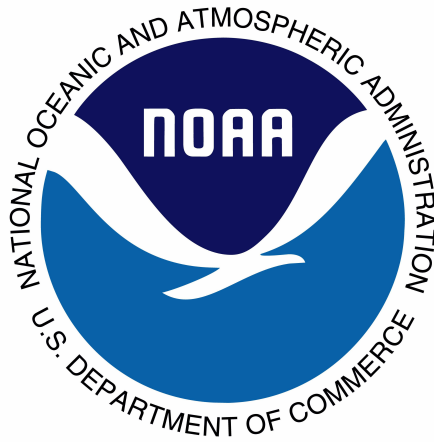


Southeast Regional Headboat Survey- 2016 South Atlantic Annual Report¹



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¹DISCLAIMER: These data are under frequent review to ensure both accuracy and integrity and are subject to change without notice.

Contents

1	Introduction	3
2	Data Collection	3
3	Landings	4
4	Dockside Intercept Sampling Program	6
5	Headboat Effort	8
6	Catch-per-unit-effort	9
7	Species Overview	9
7.1	Almaco jack	10
7.2	Banded rudderfish	11
7.3	Bank sea bass	12
7.4	Bar jack	13
7.5	Black grouper	14
7.6	Black sea Bass	15
7.7	Blackfin snapper	16
7.8	Blueline tilefish	17
7.9	Cobia	18
7.10	Coney	19
7.11	Cottonwick	20
7.12	Cubera snapper	21
7.13	Dog snapper	22
7.14	Dolphin fish	23
7.15	Hogfish	24
7.16	Gag	25
7.17	Gray snapper	26
7.18	Gray triggerfish	27
7.19	Graysby	28
7.20	Greater amberjack	29
7.21	King mackerel	30
7.22	Jolthead porgy	31
7.23	Knobbed porgy	32
7.24	Lane snapper	33
7.25	Lesser amberjack	34
7.26	Mahogany snapper	35
7.27	Margate	36
7.28	Mutton snapper	37
7.29	Ocean triggerfish	38
7.30	Red grouper	39
7.31	Red hind	40
7.32	Red porgy	41
7.33	Red snapper	42
7.34	Rock hind	43
7.35	Sailors choice	44
7.36	Sand tilefish	45
7.37	Saucereye porgy	46
7.38	Scamp	47
7.39	Schoolmaster	48
7.40	Scup	49

7.41	Silk snapper	50
7.42	Snowy grouper	51
7.43	Atlantic spadefish	52
7.44	Spanish mackerel	53
7.45	Speckled hind	54
7.46	Tilefish	55
7.47	Tomtate	56
7.48	Vermilion snapper	57
7.49	Warsaw grouper	58
7.50	White grunt	59
7.51	Whitebone porgy	60
7.52	Yellowtail snapper	61
7.53	Yellowfin grouper	62
7.54	Yellowmouth grouper	63
7.55	Spottail pinfish	64
8	Economic Data	65
9	Acknowledgements	66

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 2016 from various data sources within the headboat fleet as well as summaries for various species of management interest.

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 2016 are presented in Table 1². 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 2016 the top ten species landed in the South Atlantic headboat fishery were yellowtail snapper, vermilion snapper, white grunt, greater amberjack, king mackerel, gray snapper, little tunny, mutton snapper, gray triggerfish, black sea bass and Atlantic sharpnose shark.

²Confidential data were replaced with asterisks (***)

Table 1: Species landed ($> 1,000\text{lbs}$) from headboats in the South Atlantic U.S. The 5yr and 10yr column names represent the positive or negative 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
yellowtail snapper	176,541	21.9	54.5	178,642	23.1	48.2
vermilion snapper	141,783	-5.0	-36.8	125,217	2.5	-33.4
white grunt	125,748	-0.4	-9.1	158,123	-2.6	-2.9
greater amberjack	106,599	28.7	32.6	5,845	32.4	35.1
king mackerel	98,411	9.8	-20.1	10,862	16.8	-25.4
gray snapper	97,979	6.4	30.2	67,277	8.7	34.5
little tunny	92,765	-11.4	-1.2	14,192	1.6	16.6
mutton snapper	88,782	17.3	38.1	23,018	41.0	51.9
gray triggerfish	80,413	-25.7	-31.4	37,840	-22.0	-29.4
black sea bass	66,698	-33.1	-53.8	50,918	-34.7	-60.2
atlantic sharpnose shark	55,003	-34.1	-36.0	9,396	-28.7	-30.7
grunts	53,434	130.5	350.4	52,124	130.5	348.9
blue runner	39,900	-4.9	33.8	29,926	-7.4	31.8
blackfin tuna	36,987	47.8	146.5	4,884	96.9	234.3
dolphin	36,746	36.9	42.7	4,161	13.8	9.8
almaco jack	32,928	21.6	31.5	6,638	20.5	42.5
spottail pinfish	30,165	24.7	25.2	41,243	28.1	25.2
banded rudderfish	26,615	-29.5	-37.3	6,071	-45.1	-56.4
red porgy	25,717	-18.4	-41.2	15,315	-13.9	-40.9
lane snapper	24,147	18.1	36.9	34,097	23.1	45.1
cobia	22,216	-30.0	-33.4	1,233	-16.6	-18.3
jolthead porgy	20,849	45.9	48.6	6,075	1.9	-10.3
red grouper	18,029	30.0	6.6	2,176	30.1	7.6
tomtate	17,535	-9.6	-7.3	47,988	-9.7	-6.4
scamp	10,753	-19.9	-59.0	1,767	-8.4	-55.9
great barracuda	10,566	19.8	6.3	1,002	44.3	36.8
blueline tilefish	10,418	-32.5	10.3	2,074	-59.7	-39.5
rock hind	10,162	143.5	110.1	5,076	137.7	128.3
bigeye	9,440	29.4	61.2	10,131	56.6	104.4
ocean triggerfish	8,797	4.6	95.2	2,889	8.6	101.9
spanish mackerel	8,413	3.4	-9.7	8,603	19.5	7.2
gag	8,211	-38.1	-70.5	637	-47.2	-74.2
yellowfin tuna	***	255.7	381.4	***	315.8	540.0
queen snapper	***	225.8	551.6	***	149.6	399.3
scup	7,959	-3.0	-0.9	8,136	-17.9	-19.0
littlehead porgy	6,740	34.2	100.0	7,810	31.6	100.6
black grouper	6,405	5.6	7.7	391	-4.8	-10.6
whitebone porgy	6,084	-12.5	-7.6	4,766	-8.1	-4.6
wahoo	5,502	21.1	21.3	179	-2.9	16.2
bluefish	5,482	9.6	-7.8	3,388	44.1	15.5
porgies	4,689	32.9	162.9	5,582	32.4	163.2
key west porgy	4,646	-21.5	-30.7	4,209	-29.1	-30.6
rainbow runner	4,454	38.6	0.7	2,571	26.8	21.0
blacktip shark	3,252	34.9	-68.8	100	-53.4	-62.5
african pompano	3,170	60.4	45.8	237	37.3	41.5
snowy grouper	3,015	-40.2	15.9	525	-11.1	53.2
margate	2,499	-27.8	-16.1	588	-41.0	-35.3
bank sea bass	2,296	4.2	-8.8	5,779	15.3	4.9
bluestriped grunt	2,271	-23.8	-22.0	4,138	-17.9	-12.1
cero	2,034	14.0	4.0	831	15.4	2.3
graysby	1,969	24.7	-33.3	2,081	7.4	-25.4
pigfish	1,930	-30.5	0.0	5,272	-16.8	20.0
blackfin snapper	1,891	16.6	122.0	929	76.7	217.0
silk snapper	1,858	-17.5	-20.2	861	-31.5	-26.3

red snapper	1,844	-81.9	-94.8	331	-78.5	-94.2
yellowedge grouper	***	12.0	121.4	***	14.1	124.0
spadefish	1,702	155.4	204.6	545	159.8	218.2
crevalle jack	1,688	-13.7	-1.2	241	7.4	12.2
sailors choice	1,626	93.0	263.1	2,323	105.0	287.2
remora	1,544	-32.1	14.2	107	-34.9	-6.8
southern kingfish	***	-11.3	77.0	***	10.6	120.5
sand tilefish	1,290	14.2	11.4	1,249	5.9	19.9
pinfish	1,190	-8.7	-9.3	1,701	-39.5	-41.1
black margate	1,068	-18.0	22.4	516	-7.9	36.5

4 Dockside Intercept Sampling Program

Species with > 30 fish sampled annually in the South Atlantic headboat fishery for 2016 are presented in Table 2³. In 2016 the top ten species sampled in the South Atlantic headboat fishery were yellowtail snapper, white grunt, vermilion snapper, spottail pinfish, gray snapper, gray triggerfish, black sea bass, lane snapper, mutton snapper and blue runner.

³Confidential data were replaced with asterisks (***)

Table 2: 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.FI(%)	S.FI(%)	5yr(%)	10yr(%)
yellowtail snapper	4,795	NA	0.6	99.4	19.4	57.2
white grunt	3,878	19.5	1.1	79.4	2.1	19.6
vermillion snapper	3,117	54.3	21.6	24.1	31.4	30.4
spottail pinfish	1,883	97.1	2.9	NA	28.5	73.5
gray snapper	1,873	0.1	21.2	78.7	7.7	42.7
gray triggerfish	1,386	60.0	17.0	22.9	-9.1	11.6
black sea bass	1,347	68.6	29.6	1.8	-30.0	-47.4
lane snapper	1,231	NA	40.9	59.1	14.4	23.1
mutton snapper	992	NA	10.9	89.1	40.1	66.7
blue runner	901	2.3	9.4	88.2	-0.7	40.4
littlehead porgy	714	NA	NA	100.0	59.7	142.4
tomtate	632	81.2	14.9	4.0	-28.2	-11.8
atlantic sharpnose shark	507	36.3	61.3	2.4	-25.4	-6.3
little tunny	457	2.4	16.8	80.7	17.1	45.0
king mackerel	415	2.2	10.4	87.5	27.8	-4.6
ocean triggerfish	374	NA	NA	100.0	31.6	144.9
jolthead porgy	373	0.5	0.5	98.9	33.9	92.6
whitebone porgy	307	23.1	59.0	17.9	-12.4	14.6
scup	298	100.0	NA	NA	12.0	42.9
greater amberjack	276	17.8	66.3	15.9	45.0	101.5
almaco jack	270	24.4	30.7	44.8	20.0	63.1
pigfish	264	73.5	14.0	12.5	-10.3	11.7
key west porgy	263	13.7	0.8	85.6	-7.2	-0.0
red grouper	231	2.6	0.9	96.5	56.3	104.8
red porgy	214	73.4	15.0	11.7	-27.0	-16.8
blackfin tuna	202	1.0	0.5	98.5	137.6	281.1
banded rudderfish	201	23.9	5.0	71.1	12.2	-12.0
graysby	161	8.7	10.6	80.7	23.3	63.1
dolphin	151	27.2	14.6	58.3	13.7	13.8
bigeye	136	0.7	3.7	95.6	-2.7	11.0
rainbow runner	126	1.6	0.8	97.6	71.2	127.8
sand tilefish	118	4.2	1.7	94.1	34.7	47.7
bluestriped grunt	118	NA	NA	100.0	1.4	2.8
bank sea bass	115	82.6	16.5	0.9	2.9	-8.9
snowy grouper	111	NA	NA	100.0	77.9	232.3
spanish mackerel	111	67.6	5.4	27.0	31.8	19.2
sailors choice	98	NA	NA	100.0	17.2	36.1
bluefish	97	39.2	32.0	28.9	49.7	32.9
blueline tilefish	96	NA	NA	100.0	-57.4	-21.1
great barracuda	87	4.6	37.9	57.5	45.5	87.1
sand perch	86	46.5	10.5	43.0	50.3	61.0
cobia	86	3.5	75.6	20.9	-2.9	19.3
scamp	81	34.6	1.2	64.2	11.0	9.6
margate	76	NA	NA	100.0	45.6	129.6
queen snapper	***	NA	NA	100.0	308.0	716.1
cero	70	NA	NA	100.0	-16.1	15.7
southern kingfish	***	93.4	6.6	NA	29.2	91.2
gag	55	70.9	18.2	10.9	-39.4	-48.2
pinfish	54	57.4	42.6	NA	32.4	23.6
rock hind	50	16.0	NA	84.0	12.6	62.9
schoolmaster snapper	49	NA	2.0	98.0	51.2	160.6
silk snapper	45	NA	NA	100.0	-16.0	15.1
yellowedge grouper	***	NA	NA	100.0	125.0	309.1
cottonwick	42	NA	NA	100.0	213.4	307.8
blackfin snapper	38	NA	NA	100.0	62.4	171.4
black grouper	37	NA	NA	100.0	-39.1	7.9
hogfish	35	NA	NA	100.0	28.7	92.3

5 Headboat Effort

Estimated angler days by year and region are presented in in Table 3.

Table 3: Estimated annual effort (angler days) of headboats by region in South Atlantic U.S.

Year	Carolinas	Ga-N.Fl	S.Fl
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	103,551
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
2016	63,772	53,387	143,273

6 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.

7 Species Overview

The following section provides species specific summaries of landings, discards, dockside sampling, effort, and the nominal catch per unit effort time series⁴. 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, longspine porgy, misty grouper, Nassau grouper, queen snapper and yellowedge grouper) were limited or confidential and therefore filtered from these summaries.

⁴Confidential data were replaced with asterisks (***)

7.1 Almaco jack⁵

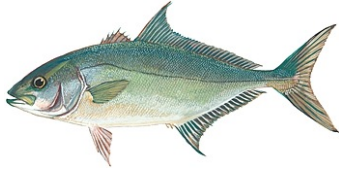


Figure 1: Almaco jack, *Seriola rivoliana*.

7.1.1 Landings

Table 4: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	8,047	45,332
2008	3,924	26,693
2009	2,181	15,498
2010	1,972	14,072
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

7.1.2 Discards

Table 5: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	983	46	13
2008	226	37	68
2009	166	73	64
2010	155	20	10
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

7.1.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 6.

⁵Confidential data were replaced with asterisks (***)

⁶The 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.

Table 6: 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	66	66	23.0	6.0
GA.N.Florida	83	79	20.0	3.9
S.Florida	120	104	20.8	4.4
S. Atl.(5 yr)	1,116	1,050	18.8	3.7
S. Atl.(10 yr)	1,639	1,549	18.9	3.8

7.1.4 Effort

Table 7: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	368	163	27
2008	264	126	158
2009	282	173	285
2010	215	91	288
2011	112	85	447
2012	244	243	652
2013	222	195	388
2014	301	184	684
2015	378	432	870
2016	457	447	599

7.1.5 Catch per Unit Effort (CPUE)⁶

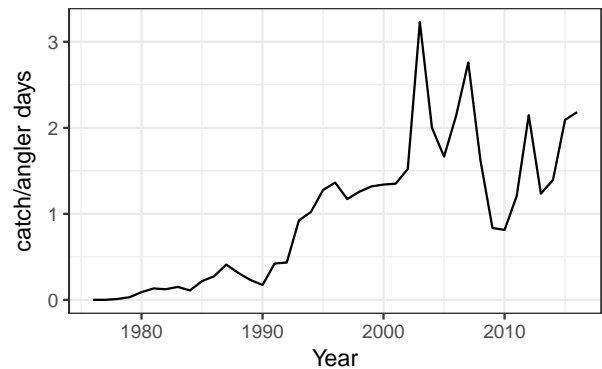


Figure 2: Nominal index (catch/angler days) from headboat logbooks.

7.2 Banded rudderfish⁷



Figure 3: Banded rudderfish, *Seriola zonanta*.

7.2.1 Landings

Table 8: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	16,279	48,229
2008	19,451	52,110
2009	15,867	42,727
2010	12,419	41,497
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

7.2.2 Discards

Table 9: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	475	22	20
2008	164	502	1,435
2009	158	340	2,648
2010	247	41	892
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

7.2.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 10.

⁷Confidential data were replaced with asterisks (***)

⁸The 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.

Table 10: 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	48	48	17.6	2.3
GA.N.Florida	10	10	18.8	2.7
S.Florida	142	130	19.4	3.0
S. Atl.(5 yr)	894	868	18.7	2.9
S. Atl.(10 yr)	2,278	2,137	19.5	3.2

7.2.4 Effort

Table 11: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	231	49	19
2008	251	73	76
2009	334	109	242
2010	293	87	314
2011	320	142	491
2012	207	163	439
2013	337	63	446
2014	307	37	577
2015	282	96	542
2016	255	58	542

7.2.5 Catch per Unit Effort (CPUE)⁸

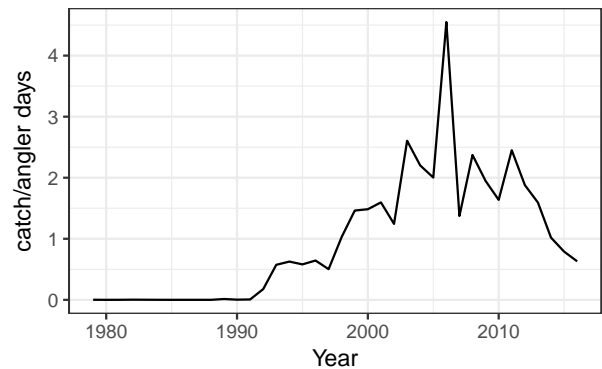


Figure 4: Nominal index (catch/angler days) from headboat logbooks.

7.3 Bank sea bass⁹

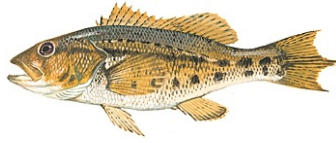


Figure 5: Bank sea bass, *Centropristis ocyurus*.

7.3.1 Landings

Table 12: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	5,110	2,197
2008	6,173	2,532
2009	5,686	3,330
2010	6,875	3,317
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

7.3.2 Discards

Table 13: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,821	985	
2008	3,694	1,144	***
2009	4,761	976	***
2010	1,182	1,896	***
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	***

7.3.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 14.

⁹Confidential data were replaced with asterisks (***)

¹⁰The 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.

Table 14: 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	95	95	9.9	0.4
GA.N.Florida	19	19	10.3	0.5
S.Florida	***	***	***	***
S. Atl.(5 yr)	555	547	10.1	0.4
S. Atl.(10 yr)	1,259	1,222	10.2	0.5

7.3.4 Effort

Table 15: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	330	127	
2008	512	162	***
2009	511	179	***
2010	569	226	***
2011	431	251	***
2012	426	63	***
2013	486	46	15
2014	433	73	15
2015	472	74	***
2016	559	83	***

7.3.5 Catch per Unit Effort (CPUE)¹⁰

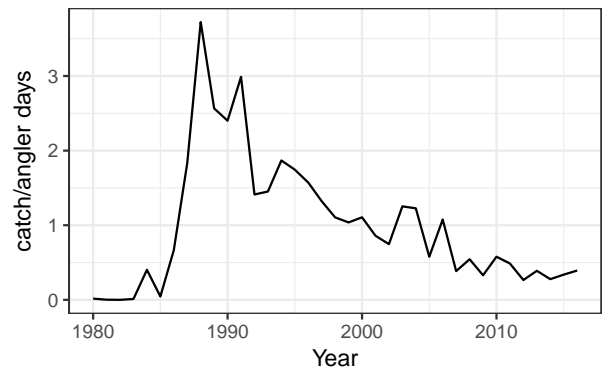


Figure 6: Nominal index (catch/angler days) from headboat logbooks.

7.4 Bar jack¹¹



Figure 7: Bar jack, *Caranx ruber*.

7.4.1 Landings

Table 16: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	221	263
2008	61	71
2009	188	376
2010	165	373
2011	306	629
2012	432	899
2013	616	919
2014	694	1,031
2015	611	534
2016	176	156

7.4.2 Discards

Table 17: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			11
2008			27
2009			19
2010			12
2011			165
2012			72
2013	***		25
2014		3	49
2015	***	1	16
2016		***	133

7.4.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 18.

¹¹Confidential data were replaced with asterisks (***)

¹²The 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.

Table 18: 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.Florida	4	4	15.1	1.4
S. Atl.(5 yr)	26	25	13.6	1.1
S. Atl.(10 yr)	31	30	14.3	1.3

7.4.4 Effort

Table 19: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			54
2008			41
2009			94
2010			81
2011			117
2012			156
2013	***	31	161
2014		59	213
2015	***	20	173
2016		***	122

7.4.5 Catch per Unit Effort (CPUE)¹²

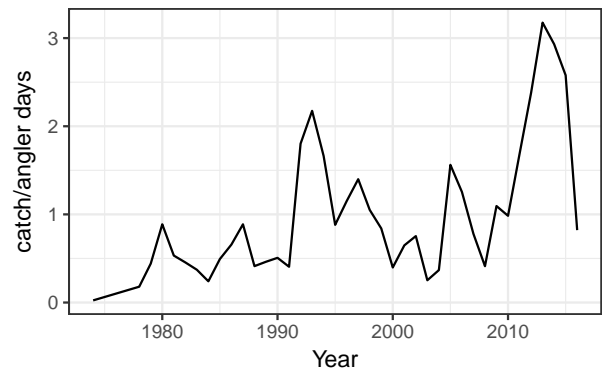


Figure 8: Nominal index (catch/angler days) from headboat logbooks.

7.5 Black grouper¹³

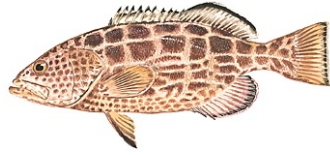


Figure 9: Black grouper, *Mycteroperca bonaci*.

7.5.1 Landings

Table 20: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	1,199	16,865
2008	261	3,165
2009	233	2,478
2010	242	2,904
2011	387	3,730
2012	333	4,940
2013	491	6,857
2014	378	5,315
2015	461	6,809
2016	391	6,405

7.5.2 Discards

Table 21: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		***	751
2008		***	831
2009		***	895
2010		***	1,320
2011		***	1,744
2012			1,807
2013	***	12	950
2014	2	***	1,104
2015			602
2016	***	***	366

7.5.3 Dockside Intercept Sampling Program

Sample sizes, average length (in.) and weight (lb) are available in Table 22.

¹³Confidential data were replaced with asterisks (***)

¹⁴The 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.

Table 22: 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.Florida	36	36	32.1	19.3
S. Atl.(5 yr)	300	291	30.5	15.9
S. Atl.(10 yr)	338	329	30.2	15.6

7.5.4 Effort

Table 23: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		***	463
2008		***	575
2009		***	660
2010		***	722
2011		***	667
2012			982
2013	***	4	744
2014	3	***	801
2015			540
2016	***	***	394

7.5.5 Catch per Unit Effort (CPUE)¹⁴

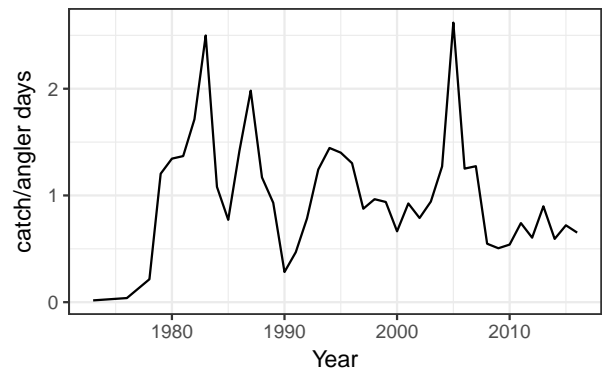


Figure 10: Nominal index (catch/angler days) from headboat logbooks.

7.6 Black sea Bass¹⁵



Figure 11: Black sea Bass, *Centropristis striata*.

7.6.1 Landings

Table 24: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	164,320	162,070
2008	92,786	99,311
2009	153,780	163,170
2010	270,277	289,235
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

7.6.2 Discards

Table 25: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	154,652	18,005	***
2008	186,774	27,036	13,467
2009	160,918	71,125	39,089
2010	211,837	119,334	63,306
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

7.6.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 26.

¹⁵Confidential data were replaced with asterisks (***)

¹⁶The 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.

Table 26: 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	924	920	14.0	1.4
GA.N.Florida	399	389	13.6	1.3
S.Florida	24	24	13.6	1.2
S. Atl.(5 yr)	9,541	9,354	13.8	1.3
S. Atl.(10 yr)	25,518	24,372	13.1	1.1

7.6.4 Effort

Table 27: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,721	1,345	***
2008	1,823	1,293	363
2009	2,078	1,747	638
2010	2,535	1,999	622
2011	2,531	1,805	690
2012	2,653	1,628	711
2013	2,497	1,691	747
2014	2,685	1,631	740
2015	2,685	1,483	550
2016	2,798	1,361	542

7.6.5 Catch per Unit Effort (CPUE)¹⁶

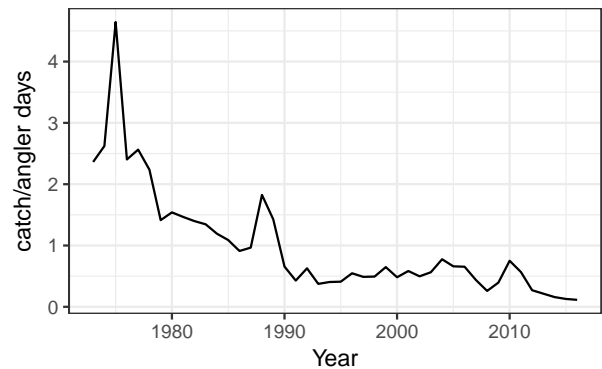


Figure 12: Nominal index (catch/angler days) from headboat logbooks.

7.7 Blackfin snapper¹⁷



Figure 13: Blackfin snapper, *Lutjanus buccanella*.

7.7.1 Landings

Table 28: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	57	45
2008	49	86
2009	61	52
2010	52	91
2011	83	137
2012	***	***
2013	186	555
2014	692	2,105
2015	811	3,540
2016	929	1,891

7.7.2 Discards

Table 29: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			17
2008	***		72
2009			52
2010			16
2011			159
2012			41
2013		***	26
2014			65
2015			109
2016			105

7.7.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 30.

¹⁷Confidential data were replaced with asterisks (***)

¹⁸The 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.

Table 30: 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.Florida	38	36	17.7	3.2
S. Atl.(5 yr)	117	107	17.8	3.4
S. Atl.(10 yr)	140	130	16.8	2.9

7.7.4 Effort

Table 31: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			10
2008	***		10
2009			6
2010			6
2011			12
2012			7
2013		***	33
2014			40
2015			42
2016			52

7.7.5 Catch per Unit Effort (CPUE)¹⁸

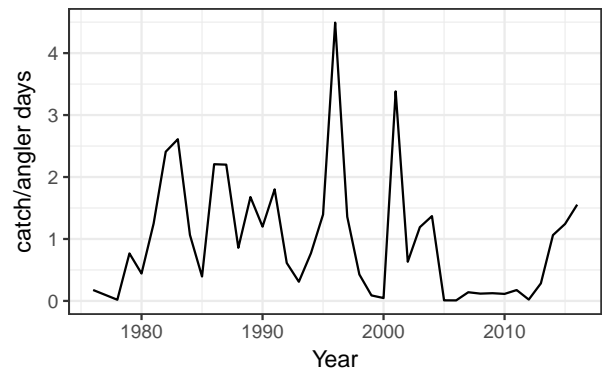


Figure 14: Nominal index (catch/angler days) from headboat logbooks.

7.8 Blueline tilefish¹⁹



Figure 15: Blueline tilefish, *Caulolatilus microps*.

7.8.1 Landings

Table 32: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	***	***
2008	34	65
2009	2,403	4,630
2010	2,052	5,952
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

7.8.2 Discards

Table 33: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		***
2008			8
2009	3	***	1
2010	***		8
2011	***	***	26
2012	***	***	95
2013	***		8
2014	***		2
2015	***		
2016	***		***

7.8.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 34.

¹⁹Confidential data were replaced with asterisks (***)

²⁰The 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.

Table 34: 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.Florida	***	***	***	***
S. Atl.(5 yr)	1,120	868	19.2	3.1
S. Atl.(10 yr)	1,208	954	19.0	3.0

7.8.4 Effort

Table 35: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		***
2008	9		5
2009	50	***	6
2010	***		18
2011	***	***	77
2012	***	***	44
2013	***		30
2014	***		60
2015	***		35
2016	***		***

7.8.5 Catch per Unit Effort (CPUE)²⁰

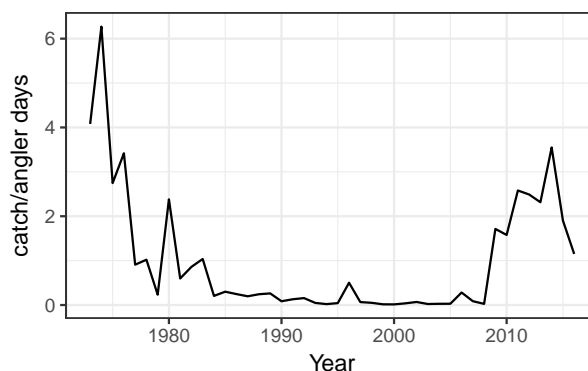


Figure 16: Nominal index (catch/angler days) from headboat logbooks.

7.9 Cobia²¹



Figure 17: Cobia, *Scomberomorus maculatus*.

7.9.1 Landings

Table 36: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	2,017	38,186
2008	1,402	36,031
2009	1,296	27,756
2010	1,706	41,655
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

7.9.2 Discards

Table 37: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	36	215	67
2008	22	656	116
2009	150	646	423
2010	149	434	426
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

7.9.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 38.

²¹Confidential data were replaced with asterisks (***)

²²The 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.

Table 38: 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	45.6	28.7
GA.N.Florida	65	57	41.8	18.7
S.Florida	17	14	42.3	22.8
S. Atl.(5 yr)	423	406	42.0	21.9
S. Atl.(10 yr)	625	668	41.9	21.8

7.9.4 Effort

Table 39: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	163	523	44
2008	137	582	166
2009	92	631	395
2010	106	610	496
2011	99	461	385
2012	140	557	616
2013	166	468	742
2014	179	470	1,070
2015	88	613	662
2016	90	550	562

7.9.5 Catch per Unit Effort (CPUE)²²

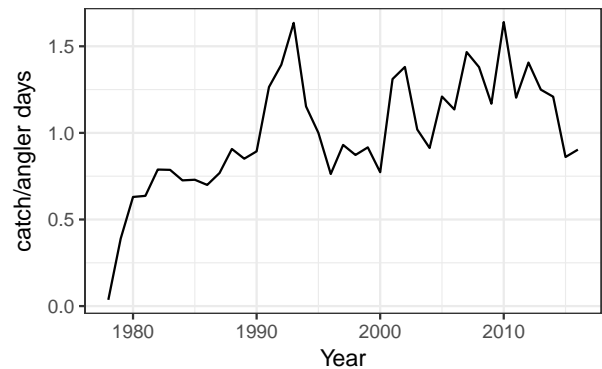


Figure 18: Nominal index (catch/angler days) from headboat logbooks.

7.10 Coney²³



Figure 19: Coney, *Cephalopholis fulva*.

7.10.1 Landings

Table 40: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	189	118
2008	136	90
2009	83	58
2010	74	49
2011	28	19
2012	28	20
2013	39	26
2014	158	103
2015	242	263
2016	154	138

7.10.2 Discards

Table 41: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		153
2008			67
2009			29
2010			63
2011			36
2012			57
2013			74
2014			139
2015			189
2016	***	***	295

7.10.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 42.

²³Confidential data were replaced with asterisks (***)

²⁴The 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.

Table 42: 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.Florida	11	9	11.1	0.9
S. Atl.(5 yr)	41	38	11.3	1.0
S. Atl.(10 yr)	123	118	11.0	0.9

7.10.4 Effort

Table 43: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		52
2008			95
2009			73
2010			67
2011			46
2012			62
2013			81
2014			208
2015			293
2016	***	***	252

7.10.5 Catch per Unit Effort (CPUE)²⁴

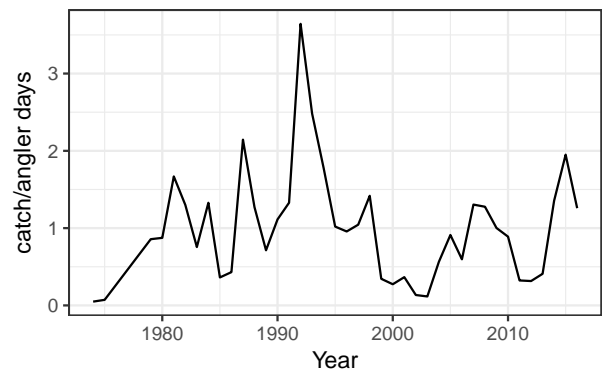


Figure 20: Nominal index (catch/angler days) from headboat logbooks.

7.11 Cottonwick²⁵



Figure 21: Cottonwick, *Haemulon melanurum*.

7.11.1 Landings

Table 44: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	***	***
2008	***	***
2009	***	***
2010	***	***
2012	***	***
2013	***	***
2014	12	7
2015	81	55
2016	436	274

7.11.2 Discards

Table 45: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			***
2008			***
2009			***
2010			***
2011			***
2012			***
2013			17
2014			23
2015			812
2016			1,237

7.11.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 46.

²⁵Confidential data were replaced with asterisks (***)

²⁶The 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.

Table 46: 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.Florida	42	29	10.2	0.5
S. Atl.(5 yr)	67	53	10.4	0.6
S. Atl.(10 yr)	103	89	10.1	0.5

7.11.4 Effort

Table 47: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			***
2008			***
2009			***
2010			***
2011			***
2012			***
2013			8
2014			8
2015			110
2016			124

7.11.5 Catch per Unit Effort (CPUE)²⁶

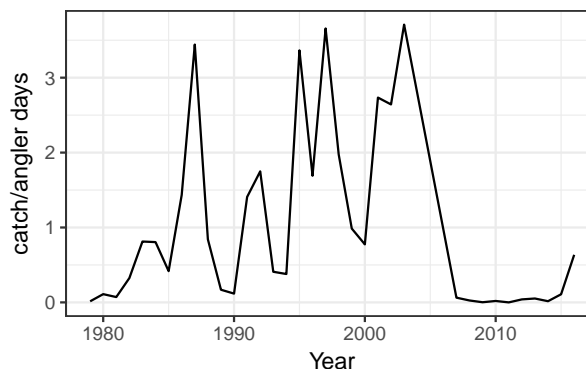


Figure 22: Nominal index (catch/angler days) from headboat logbooks.

7.12 Cubera snapper²⁷

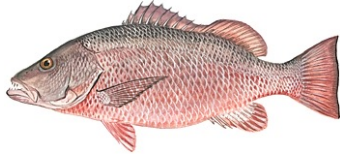


Figure 23: Cubera snapper, *Lutjanus cyanopterus*.

7.12.1 Landings

Table 48: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	1,135	11,701
2008	240	3,870
2009	190	3,398
2010	243	3,668
2011	315	4,999
2012	809	13,067
2013	277	2,794
2014	10	101
2015	40	576
2016	11	206

7.12.2 Discards

Table 49: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	95		2
2008	***	8	44
2009		3	9
2010	***	6	
2011	***	2	12
2012	***		45
2013	***	***	21
2014	***		1
2015	***		
2016	***	***	***

7.12.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 50.

²⁷Confidential data were replaced with asterisks (***)

²⁸The 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.

Table 50: 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.Florida	***	***	***	***
S. Atl.(5 yr)	7	6	29.7	17.0
S. Atl.(10 yr)	15	14	29.2	13.9

7.12.4 Effort

Table 51: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	84	18	11
2008	***	20	25
2009	4	8	21
2010	***	12	23
2011	***	34	29
2012	***	71	33
2013	***	***	18
2014	***		9
2015	***		30
2016	***	***	***

7.12.5 Catch per Unit Effort (CPUE)²⁸

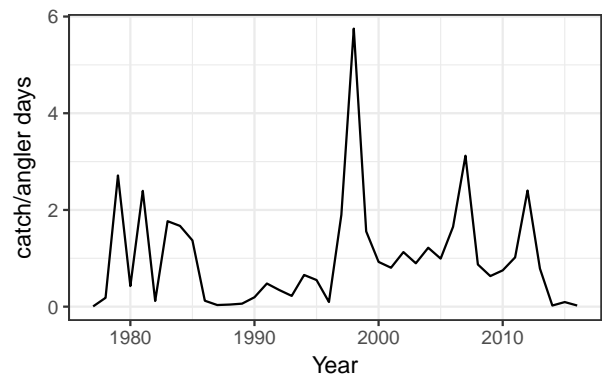


Figure 24: Nominal index (catch/angler days) from headboat logbooks.

7.13 Dog snapper²⁹



Figure 25: Dog snapper, *Lutjanus jocu*.

7.13.1 Landings

Table 52: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	25	42
2008	130	673
2009	11	64
2010	101	549
2011	34	136
2012	45	127
2013	51	148
2014	24	73
2015	65	418
2016	74	414

7.13.2 Discards

Table 53: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			6
2008			86
2009		***	
2010		***	53
2011			2
2012			1
2013			4
2014	***	***	5
2015			1
2016	***	***	

7.13.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 54.

Table 54: 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.Florida	6	5	15.5	3.5
S. Atl.(5 yr)	21	19	19.2	5.9
S. Atl.(10 yr)	40	37	16.8	4.1

7.13.4 Effort

Table 55: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			12
2008			15
2009		***	8
2010		***	17
2011			23
2012			35
2013			39
2014	***	***	23
2015			41
2016	***	***	43

7.13.5 Catch per Unit Effort (CPUE)³⁰

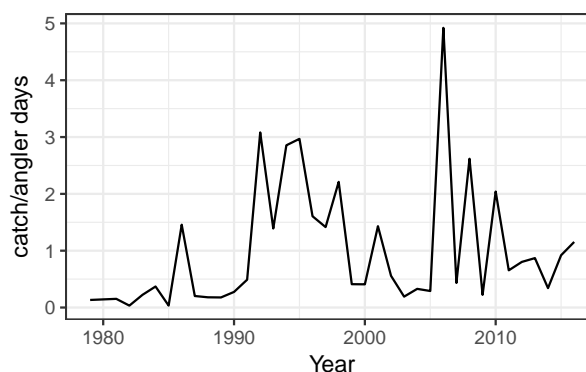


Figure 26: Nominal index (catch/angler days) from headboat logbooks.

²⁹Confidential data were replaced with asterisks (***)

³⁰The 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.

7.14 Dolphin fish³¹



Figure 27: Dolphin fish, *Coryphaena hippurus*.

7.14.1 Landings

Table 56: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,145	47,000
2008	2,055	12,825
2009	3,643	24,138
2010	4,180	19,226
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

7.14.2 Discards

Table 57: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	28	18	167
2008	4	46	414
2009	18	60	229
2010	3	42	220
2011	10	51	552
2012	7	18	190
2013	7	38	373
2014	9	46	673
2015	71	32	568
2016	12	8	281

7.14.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 58.

³¹Confidential data were replaced with asterisks (***)

³²The 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.

Table 58: 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	41	41	38.3	11.8
GA.N.Florida	22	21	32.7	7.5
S.Florida	85	77	31.8	7.1
S. Atl.(5 yr)	638	607	32.2	7.4
S. Atl.(10 yr)	1,255	1,240	31.1	6.7

7.14.4 Effort

Table 59: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	344	125	81
2008	234	116	200
2009	341	188	440
2010	278	154	410
2011	224	165	510
2012	208	155	485
2013	173	72	665
2014	243	87	893
2015	168	98	1,025
2016	217	56	732

7.14.5 Catch per Unit Effort (CPUE)³²

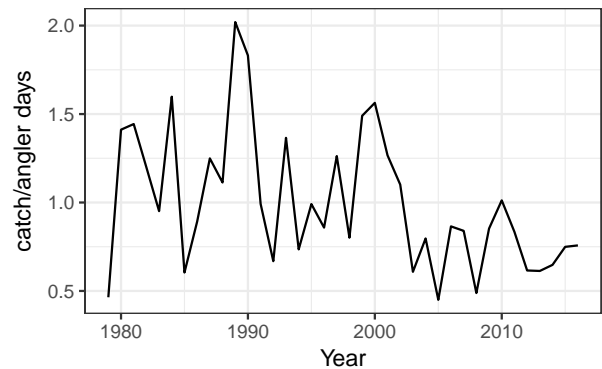


Figure 28: Nominal index (catch/angler days) from headboat logbooks.

7.15 Hogfish³³



Figure 29: Hogfish, *Lachnolaimus maximus*.

7.15.1 Landings

Table 60: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	687	4,151
2008	272	1,078
2009	154	224
2010	98	188
2011	107	837
2012	214	360
2013	127	259
2014	190	392
2015	287	743
2016	170	282

7.15.2 Discards

Table 61: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		***	115
2008		***	175
2009		***	71
2010	36		39
2011	2	***	32
2012	20		86
2013	754	***	104
2014	1,145		109
2015	116	***	153
2016	***		112

7.15.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 62.

³³Confidential data were replaced with asterisks (***)

³⁴The 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.

Table 62: 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.Florida	35	34	13.3	1.7
S. Atl.(5 yr)	136	131	13.2	1.6
S. Atl.(10 yr)	182	177	14.2	2.4

7.15.4 Effort

Table 63: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	60	***	125
2008	41	***	156
2009	16	***	121
2010	24		75
2011	13	***	81
2012	10		130
2013	17	***	186
2014	24		220
2015	12	***	260
2016	***		159

7.15.5 Catch per Unit Effort (CPUE)³⁴

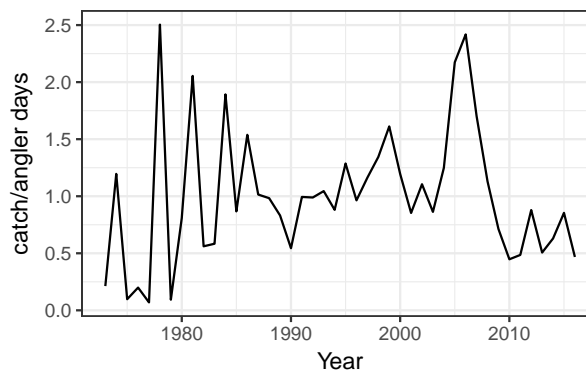


Figure 30: Nominal index (catch/angler days) from headboat logbooks.

7.16 Gag³⁵



Figure 31: Gag, *Mycteroperca microlepis*.

7.16.1 Landings

Table 64: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,703	78,803
2008	3,062	39,106
2009	3,001	31,556
2010	3,281	32,366
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

7.16.2 Discards

Table 65: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,413	1,196	921
2008	914	2,777	940
2009	1,122	6,223	999
2010	1,717	2,224	898
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

7.16.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 66.

³⁵Confidential data were replaced with asterisks (***)

³⁶The 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.

Table 66: 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	39	39	28.5	10.7
GA.N.Florida	10	10	32.2	16.0
S.Florida	6	6	28.0	11.3
S. Atl.(5 yr)	454	436	28.3	11.1
S. Atl.(10 yr)	1,058	1,008	28.2	10.9

7.16.4 Effort

Table 67: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	528	843	344
2008	480	993	467
2009	531	1,319	653
2010	777	1,011	542
2011	610	767	616
2012	519	725	1,198
2013	468	355	526
2014	436	218	343
2015	369	231	259
2016	361	195	138

7.16.5 Catch per Unit Effort (CPUE)³⁶

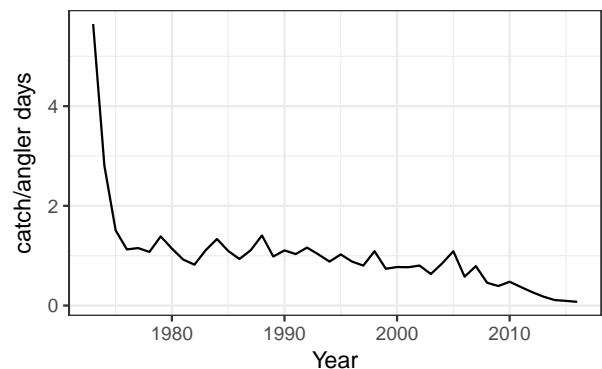


Figure 32: Nominal index (catch/angler days) from headboat logbooks.

7.17 Gray snapper³⁷



Figure 33: Gray snapper, *Lutjanus griseus*.

7.17.1 Landings

Table 68: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	41,702	77,956
2008	30,557	48,029
2009	35,476	48,235
2010	40,114	60,566
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

7.17.2 Discards

Table 69: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	641	53	4,902
2008	10	112	3,114
2009	6	139	3,734
2010		219	5,090
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

7.17.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 70.

³⁷Confidential data were replaced with asterisks (***)

³⁸The 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.

Table 70: 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	398	396	16.6	2.7
S.Florida	1,470	1,324	12.8	1.1
S. Atl.(5 yr)	8,674	8,150	13.7	1.5
S. Atl.(10 yr)	13,091	12,395	13.8	1.6

7.17.4 Effort

Table 71: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	59	810	909
2008	41	843	1,590
2009	23	938	1,824
2010	9	913	1,982
2011	21	619	1,854
2012	20	769	2,518
2013	***	774	2,900
2014	19	839	4,929
2015	***	810	4,789
2016		840	4,242

7.17.5 Catch per Unit Effort (CPUE)³⁸

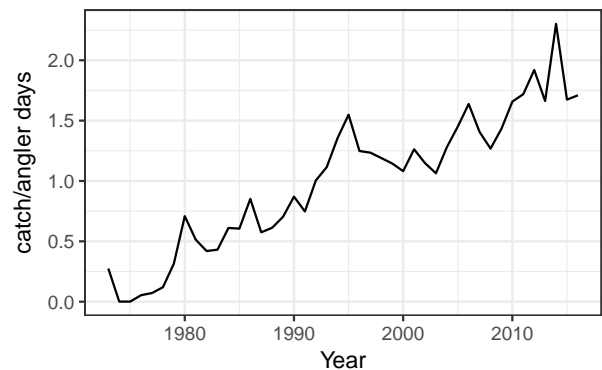


Figure 34: Nominal index (catch/angler days) from headboat logbooks.

7.18 Gray triggerfish³⁹



Figure 35: Gray triggerfish, *Balistes capriscus*.

7.18.1 Landings

Table 72: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	66,403	133,287
2008	44,758	90,625
2009	59,945	128,657
2010	68,807	152,561
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

7.18.2 Discards

Table 73: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	171	490	1,144
2008	225	496	10,315
2009	149	879	9,411
2010	39	975	18,377
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

7.18.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 74.

³⁹Confidential data were replaced with asterisks (***)

⁴⁰The 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.

Table 74: 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	832	818	13.3	1.9
GA.N.Florida	236	231	14.7	2.7
S.Florida	318	294	12.9	1.8
S. Atl.(5 yr)	7,600	7,305	13.6	2.2
S. Atl.(10 yr)	12,317	11,823	13.5	2.2

7.18.4 Effort

Table 75: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	938	1,116	306
2008	796	1,002	1,362
2009	894	1,527	2,017
2010	1,120	1,560	2,227
2011	919	1,457	2,221
2012	792	1,362	2,692
2013	814	1,254	2,498
2014	825	1,244	3,618
2015	766	1,038	4,215
2016	770	1,066	4,206

7.18.5 Catch per Unit Effort (CPUE)⁴⁰

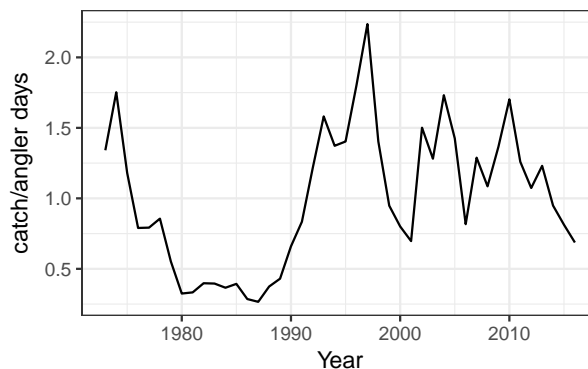


Figure 36: Nominal index (catch/angler days) from headboat logbooks.

7.19 Graysby⁴¹

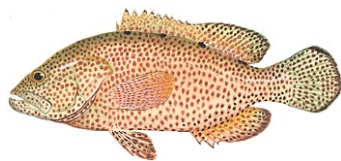


Figure 37: Graysby, *Cephalopholis cruentata*.

7.19.1 Landings

Table 76: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	9,587	12,877
2008	3,303	3,214
2009	2,239	2,554
2010	1,858	1,766
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

7.19.2 Discards

Table 77: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	158		868
2008	3	2	1,155
2009	6	8	447
2010	1	18	580
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

7.19.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 78.

⁴¹Confidential data were replaced with asterisks (***)

⁴²The 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.

Table 78: 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	14	14	12.5	1.2
GA.N.Florida	17	17	12.3	1.3
S.Florida	130	95	9.8	0.6
S. Atl.(5 yr)	624	593	10.0	0.6
S. Atl.(10 yr)	958	911	10.4	0.7

7.19.4 Effort

Table 79: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	309	48	303
2008	147	61	300
2009	154	100	324
2010	132	40	333
2011	112	4	331
2012	62	***	718
2013	19	10	891
2014	74	9	1,574
2015	72	42	1,720
2016	81	49	1,284

7.19.5 Catch per Unit Effort (CPUE)⁴²

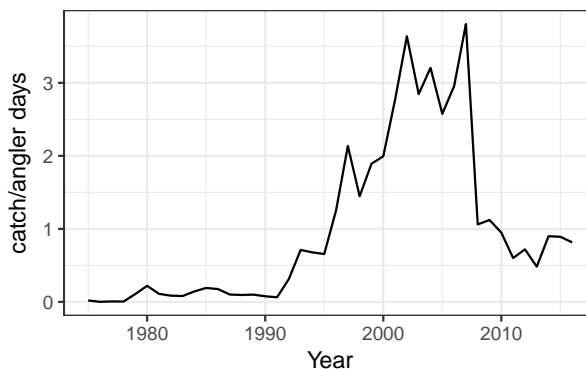


Figure 38: Nominal index (catch/angler days) from headboat logbooks.

7.20 Greater amberjack⁴³



Figure 39: Greater amberjack, *Seriola dummerili*.

7.20.1 Landings

Table 80: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,323	114,445
2008	4,452	75,027
2009	4,776	89,216
2010	3,504	74,698
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

7.20.2 Discards

Table 81: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,393	809	55
2008	1,176	1,773	274
2009	338	623	538
2010	975	423	215
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

7.20.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 82.

⁴³Confidential data were replaced with asterisks (***)

⁴⁴The 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.

Table 82: 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	49	49	38.7	20.9
GA.N.Florida	182	177	34.6	14.8
S.Florida	35	34	36.8	22.5
S. Atl.(5 yr)	869	912	35.1	17.5
S. Atl.(10 yr)	1,264	1,318	35.2	17.3

7.20.4 Effort

Table 83: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	478	357	71
2008	423	428	191
2009	509	437	257
2010	396	328	223
2011	307	180	262
2012	386	222	358
2013	441	388	203
2014	447	420	301
2015	467	664	401
2016	461	655	293

7.20.5 Catch per Unit Effort (CPUE)⁴⁴

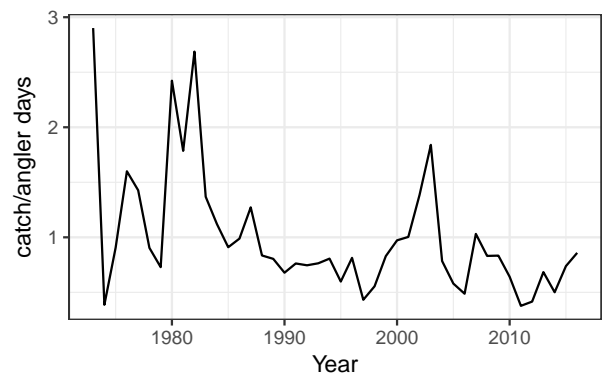


Figure 40: Nominal index (catch/angler days) from headboat logbooks.

7.21 King mackerel⁴⁵



Figure 41: King mackerel, *Scomberomorus cavalla*.

7.21.1 Landings

Table 84: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	33,647	256,291
2008	15,990	117,598
2009	18,823	157,561
2010	19,188	156,627
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

7.21.2 Discards

Table 85: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	928	136	215
2008	508	1,189	1,083
2009	317	97	1,666
2010	126	23	2,578
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

7.21.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 86.

⁴⁵Confidential data were replaced with asterisks (***)

⁴⁶The 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.

Table 86: 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	9	8	31.6	10.5
GA.N.Florida	42	42	38.4	12.4
S.Florida	343	333	32.7	8.2
S. Atl.(5 yr)	1,497	1,474	33.3	9.0
S. Atl.(10 yr)	3,960	4,079	33.2	8.2

7.21.4 Effort

Table 87: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	595	562	505
2008	474	564	1,848
2009	501	550	2,431
2010	334	431	2,389
2011	271	228	1,979
2012	247	262	2,069
2013	219	170	1,980
2014	193	139	3,357
2015	196	181	3,710
2016	221	229	3,174

7.21.5 Catch per Unit Effort (CPUE)⁴⁶

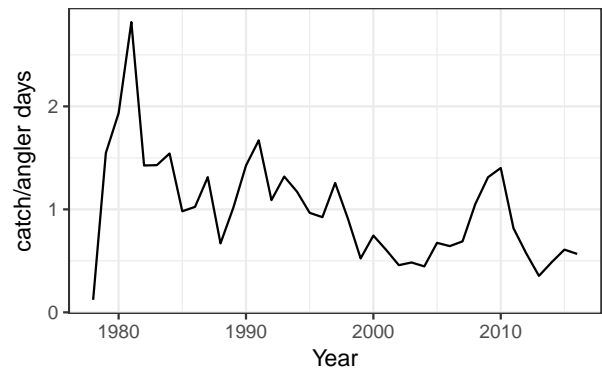


Figure 42: Nominal index (catch/angler days) from headboat logbooks.

7.22 Jolthead porgy⁴⁷



Figure 43: Jolthead porgy, *Calamus bajonado*.

7.22.1 Landings

Table 88: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	9,910	19,367
2008	5,639	10,023
2009	8,075	13,286
2010	6,478	10,402
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

7.22.2 Discards

Table 89: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	6	4	175
2008	48	119	133
2009	17	16	26
2010	44		64
2011	30		152
2012	12	2	48
2013	70	3	83
2014	274	2	803
2015			189
2016	92		1,227

7.22.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 90.

⁴⁷Confidential data were replaced with asterisks (***)

⁴⁸The 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.

Table 90: 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	15.5	2.3
GA.N.Florida	2	2	19.5	6.1
S.Florida	367	316	15.2	2.3
S. Atl.(5 yr)	1,387	1,278	15.4	2.4
S. Atl.(10 yr)	1,928	1,804	15.2	2.3

7.22.4 Effort

Table 91: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	246	4	451
2008	204	61	607
2009	300	30	553
2010	249	35	706
2011	238	66	721
2012	160	69	1,169
2013	145	25	1,006
2014	169	21	1,509
2015	170	26	2,055
2016	115	14	2,181

7.22.5 Catch per Unit Effort (CPUE)⁴⁸

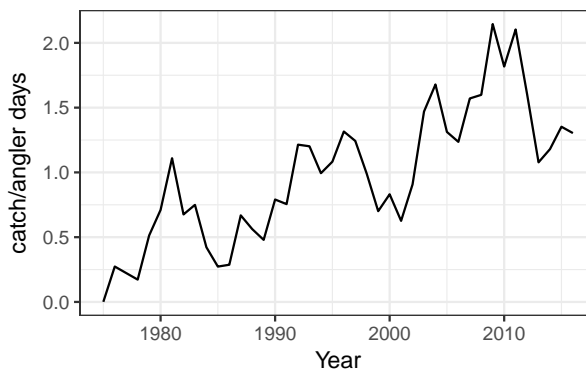


Figure 44: Nominal index (catch/angler days) from headboat logbooks.

7.23 Knobbed porgy⁴⁹

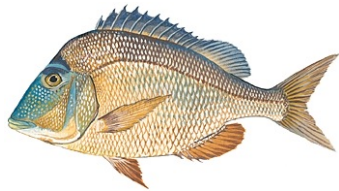


Figure 45: Knobbed porgy, *Calamus nodosus*.

7.23.1 Landings

Table 92: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	10,960	14,554
2008	5,023	6,182
2009	4,949	5,927
2010	4,311	5,026
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

7.23.2 Discards

Table 93: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	2		24
2008	12	5	65
2009			100
2010	6		85
2011	7		130
2012	10		304
2013	7	***	260
2014	1		1,195
2015	132	***	322
2016	145	1	591

7.23.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 94.

⁴⁹Confidential data were replaced with asterisks (***)

⁵⁰The 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.

Table 94: 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	36	36	14.4	2.0
GA.N.Florida	2	2	16.8	2.9
S.Florida	224	214	11.6	0.9
S. Atl.(5 yr)	1,412	1,351	11.7	1.0
S. Atl.(10 yr)	2,622	2,561	11.9	1.0

7.23.4 Effort

Table 95: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	301	6	483
2008	158	7	713
2009	88	6	833
2010	124	21	760
2011	92	16	783
2012	71	12	933
2013	70	***	993
2014	61		1,205
2015	106	***	1,186
2016	98	10	1,059

7.23.5 Catch per Unit Effort (CPUE)⁵⁰

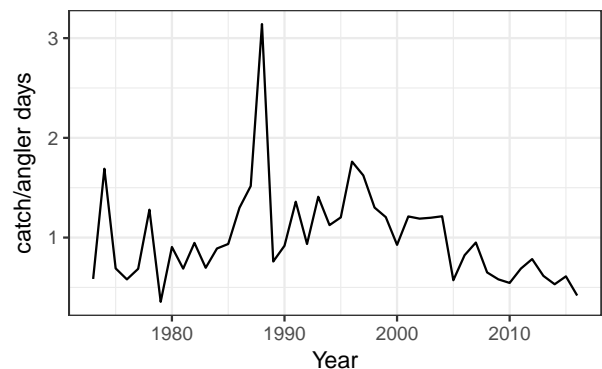


Figure 46: Nominal index (catch/angler days) from headboat logbooks.

7.24 Lane snapper⁵¹



Figure 47: Lane snapper, *Lutjanus synagris*.

7.24.1 Landings

Table 96: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	19,825	13,543
2008	27,507	21,566
2009	19,669	15,451
2010	17,063	13,772
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

7.24.2 Discards

Table 97: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		46	2,685
2008		147	6,260
2009		404	4,415
2010	***	77	2,058
2011		28	965
2012		14	1,535
2013		97	1,937
2014	***	705	2,755
2015		692	4,175
2016		543	6,751

7.24.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 98.

Table 98: 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	497	496	12.7	1.1
S.Florida	727	637	10.4	0.6
S. Atl.(5 yr)	5,364	4,934	11.2	0.8
S. Atl.(10 yr)	9,959	9,164	11.1	0.8

7.24.4 Effort

Table 99: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		820	409
2008		885	1,018
2009		1,121	1,127
2010	***	744	1,138
2011		371	867
2012		413	1,269
2013		601	1,500
2014	***	897	2,597
2015		781	2,550
2016		760	2,463

7.24.5 Catch per Unit Effort (CPUE)⁵²

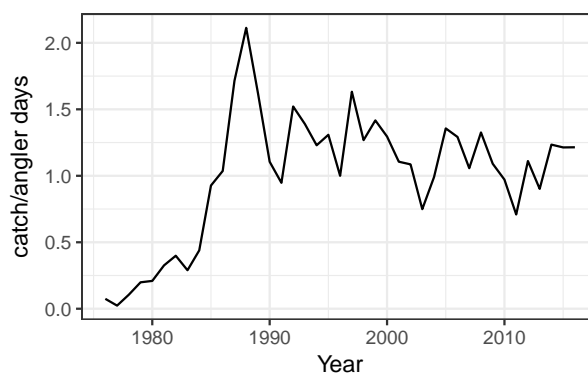


Figure 48: Nominal index (catch/angler days) from headboat logbooks.

⁵¹Confidential data were replaced with asterisks (***)

⁵²The 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.

7.25 Lesser amberjack⁵³

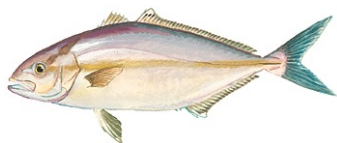


Figure 49: Lesser amberjack, *Seriola fasciata*.

7.25.1 Landings

Table 100: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	981	14,949
2008	22	82
2009	***	***
2010	***	***
2011	***	***
2012	***	***
2013	975	4,693
2014	896	4,270
2015	336	728
2016	320	772

7.25.2 Discards

Table 101: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		
2008	***		***
2009	***		***
2010	***		
2011	***	***	***
2012	***		3
2013	35	82	14
2014	77	27	153
2015	10	29	43
2016	2	***	165

7.25.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 102.

Table 102: 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	16	16	23.3	5.3
S. Atl.(5 yr)	50	46	21.5	4.5
S. Atl.(10 yr)	129	124	25.9	8.7

7.25.4 Effort

Table 103: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	***		6
2008	***	3	***
2009	***		***
2010	***		
2011	***	***	***
2012	***		3
2013	55	37	52
2014	35	29	116
2015	15	8	84
2016	7	***	144

7.25.5 Catch per Unit Effort (CPUE)⁵⁴

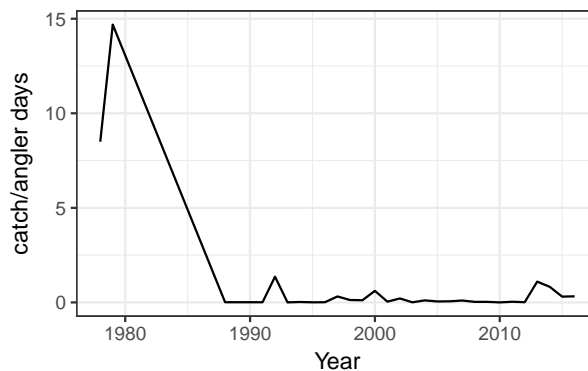


Figure 50: Nominal index (catch/angler days) from headboat logbooks.

⁵³Confidential data were replaced with asterisks (***)

⁵⁴The 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.

7.26 Mahogany snapper⁵⁵



Figure 51: Mahogany snapper, *Lutjanus mahogoni*.

7.26.1 Landings

Table 104: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2008	43	43
2009	***	***
2010	23	23
2011	34	34
2012	29	30
2013	116	114
2014	176	181
2015	184	180
2016	203	183

7.26.2 Discards

Table 105: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2008			
2009			***
2010			
2011			6
2012			2
2013			8
2014			24
2015			98
2016			177

7.26.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 106.

Table 106: 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.Florida	2	2	12.4	1.0
S. Atl.(5 yr)	15	13	13.2	1.1
S. Atl.(10 yr)	38	36	13.2	1.1

7.26.4 Effort

Table 107: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2008			13
2009			***
2010			13
2011			19
2012			15
2013			52
2014			116
2015			124
2016			88

7.26.5 Catch per Unit Effort (CPUE)⁵⁶

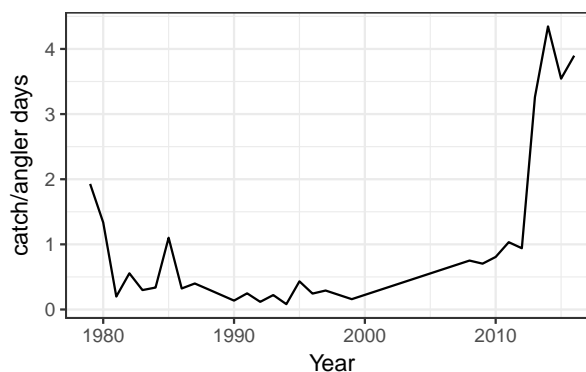


Figure 52: Nominal index (catch/angler days) from headboat logbooks.

⁵⁵Confidential data were replaced with asterisks (***)

⁵⁶The 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.

7.27 Margate⁵⁷

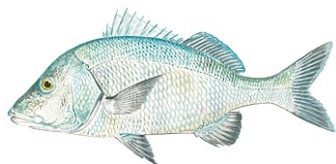


Figure 53: Margate, *Haemulon album*.

7.27.1 Landings

Table 108: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	1,758	7,076
2008	741	1,253
2009	765	1,858
2010	398	1,781
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

7.27.2 Discards

Table 109: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	35	***	1,142
2008	566	1	21
2009	95	29	15
2010	***		12
2011	28	5	11
2012	***		22
2013	613	13	30
2014	***		56
2015			96
2016		***	52

7.27.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 110.

Table 110: 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.Florida	75	73	20.8	5.3
S. Atl.(5 yr)	260	244	19.9	4.6
S. Atl.(10 yr)	330	313	19.4	4.3

7.27.4 Effort

Table 111: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	13	***	112
2008	23	4	132
2009	28	10	145
2010	***	7	169
2011	12	12	149
2012	***	8	313
2013	11	5	247
2014	***	15	303
2015		10	320
2016		***	253

7.27.5 Catch per Unit Effort (CPUE)⁵⁸

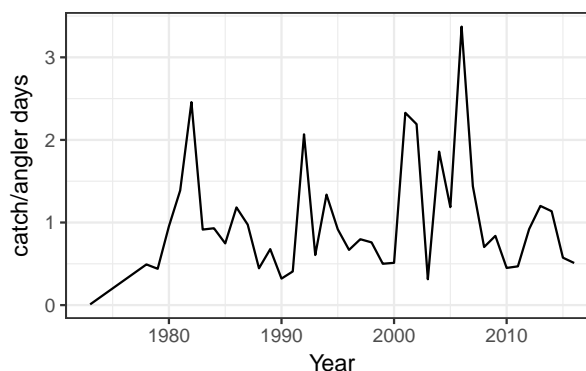


Figure 54: Nominal index (catch/angler days) from headboat logbooks.

⁵⁷Confidential data were replaced with asterisks (***)

⁵⁸The 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.

7.28 Mutton snapper⁵⁹



Figure 55: Mutton snapper, *Lutjanus analis*.

7.28.1 Landings

Table 112: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	13,391	46,975
2008	12,470	42,220
2009	18,021	72,387
2010	14,614	49,645
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

7.28.2 Discards

Table 113: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	6	48	1,849
2008	***	1,050	6,135
2009	***	455	5,766
2010	***	264	3,006
2011	***	31	792
2012			2,061
2013	***	95	4,927
2014	20	547	10,401
2015	20	690	10,469
2016	***	272	20,719

7.28.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 114.

Table 114: 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	106	107	20.1	4.4
S.Florida	879	803	20.8	5.1
S. Atl.(5 yr)	3,519	3,362	20.9	5.1
S. Atl.(10 yr)	5,913	5,723	20.1	4.4

7.28.4 Effort

Table 115: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	4	132	891
2008	***	358	2,413
2009	***	390	3,200
2010	***	281	3,051
2011	***	150	2,056
2012	3	100	2,581
2013	***	85	2,961
2014	11	252	5,832
2015	4	271	5,967
2016	***	348	5,484

7.28.5 Catch per Unit Effort (CPUE)⁶⁰

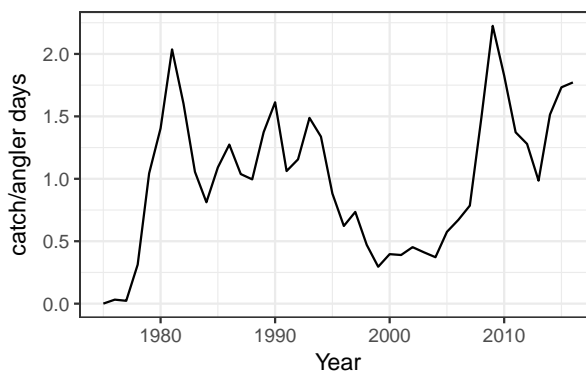


Figure 56: Nominal index (catch/angler days) from headboat logbooks.

⁵⁹Confidential data were replaced with asterisks (***)

⁶⁰The 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.

7.29 Ocean triggerfish⁶¹

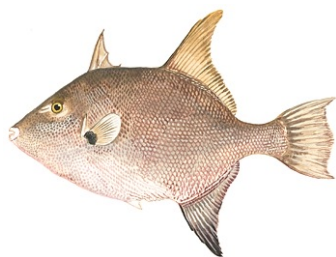


Figure 57: Ocean triggerfish, *Canthidermis sufflamen*.

7.29.1 Landings

Table 116: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	113	267
2008	167	468
2009	169	582
2010	170	595
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

7.29.2 Discards

Table 117: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			7
2008			7
2009			12
2010			23
2011			11
2012			80
2013	***		552
2014		***	1,380
2015			191
2016			168

7.29.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 118.

Table 118: 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.Florida	23	351	16.6	3.0
S. Atl.(5 yr)	162	1,371	16.6	3.1
S. Atl.(10 yr)	267	1,477	16.4	3.1

7.29.4 Effort

Table 119: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			46
2008			42
2009			85
2010			98
2011			118
2012			257
2013	***		492
2014		***	838
2015			643
2016			426

7.29.5 Catch per Unit Effort (CPUE)⁶²

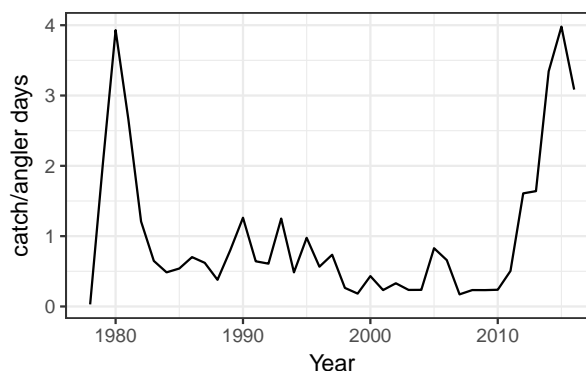


Figure 58: Nominal index (catch/angler days) from headboat logbooks.

⁶¹Confidential data were replaced with asterisks (***)

⁶²The 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.

7.30 Red grouper⁶³

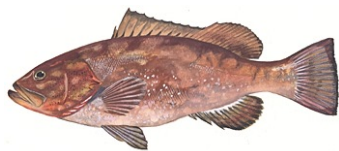


Figure 59: Red grouper, *Epinephelus morio*.

7.30.1 Landings

Table 120: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	5,159	43,651
2008	2,443	20,786
2009	1,426	15,693
2010	1,283	9,509
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

7.30.2 Discards

Table 121: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	761	225	3,227
2008	172	151	6,511
2009	70	191	12,121
2010	300	357	13,746
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

7.30.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 122.

Table 122: 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	30.9	20.2
GA.N.Florida	2	2	20.3	4.9
S.Florida	222	198	24.0	8.4
S. Atl.(5 yr)	734	702	23.8	8.1
S. Atl.(10 yr)	1,123	1,058	23.5	7.9

7.30.4 Effort

Table 123: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	322	217	691
2008	229	128	1,210
2009	189	165	1,917
2010	163	290	2,208
2011	139	227	1,380
2012	95	129	2,029
2013	62	184	2,429
2014	45	70	1,935
2015	31	36	1,672
2016	22	14	2,595

7.30.5 Catch per Unit Effort (CPUE)⁶⁴

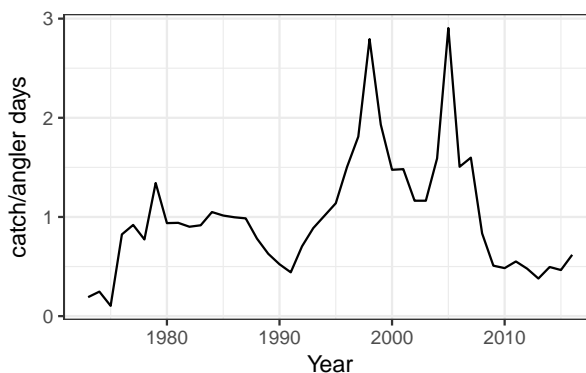


Figure 60: Nominal index (catch/angler days) from headboat logbooks.

⁶³Confidential data were replaced with asterisks (***)

⁶⁴The 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.

7.31 Red hind⁶⁵



Figure 61: Red hind, *Epinephelus guttatus*.

7.31.1 Landings

Table 124: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	1,539	3,820
2008	597	707
2009	458	692
2010	270	424
2011	136	253
2012	104	212
2013	91	93
2014	192	225
2015	266	277
2016	206	239

7.31.2 Discards

Table 125: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		***	70
2008	1	***	131
2009		2	62
2010	1	5	53
2011	9	***	21
2012		***	63
2013		***	93
2014	8		126
2015		***	197
2016		***	294

7.31.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 126.

Table 126: 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.Florida	10	9	14.2	1.6
S. Atl.(5 yr)	95	91	13.5	1.6
S. Atl.(10 yr)	153	147	13.2	1.5

7.31.4 Effort

Table 127: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	67	***	86
2008	49	***	97
2009	49	7	94
2010	25	9	78
2011	15	***	27
2012	8	***	65
2013	4	***	99
2014	5		156
2015	6	***	235
2016	6	***	206

7.31.5 Catch per Unit Effort (CPUE)⁶⁶

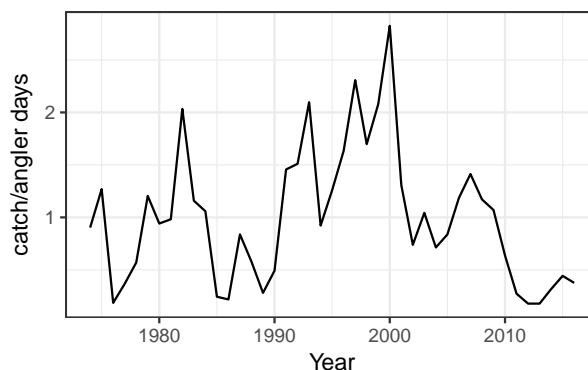


Figure 62: Nominal index (catch/angler days) from headboat logbooks.

⁶⁵Confidential data were replaced with asterisks (***)

⁶⁶The 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.

7.32 Red porgy⁶⁷



Figure 63: Red porgy, *Pagrus pagrus*.

7.32.1 Landings

Table 128: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	74,937	117,255
2008	32,521	52,598
2009	19,541	33,752
2010	21,924	37,413
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

7.32.2 Discards

Table 129: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	42,543	26	3
2008	27,676	123	23
2009	14,398	225	145
2010	12,398	121	401
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

7.32.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 130.

⁶⁷Confidential data were replaced with asterisks (***)

⁶⁸The 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.

Table 130: 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	157	155	14.7	1.7
GA.N.Florida	32	32	15.3	2.0
S.Florida	24	25	14.6	1.7
S. Atl.(5 yr)	1,462	1,423	14.9	1.8
S. Atl.(10 yr)	2,570	2,472	14.8	1.7

7.32.4 Effort

Table 131: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	704	148	21
2008	531	144	43
2009	537	129	113
2010	629	97	197
2011	568	89	200
2012	491	57	278
2013	431	53	147
2014	432	60	78
2015	443	93	130
2016	435	115	93

7.32.5 Catch per Unit Effort (CPUE)⁶⁸



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

7.33 Red snapper⁶⁹



Figure 65: Red snapper, *Lutjanus campechanus*.

7.33.1 Landings

Table 132: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,889	37,460
2008	18,943	115,309
2009	21,507	141,087
2010	477	2,610
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

7.33.2 Discards

Table 133: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	3,463	69,049	***
2008	2,428	71,242	1,016
2009	831	54,709	2,366
2010	2,058	34,248	2,534
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

7.33.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 134.

Table 134: 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.Florida	20	20	22.1	5.6
S. Atl.(5 yr)	681	626	20.4	5.6
S. Atl.(10 yr)	2,076	1,731	21.2	5.9

7.33.4 Effort

Table 135: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	188	1,370	***
2008	205	1,729	180
2009	239	2,021	293
2010	286	1,679	119
2011	258	1,477	135
2012	178	1,499	125
2013	137	1,380	115
2014	187	1,469	154
2015	250	1,368	59
2016	266	1,357	77

7.33.5 Catch per Unit Effort (CPUE)⁷⁰

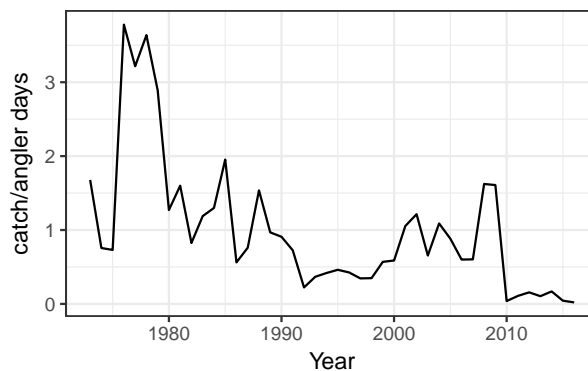


Figure 66: Nominal index (catch/angler days) from headboat logbooks.

⁶⁹Confidential data were replaced with asterisks (***)

⁷⁰The 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.

7.34 Rock hind⁷¹

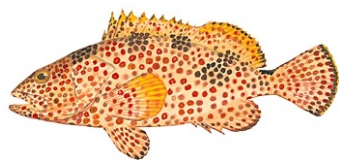


Figure 67: Rock hind, *Epinephelus adscensionis*.

7.34.1 Landings

Table 136: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	4,912	12,217
2008	1,763	3,773
2009	2,149	4,635
2010	1,283	3,109
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

7.34.2 Discards

Table 137: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	9	1	462
2008	6	3	723
2009	8	7	433
2010	14	22	356
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

7.34.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 138.

⁷¹Confidential data were replaced with asterisks (***)

⁷²The 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.

Table 138: 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	16.6	2.9
S.Florida	41	32	14.2	1.9
S. Atl.(5 yr)	216	204	14.5	2.0
S. Atl.(10 yr)	301	287	14.8	2.1

7.34.4 Effort

Table 139: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	189	11	193
2008	116	16	275
2009	182	17	282
2010	136	33	180
2011	171	***	213
2012	95	6	526
2013	73	22	381
2014	109	18	659
2015	116	21	839
2016	122	19	719

7.34.5 Catch per Unit Effort (CPUE)⁷²

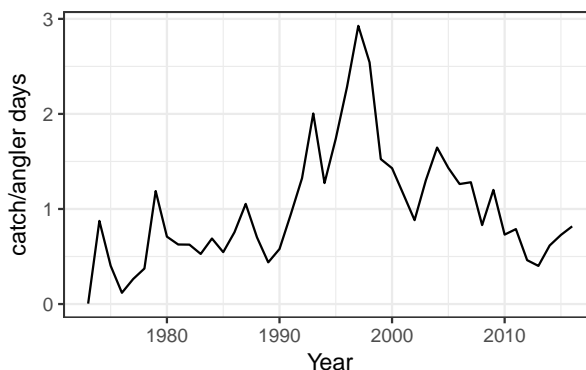


Figure 68: Nominal index (catch/angler days) from headboat logbooks.

7.35 Sailors choice⁷³



Figure 69: Sailors choice, *Haemulon parra*.

7.35.1 Landings

Table 140: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2008	***	***
2009	***	***
2010	105	95
2011	31	22
2012	283	210
2013	949	785
2014	837	682
2015	1,274	910
2016	2,323	1,627

7.35.2 Discards

Table 141: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2008			***
2009			***
2010			19
2011			1
2012			24
2013	***	***	121
2014		***	124
2015		***	98
2016		***	792

7.35.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 142.

Table 142: 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.Florida	98	93	11.1	0.7
S. Atl.(5 yr)	416	374	11.1	0.7
S. Atl.(10 yr)	718	667	11.3	0.8

7.35.4 Effort

Table 143: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2008			***
2009			***
2010			48
2011			13
2012			71
2013	***	***	186
2014		***	280
2015		***	533
2016		***	612

7.35.5 Catch per Unit Effort (CPUE)⁷⁴

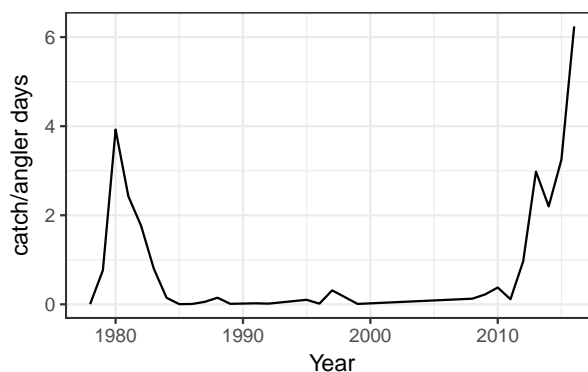


Figure 70: Nominal index (catch/angler days) from headboat logbooks.

⁷³Confidential data were replaced with asterisks (***)

⁷⁴The 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.

7.36 Sand tilefish⁷⁵



Figure 71: Sand tilefish, *Malacanthus plumier*.

7.36.1 Landings

Table 144: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	736	799
2008	1,333	2,607
2009	729	584
2010	1,062	1,357
2011	657	587
2012	695	632
2013	835	781
2014	1,301	1,162
2015	1,819	1,785
2016	1,249	1,290

7.36.2 Discards

Table 145: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			32
2008			460
2009	8		506
2010	7		519
2011	9	***	751
2012	4		1,891
2013			1,222
2014	4		1,722
2015		***	2,074
2016	1	***	2,490

7.36.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 146.

⁷⁵Confidential data were replaced with asterisks (***)

⁷⁶The 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.

Table 146: 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	18.3	1.5
S.Florida	88	104	17.8	1.0
S. Atl.(5 yr)	372	402	17.1	1.0
S. Atl.(10 yr)	728	740	16.7	0.9

7.36.4 Effort

Table 147: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	11		32
2008	27		310
2009	16		361
2010	15		429
2011	11	***	392
2012	7		712
2013	17		568
2014	8		1,122
2015	9	***	1,322
2016	14	***	1,026

7.36.5 Catch per Unit Effort (CPUE)⁷⁶

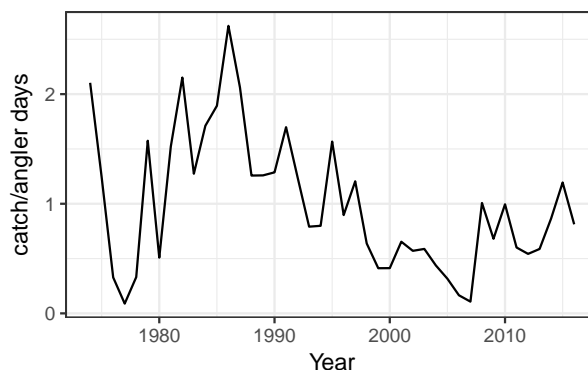


Figure 72: Nominal index (catch/angler days) from headboat logbooks.

7.37 Saucereye porgy⁷⁷



Figure 73: Saucereye porgy, *Calamus calamus*.

7.37.1 Landings

Table 148: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	652	885
2008	511	685
2009	99	89
2010	182	292
2011	170	437
2012	176	184
2013	111	135
2014	28	34
2015	110	121
2016	74	81

7.37.2 Discards

Table 149: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			1
2008			1
2009			
2010			1
2011			1
2012			1
2013			
2014			14
2015			
2016			3

7.37.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 150.

Table 150: 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.Florida	5	5	11.2	0.8
S. Atl.(5 yr)	38	35	11.8	1.0
S. Atl.(10 yr)	172	171	12.3	1.1

7.37.4 Effort

Table 151: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			114
2008			127
2009			37
2010			50
2011			54
2012			100
2013			65
2014			34
2015			69
2016			40

7.37.5 Catch per Unit Effort (CPUE)⁷⁸

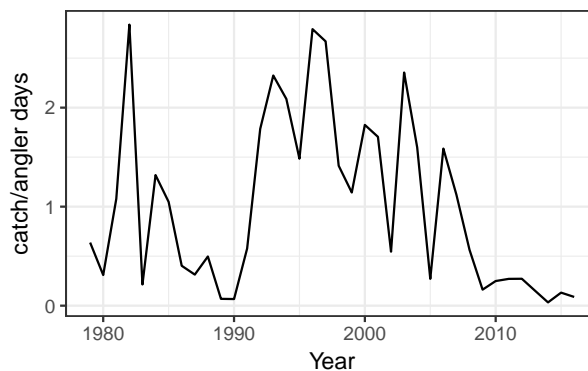


Figure 74: Nominal index (catch/angler days) from headboat logbooks.

⁷⁷Confidential data were replaced with asterisks (***)

⁷⁸The 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.

7.38 Scamp⁷⁹



Figure 75: Scamp, *Mycteroperca phenax*.

7.38.1 Landings

Table 152: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	16,506	98,985
2008	5,021	28,730
2009	3,608	24,606
2010	3,270	20,706
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

7.38.2 Discards

Table 153: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	5,409	192	106
2008	2,325	529	282
2009	2,271	526	310
2010	2,459	266	307
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

7.38.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 154.

Table 154: 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	27	28	23.7	7.1
GA.N.Florida	1	1	25.4	8.5
S.Florida	***	***	***	***
S. Atl.(5 yr)	356	353	23.3	7.1
S. Atl.(10 yr)	726	710	22.7	6.6

7.38.4 Effort

Table 155: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	627	251	65
2008	444	360	149
2009	462	422	199
2010	533	238	154
2011	412	134	104
2012	318	112	153
2013	288	61	94
2014	357	31	75
2015	338	43	80
2016	353	36	79

7.38.5 Catch per Unit Effort (CPUE)⁸⁰

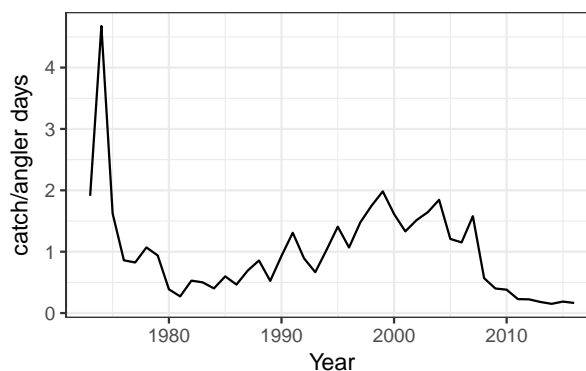


Figure 76: Nominal index (catch/angler days) from headboat logbooks.

⁷⁹Confidential data were replaced with asterisks (***)

⁸⁰The 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.

7.39 Schoolmaster⁸¹

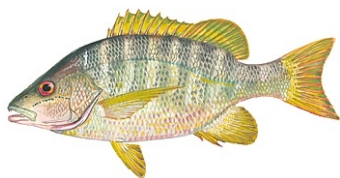


Figure 77: Schoolmaster, *Lutjanus apodus*.

7.39.1 Landings

Table 156: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	198	158
2008	617	523
2009	425	361
2010	215	175
2011	173	149
2012	288	276
2013	118	411
2014	250	886
2015	527	361
2016	514	512

7.39.2 Discards

Table 157: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			39
2008			173
2009			76
2010		***	58
2011			42
2012			20
2013			25
2014		***	101
2015			273
2016		***	198

7.39.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 158.

Table 158: 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.Florida	48	46	11.9	1.1
S. Atl.(5 yr)	162	150	11.4	1.0
S. Atl.(10 yr)	188	176	11.4	1.0

7.39.4 Effort

Table 159: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007			81
2008			166
2009			140
2010		***	110
2011			79
2012			111
2013			86
2014		***	96
2015			155
2016		***	200

7.39.5 Catch per Unit Effort (CPUE)⁸²

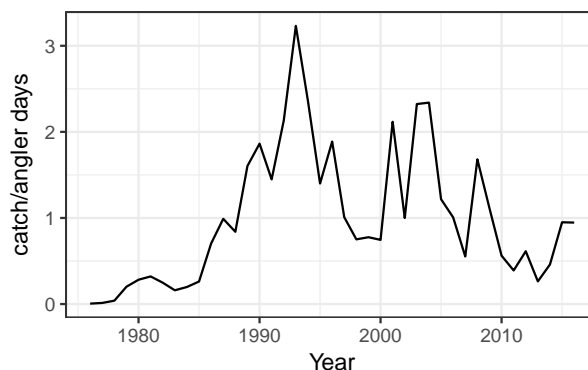


Figure 78: Nominal index (catch/angler days) from headboat logbooks.

⁸¹Confidential data were replaced with asterisks (***)

⁸²The 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.

7.40 Scup⁸³



Figure 79: Scup, *Stenotomus chrysops*.

7.40.1 Landings

Table 160: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	12,131	6,764
2008	5,999	5,716
2009	10,717	8,551
2010	11,492	10,302
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

7.40.2 Discards

Table 161: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	3,748	21	
2008	1,685	***	
2009	1,607	4	
2010	1,585	10	
2011	2,540	3	
2012	1,733		
2013	1,850		***
2014	3,689	***	
2015	1,831	***	
2016	2,348	1	

7.40.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 162.

⁸³Confidential data were replaced with asterisks (***)

⁸⁴The 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.

Table 162: 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	298	298	12.2	1.0
S. Atl.(5 yr)	1,328	1,321	11.7	0.9
S. Atl.(10 yr)	2,080	2,065	11.4	0.9

7.40.4 Effort

Table 163: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	298	11	
2008	196	***	
2009	201	5	
2010	300	11	
2011	402	23	
2012	514	7	
2013	430		***
2014	409	***	
2015	446	***	
2016	488	4	

7.40.5 Catch per Unit Effort (CPUE)⁸⁴

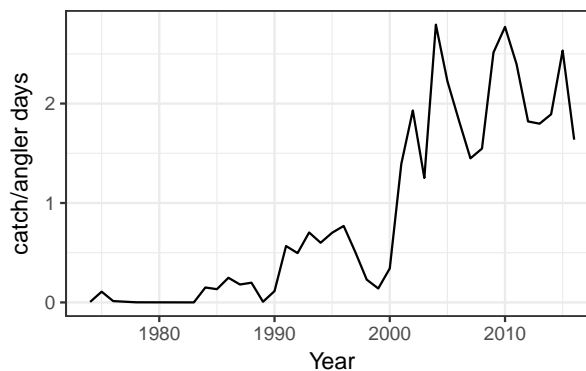


Figure 80: Nominal index (catch/angler days) from headboat logbooks.

7.41 Silk snapper⁸⁵



Figure 81: Silk snapper, *Lutjanus vivanus*.

7.41.1 Landings

Table 164: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	1,360	2,268
2008	591	1,044
2009	1,662	5,202
2010	1,063	1,890
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

7.41.2 Discards

Table 165: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		***	118
2008	***	***	40
2009		71	123
2010	***	21	50
2011	***	19	68
2012	***	114	57
2013	***		2
2014	***		3
2015	***	***	43
2016	***		14

7.41.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 166.

Table 166: 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.Florida	44	43	17.0	2.5
S. Atl.(5 yr)	267	260	15.5	1.8
S. Atl.(10 yr)	390	383	15.7	1.9

7.41.4 Effort

Table 167: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	5	***	43
2008	***	***	33
2009		4	82
2010	***	4	74
2011	***	3	61
2012	***	7	61
2013	***		43
2014	***		36
2015	***	***	62
2016	***		69

7.41.5 Catch per Unit Effort (CPUE)⁸⁶

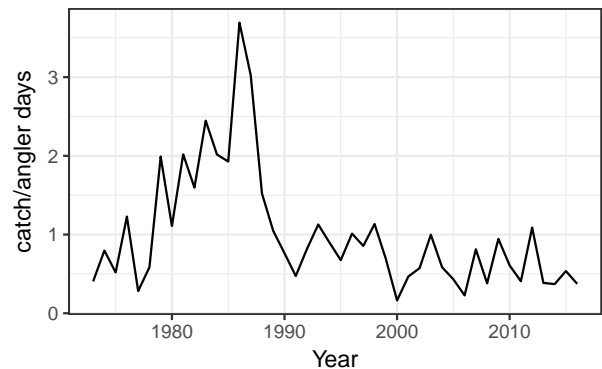


Figure 82: Nominal index (catch/angler days) from headboat logbooks.

⁸⁵Confidential data were replaced with asterisks (***)

⁸⁶The 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.

7.42 Snowy grouper⁸⁷

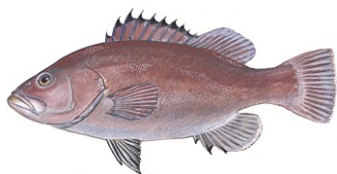


Figure 83: Snowy grouper, *Epinephelus niveatus*.

7.42.1 Landings

Table 168: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	173	283
2008	53	91
2009	108	204
2010	77	139
2011	63	67
2012	60	85
2013	449	4,559
2014	1,138	13,203
2015	781	4,372
2016	525	3,016

7.42.2 Discards

Table 169: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	15	***	***
2008	5	4	12
2009	7	14	75
2010	8	16	24
2011	11	***	22
2012	4	***	42
2013	8	***	16
2014	21	***	5
2015	3	***	9
2016		***	

7.42.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 170.

⁸⁷Confidential data were replaced with asterisks (***)

⁸⁸The 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.

Table 170: 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.Florida	108	104	21.4	5.9
S. Atl.(5 yr)	301	285	21.0	5.8
S. Atl.(10 yr)	323	306	20.5	5.5

7.42.4 Effort

Table 171: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	24	***	***
2008	18	5	14
2009	39	13	24
2010	25	18	17
2011	15	***	26
2012	16	***	23
2013	6	***	21
2014	10	***	42
2015	4	***	26
2016		***	13

7.42.5 Catch per Unit Effort (CPUE)⁸⁸

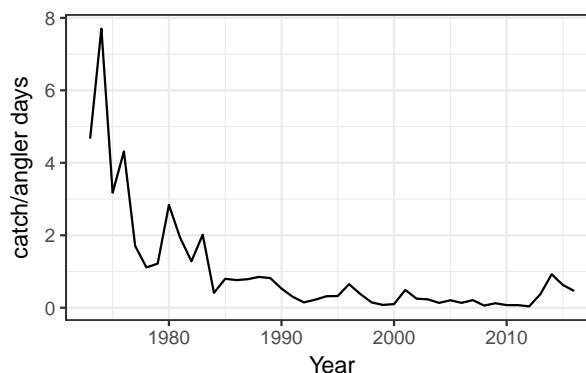


Figure 84: Nominal index (catch/angler days) from headboat logbooks.

7.43 Atlantic spadefish⁸⁹



Figure 85: Atlantic spadefish, *Chaetodipterus faber*.

7.43.1 Landings

Table 172: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	62	82
2008	128	164
2009	172	787
2010	245	1,067
2011	57	156
2012	37	208
2013	153	295
2014	120	299
2015	194	829
2016	545	1,703

7.43.2 Discards

Table 173: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	2		***
2008	13		***
2009	***	30	***
2010	52	1	***
2011	***		12
2012	18		14
2013	35		8
2014	34	2	7
2015	***	1	31
2016	***	20	188

7.43.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 174.

Table 174: 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	***	***	***	***
GA.N.Florida	15	12	17.2	5.3
S.Florida	***	***	***	***
S. Atl.(5 yr)	49	46	15.6	4.2
S. Atl.(10 yr)	106	101	15.3	4.2

7.43.4 Effort

Table 175: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	9	12	***
2008	13	11	***
2009	***	55	***
2010	6	25	***
2011	***	26	4
2012	6	13	4
2013	28	44	5
2014	9	52	8
2015	***	61	19
2016	***	77	24

7.43.5 Catch per Unit Effort (CPUE)⁹⁰

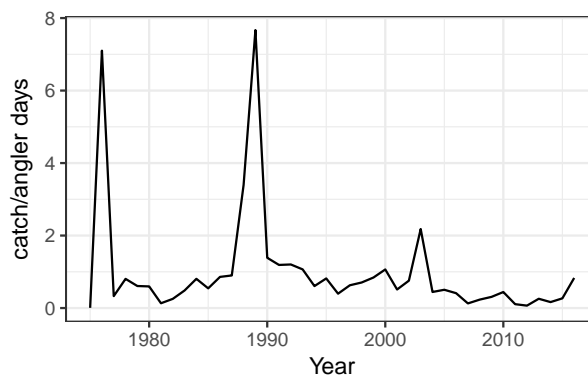


Figure 86: Nominal index (catch/angler days) from headboat logbooks.

⁸⁹Confidential data were replaced with asterisks (***)

⁹⁰The 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.

7.44 Spanish mackerel⁹¹



Figure 87: Spanish Mackerel, *Scomberomorus maculatus*.

7.44.1 Landings

Table 176: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,008	7,200
2008	8,863	8,588
2009	9,838	10,665
2010	6,287	6,753
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

7.44.2 Discards

Table 177: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,048	18	16
2008	1,253	108	33
2009	1,857	41	
2010	1,069	30	2
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

7.44.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 178.

⁹¹Confidential data were replaced with asterisks (***)

⁹²The 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.

Table 178: 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	75	65	16.7	1.0
GA.N.Florida	6	6	18.4	1.3
S.Florida	30	29	22.3	2.3
S. Atl.(5 yr)	419	394	19.2	1.6
S. Atl.(10 yr)	913	901	18.7	1.4

7.44.4 Effort

Table 179: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	189	28	142
2008	354	90	115
2009	399	55	80
2010	324	35	225
2011	626	14	224
2012	544	16	150
2013	330	23	267
2014	381	44	355
2015	306	23	262
2016	439	25	206

7.44.5 Catch per Unit Effort (CPUE)⁹²

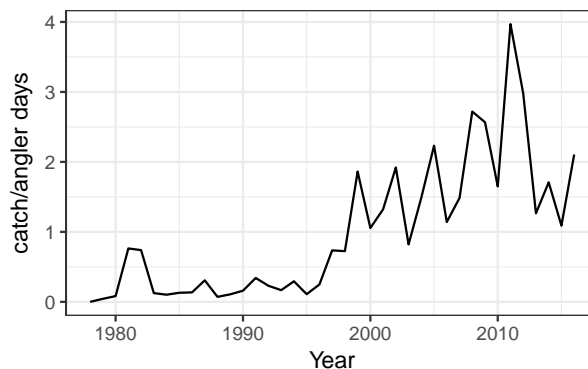


Figure 88: Nominal index (catch/angler days) from headboat logbooks.

7.45 Speckled hind⁹³



Figure 89: Speckled Hind, *Epinephelus drummond-hayi*.

7.45.1 Landings

Table 180: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	372	1,170
2008	481	1,657
2009	264	282
2010	42	53
2011	22	29
2012	26	29
2013	48	277
2014	11	65
2015	8	9

7.45.2 Discards

Table 181: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	191	1	45
2008	16	2	29
2009	5	6	27
2010	2	***	26
2011	10	5	16
2012	4	***	21
2013	7	***	49
2014	8	***	14
2015	***	***	16
2016	***		41

7.45.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 182.

⁹³Confidential data were replaced with asterisks (***)

⁹⁴The 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.

Table 182: 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.(5 yr)	12	12	18.7	5.5
S. Atl.(10 yr)	44	34	14.8	3.1

7.45.4 Effort

Table 183: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	79	4	28
2008	73	9	32
2009	27	23	72
2010	11	***	26
2011	7	6	13
2012	10	***	21
2013	8	***	37
2014	5	***	14
2015	***	***	10
2016	***		9

7.45.5 Catch per Unit Effort (CPUE)⁹⁴

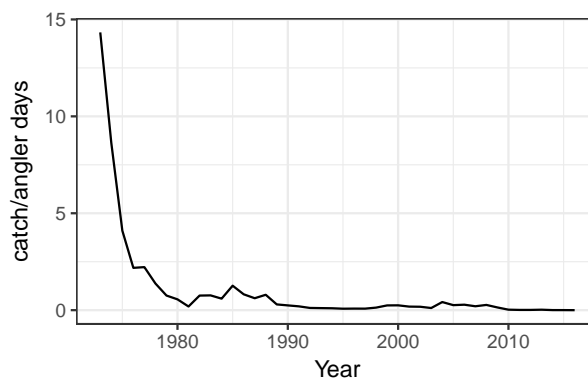


Figure 90: Nominal index (catch/angler days) from headboat logbooks.

7.46 Tilefish⁹⁵



Figure 91: Tilefish, *Lopholatilus chamaeleonticeps*.

7.46.1 Landings

Table 184: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2013	55	634
2014	200	1,885
2015	142	958
2016	***	***

7.46.2 Discards

Table 185: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2013			1
2014			31
2015			48
2016			***

7.46.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 186.

Table 186: 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.Florida	***	***	***	***
S. Atl.(5 yr)	29	28	26.3	8.3
S. Atl.(10 yr)	31	30	26.0	8.0

⁹⁵Confidential data were replaced with asterisks (***)

⁹⁶The 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.

7.46.4 Effort

Table 187: 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			***

7.46.5 Catch per Unit Effort (CPUE)⁹⁶

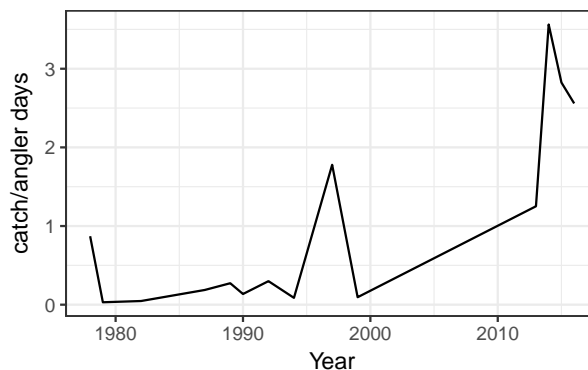


Figure 92: Nominal index (catch/angler days) from headboat logbooks.

7.47 Tomtate⁹⁷



Figure 93: Tomtate, *Haemulon aurolineatum*.

7.47.1 Landings

Table 188: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	51,375	18,364
2008	44,055	15,879
2009	52,375	19,511
2010	45,243	17,932
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

7.47.2 Discards

Table 189: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	35,530	31,653	1,649
2008	20,671	63,210	1,593
2009	27,671	61,862	8,833
2010	18,506	49,109	4,499
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

7.47.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 190.

⁹⁷Confidential data were replaced with asterisks (***)

⁹⁸The 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.

Table 190: 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	513	510	9.4	0.4
GA.N.Florida	94	91	9.2	0.4
S.Florida	25	25	8.8	0.3
S. Atl.(5 yr)	4,395	4,298	9.0	0.4
S. Atl.(10 yr)	7,132	6,932	9.0	0.4

7.47.4 Effort

Table 191: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	851	342	53
2008	786	654	508
2009	879	803	745
2010	972	782	679
2011	1,050	852	712
2012	1,278	613	919
2013	1,218	522	681
2014	1,145	506	1,267
2015	1,248	657	1,217
2016	1,222	597	1,071

7.47.5 Catch per Unit Effort (CPUE)⁹⁸

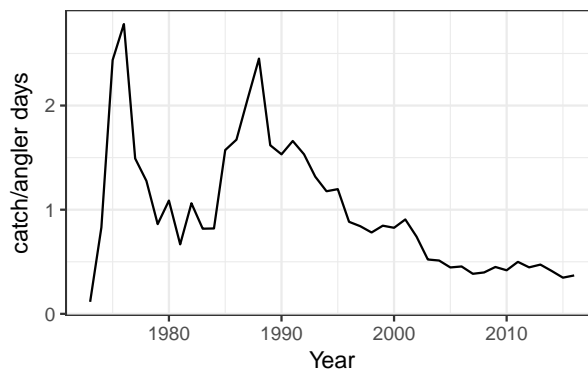


Figure 94: Nominal index (catch/angler days) from headboat logbooks.

7.48 Vermilion snapper⁹⁹



Figure 95: Vermilion snapper, *Rhomboplites aurorubens*.

7.48.1 Landings

Table 192: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	507,970	613,770
2008	262,851	301,178
2009	225,311	261,109
2010	138,405	169,860
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

7.48.2 Discards

Table 193: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	94,761	32,528	484
2008	69,070	52,491	11,032
2009	63,126	60,784	15,810
2010	46,287	39,744	8,684
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

7.48.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 194.

Table 194: 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	1,694	1,691	14.1	1.2
GA.N.Florida	671	664	12.8	1.0
S.Florida	748	576	12.9	1.0
S. Atl.(5 yr)	11,840	11,397	13.6	1.2
S. Atl.(10 yr)	23,843	22,353	13.4	1.1

7.48.4 Effort

Table 195: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	854	1,090	54
2008	722	1,208	713
2009	840	1,291	953
2010	825	1,091	930
2011	696	1,046	870
2012	619	909	1,248
2013	562	783	1,106
2014	670	993	1,216
2015	646	1,170	1,910
2016	741	1,113	2,408

7.48.5 Catch per Unit Effort (CPUE)¹⁰⁰

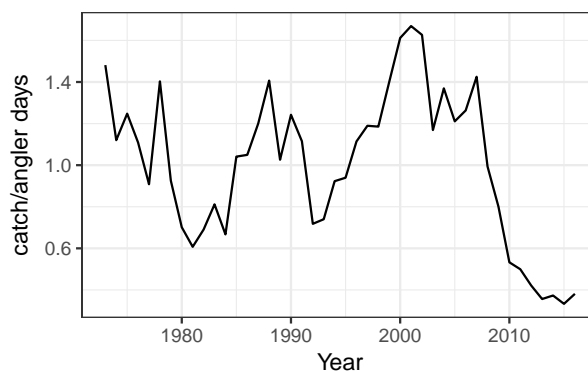


Figure 96: Nominal index (catch/angler days) from headboat logbooks.

⁹⁹Confidential data were replaced with asterisks (***)

¹⁰⁰The 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.

7.49 Warsaw grouper¹⁰¹



Figure 97: Warsaw grouper, *Epinephelus nigritus*.

7.49.1 Landings

Table 196: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	56	704
2008	103	1,151
2009	81	975
2010	69	1,059
2011	16	234
2012	***	***
2013	***	***
2014	41	1,684
2015	***	***
2016	***	***

7.49.2 Discards

Table 197: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007		16	3
2008	14	51	10
2009		16	7
2010	***	28	12
2011		25	8
2012		11	11
2013	***	19	6
2014	***	***	4
2015			3
2016			5

7.49.3 Dockside Intercept Sampling Program

Sample sizes, average length (in.) and weight (lb) are available in Table 198. Very few warsaw grouper were encountered from headboat trips.

¹⁰¹Confidential data were replaced with asterisks (***)

¹⁰²The 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.

Table 198: 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.Florida	***	***	***	***
S. Atl.(5 yr)	2	3	28.3	50.2
S. Atl.(10 yr)	21	23	26.9	19.7

7.49.4 Effort

Table 199: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	7	35	7
2008	7	80	10
2009	4	61	12
2010	***	59	11
2011		33	6
2012		10	5
2013	***	15	10
2014	***	***	14
2015			8
2016			11

7.49.5 Catch per Unit Effort (CPUE)¹⁰²

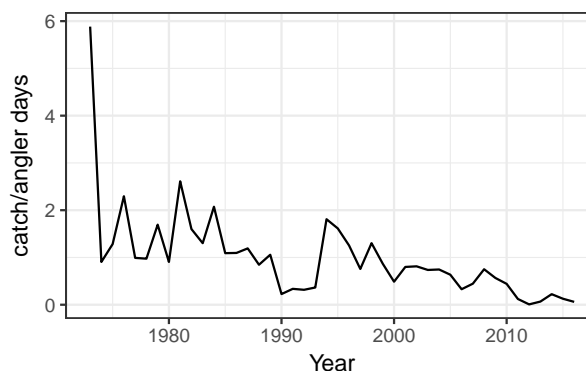


Figure 98: Nominal index (catch/angler days) from headboat logbooks.

7.50 White grunt¹⁰³

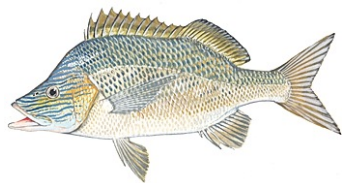


Figure 99: White grunt, *Haemulon plumieri*.

7.50.1 Landings

Table 200: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	257,042	262,040
2008	144,355	119,115
2009	148,006	138,015
2010	138,359	124,677
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

7.50.2 Discards

Table 201: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,976	291	16,158
2008	1,898	804	28,135
2009	892	1,931	35,147
2010	1,132	2,101	31,565
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

7.50.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 202.

¹⁰³Confidential data were replaced with asterisks (***)

¹⁰⁴The 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.

Table 202: 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	755	749	12.9	1.4
GA.N.Florida	42	42	14.4	1.9
S.Florida	3,077	2,688	10.2	0.6
S. Atl.(5 yr)	18,944	17,690	10.9	0.7
S. Atl.(10 yr)	32,359	30,677	11.0	0.8

7.50.4 Effort

Table 203: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	1,068	65	1,293
2008	916	73	2,042
2009	993	80	2,267
2010	1,344	99	2,226
2011	1,140	139	2,199
2012	1,016	132	3,015
2013	805	88	2,730
2014	1,011	73	4,304
2015	954	***	4,435
2016	1,058	52	4,093

7.50.5 Catch per Unit Effort (CPUE)¹⁰⁴

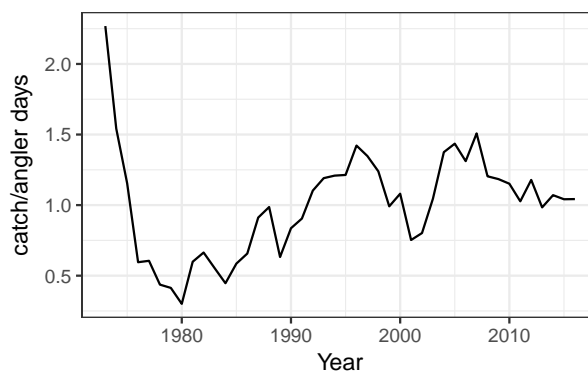


Figure 100: Nominal index (catch/angler days) from headboat logbooks.

7.51 Whitebone porgy¹⁰⁵

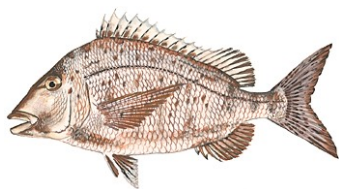


Figure 101: Whitebone porgy, *Calamus leucosteus*.

7.51.1 Landings

Table 204: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	6,454	8,006
2008	3,344	4,244
2009	3,076	3,583
2010	5,381	7,037
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

7.51.2 Discards

Table 205: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	111	26	166
2008	267	150	108
2009	6	58	177
2010		12	143
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

7.51.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 206.

Table 206: 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	71	70	12.9	1.3
GA.N.Florida	179	178	12.7	1.3
S.Florida	55	53	11.7	1.0
S. Atl.(5 yr)	1,747	1,697	12.6	1.4
S. Atl.(10 yr)	2,673	2,554	12.5	1.3

7.51.4 Effort

Table 207: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	303	366	171
2008	190	484	401
2009	124	463	542
2010	225	564	541
2011	266	581	419
2012	157	593	733
2013	136	609	763
2014	206	565	726
2015	255	746	656
2016	333	591	717

7.51.5 Catch per Unit Effort (CPUE)¹⁰⁶

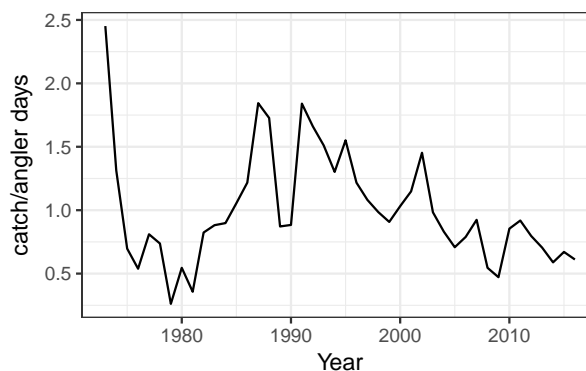


Figure 102: Nominal index (catch/angler days) from headboat logbooks.

¹⁰⁵Confidential data were replaced with asterisks (***)

¹⁰⁶The 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.

7.52 Yellowtail snapper¹⁰⁷



Figure 103: Yellowtail snapper, *Ocyurus chrysurus*.

7.52.1 Landings

Table 208: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	99,469	81,890
2008	100,831	91,143
2009	83,981	75,074
2010	99,898	85,553
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

7.52.2 Discards

Table 209: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	100	97	26,622
2008	47	264	40,914
2009		320	37,087
2010	***	174	35,530
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

7.52.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 210.

¹⁰⁷Confidential data were replaced with asterisks (***)

¹⁰⁸The 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.

Table 210: 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	27	27	15.8	1.7
S.Florida	4,713	3,977	14.0	1.0
S. Atl.(5 yr)	19,913	18,430	14.2	1.0
S. Atl.(10 yr)	30,274	28,434	14.2	1.0

7.52.4 Effort

Table 211: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	73	291	1,403
2008	23	211	3,006
2009	6	278	3,417
2010	***	113	3,761
2011	5	79	3,492
2012	6	92	4,558
2013	10	151	5,097
2014	9	179	8,095
2015	***	147	8,593
2016	***	96	7,030

7.52.5 Catch per Unit Effort (CPUE)¹⁰⁸

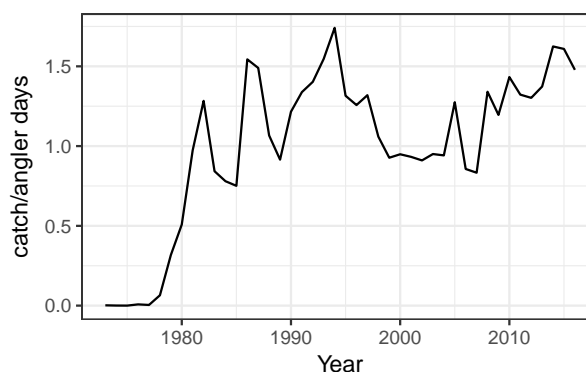


Figure 104: Nominal index (catch/angler days) from headboat logbooks.

7.53 Yellowfin grouper¹⁰⁹



Figure 105: Yellowfin grouper, *Mycteroperca venenosa*.

7.53.1 Landings

Table 212: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	234	1,586
2008	19	191
2009	17	174
2010	14	125
2011	10	83
2012	12	111
2013	***	***
2014	35	421
2015	18	118
2016	***	***

7.53.2 Discards

Table 213: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	42		2
2008	***		8
2009	***	***	
2010	***		4
2011	2		6
2012	***		4
2013	***		6
2014			3
2015	***		***
2016			***

7.53.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 214.

Table 214: 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.Florida	***	***	***	***
S. Atl.(5 yr)	10	9	29.1	12.9
S. Atl.(10 yr)	10	9	29.1	12.9

7.53.4 Effort

Table 215: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	17		7
2008	***		20
2009	***	***	10
2010	***		11
2011	6		8
2012	***		7
2013	***		13
2014			8
2015	***		***
2016			***

7.53.5 Catch per Unit Effort (CPUE)¹¹⁰

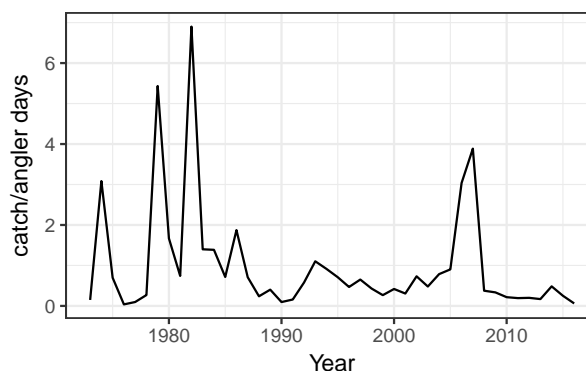


Figure 106: Nominal index (catch/angler days) from headboat logbooks.

¹⁰⁹Confidential data were replaced with asterisks (***)

¹¹⁰The 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.

7.54 Yellowmouth grouper¹¹¹



Figure 107: Yellowmouth grouper, *Mycteroperca interstitialis*.

7.54.1 Landings

Table 216: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	235	2,004
2008	40	341
2009	14	95
2010	15	101
2011	6	36
2012	***	***
2013	***	***
2014	***	***
2015	***	***
2016	***	***

7.54.2 Discards

Table 217: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	12	***	***
2008			4
2009		***	2
2010	***	***	***
2011	***		7
2012		***	3
2013	***		***
2014			***
2015			***
2016			***

7.54.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 218.

Table 218: 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.Florida	***	***	***	***
S. Atl.(5 yr)	3	6	24.9	7.2
S. Atl.(10 yr)	7	10	23.5	6.1

7.54.4 Effort

Table 219: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	24	***	***
2008	12		8
2009		***	10
2010	***	***	***
2011	***		5
2012		***	6
2013	***		***
2014			***
2015			***
2016			***

7.54.5 Catch per Unit Effort (CPUE)¹¹²

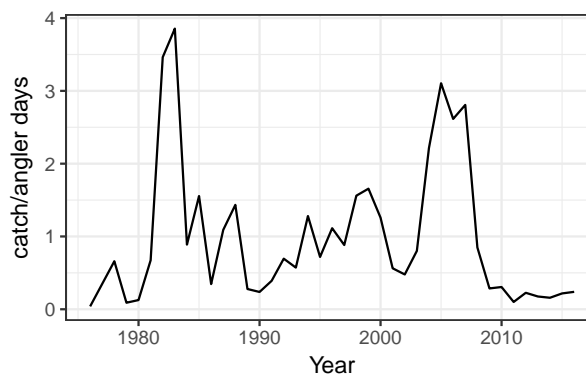


Figure 108: Nominal index (catch/angler days) from headboat logbooks.

¹¹¹Confidential data were replaced with asterisks (***)

¹¹²The 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.

7.55 Spottail pinfish¹¹³



Figure 109: Spottail pinfish, *Diplodus holbrookii*.

7.55.1 Landings

Table 220: Annual landings in number and weight (lb).

Year	Landings(n)	Landings (lb)
2007	64,132	41,003
2008	20,544	15,415
2009	25,658	19,188
2010	25,162	20,863
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

7.55.2 Discards

Table 221: Annual discards in number by region.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	6,373	39	2
2008	6,802	159	465
2009	15,744	133	27
2010	6,692	108	1
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

7.55.3 Dockside Intercept Sampling Program

Regional sample sizes, average length (in.) and weight (lb) are available in Table 222.

¹¹³Confidential data were replaced with asterisks (***)

¹¹⁴The 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.

Table 222: 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	1,828	1,822	10.4	0.7
GA.N.Florida	55	55	11.5	1.0
S. Atl.(5 yr)	7,320	7,271	10.5	0.8
S. Atl.(10 yr)	10,836	10,711	10.5	0.8

7.55.4 Effort

Table 223: Regional summary of all positive (caught and/or discarded) headboat trips for last ten years.

Year	Carolinas	GA.N.Fl.	S.Fl
2007	535	56	4
2008	584	81	14
2009	737	87	20
2010	847	79	8
2011	962	108	***
2012	1,041	74	21
2013	990	30	6
2014	928	64	***
2015	1,077	56	***
2016	1,202	72	6

7.55.5 Catch per Unit Effort (CPUE)¹¹⁴

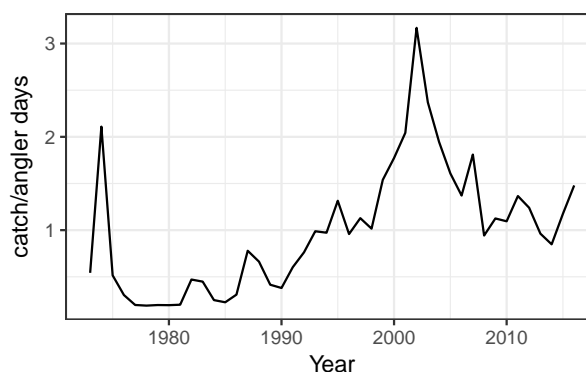


Figure 110: Nominal index (catch/angler days) from headboat logbooks.

8 Economic Data

Large for-hire fishing vessels, called headboats or party-boats, 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 2015. We only consider trips less than 13 hours and in order to focus on headboat-type vessels and trips we removed vessels that are not permitted to take more than six passengers and removed trips that took less than seven passengers. We also removed vessels with fewer than 10 trips in 2015. There were 5 vessels removed from the original set of permitted vessels in the South Atlantic, leaving 51 vessels. There were 1,026 trips removed from the original set of trips by permitted vessels in the South Atlantic, leaving 10,437 trips.

Descriptive statistics for trips in the South Atlantic are presented in Table 1. South Atlantic trips in 2015 used less fuel on average than the average Southeast trip. Trips in the South Atlantic also took fewer anglers, passengers, and crew on average than Southeast trips overall.

Table 1: Headboat Trip Characteristics (N=10,437)

	mean	sd	median	min	max
Gallons	59.47	60.62	30.00	6.00	500.00
Price per Gallon	3.32	0.76	3.40	1.26	6.63
Anglers	26.95	17.16	22.00	1.00	127.00
Passengers	27.03	17.23	22.00	7.00	160.00
Crew	1.85	0.96	2.00	1.00	6.00

The average trip characteristics by duration 2015 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

Duration	Gallons	\$/Gallon	Anglers	Passengers	Crew
1/2 day (3-5.99 hours)	35.92	3.44	25.23	25.26	1.63
3/4 day (6-7.99 hours)	69.08	3.30	30.27	30.43	2.24
Full day (8-9.99 hours)	138.85	2.89	31.39	31.56	2.57
Full day plus (10-12 hours)	205.27	2.60	33.29	33.63	2.49

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. Trips originating from ports in southern Florida use relatively less fuel, perhaps because the Gulf Stream is closer and fuel is more expensive in the urban areas. Similar maps are shown for the number of passengers and the number of crew in the other two panes of Figure 2.

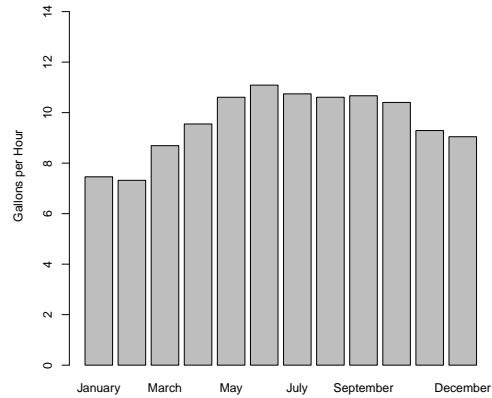


Figure 1: Gallons of Fuel Used per Hour on Headboat Trips by Month

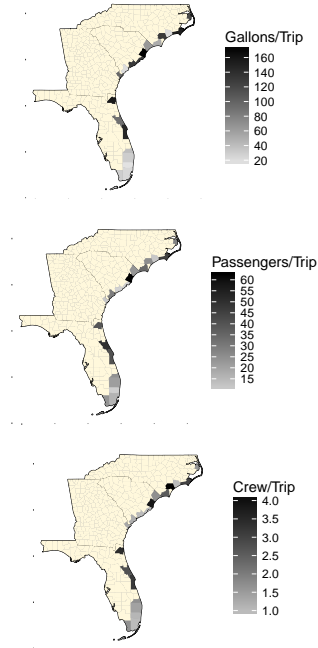


Figure 2: Headboat Trip Characteristics by Homeport County

9 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.