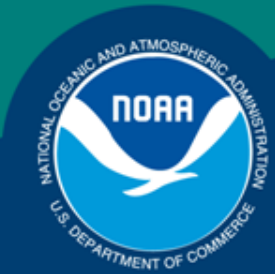


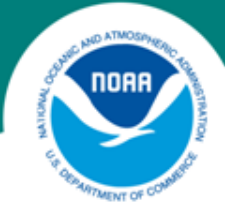
Science, Service, Stewardship



South Atlantic Recreational Landings Estimation and Projection

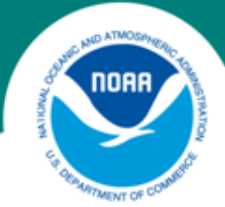
Southeast Fisheries Science Center
Southeast Regional Office
Office of Science and Technology

**NOAA
FISHERIES
SERVICE**



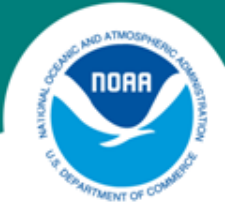
PRESENTATION OUTLINE

- How estimates of recreational landings are made:
 - MRIP private and shore fishing
 - For-hire survey (FHS) charter boat
 - SE Region Headboat Survey (SRHS)
- How projections of future landings and closure dates were calculated for the 2011/12 fishing season
- Tables related to 2011 sampling



DATA COLLECTION OBJECTIVES

- Coastwide monitoring of:
 - marine recreational fishing effort
 - marine recreational catch per trip (CPUE)
- Reliable annual, regional estimates of:
 - total fishing effort
 - total angler catches by species
 - landings
 - discards



MUTIPLE SURVEYS FOR MULTIPLE MODES

- Marine Recreational Fisheries Surveys
 - Shore fishing effort and catch
 - Private/rental boat fishing effort and catch
- For-Hire Survey (FHS)
 - Charter boat fishing effort and catch
- Southeast Region Headboat Survey (SRHS)
 - Headboat fishing effort and catch



MRIP PRIVATE AND SHORE EFFORT

Coastal Household Telephone Survey

- Surveys households in coastal counties
- Random-digit-dialing sampling method
- Only gathers fishing effort (number of trips) from coastal residents' marine recreational fishing activity
- No catch information is collected.
- For each fishing trip:
 - Mode of fishing (shore, private boat)
 - State and county of fishing access
 - Date and time of return
 - Private vs. public access

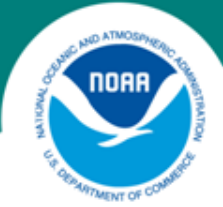




MRIP CHARTER BOAT EFFORT

For-Hire Telephone Survey

- Surveys charter boats only in South Atlantic
- Utilizes directory of charter boats
- Weekly survey within 2-month 'wave'
 - Selects random sample of vessels
 - Contacts operators/owners
 - Collects fishing effort only
 - (trips & number anglers per trip)
 - Only one week recall



HEADBOAT EFFORT

Headboat Activity Report

- Monthly total number of trips by vessel by trip type tabulated from logbook reports and expanded (as necessary) using ticket office reports, direct observation, and other information
- Reported and total trips converted to angler days using log reports, ticket office reports, and recent average anglers per trip type





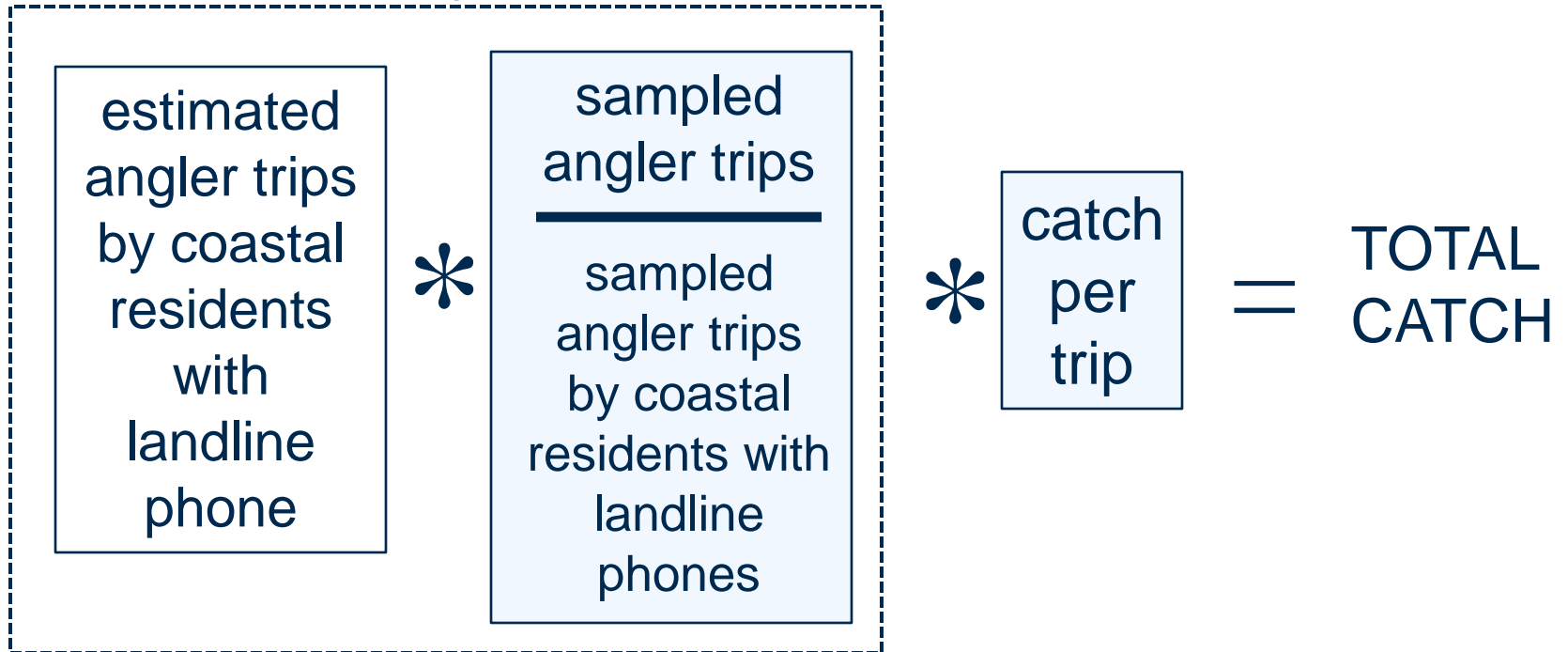
MRIP Private, Shore and Charter Catch Rates Access-Point Angler Intercept Survey

- Interview anglers about completed trips at fishing sites
- Sampler located to intercept all (not selective!)
- Weighted site selection (high-use sites sampled more frequently than low-use sites)
- Data obtained:
 - Angler – avidity, home location
 - Trip data – mode, area & hours fished, fish sought
 - Catch data – # per species, disposition, size (measure & weigh)



MRIP Private and Shore Catch Estimation

Total angler trips



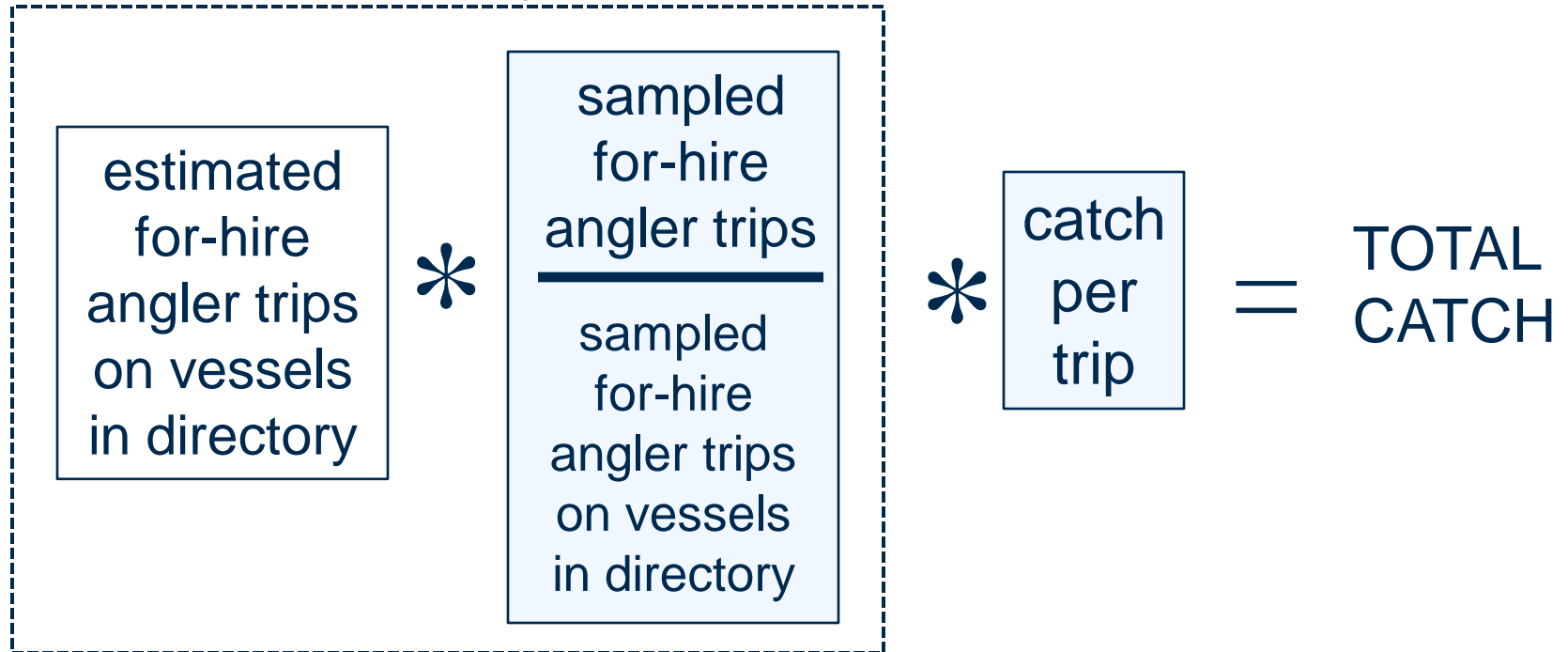
Coastal Household
Telephone Survey

Angler Intercept Survey



MRIP Charter Catch Estimation

Total for-hire angler trips



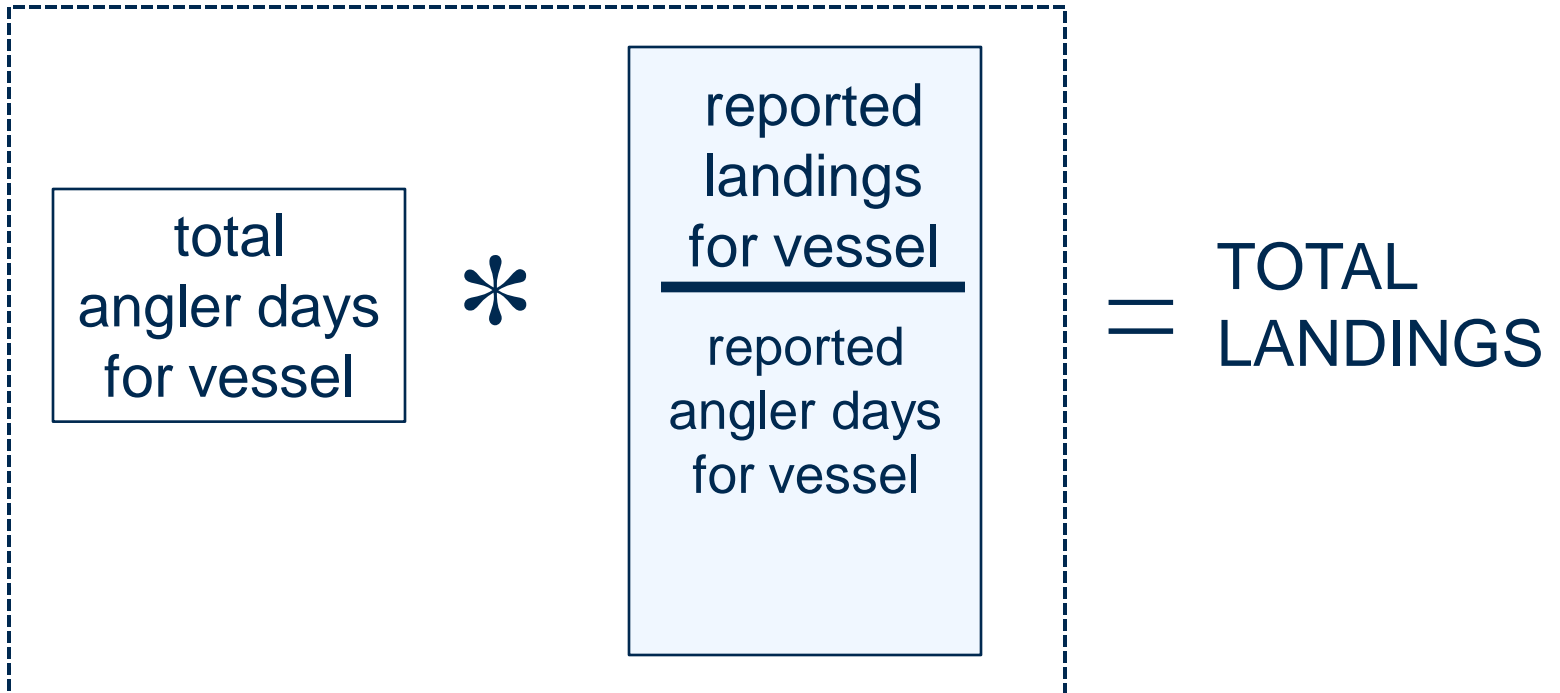
For-Hire Telephone
Survey

Angler Intercept Survey



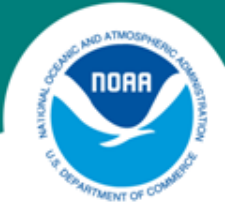
Headboat Landings Estimation

Sum for all vessels



Headboat
Activity Report

Vessel log books



Black Sea Bass Recreational Annual Catch Limit and Accountability Measures

50 CFR 622.49 (b)(5)(ii)

If recreational landings, ..., reach or are projected to reach the recreational ACL of 409,000 lb gw, and black sea bass are overfished, ... the AA will file a notification ... to close the recreational black sea bass fishery for the remainder of the fishing year

Without regard to overfished status, if black sea bass recreational landings exceed the ACL, the AA will file a notification ...to reduce the ACL for that fishing year by the amount of the overage.



SEFSC ACL Recreational Landings used for monitoring and projections

- Aggregation of MRIP survey and Headboat estimates
- Some MRIP estimates of landings in number of fish do not have estimated landed weight
 - SEFSC provides estimated weights in those situations using averages for the species
 - For black sea bass this has resulted in the addition of only 697 lb in one year during 1998/1999 - 2010/2011
- NC MRFSS landings post-stratified; landings north of Cape Hatteras excluded.



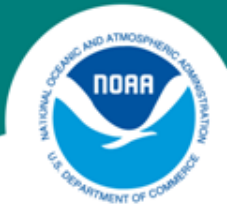
2010-11 Recreational Landings (lbs gw) and ACL Adjustment

Month(s)	Headboat*	MRFSS	Total	Cum. Total	% Quota
Jun 1-30	33,693	60,990	94,683	94,683	23.1%
Jul-Aug	69,184	53,260	122,445	217,128	53.1%
Sep-Oct	38,208	105,305	143,512	360,640	88.2%
Nov-Dec	23,903	30,590	54,493	415,133	100.1%
Jan-Feb	3,175	37,342	40,517	455,650	111.4%
Mar-Apr	146	19,499	19,645	475,295	116.2%
May 1-30	958	0	958	476,253	116.4%
Total	169,267	306,986	476,253	---	

* Headboat landings for Jan 1-May 31 are preliminary

ACL OVERAGE = 67,253 lbs

ADJUSTED ACL = 341,747 lbs



Black Sea Bass Recreational 2011-12 ACL Projection

- Included available landings through August:

Month(s)	Headboat*	MRFSS Private	MRFSS Charter	Cum. Total	% Adjusted Quota
Jun 1-30	65,178	60,789	29,367	155,334	44.7%
Jul-Aug	63,186			218,520	63.9%
Total	128,364	60,789	29,367	---	---

- Projected Jul-Oct MRFSS landings and Sept-Oct headboat landings until ACL was met.

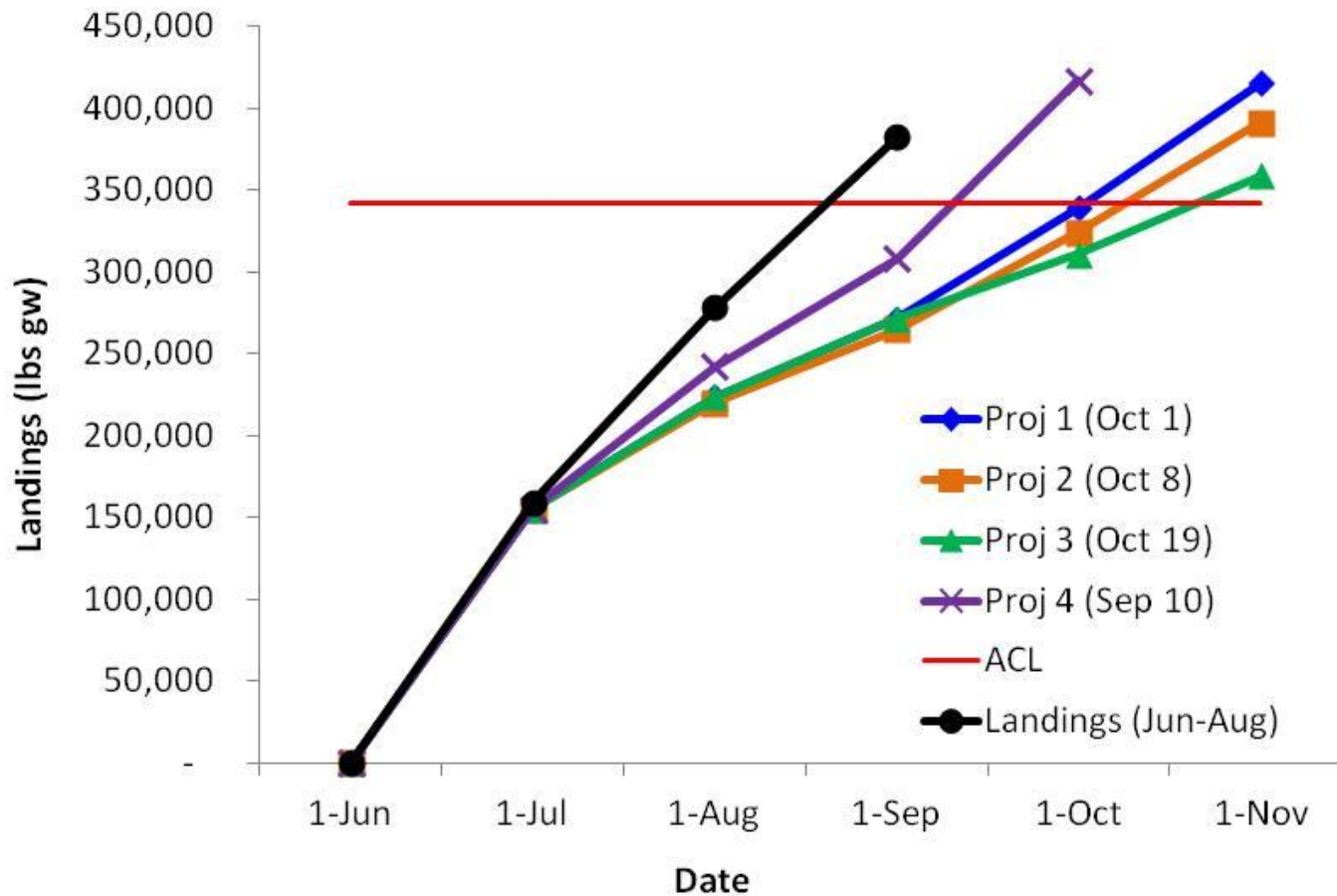


Black Sea Bass Recreational 2011-12 ACL Projection

- Four methods used to project landings:
 1. 2010/11 landings used as proxy; no adjustment for bag limit
 2. 2010/11 landings as adjusted for bag limit reduction
 3. 2010/11 landings used as proxy, but Sep-Oct 2010 private landings set equal to Jul-Aug 2010 landings
 4. Ratio of reported 2011 vs. 2010 landings by mode used to estimate 2011 landings not yet reported.
- Methods described in:
[http://sero.nmfs.noaa.gov/sf/pdfs/South Atlantic Black Sea Bass Closure Analysis 2011-12 10-17-11.pdf](http://sero.nmfs.noaa.gov/sf/pdfs/South%20Atlantic%20Black%20Sea%20Bass%20Closure%20Analysis%202011-12%2010-17-11.pdf)



Black Sea Bass Recreational ACL Projections



DATA REQUEST

A) MRFSS

- a) # of phone intercepts made in each state.
- b) # of black sea bass reported from each phone intercept by state.
- c) # of dockside intercepts, per state.
- d) # of seabass weighed and measured in each state.
- e) Estimated # of recreational fishermen that actually fished for black sea bass in each State.

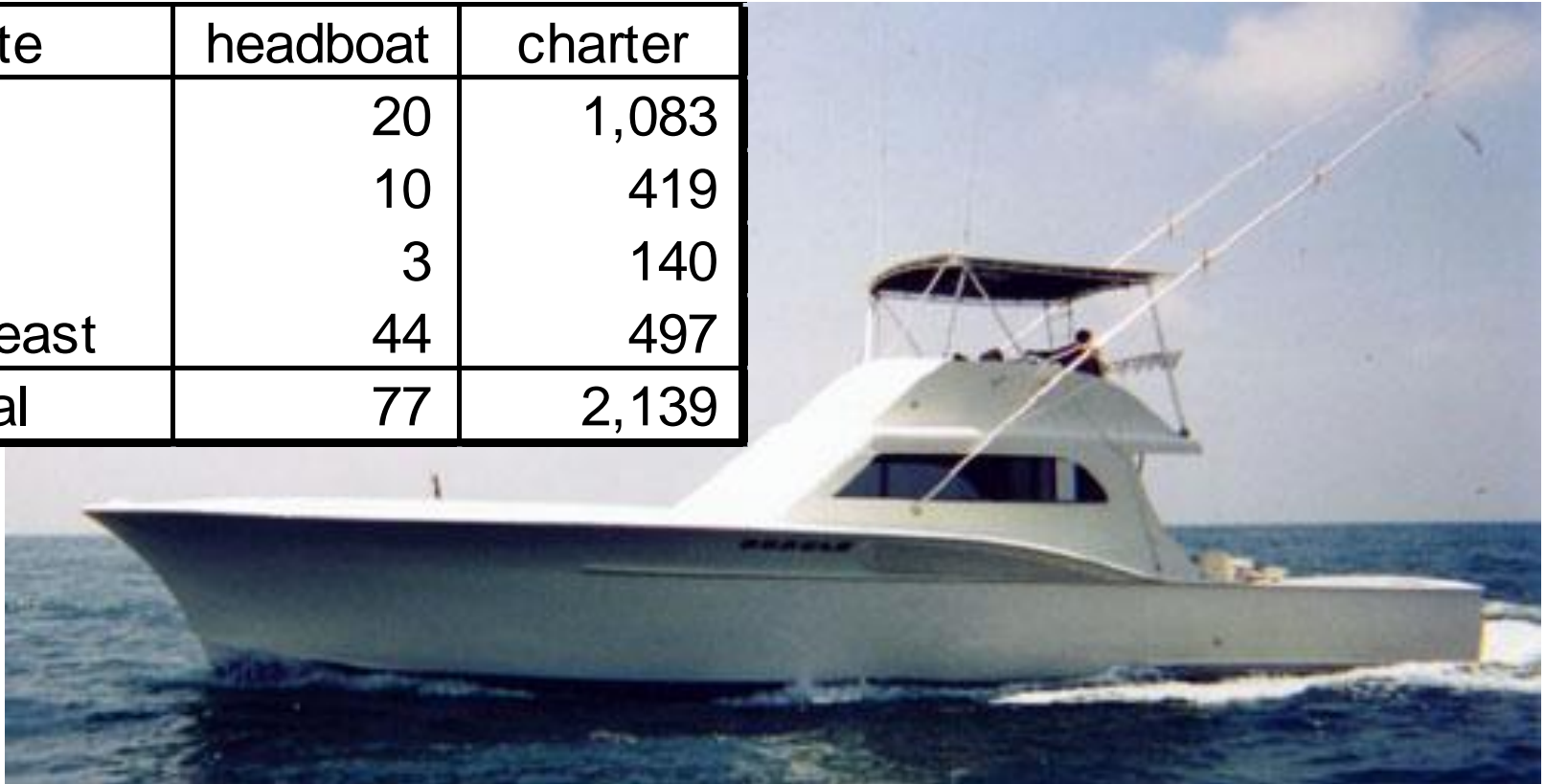
B) Headboat and Charter sectors

- a) # of headboats sampled by state.
- b) # of charter vessels sampled by state.
- c) # of sea bass landed by headboat and charter vessels by state.
- d) # of sea bass weighed and measured from charter and headboats.
- e) # of headboats and charter vessels by state.



Number of Charter and Headboat Vessels in Sampling Frame By State

State	headboat	charter
NC	20	1,083
SC	10	419
GA	3	140
FL east	44	497
Total	77	2,139





Number of Phone Intercepts by State

State	Charter ¹	Private & Shore ²		
		Households contacted May-Aug		
		Fishing	Non-fishing	Total
NC	1,027	498	7,437	7,935
SC	410	216	3,511	3,727
GA	219	114	1,451	1,565
FL east	398	888	12,160	13,048
Total	2,054	1,716	24,559	26,275

¹For-Hire Survey, statistic is the number of times vessels were contacted - a vessel might be contacted more than once in a wave

²Coastal Household Telephone Survey



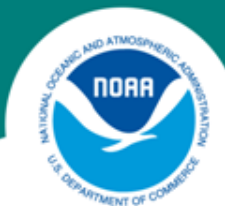
Dockside Sampling by Mode and State

angler intercepts (Jan-Aug)				
	charter	private & shore		headboat trips sampled for biological information (May-Sept)
NC	2,538	10,135	NC	106
SC	342	1,263	SC	46
GA	323	735	GA	4
FL east	624	8,518	FL east	219
Total	3,827	20,651	Total	375



Black Sea Bass Measured and Weighed by Mode and State

State	headboat (June-Sept)		charter (May-Aug)		private & shore (May-Aug)	
	lengths	weights	lengths	weights	lengths	weights
NC	1,271	1,244	139	129	39	38
SC	335	344	24	21	14	6
GA	43	43	77	77	24	24
FL east	918	876	72	72	44	44
Total	2,567	2,507	312	299	121	112



Number of Black Sea Bass Landed by Mode and State

State	headboat (June- Sept)	charter (May-Aug)	private & shore (May-Aug)	Total
NC*	26,941	22,586	30,360	79,887
SC	49,598	16,884	16,025	82,507
GA	5,155	5,558	36,576	47,289
FL east	75,347	32,170	87,823	195,340
Total	157,041	77,198	170,784	405,023

* NC has not been post-stratified to remove landings north of Cape Hatteras



NOAA Fisheries Websites

<http://www.noaa.org/fisheries.html>

(NOAA Fisheries)

<http://www.countmyfish.noaa.gov/index.html>

(MRIP program)

<http://www.st.nmfs.gov/st1/recreational/index.html>

(Recreational Fisheries Statistics)

[http://sero.nmfs.noaa.gov/sf/RecreationalLandingsand
CatchLimits.html](http://sero.nmfs.noaa.gov/sf/RecreationalLandingsandCatchLimits.html)

(SE Region ACL monitoring page)



Questions?