Recreational Effort, Catch, and Biological Sampling in Florida During the 2024 South Atlantic Red Snapper Season

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Executive Summary

Since 2012, the state of Florida has conducted specialized surveys to provide precise estimates of Red Snapper effort and catch during recreational mini-seasons in the South Atlantic (Sauls et al., 2017). This report summarizes methods and results for specialized surveys of the private and charter boat segments of the recreational fishery operating from the east coast of Florida during the 2024 recreational season for Red Snapper in the South Atlantic. The season took place over a single day in July (July 12th, 2024). Final estimates for the 2024 season are provided for both the private and charter boat segments of the recreational fishery.

During the 2024 season, weather conditions were favorable for offshore fishing. An estimated 16,981 ± 3,595 (SE) private boat angler trips targeted Red Snapper over the 2024 season, which is a 45.9% decrease from the previous year's two-day season. 2024 marks the first year a one-day season was held, and the season duration was likely a contributing factor. A total of 576 private boat parties were interviewed upon returning from trips and an estimated 11,822 ± 2,527 Red Snapper were harvested by private boat anglers.

For the federally permitted charter fleet, a total of 447 active charter vessels with a South Atlantic Snapper-Grouper permit were included in the sample frame, and 404 were selected for this survey. Of those selected, 80.9% responded to the dual mail / telephone survey. An estimated 763 ± 65 Red Snapper were harvested during 790 ± 54 angler trips from charter vessels over the one-day season. The majority (97.3%) of charter landings were from northeast Florida (Martin County north to the Georgia border).

The Red Snapper harvest season also provides a valuable opportunity to collect a large volume of fishery dependent biological samples including length, weight, and otoliths for aging. During the one-day season in 2024, biological data were collected from 669 Red Snapper in the private boat fleet and from 83 Red Snapper in the charter boat fleet. Fin clips were taken from fish for genetic sampling as part of the South Atlantic Red Snapper Research Program (https://www.scseagrant.org/south-atlantic-red-snapper-research-program/). Fin clips will be used to estimate South Atlantic Red Snapper abundance using Genetic close-kin mark recapture.

Section 1. Private Mode

Methods

The survey design and estimation methods for private boat mode described below were developed over prior Red Snapper seasons. Detailed methods are described in Sauls et al., 2017.

Sample Design — Off the Atlantic coast of peninsular Florida, recreational boaters must pass through one of nine navigable inlets to access Red Snapper fishing grounds in the Exclusive Economic Zone (Figure 1.1). Recreational boat traffic through these egress points was monitored during the season and boat traffic was observed during all of three time periods. The morning period began at local sunrise (6:30 a.m.) and ended at 10:00 a.m., the midday period began at 10:00 a.m. and ended at 3:15 p.m., and the evening period began at 3:15 p.m. and ended at local sunset (8:30 p.m.). Matanzas Inlet is a minor egress point and was not monitored during the Red Snapper season. A ratio adjustment calculated from monitoring in prior seasons was applied to St. Augustine to account for the small amount of additional effort through Matanzas Inlet.

A complementary intercept survey was also conducted to interview parties as they returned from boating trips to determine whether they were fishing for Red Snapper, measure catch rates and collect biological samples from harvested fish. Private boat launch sites adjacent to each of the eight monitored inlets were randomly selected. The boat party interview also collected data necessary for a complete accounting of recreational fishing effort specifically for Red Snapper. During an assignment, each party that returned from a recreational boat trip was interviewed to determine the proportion that exited through inlets for the purpose of targeting Red Snapper. The proportion of fishing trips that departed before sunrise and thus were not accounted for in the inlet boat count survey. Field procedures for conducting trip interviews with intercepted vessels are described in reports for previous years (Sauls et al., 2017; Vecchio et al., 2021; Sauls and Corbett, 2022; Corbett and Sauls, 2023).

Estimation

The following steps were used to estimate total fishing effort (Table 1.1):

1) The numbers of recreational boats observed exiting through each inlet during daylight hours was expanded to generate an unadjusted estimate of boat trips in the Atlantic Ocean across all inlets.

2) The estimated number of boat trips taken by federally permitted charter vessels (see next section) was subtracted to estimate the number of private recreational boat trips.

3) The estimated private recreational boat trips were multiplied by the proportion of private recreational boat parties and non-federally permitted charter parties that reported targeting Red Snapper during intercept survey interviews.

4) The estimated boat trips that targeted Red Snapper were adjusted to account for additional boat parties that reported exiting through inlets before sunrise to target Red Snapper.

5) The adjusted boat trips that targeted Red Snapper were multiplied by the mean number of anglers per intercepted boat party to get the total estimated number of angler trips targeting Red Snapper.

Landings were estimated by multiplying total effort by the mean catch per angler trip, the metric used for catch per unit of effort (CPUE) estimated from intercept data. Intercept data are weighted by proportional fishing effort across inlets. A description of calculations is provided in prior years' reports and in Sauls et al., 2017.

Results

Overall, the weather was generally favorable for offshore fishing during the 2024 season. National Oceanographic and Atmospheric Administration (NOAA) National Data Buoy Center wind speed, direction, and wave height data from offshore of Cape Canaveral indicated mostly southern winds for the duration of the season with an average wind speed of 5 mph and gusts ranging from 2-9 mph. Buoys stationed offshore from Fernandina Beach to Fort Pierce indicated wave height ranging from 1-3 feet, air temperature between 80-87 degrees Fahrenheit and sea surface temperature between 83-87 degrees Fahrenheit (NOAA 2024).

An estimated 16,981 ± 3,595 (SE) angler trips targeted Red Snapper over the one-day season, which represents a 45.9% decrease compared to the two-day season in 2023. Mean daily fishing effort in 2024 was the second highest recorded since the survey began in 2012; the highest being the two-day season in 2023 (Figure 1.2). A total of 576 private boat parties were interviewed upon returning from trips in the ocean and 80% reported fishing for Red Snapper. Overall CPUE for landed fish was 0.696 ± 0.021 (Table 1.2), which has not varied significantly in recent years (Vecchio et al., 2021; Sauls and Corbett, 2022; Corbett and Sauls, 2023). Catch rates for harvested fish were highest in St. Augustine, Port Canaveral, and Ponce Inlet (Table 1.2). An estimated 11,822 ± 2527 Red Snapper were harvested during the season. Harvested Red Snapper averaged 600 ± 4.75 mm fork length and 4.054 ± 0.086 kg.

For every Red Snapper harvested during the one-day season, an estimated 1.6 fish were released as discards. The overall discard rate was 1.12 ± 0.11 fish per angler trip and ranged as high as 1.74 ± 0.37 in Mayport to as low as 0.20 ± 0.13 in St. Lucie (Table 1.3). A total estimated 19,064 ± 4,436 Red Snapper were released during the season (Table 1.3). There was a 55% decrease in estimated discards in 2024 compared to the two-day 2023 season. Amongst released fish, there has been a notable increase in the proportion of parties that used a descender device on their trip in recent years (Figure 1.3). Before the 2020 season (when having a descending device onboard was first required), descender device use was rarely reported (<3% of fishing parties interviewed). Since then at least one quarter of fishing parties report using a descender device during the Red Snapper season (Table 1.5).

Table 1.1. Effort estimates for private boat mode by nearest inlet for 2024. All uncertainty estimates are ± SE.

Inlet	Number of boat parties intercepted	Mean anglers per party	Proportion of trips targeting Red Snapper	Proportion of trips departing after sunrise	Targeted boat trips	Targeted angler trips
Cumberland	50	4.22±0.22	0.83±0.076	0.60±0.0731	213±121	900±512
Mayport	35	3.88±0.21	0.94±0.054	0.56±0.085	729±300	2,831±1,171
St Augustine	71	4.37±0.25	0.93±0.038	0.72±0.054	413±165	1,803±725
Ponce Inlet	75	3.88±0.18	0.65±0.100	0.26±0.055	1,173±687	4,546±2,669
Port Canaveral	148	4.43±0.15	0.96±0.027	0.42±0.041	899±385	3,980±1,707
Sebastian Inlet	74	3.73±0.19	0.81±0.069	0.51±0.061	450±193	1,681±724
Fort Pierce	105	3.33±0.13	0.62±0.067	0.57±0.055	262±112	872±375
St. Lucie	18	3.00±0.94	0.27±0.114	0.67±0.193	123±75	368±243
Overall	576	4.01±0.073	0.79±0.025	0.50±0.022	4,262±898	16,981±3,595

Table 1.2. Mean CPUE (landings per angler trip), estimated total landings (# of fish), mean weight (kg), and estimated total landings (kg). All uncertainty is expressed as ± SE.

Inlet	**CPUE**	**Landings (# fish)**	**Mean weight (kg)**	**Landings (kg)**
Cumberland	0.83±0.053	742±424	3.87±0.22	
Mayport	0.72±0.065	2,028±856	3.79±0.21	
St Augustine	0.85±0.042	1,537±622	4.51±0.18	
Ponce	0.73±0.047	3,339±1,968	4.20±0.22	
Port Canaveral	0.78±0.032	3,084±1,327	4.44±0.11	
Sebastian	0.44±0.056	740±330	4.01±0.29	
Fort Pierce	0.27±0.046	236±108	2.75±0.23	
St. Lucie	0.10±0.091	37±35	3.18±0.49	
Overall	0.70±0.021	11,822±2,527	4.05±0.086	47,930±10,296
c.v.	0.031	0.214	0.0213	0.215

Table 1.3. Mean releases per angler trip and estimated total landings ±SE.

Inlet	Mean Release per angler trip	Estimated Releases (numbers of fish)
Cumberland	1.06±0.24	949±568
Mayport	1.74±0.37	4,926±2,249
St Augustine	1.29±0.26	2,329±1,030
Ponce	1.12±0.24	5,072±3,106
Port Canaveral	1.12±0.22	4,438±2,063
Sebastian	0.48±0.14	809±406
Fort Pierce	0.42±0.13	368±188
St. Lucie	0.20±0.13	74±60
Overall	1.12±0.11	19,064±4,436
c.v.	0.099	.233

Table 1.4. Season length and total catch estimates for private boat mode expressed in numbers of Red Snapper during 2024 as compared to previous monitored seasons. Error is shown as SE.

Year	Month(s)	Number of days	Estimated harvest	Estimated discards
2024	July	1	11,822 (±2,527)	19,064 (±4,436)
2023	July	2	26,915 (±6,843)	34,864 (±9,143)
2022	July	2	16,324 (±4,549)	24,273 (±7,142)
2021	July	3	30,206 (±3,159)	54,685 (±5,541)
2020	July	4	30,921 (±5,820)	Not available
2019	July	5	37,750 (±6,292)	56,648 (±10,163)
2018	August	6	30,050 (±6,256)	41,660 (±10,057)
2017	Nov.-Dec.	9	5,390 (±475)	4,331 (±561)
2014	July	8	22,013 (±2,782)	9,755 (±1,741)
2013	August	3	6,999 (±1,321)	5,033 (±1,512)
2012	Sept.	6	11,136 (±1,734)	17,587 (±9,031)

Table 1.5. Proportion of fishing parties interviewed during 2024 that reported discarding Red Snapper in-season by release method. Data were summarized for parties that reported releasing all fish at the surface without applying a barotrauma mitigation technique (surface release only), venting at least some (or all) fish released at the surface (venting), descending at least some fish (descending), or venting and descending at least some fish (venting and descending).

Inlet	Fishing parties (n)	Surface release only	Venting	Descending	Venting and descending
Cumberland	28	0.429	0.250	0.214	0.107
Mayport	24	0.250	0.417	0.125	0.208
St. Augustine	50	0.240	0.480	0.180	0.100
Ponce Inlet	9	0.667	0.111	0.222	0.000
Port Canaveral	84	0.226	0.333	0.321	0.119
Sebastian Inlet	21	0.190	0.190	0.476	0.143
Fort Pierce	17	0.176	0.412	0.353	0.059
St. Lucie	3	0.667	0.000	0.333	0.000
Overall	236	0.271	0.343	0.271	0.114

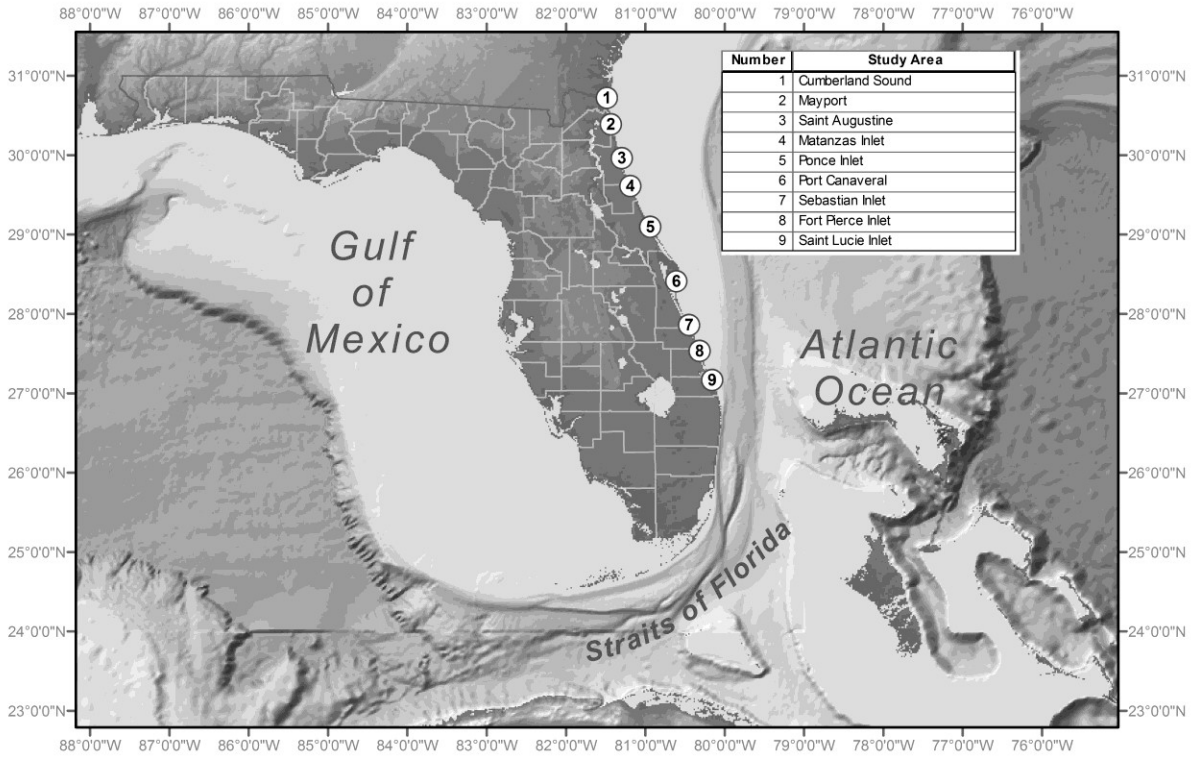

Figure 1.1. Geographic area of study and inlets included in study area.

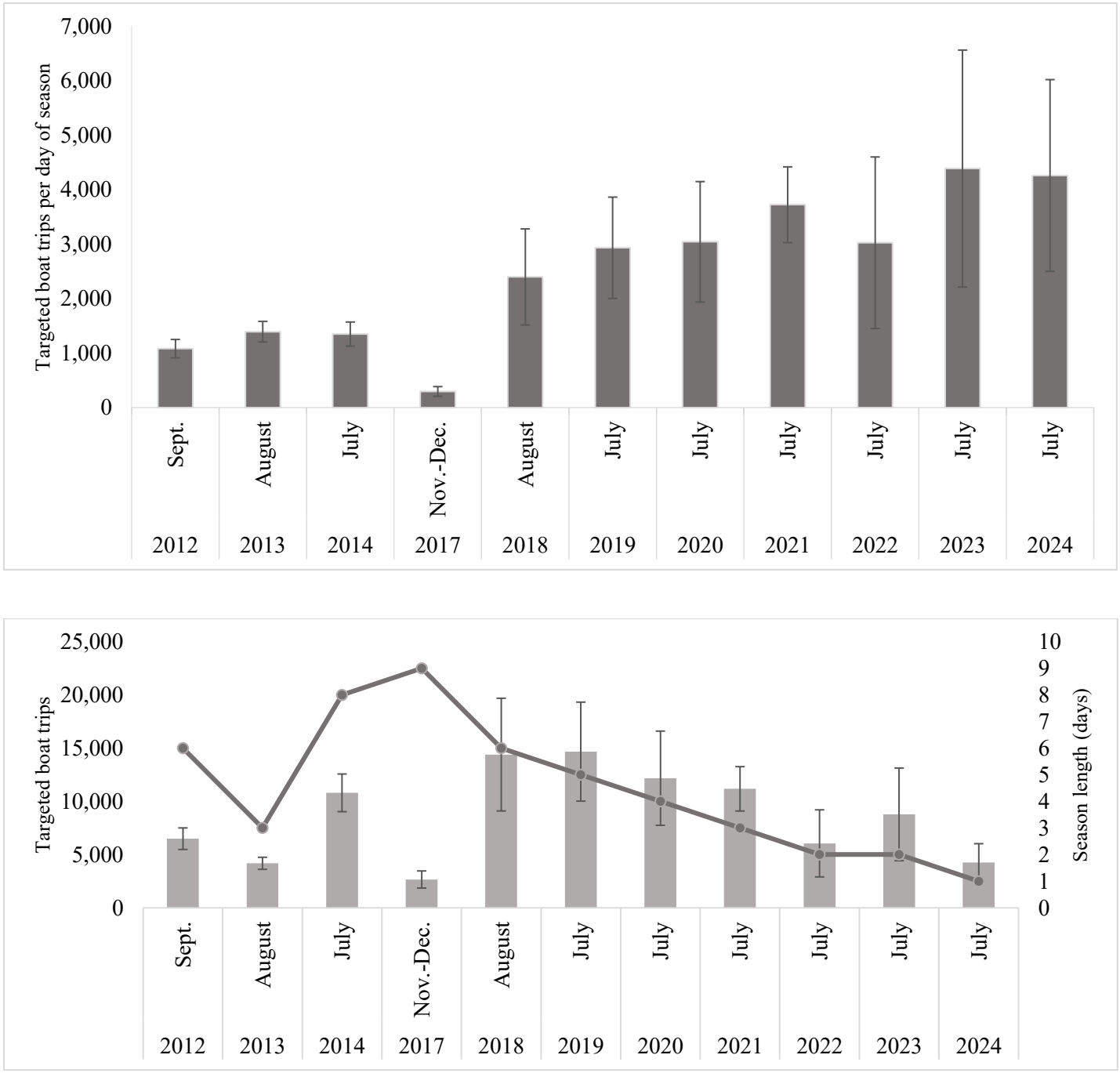

Figure 1.2. Mean boat parties per day that targeted Red Snapper during the harvest season (top panel), and total estimated boat trips with season length as a second axis (bottom panel).

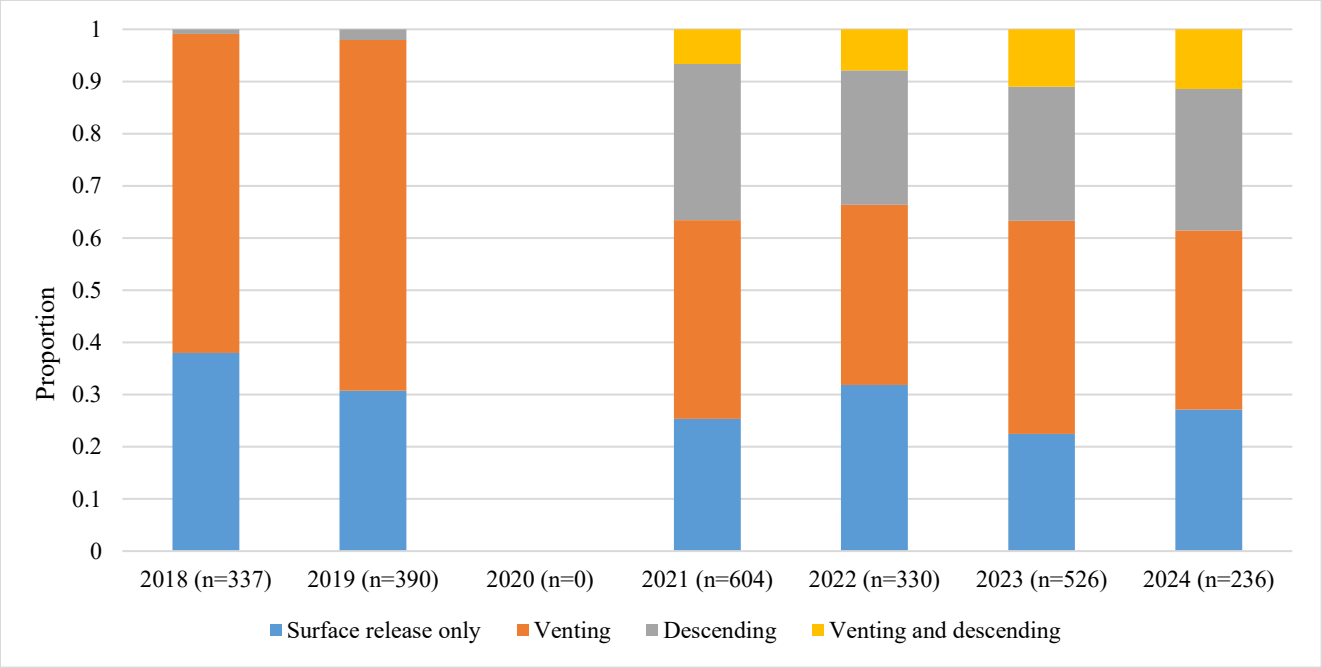

Figure 1.3. Proportion of fishing parties interviewed by year that reported release method techniques. Data on release methods was not collected in 2020 due to the covid pandemic.

Section 2: Charter Mode

Methods

Mail / Telephone Survey — A list of for-hire vessels with federal permits in the South Atlantic is provided to the Florida Fish and Wildlife Research Institute (FWRI) by the NOAA Fisheries Southeast Regional Office (SERO) prior to the season opening. This wave 4, 2024 directory allows for the identification of the population of active charter vessels included in the Marine Recreational Information Program (MRIP) For-Hire Survey (FHS) in Florida that possess a South Atlantic Snapper-Grouper permit during the July 2024 season. This population is surveyed on their fishing activity during the Red Snapper season in the South Atlantic and responses are used to generate an expanded estimate of effort and catch. The permit list was merged (using the vessel registration number) with an up-to-date list of active charter vessels operating in Florida. This list is maintained by FWRI for NOAA Fisheries and serves as the sample frame for the telephone survey portion of the MRIP For-Hire Survey (FHTS; for complete documentation: https://media.fisheries.noaa.gov/2021-09/MRIP-Survey-Design-and-Statistical-Methods-2021-09-15.pdf). Vessels selected to participate in the FHTS (10% sampled weekly) during the South Atlantic Red Snapper season were excluded from FWC's survey. All remaining vessels were selected to report Red Snapper trips during the 2024 season.

Two weeks before the July fishing season opened, each selected vessel was sent a letter describing the intent of FWC staff to collect catch and effort data for charter trips targeting or harvesting Red Snapper. The letter explained that captains could participate in the survey by completing and returning the enclosed log sheet (Appendix 1). If the log sheet was not returned, FWC attempted to contact vessel operators by telephone up to two weeks after the Red Snapper season. The log sheets were printed on waterproof paper to encourage captains to fill it out while on the boat to improve the accuracy of responses. A postage-paid envelope was also provided to encourage prompt return of the log sheet. The logs provided space to record trip and catch level data for up to three trips that targeted Red Snapper on each day the Red Snapper season was open, including: number of anglers, number of passengers, trip origin (state and county), distance from shore and depth fished, dock to dock hours, hours fished, and numbers of Red Snapper harvested and released (Appendix 2). Each vessel representative was called up to five times, until a successful contact was made or until their mailed log sheet was received (Figure 2.1). Vessels that did not return the log sheet or that could not be contacted by the fifth call attempt were marked as non-contacts for the fishing season.

Catch and Effort Estimation – Survey responses were used to estimate the total number of charter boat trips that targeted Red Snapper, charter angler trips that targeted Red Snapper, and numbers of Red Snapper harvested and discarded by all active federally permitted charter vessels during the South Atlantic Red Snapper fishing season. The formula used to calculate the total boat trips, angler trips, and numbers of fish harvested and released for each region is:

$$\hat{Y} = \sum_{i=1}^{n} w_h y_{h,i} \quad (2.1)$$

Where $y_{h,i}$ corresponds with the total number of boat trips, anglers, or fish reported by respondent *i* in region *h* during the time when Red Snapper harvest was open. The sample

weight, w_h, accounts for variable participation and survey response rates across different regions of the state and was calculated as:

$$w_h = {}^{N_h}/_{n_h} \quad (2.2)$$

Where N_h is the total number of active federally permitted charter vessels in Florida, and n_h is the total number of charter vessels that were interviewed in the dockside intercept survey. The Northeast region included permitted vessels with a home port in one of the counties on the Atlantic coast of Florida where Red Snapper are most likely to be targeted during the South Atlantic season (Table 2.1). Additionally, vessels with home ports in southeast Florida, Monroe County, and the Gulf coast of the state were treated as three separate strata in the estimation (Table 2.1). The SAS procedure, PROC SURVEYMEANS, was used for this estimation (Appendix 3), and the variance is calculated using the Taylor Series method (SAS Enterprise Guide, 2020).

Undercoverage Adjustment – Off-frame charter vessels that were encountered during surveys described in section 1 were included in expansions for total effort in the private boat fishery (described in section 1, above). Thus, an under-coverage adjustment was not applied to the estimates of fishing effort for charter mode, since this would result in an over-estimate of total recreational landings for both modes combined.

Results and Discussion: Charter Mode

The 2024 South Atlantic Red Snapper season marked the eighth year that a dual mail / phone survey was used to collect trip level data from the federal for-hire fleet. The survey was distributed to a total of 404 permitted vessels, with an overall response rate of 80.9% (Table 2.2) and has maintained a minimum 80% response rate since 2022 (Table 2.3). Estimates of boat trips, angler trips, harvest, and discards were generated for northeast Florida (Nassau to Martin Counties), southeast Florida (Palm Beach to Miami-Dade Counties), and the Florida Keys (Monroe County; Table 2.4). Overall, during the 2024 season, an estimated 763 ± 65 (SE) Red Snapper were harvested during 159 ± 9 charter boat trips. Trip details provided by 100 charter vessels operating in northeast Florida reported an average fishing depth of 33.37 ± 13.52 m and distance from shore of 22.71 ± 9.42 mi. The 2024 survey yielded eight trip-level reports from the Florida Keys. These Florida Keys trip reports indicate that charter trips occurred closer to shore (24.29 ± 18.21 mi from shore), but at deeper depths (89.92 ± 22.07 m) than northeast Florida Trips. The survey additionally yielded one trip level report from the west Florida region (Escambia to Collier Counties) with a reported depth of 19.81 m, 13 mi from shore. No Red Snapper trips were reported by respondents from vessels with home ports in southeast Florida.

Table 2.1. Regional groupings of coastal counties used for generating catch and effort estimates.

Region	Coastal Counties
Northeast	Nassau, Duval, Clay, St Johns, Flagler, Volusia, Brevard, St. Lucie, Martin
Southeast	Palm Beach, Broward, Miami-Dade
Keys	Monroe
West Florida	Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Wakulla, Taylor, Dixie, Levy, Citrus, Hernando, Pasco, Pinellas, Hillsborough, Manatee, Sarasota, Charlotte, Lee, Collier

Table 2.2. Survey frame, summary of response via mail and phone, and response rates by region for the 2024 season.

Region	Charter Vessels	Total Selected	Proportion Selected	Mail Responses	Phone Responses	Response Rate
Northeast	184	166	0.902	30	91	0.747
Southeast	55	51	0.927	7	38	0.882
Keys	153	139	0.908	15	101	0.835
West Florida	55	48	0.873	16	26	0.875
Overall	447	404	0.904	68	256	0.809

Table 2.3. Table of response rates during 2017-2024, the time frame that the combined mail-telephone survey has been conducted.

Year	Northeast	Southeast	Keys	West Florida	Overall
2024	0.747	0.882	0.835	0.875	0.809
2023	0.817	0.830	0.794	0.839	0.812
2022	0.814	1.000	0.725	0.864	0.808
2021	0.846	0.522	0.772	0.831	0.779
2020	0.731	0.447	0.709	0.886	0.724
2019	0.688	0.683	0.691	0.907	0.740
2018	0.703	0.816	0.777	0.902	0.792
2017	0.846	0.763	0.768	0.875	0.803

Table 2.4. Total estimated effort and catch (±SE) from active, federally permitted charter vessels.

Region	Targeted Boat Trips	Targeted Angler Trips	Total Fish Harvested	Mean Weight per Fish (lb.)	Total Pounds Landed	Total Fish Released
Northeast	148 (±9)	755 (±53)	742 (±65)			1,425 (±180)
Southeast	0	0	0			0
Keys	11 (±2)	34 (±7)	22 (±8)			17 (±7)
Overall	159 (±9)	790 (±54)	763 (±65)	3.933 (±0.100)	3,001 (±268)	1,436 (±307)

Table 2.5. Mean daily charter effort in 2024 compared with prior years.

Year	Season Length (Days)	Targeted Boat Trips	Targeted Boat Trips per Day	Angler Trips	Angler Trips per Day
2024	1	159	159	790	790
2023	2	284	142	1,432	716
2022	2	266	133	1,347	674
2021	3	372	124	3,785	1262
2020	4	592	148	2,783	696
2019	5	584	117	2,899	580

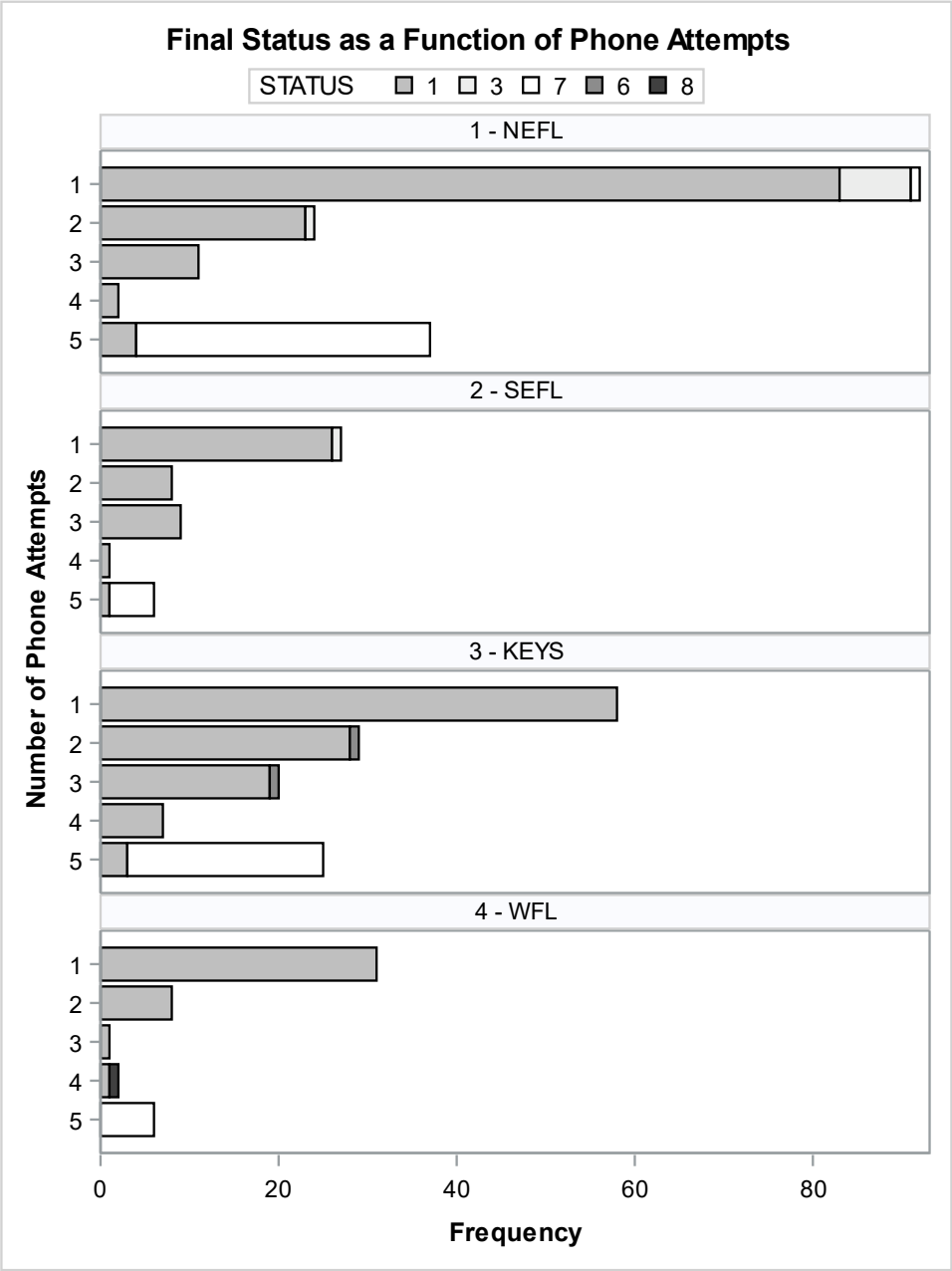

Figure 2.1. Frequency of attempted phone calls to federally permitted charter representatives, as a function of the status after the final call. Status Codes: 1=Complete interview, 2=Incomplete, but all key questions answered, 3=Refusal, 4=Language barrier, 5=Mid-Interview refusal, 6=Ineligible, 7=Unable to Contact, 8=Inactive.

Section 3. Biological Sampling

Methods

The Red Snapper harvest season provides an opportunity to collect fishery dependent biological samples from a species with a very short open season. Biological samples were collected from both the private boat and charter boat fisheries (described above in Sections 1 and 2). Each fish was measured (at midline in mm) and weighed (kg). One otolith was extracted for ageing and fin clip tissue samples were taken for genetic testing.

To account for varied sampling rates across inlets in the study area, sample weights were calculated. For private boat catch, sample weights were calculated for each inlet as:

$$W_h = {}^{\hat{C}_h}/_{n_h} \tag{3.1}$$

where $\hat{C}_h$ is the estimated landings for inlet h (reported in Table 1.3), and n is the number of fish sampled in inlet h (reported in results section below). Sample weights for each inlet were used to calculate an overall weighted mean for fork length (mm) and kilograms for landed fish (using the survey means procedure in SAS; SAS Enterprise Guide, 2020. The sample weights for fish in each 1 cm length bin were also summed and divided by the sum of all sample weights (equal to total estimated landings) to calculate the weighted proportion of fish in each size category.

Red Snapper otoliths were assigned a unique sample number and associated data entered into the central database for fishery dependent biological samples housed at FWRI. Otoliths collected during the 2024 season were sectioned and aged in house at FWRI's Age and Growth Lab. Fin clips taken for genetic analysis were shipped to the Marine Genomics Lab at Texas A&M University – Corpus Christi as a part of the South Atlantic Red Snapper Research Project. All resulting biological data will be shared with analysts from the NMFS Southeast Fisheries Science Center for the next SEDAR stock assessment update.

Results

Biological samples were collected during intercept assignments from both the private boat and charter fisheries. Sample sizes during 2024 are provided in Table 3.1. Overall, 2024 yielded a smaller charter fleet sample size than previous years (Vecchio et al., 2021; Sauls and Corbett, 2022; Corbett and Sauls, 2023) due to under coverage of opportunistic charter sites. St. Augustine had a larger sample size of charter boats in because the site selected for private boat sampling also had charter boat pressure. The length frequency of fish harvested by private boat anglers and charter boats is shown in Figure 3.1. Red Snapper sampled from the private boat fishery had a mean length of 606.18 mm ($\pm$4.66) and mean weight of 4.15 kg ($\pm$0.089). Red Snapper sampled from charter boats that were included in the charter survey averaged 618.22 mm ($\pm$12.22) and 4.39 kg ($\pm$0.237).

Table 3.1. Numbers of fish sampled from private boat and charter boat trips.

PRIVATE BOAT				
Inlet	Lengths	Weights	Otoliths	Genetic Samples
Cumberland	76	76	75	75
Mayport	72	71	72	72
St. Augustine	71	63	62	61
Ponce Inlet	98	86	98	97
Port Canaveral	226	219	227	227
Sebastian Inlet	59	56	57	57
Fort Pierce Inlet	66	64	66	66
St. Lucie Inlet	1	1	1	1
Total	669	636	658	656
CHARTER BOAT				
Cumberland	0	0	0	0
Mayport	0	0	0	0
St. Augustine	64	60	64	64
Ponce Inlet	2	2	2	2
Port Canaveral	0	0	0	0
Sebastian	0	0	0	0
Fort Pierce	1	1	1	1
St. Lucie Inlet	16	15	15	16
Total	83	78	82	83

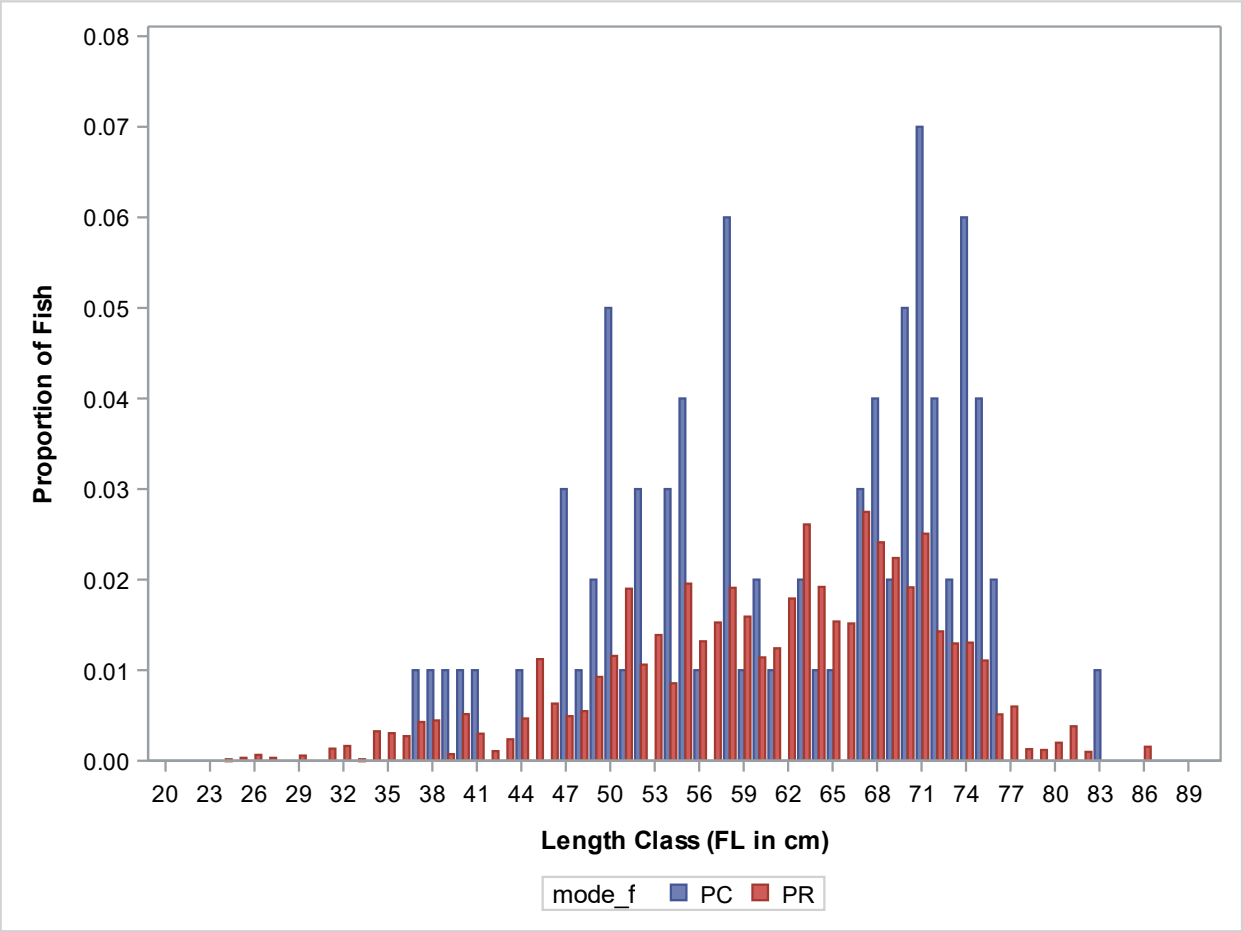

Figure 3.1. Size distribution of harvested Red Snapper sampled from private boat (PR) and charter boat (PC) trips sampled during 2024. Samples from private boats are weighted proportional to total estimated landings for each inlet. Lengths are shown as fork length (FL) in centimeters (cm).

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Appendix 1. Letter sent to federally permitted charter representatives the week prior to the South Atlantic Red Snapper Season opening.

FWC RED SNAPPER SURVEY

Florida Fish and Wildlife Conservation Commission

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Coral Gables

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Jessica Crawford
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Managing fish and wildlife resources for their long-term well-being and the benefit of people.

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MyFWC.com/Research

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July 1, 2024

Dear Florida Charter Vessel Operator:

The 2024 federal red snapper recreational fishery in the South Atlantic will be open for one day, July 12th. The state of Florida is requesting your assistance so that we can collect more precise information on the numbers of charter trips and numbers of red snapper harvested during this short season. You are receiving this letter because our records show that you have a valid South Atlantic Headboat/Charter Snapper-Grouper permit. Enclosed is a log sheet printed on waterproof paper that may be used to keep track of your charter fishing activity during the 2024 federal red snapper recreational season. You may respond to this survey in one of two ways:

1. At the close of the federal red snapper season, return the completed log sheet using the self-addressed postage-paid envelope. If your charter business is not offering charter fishing trips in the Atlantic Ocean during the 2024 season, simply record this information at the top of the log sheet and mail it to us at your earliest convenience.

2. After July 12th, an FWC biologist will contact you by telephone to conduct a short interview and collect information about your charter fishing activity during the red snapper season. If you have already mailed your log sheet to FWC when you receive our call, please let the caller know and we will not contact you again.

NOTICE

This date (July 12th, 2024) is subject to change if NOAA Fisheries determines a Small Craft Advisory will exist or is projected to exist. Any change in the date of the recreational season will be announced in the Federal Register, *Fishery Bulletin, and an announcement via NOAA Weather Radio.*

Should the 2024 recreational season change from its scheduled date, FWC biologists will not contact you until after the conclusion of the moved season. If you plan to take part in charter fishing activity, please keep the logbook pages to complete during the new season date.

We are collecting this additional information because the regular dockside intercept survey (when FWC biologists interview charter customers at the dock) was not designed to precisely estimate landings over very short fishing seasons. Therefore, your assistance during this special season is requested to ensure that we collect the best data possible to assess the federal red snapper season. Results from this survey will be shared directly with federal fishery managers for use in monitoring landings during the 2024 season and stock assessment updates for red snapper.

FWC will also be conducting dockside surveys with charter boat and private recreational anglers as they return from red snapper fishing trips. Biologists will ask for permission to weigh and measure fish and collect samples to determine the age of each fish. The recreational harvest season offers our only opportunity to collect this vital information for use in future stock assessments. To learn more about these efforts, please visit our website. A copy of the report produced last year is available at https://myfwc.com/research/saltwater/fishstats/srfs/atlanticredsnapper/. Please feel free to contact me, Beverly Sauls, at (727) 896-8626 or FishStats@MyFWC.com if you have any questions or concerns. Thank you for your cooperation.

Sincerely,

Beverly Sauls

Beverly Sauls
Research Administrator

Appendix 2. Log sheet send to federally permitted charter representatives the week prior to the South Atlantic Red Snapper season opening.

Florida – Red Snapper Survey Log Vessel Name: Vessel Number:

Did you participate in the 2024 Federal South Atlantic Red Snapper Season (Trips where you caught or tried to catch Atlantic Red Snapper)? *YES* *NO*
If you circled yes above, please complete the log sheet below. ***Only report trips where Atlantic Red snapper were harvested, released at sea, or targeted.***

Please return all completed log sheets with the self-addressed postage-paid envelope provided. Thank you for your participation.

Trip No.	Trip Type (Charter, Headboat, or Other)	No. of Anglers	No. in Party	Origin of Trip		Miles from Shore (range)	Miles from Shore (majority of trip)	Depth Fished (majority of trip)	Time Trip Started (24hr)	Time Trip Ended (24hr)	Time Spent Fishing (nearest half-hr)	No. of Atlantic Red Snapper Kept	No. of Atlantic Red Snapper Released
				State	County								
1													
2													
3													

Please write any additional comments about the season or your trips below or on the back of this sheet.

Appendix 3. The PROC SURVEYMEANS code used in SAS to generate the estimated number of charter boat trips that targeted Red Snapper, charter angler trips that targeted Red Snapper, and numbers of fish harvested and discarded by all active federally permitted charter vessels during the 2024 South Atlantic Red Snapper season.

```
 *CALCULATE ESTIMATES FOR TRIPS TAKEN, NUMBER OF TOTAL ANGLERS, NUMBER OF HARVESTED FISH, NUMBER OF RELEASED FISH;
proc surveymeans data=merg2 total=population sum sumwgt varsum cvsum stderr;
    strata region ;
    var rf_trips anglers num_harv num_rel;
    weight w;
    domain region ;
    ods output StrataInfo=stratinfo statistics=stats domain=domainstats;
    run;
```