(5 yr)	462	453	15.0	1.8

#### 8.33.4 Effort

Table 136: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	568	89	200
2012	491	57	278
2013	433	53	147
2014	432	60	78
2015	443	93	130
2016	435	115	94
2017	394	46	202
2018	277	43	34
2019	207	11	***
2020	208	22	***

## 8.33.5 Catch per Unit Effort (CPUE)<sup>71</sup>

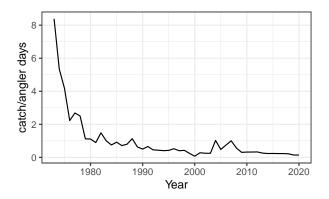


Figure 66: Nominal index (catch/angler days) from headboat logbooks.

# 8.33.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 135.

<sup>70</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>71</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.34 Red snapper<sup>72</sup>



Figure 67: Red snapper, Lutjanus campechanus.

## 8.34.1 Landings

Table 137: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	1,359	8,660
2012	2,127	$10,\!471$
2013	1,520	12,036
2014	2,952	22,450
2015	750	4,010
2016	331	1,844
2017	2,724	17,523
2018	4,435	30,126
2019	4,055	26,279
2020	3,224	18,305

### 8.34.2 Discards

Table 138: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,240	31,713	9,029
2012	834	42,199	4,272
2013	592	43,307	2,841
2014	1,401	$42,\!398$	2,813
2015	2,305	49,665	2,435
2016	2,045	$61,\!450$	3,016
2017	1,532	36,339	3,430
2018	2,550	$41,\!177$	$3,\!559$
2019	2,434	$44,\!256$	1,871
2020	4,996	$47,\!506$	540

8.34.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 139.

Table 139: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	1,724	1,646	21.4	6.3
S. Atl.(5 yr)	1,070	1,045	22.0	6.7

#### 8.34.4 Effort

Table 140: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	258	1,477	135
2012	178	1,499	125
2013	137	1,381	115
2014	187	1,469	154
2015	250	1,370	59
2016	266	1,360	79
2017	259	1,197	196
2018	259	1,129	266
2019	275	1,255	109
2020	525	972	96

## 8.34.5 Catch per Unit Effort (CPUE)<sup>73</sup>

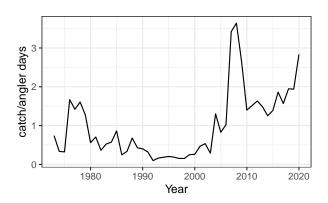


Figure 68: Nominal index (catch/angler days) from headboat logbooks.

<sup>72</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>73</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.35 Rock hind $^{74}$

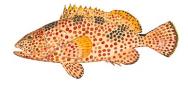


Figure 69: Rock hind, Epinephelus adcensionis.

## **8.35.1** Landings

Table 141: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	1,451	3,764
2012	898	2,142
2013	815	1,814
2014	1,534	3,219
2015	2,355	3,529
2016	5,076	10,162
2017	1,187	2,738
2018	767	1,546
2019	421	1,369
2020	837	2,678

#### 8.35.2 Discards

Table 142: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	127	***	374
2012	22	7	1,115
2013		71	338
2014	28	16	711
2015	60	5	2,342
2016	61	32	5,041
2017	73	3	270
2018	18	13	437
2019	16	***	116
2020	25	***	127

Table 143: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	312	293	14.7	2.0
S. Atl.(5 yr)	134	118	14.7	2.1

#### 8.35.4 Effort

Table 144: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	171	***	213
2012	95	6	526
2013	74	22	381
2014	109	18	659
2015	116	21	840
2016	122	19	719
2017	111	14	301
2018	65	12	277
2019	31	***	177
2020	97	***	117

## 8.35.5 Catch per Unit Effort (CPUE)<sup>75</sup>

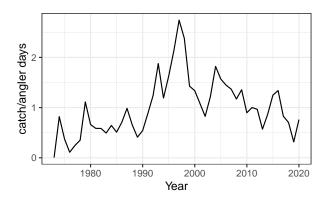


Figure 70: Nominal index (catch/angler days) from headboat logbooks.

# 8.35.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 143.

 $<sup>\</sup>overline{^{74}}$ Confidential data were replaced with asterisks (\*\*\*)

 $<sup>^{75}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.36 Sailors choice<sup>76</sup>



Figure 71: Sailors choice, Haemulon parra.

### **8.36.1** Landings

Table 145: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	31	22
2012	283	210
2013	949	785
2014	837	682
2015	1,274	910
2016	2,323	1,627
2017	545	385
2018	307	221
2019	281	189
2020	649	390

### 8.36.2 Discards

Table 146: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			1
2012			24
2013	***	***	121
2014		***	124
2015		***	98
2016		***	792
2017		***	968
2018	***		217
2019			32
2020			156

Table 147: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	655	598	11.0	0.7
S. Atl.(5 yr)	299	280	10.8	0.7
S.Florida	47	47	10.4	0.6

#### 8.36.4 Effort

Table 148: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			13
2012			71
2013	***	***	186
2014		***	280
2015		***	533
2016		***	616
2017		***	448
2018	***		187
2019			95
2020			109

## 8.36.5 Catch per Unit Effort (CPUE)<sup>77</sup>

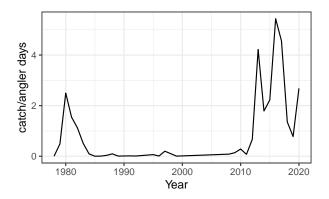


Figure 72: Nominal index (catch/angler days) from headboat logbooks.

# 8.36.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 147.

 $<sup>\</sup>overline{^{76}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>77</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.37 Sand tilefish<sup>78</sup>



Figure 73: Sand tilefish, Malacanthus plumier.

## 8.37.1 Landings

Table 149: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	657	587
2012	695	632
2013	835	781
2014	1,301	1,162
2015	1,819	1,785
2016	1,249	1,290
2017	667	712
2018	446	548
2019	143	183
2020	321	268

## 8.37.2 Discards

Table 150: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	9	***	751
2012	4		1,891
2013			1,222
2014	4		1,722
2015		***	2,074
2016	1	***	2,490
2017			3,086
2018	3		1,101
2019			430
2020			410

Table 151: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	578	615	17.1	1.0
S. Atl.(5 yr)	270	295	17.5	1.1
S.Florida	16	16	17.2	0.9

#### 8.37.4 Effort

Table 152: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

	~ 1.	@ 4 37 F1	0.71
Year	Carolinas	GA.N.Fl.	S.Fl
2011	11	***	392
2012	7		712
2013	17		568
2014	8		1,122
2015	9	***	1,323
2016	14	***	1,029
2017	19		995
2018	13		467
2019	8		177
2020	20		175

## 8.37.5 Catch per Unit Effort (CPUE)<sup>79</sup>

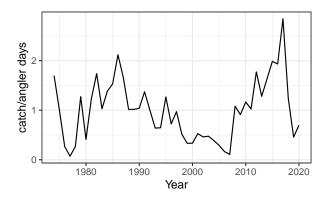


Figure 74: Nominal index (catch/angler days) from headboat logbooks.

# 8.37.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 151.

 $<sup>\</sup>overline{^{78}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>79</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.38 Saucereye porgy<sup>80</sup>



Figure 75: Saucereye porgy, Calamus calamus.

### **8.38.1** Landings

Table 153: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	170	437
2012	176	184
2013	111	135
2014	28	34
2015	110	121
2016	74	81
2017	3	3
2020	***	***

### 8.38.2 Discards

Table 154: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			1
2012			1
2013			
2014			14
2015			
2016			3
2017			2
2020		***	***

# 8.38.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 155.

Table 155: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	60	58	11.6	1.0
S. Atl.(5 yr)	12	12	10.5	0.7

 $<sup>\</sup>overline{^{80}}$ Confidential data were replaced with asterisks (\*\*\*)

#### 8.38.4 Effort

Table 156: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			54
2012			100
2013			65
2014			34
2015			69
2016			40
2017			4
2020		***	***

## 8.38.5 Catch per Unit Effort (CPUE)<sup>81</sup>

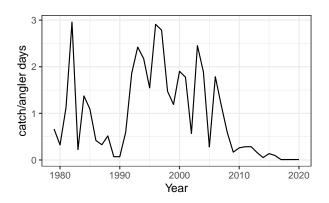


Figure 76: Nominal index (catch/angler days) from headboat logbooks.

<sup>&</sup>lt;sup>81</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.39 Scamp<sup>82</sup>



Figure 77: Scamp, Mycteroperca phenax.

## 8.39.1 Landings

Table 157: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	2,014	21,895
2012	2,063	13,199
2013	1,778	15,355
2014	1,826	15,363
2015	2,208	12,482
2016	1,767	10,753
2017	1,658	14,278
2018	1,114	7,817
2019	1,025	8,313
2020	878	7,056

#### 8.39.2 Discards

Table 158: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,230	155	236
2012	867	222	216
2013	1,070	35	65
2014	1,406	42	73
2015	1,527	30	79
2016	1,216	55	70
2017	872	6	35
2018	648	3	37
2019	561	41	47
2020	409	17	24

Table 159: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	487	478	23.3	7.1
S. Atl.(5 yr)	200	193	23.2	7.0

#### 8.39.4 Effort

Table 160: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	412	134	104
2012	318	112	153
2013	290	61	94
2014	357	31	75
2015	338	43	80
2016	353	36	79
2017	337	17	65
2018	242	18	59
2019	225	35	63
2020	236	13	47

## 8.39.5 Catch per Unit Effort (CPUE)<sup>83</sup>

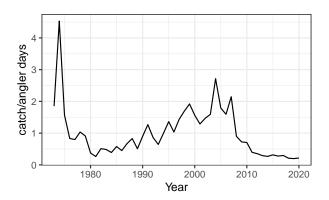


Figure 78: Nominal index (catch/angler days) from headboat logbooks.

# 8.39.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 159.

 $<sup>\</sup>overline{^{82}}$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>83</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.40 Schoolmaster<sup>84</sup>

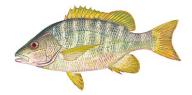


Figure 79: Schoolmaster, Lutjanus apodus.

### 8.40.1 Landings

Table 161: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	173	149
2012	288	276
2013	118	411
2014	250	886
2015	527	361
2016	514	512
2017	420	407
2018	279	293
2019	207	239
2020	577	628

#### 8.40.2 Discards

Table 162: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			42
2012			20
2013			25
2014		***	101
2015			273
2016		***	198
2017		***	217
2018			60
2019			55
2020		***	157

Table 163: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	207	189	11.5	1.0
S. Atl.(5 yr)	92	84	12.1	1.2
S.Florida	1	1	10.7	0.8

### 8.40.4 Effort

Table 164: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011			79
2012			111
2013			86
2014		***	96
2015			155
2016		***	200
2017		***	185
2018			101
2019			91
2020		***	98

## 8.40.5 Catch per Unit Effort (CPUE)<sup>85</sup>

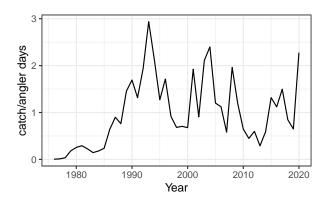


Figure 80: Nominal index (catch/angler days) from headboat logbooks.

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Regional sample sizes, average length (in.) and weight (lb) are available in Table 163.

 $<sup>^{84}</sup>$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>85</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.41 Scup<sup>86</sup>

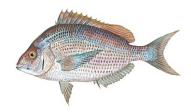


Figure 81: Scup, Stenotomus chrysops.

### 8.41.1 Landings

Table 165: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	10,539	7,937
2012	8,907	7,498
2013	8,185	6,336
2014	10,449	7,727
2015	13,846	11,506
2016	8,136	7,959
2017	8,977	7,437
2018	12,425	15,711
2019	13,871	13,622
2020	12,413	12,337

#### 8.41.2 Discards

Table 166: Annual discards in number by region.

as GA.N.Fl. 10 3 33 50 89 ***	***
33 50 89 ***	***
50 39 ***	***
89 ***	***
59	
31 ***	
18 1	
)1 ***	***
58 ***	
(1 ***	
) 1	

8.41.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 167.

Table 167: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	1	1	12.2	1.0
GA.N.Florida	***	***	***	***
S. Atl.(10 yr)	495	485	9.9	0.6
S. Atl.(5 yr)	193	182	10.3	0.6

#### 8.41.4 Effort

Table 168: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	402	23	
2012	514	7	
2013	434		***
2014	409	***	
2015	447	***	
2016	488	4	
2017	389	***	***
2018	197	***	
2019	419	***	
2020	292	***	

## 8.41.5 Catch per Unit Effort (CPUE)<sup>87</sup>

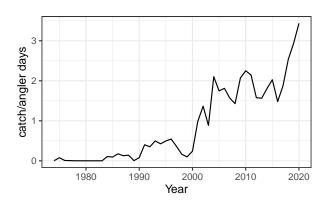


Figure 82: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>^{86}</sup>$ Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>87</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.42 Silk snapper<sup>88</sup>



Figure 83: Silk snapper, Lutjanus vivanus.

#### **8.42.1** Landings

Table 169: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	724	1,612
2012	2,206	4,318
2013	957	1,625
2014	919	1,164
2015	1,345	2,292
2016	861	1,858
2017	733	1,414
2018	137	175
2019	423	369
2020	231	80

#### 8.42.2 Discards

Table 170: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	19	68
2012	***	114	57
2013	***		2
2014	***		3
2015	***	***	43
2016	***		14
2017		***	34
2018			32
2019			59
2020	***		44

Table 171: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	345	337	15.3	1.8
S. Atl.(5 yr)	109	107	15.4	2.0
S.Florida	12	12	9.2	0.3

#### 8.42.4 Effort

Table 172: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***	3	61
2012	***	7	61
2013	***		43
2014	***		36
2015	***	***	62
2016	***		70
2017		***	33
2018			41
2019			30
2020	***		32

## 8.42.5 Catch per Unit Effort (CPUE)<sup>89</sup>

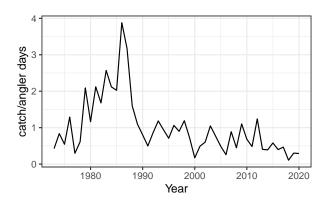


Figure 84: Nominal index (catch/angler days) from headboat logbooks.

# 8.42.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 171.

 $<sup>^{88}\</sup>mathrm{Confidential}$  data were replaced with a sterisks (\*\*\*)

<sup>&</sup>lt;sup>89</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.43 Snowy grouper<sup>90</sup>



Figure 85: Snowy grouper, Epinephelus niveatus.

## 8.43.1 Landings

Table 173: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	63	67
2012	60	85
2013	449	4,559
2014	1,138	13,203
2015	781	4,372
2016	525	3,016
2017	773	3,433
2018	190	1,655
2019	237	624
2020	***	***

### 8.43.2 Discards

Table 174: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	11	***	22
2012	4	***	42
2013	8	***	16
2014	21	***	5
2015	3	***	9
2016		***	
2017		***	4
2018	***		
2019	***	***	***
2020		***	***

8.43.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 175.

Table 175: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	338	321	21.1	6.0
S. Atl.(5 yr)	143	138	21.6	6.4

#### 8.43.4 Effort

Table 176: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	15	***	26
2012	16	***	23
2013	6	***	21
2014	10	***	42
2015	4	***	26
2016		***	13
2017	7	***	12
2018	***		6
2019	***	***	***
2020		***	***

## 8.43.5 Catch per Unit Effort (CPUE)<sup>91</sup>

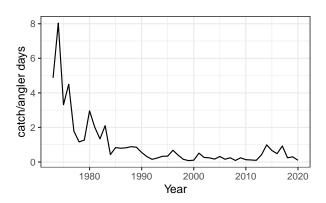


Figure 86: Nominal index (catch/angler days) from headboat logbooks.

<sup>90</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>91</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.44 Spanish mackerel<sup>92</sup>



Figure 87: Spanish Mackerel,  $Scomberomorus\ maculatus.$ 

#### 8.44.1 Landings

Table 177: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	13,219	19,259
2012	10,224	11,677
2013	4,770	5,732
2014	7,611	8,984
2015	4,797	5,893
2016	8,603	8,414
2017	7,996	8,919
2018	4,383	5,653
2019	5,759	7,750
2020	5,422	10,132

### 8.44.2 Discards

Table 178: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,794	16	11
2012	1,088	1	1
2013	848	55	22
2014	821	5	28
2015	1,126	1	62
2016	1,254	4	53
2017	850	3	208
2018	831	4	2
2019	716	5	173
2020	804	5	163

Table 179: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	735	715	19.1	1.6
S. Atl.(5 yr)	395	377	18.5	1.4
S.Florida	6	5	21.6	1.7

#### 8.44.4 Effort

Table 180: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	626	14	224
2012	544	16	150
2013	330	23	267
2014	381	44	355
2015	307	23	262
2016	439	25	230
2017	386	10	150
2018	235	24	113
2019	317	22	372
2020	354	18	244

## 8.44.5 Catch per Unit Effort (CPUE)<sup>93</sup>

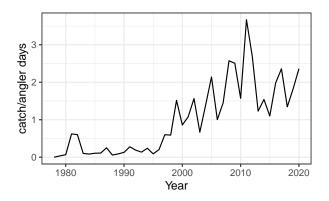


Figure 88: Nominal index (catch/angler days) from headboat logbooks.

# 8.44.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 179.

<sup>92</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>93</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.45 Speckled hind<sup>94</sup>



Figure 89: Speckled Hind, Epinephelus drummond-hayi.

## **8.45.1** Landings

Table 181: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	22	29
2012	26	29
2013	48	277
2014	11	65
2015	8	9
2017	2	12
2019	***	***

#### 8.45.2 Discards

Table 182: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	10	5	16
2012	4	***	21
2013	7	***	49
2014	8	***	14
2015	***	***	16
2016	***		41
2017	***	***	4
2018	***		***
2019			***
2020		***	***

Table 183: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	16	16	19.5	6.4
S. Atl.(5 yr)	9	9	20.4	7.1

#### 8.45.4 Effort

Table 184: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Carolinas	GA.N.Fl.	S.Fl
7	6	13
10	***	21
8	***	37
5	***	14
***	***	10
***		9
***	***	3
***		***
		***
	***	***
	7 10 8 5 *** ***	7 6 10 *** 8 *** 5 *** *** *** ***

## 8.45.5 Catch per Unit Effort (CPUE)<sup>95</sup>

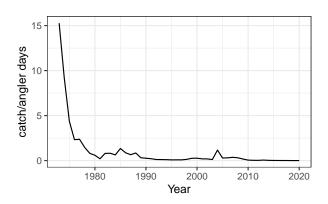


Figure 90: Nominal index (catch/angler days) from headboat logbooks.

# 8.45.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 183.

<sup>94</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>95</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.46 Spottail pinfish<sup>96</sup>



Figure 91: Spottail pinfish, Diplodus holbrookii.

### 8.46.1 Landings

Table 185: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	33,001	23,537
2012	32,728	25,193
2013	24,480	17,846
2014	26,509	20,027
2015	36,029	27,731
2016	41,243	30,165
2017	34,440	26,357
2018	21,744	15,947
2019	26,230	20,757
2020	24,267	19,258

## 8.46.2 Discards

Table 186: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	7,225	207	***
2012	$3,\!552$	17	25
2013	3,432	11	2
2014	4,192	69	***
2015	6,118	13	***
2016	5,989	59	26
2017	7,331	46	***
2018	6,200	7	***
2019	3,653	***	***
2020	3,130	5	***

Table 187: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	3	3	10.4	0.7
GA.N.Florida	1	1	11.7	1.1
S. Atl.(10 yr)	2,112	2,085	10.3	0.7
S. Atl.(5 yr)	713	692	10.5	0.8

#### 8.46.4 Effort

Table 188: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	962	108	***
2012	1,041	74	21
2013	993	30	6
2014	928	64	***
2015	1,079	56	***
2016	1,202	72	6
2017	1,047	56	***
2018	532	76	***
2019	738	***	***
2020	688	28	***

## 8.46.5 Catch per Unit Effort (CPUE)<sup>97</sup>

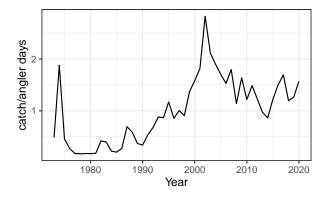


Figure 92: Nominal index (catch/angler days) from headboat logbooks.

# 8.46.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 187.

<sup>96</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>97</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.47 Tilefish<sup>98</sup>



Figure 93: Tilefish, Lopholatilus chamaeleonticeps.

### **8.47.1** Landings

Table 189: Annual landings in number and weight (lb).

Landings(n)	Landings (lb)
55	634
200	1,885
142	958
***	***
***	***
***	***
***	***
***	***
	55 200 142 *** *** ***

#### 8.47.2 Discards

Table 190: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2013			1
2014			31
2015			48
2016			***
2017			***
2018			***
2019	***		
2020	***	***	

# 8.47.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 191.

Table 191: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	36	35	26.2	8.0
S. Atl.(5 yr)	12	11	25.3	6.4

<sup>98</sup>Confidential data were replaced with asterisks (\*\*\*)

#### 8.47.4 Effort

Table 192: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2013			10
2014			39
2015			28
2016			***
2017			***
2018			***
2019	***		
2020	***	***	

## 8.47.5 Catch per Unit Effort (CPUE)<sup>99</sup>

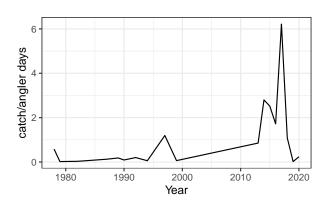


Figure 94: Nominal index (catch/angler days) from headboat logbooks.

<sup>&</sup>lt;sup>99</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.48 Tomtate<sup>100</sup>



Figure 95: Tomtate, Haemulon aurolineatum.

## 8.48.1 Landings

Table 193: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	53,782	20,464
2012	51,810	18,754
2013	56,497	20,949
2014	59,703	21,619
2015	49,853	18,170
2016	47,988	17,536
2017	46,365	17,836
2018	44,298	16,562
2019	34,174	13,435
2020	32,378	20,996

### 8.48.2 Discards

Table 194: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	15,087	35,575	1,763
2012	17,408	24,084	5,930
2013	19,653	12,363	4,316
2014	24,053	30,146	$35,\!573$
2015	$20,\!526$	40,778	27,183
2016	$17,\!874$	29,901	15,227
2017	21,131	$15,\!698$	17,002
2018	12,140	32,933	18,277
2019	18,149	$25,\!354$	13,754
2020	19,463	15,713	10,468

Table 195: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	42	42	9.6	0.4
S. Atl.(10 yr)	$4,\!272$	4,214	8.9	0.4
S. Atl.(5 yr)	1,770	1,748	9.1	0.4
S.Florida	4	4	9.4	0.5

#### 8.48.4 Effort

Table 196: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,050	852	712
2012	1,278	613	919
2013	1,223	523	681
2014	1,145	506	1,267
2015	1,253	659	1,217
2016	1,222	597	1,077
2017	1,018	498	1,061
2018	544	668	1,008
2019	958	537	702
2020	789	394	457

## 8.48.5 Catch per Unit Effort (CPUE)<sup>101</sup>

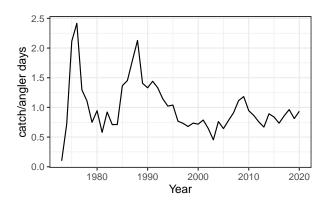


Figure 96: Nominal index (catch/angler days) from headboat logbooks.

# 8.48.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 195.

 $<sup>^{100}</sup>$ Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>101</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.49 Vermilion snapper $^{102}$



Figure 97: Vermilion snapper, Rhomboplites aurorubens.

## 8.49.1 Landings

Table 197: Annual landings in number and weight (lb).

3.7	T 1: ( )	T 1: (11.)
Year	Landings(n)	Landings (lb)
2011	133,402	151,076
2012	124,043	147,060
2013	107,125	134,812
2014	135,572	169,803
2015	119,031	152,879
2016	$125,\!217$	141,783
2017	138,368	156,995
2018	126,270	143,521
2019	131,259	152,001
2020	112,951	120,228

#### 8.49.2 Discards

Table 198: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	46,091	37,485	7,326
2012	33,065	23,938	21,941
2013	30,149	11,732	5,052
2014	37,243	25,067	6,054
2015	42,823	42,004	13,407
2016	54,055	$31,\!252$	13,890
2017	47,400	$28,\!531$	11,063
2018	50,968	29,213	8,727
2019	$53,\!683$	$29,\!279$	3,749
2020	$42,\!497$	19,143	1,089

# 8.49.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 199.

Table 199: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	32	32	14.1	1.1
GA.N.Florida	77	78	12.5	0.8
S. Atl.(10 yr)	14,974	14,342	13.3	1.1
S. Atl.(5 yr)	6,535	6,172	13.1	1.1
S.Florida	5	5	11.6	0.7

#### 8.49.4 Effort

Table 200: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	696	1,046	870
2012	619	909	1,248
2013	564	783	1,106
2014	670	993	1,216
2015	646	1,174	1,910
2016	741	1,113	$2,\!442$
2017	738	935	1,819
2018	611	962	1,543
2019	698	949	1,013
2020	759	713	822

## 8.49.5 Catch per Unit Effort (CPUE)<sup>103</sup>

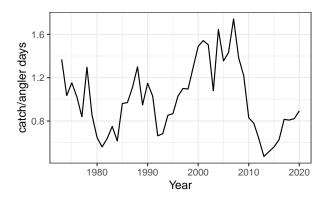


Figure 98: Nominal index (catch/angler days) from headboat logbooks.

<sup>102</sup>Confidential data were replaced with asterisks (\*\*\*)

 $<sup>^{103}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.50 Warsaw grouper<sup>104</sup>



Figure 99: Warsaw grouper, Epinephelus nigritus.

### 8.50.1 Landings

Table 201: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	16	234
2012	1	6
2013	11	452
2014	41	1,684
2015	23	775
2016	10	344
2017	16	822
2018	***	***

## 8.50.2 Discards

Table 202: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		25	8
2012		11	11
2013	***	19	6
2014	***	***	4
2015			3
2016			5
2017			3
2018			***
2019		8	
2020			***

Sample sizes, average length (in.) and weight (lb) are available in Table 203. Very few warsaw grouper were encountered from headboat trips.

Table 203: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	3	4	26.7	40.3
S. Atl.(5 yr)	1	1	46.5	91.5

#### 8.50.4 Effort

Table 204: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		33	6
2012		10	5
2013	***	15	10
2014	***	***	14
2015			8
2016			11
2017			10
2018			***
2019		7	
2020			***

8.50.5 Catch per Unit Effort (CPUE)<sup>105</sup>

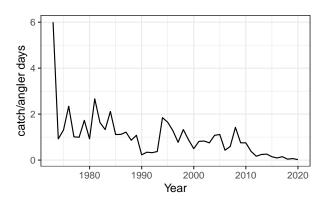


Figure 100: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>^{104}</sup>$ Confidential data were replaced with asterisks (\* \* \*)

 $<sup>^{105}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.51 Whitebone porgy<sup>106</sup>



Figure 101: Whitebone porgy, Calamus leucosteus.

### 8.51.1 Landings

Table 205: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	5,788	8,235
2012	$5,\!297$	7,621
2013	5,009	6,712
2014	5,145	6,752
2015	5,711	7,583
2016	4,766	6,085
2017	5,892	7,314
2018	4,202	5,299
2019	4,843	5,654
2020	4,752	6,975

#### 8.51.2 Discards

Table 206: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	6	31	50
2012	195	64	48
2013	8	37	22
2014	450	530	775
2015	42	102	99
2016	604	297	1,560
2017	1	19	3,940
2018	249	35	946
2019	434	14	264
2020	71	26	184

# 8.51.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 207.

Table 207: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	5	5	12.1	1.0
GA.N.Florida	28	30	13.8	1.5
S. Atl.(10 yr)	2,306	2,242	12.5	1.4
S. Atl.(5 yr)	812	800	12.5	1.3
S.Florida	9	7	11.2	1.0

#### 8.51.4 Effort

Table 208: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	266	581	419
2012	157	593	733
2013	138	609	763
2014	206	565	726
2015	255	747	656
2016	333	593	723
2017	324	486	1,045
2018	208	347	618
2019	246	412	570
2020	282	292	412

## 8.51.5 Catch per Unit Effort (CPUE)<sup>107</sup>

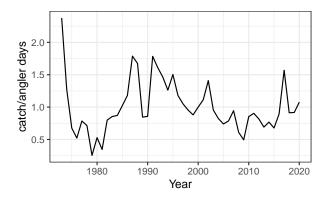


Figure 102: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>^{106}</sup>$ Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>107</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.52 White grunt 108



Figure 103: White grunt, Haemulon plumierii.

### 8.52.1 Landings

Table 209: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	128,643	108,574
2012	164,769	129,666
2013	135,977	108,215
2014	179,980	143,072
2015	173,024	124,627
2016	158,123	125,748
2017	148,353	111,916
2018	133,993	102,592
2019	135,798	104,613
2020	113,883	81,298

#### **8.52.2** Discards

Table 210: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	580	1,681	28,710
2012	601	1,949	35,963
2013	640	144	39,985
2014	1,022	156	73,780
2015	1,693	***	$63,\!612$
2016	2,339		39,781
2017	1,941	11	57,628
2018	3,187	71	50,959
2019	3,671	36	69,089
2020	2,055	3	54,717

# 8.52.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 211.

Table 211: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
Carolinas	22	22	12.9	1.2
GA.N.Florida	13	13	12.5	1.1
S. Atl.(10 yr)	27,886	25,962	10.7	0.7
S. Atl.(5 yr)	11,070	10,008	10.6	0.7
S.Florida	467	419	10.2	0.6

#### 8.52.4 Effort

Table 212: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	1,140	139	2,199
2012	1,016	132	3,015
2013	810	88	2,737
2014	1,011	73	4,306
2015	955	***	$4,\!438$
2016	1,058	52	4,124
2017	952	50	3,747
2018	753	72	3,634
2019	1,052	65	3,886
2020	887	56	3,097

## 8.52.5 Catch per Unit Effort (CPUE)<sup>109</sup>

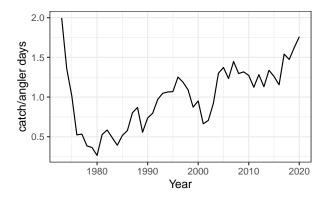


Figure 104: Nominal index (catch/angler days) from headboat logbooks.

 $<sup>^{108}</sup>$ Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>109</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.53 Yellowtail snapper<sup>110</sup>



Figure 105: Yellowtail snapper, Ocyurus chrysurus.

### 8.53.1 Landings

Table 213: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	95,557	85,025
2012	108,673	116,525
2013	111,052	108,739
2014	158,616	159,308
2015	168,609	163,029
2016	178,642	176,542
2017	103,385	101,249
2018	107,368	99,877
2019	112,757	101,740
2020	77,341	66,681

#### 8.53.2 Discards

Table 214: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011		156	24,135
2012		140	30,077
2013	6	434	38,325
2014		44	$63,\!517$
2015	***	12	64,996
2016	***	92	67,189
2017		23	31,690
2018		86	44,762
2019	2	43	60,832
2020		21	$43,\!654$

Table 215: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
GA.N.Florida	6	6	12.4	0.6
S. Atl.(10 yr)	32,078	$29,\!578$	14.1	1.0
S. Atl.(5 yr)	14,928	$13,\!274$	14.0	0.9
S.Florida	617	573	14.2	1.0

#### 8.53.4 Effort

Table 216: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	5	79	3,492
2012	6	92	4,558
2013	10	151	5,112
2014	9	179	8,096
2015	***	147	8,596
2016	***	96	7,076
2017	8	73	4,573
2018	7	73	4,738
2019	14	82	4,825
2020	17	34	3,863

## 8.53.5 Catch per Unit Effort (CPUE)<sup>111</sup>

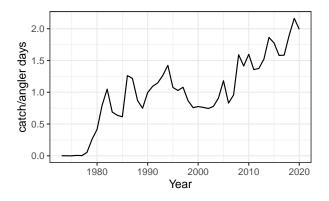


Figure 106: Nominal index (catch/angler days) from headboat logbooks.

# 8.53.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 215.

 $<sup>^{110}</sup>$ Confidential data were replaced with asterisks (\* \* \*)

<sup>&</sup>lt;sup>111</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.54 Yellowfin grouper<sup>112</sup>



Figure 107: Yellowfin grouper, Mycteroperca venenosa.

#### 8.54.1 Landings

Table 217: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2011	10	83
2012	12	111
2013	10	112
2014	35	421
2015	18	118
2016	***	***
2017	***	***
2018	***	***
2020	***	***

#### 8.54.2 Discards

Table 218: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	2		6
2012	***		4
2013	***		6
2014			3
2015	***		***
2016			***
2017			***
2018			***
2019		***	
2020	***		***

# 8.54.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 219.

Table 219: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	10	9	29.1	12.9
S. Atl.(5 yr)	2	1	33.1	15.7

#### 8.54.4 Effort

Table 220: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	6		8
2012	***		7
2013	***		13
2014			8
2015	***		***
2016			***
2017			***
2018			***
2019		***	
2020	***		***

## 8.54.5 Catch per Unit Effort (CPUE)<sup>113</sup>

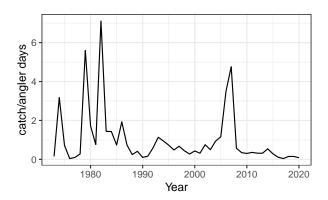


Figure 108: Nominal index (catch/angler days) from headboat logbooks.

<sup>112</sup>Confidential data were replaced with asterisks (\*\*\*)

<sup>&</sup>lt;sup>113</sup>The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 8.55 Yellowmouth grouper<sup>114</sup>



Figure 109: Yellow mouth grouper,  $Mycteroperca\ interstitialis$ .

### 8.55.1 Landings

Table 221: Annual landings in number and weight (lb).

Year	I am dim ma(m)	Landings (lb)
	Landings(n)	Landings (1b)
2011	6	36
2012	12	62
2013	12	126
2014	***	***
2015	***	***
2016	***	***
2017	***	***
2018	9	50
2019	***	***
2020	***	***

#### 8.55.2 Discards

Table 222: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***		7
2012		***	3
2013	***		***
2014			***
2015			***
2016			***
2017			***
2018	***		***
2019			***
2020	***		

# 8.55.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 223.

Table 223: Dockside intercept sampling program summary by region and 5 year, 10 year and cumulative averages.

Region	Len. (n)	Wgt. (n)	Avg.len(in.)	Avg.wgt(lbs)
S. Atl.(10 yr)	6	9	25.0	7.1
S. Atl.(5 yr)	4	5	24.2	5.9

#### 8.55.4 Effort

Table 224: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2011	***		5
2012		***	6
2013	***		***
2014			***
2015			***
2016			***
2017			***
2018	***		***
2019			***
2020	***		

## 8.55.5 Catch per Unit Effort (CPUE)<sup>115</sup>

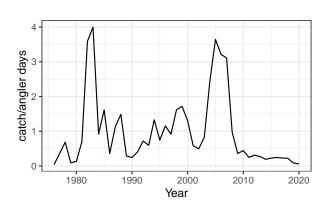


Figure 110: Nominal index (catch/angler days) from headboat logbooks.

<sup>114</sup>Confidential data were replaced with asterisks (\*\*\*)

 $<sup>^{115}</sup>$ The nominal index reflects the raw data and does not necessarily reflect fluctuations in population size. A more thorough examination of these data are required before associating these time series with abundance.

## 9 Economic Data

Large for-hire fishing vessels, called headboats or partyboats, play an important role in the Southeast's recreational fisheries. Headboats provide an affordable way for individual, often unscheduled, customers to participate in a half or full day (or longer) of bottom or drift fishing. The customer is typically charged \$40 to \$100 for a fishing trip that includes the gear, bait, and fishing instructions. This fact sheet summarizes the data collected on the number of crew, the number of non-fishing passengers, the gallons of fuel used, and the price paid per gallon of fuel from South Atlantic headboats during 2020. In previous years of this fact sheet, we removed the following from the database: trips more than 12 hours; trips by vessels that are not permitted to take more than six passengers; trips that took less than seven passengers; and trips by vessels that took fewer than 10 trips in the year. For 2020 we are not removing any trips, i.e., we are reporting the summary statistics for the database as reported in the logbook. There were 66 South Atlantic headboats in the database for 2020 that reported a total of 9,742 trips.

Descriptive statistics for trips in the South Atlantic are presented in Table 1.

Table 1: Headboat trip characteristics (N=9,742)

	mean	sd	median	min	max
Gallons	62.93	79.59	40.00	1.00	1200.00
Price per Gallon	2.66	0.81	2.65	0.10	8.00
Anglers	20.04	14.86	15.00	1.00	113.00
Passengers	20.09	15.00	15.00	1.00	196.00
Crew	1.77	1.12	1.00	1.00	18.00

The average trip characteristics by duration of 2020 trips in the South Atlantic are shown in Table 2. Longer trips use more fuel on average, nearly doubling with each duration increment. The remaining trip characteristics also seem to increase with duration. However, the difference between each trip duration for each characteristic is not large.

Table 2: Headboat trip characteristics by trip duration

rable 2. Headboat trip characteristics by trip daration									
Duration	Gallons	\$/Gallon	Anglers	Passengers	Crew				
1/2 day (3-5.99 hours)	36.35	2.75	18.32	18.35	1.58				
3/4 day (6-7.99 hours)	61.23	2.67	23.70	23.74	2.04				
Full day (8-9.99 hours)	109.52	2.51	23.88	24.12	2.18				
Full day plus (10-12 hours)	182.23	2.15	23.76	23.77	2.15				
other	427.35	2.11	26.32	26.32	3.79				

The average gallons used per hour by month on headboat trips across the year in the South Atlantic is shown in Figure 1. Headboats tend to use the most fuel per hour during the summer months in the South Atlantic.

The top panel of Figure 2 shows the average gallons used per headboat trip from each county. Similar maps are shown for the number of passengers and the number of crew in the other two panes of Figure 2.

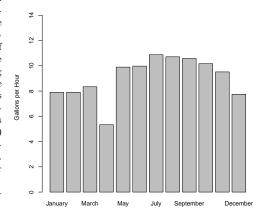


Figure 1: Gallons of fuel used per hour on headboat trips by month

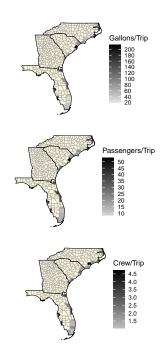


Figure 2: Headboat trip characteristics by home port county.

## 10 Acknowledgements

We thank the many headboat captains, crew members and NMFS port agents for their efforts in providing data throughout the many years. We would also like to thank those that contributed text and valuable feedback during the development of this report including Erik Williams, Kyle Shertzer, Ken Brennan, Todd Kellison and David Carter.