

Summary of Black Sea Bass (*Centropristis striata*) Length Composition sampling from the Gulf
& South Atlantic Fisheries Foundation Observer Program 2007-2009

By

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Description of the Gulf and South Atlantic Fisheries Foundation Observer Program

The observer program run by the Gulf and South Atlantic Fisheries Foundation, Inc. is a Cooperative Research Program funded by NOAA. The primary focus of this research is to collect data to quantify total catch, effort, and discards. Selection of vessels focused on adequate coverage of fishing areas and vessel types. Fishing vessels were solicited to volunteer for participation in the program, so selection of vessels was not a random selection from the entire universe of fishing vessels. Participating vessels were compensated when crew members were excluded from the trip to make room for the observer.

All observers were trained before deployment on vessels. This detailed training provided instruction on all administrative and programmatic procedures. Observers trained on data collection procedures, identification of fauna and proper handling of protected species. Observers were also trained to describe and provide measurements of fishing gear, as well as best practices aboard a fishing vessel.

For each trip, a vessel characterization form was filled out to record vessel name, vessel number, construction, trip dates, port, and other vessel characteristics. The observer then collected information on gear configuration used. At each station the observer recorded data on location, depth, number of sets, number of hooks and other measures of effort. Reels were randomly selected for sampling of each set, where gear used, number of fish kept, number discarded and length of each fish were recorded. Disposition of each fish (kept, discarded) was recorded and the condition of each discarded (live, dead, not determined) was also recorded.

After each trip the data was reviewed by the Vessel/Observer coordinator and entered into the Reef Fish database located at the NOAA Fisheries Galveston Lab. After all data were entered and backed-up, the data (both electronic and hard copies) were archived at the Foundation's office in Tampa, FL, where it is available for use by interested parties (Gulf & South Atlantic Fisheries Foundation, Inc., 2010).

Biological sampling

Observer sampling data for black sea bass were extracted from the Gulf and South Atlantic Fisheries Foundation data base. The data extracted were limited to South Atlantic areas and observations having a valid length. The data were then standardized to NMFS areas, TL in mm, pounds whole weight and disposition (kept, discarded). Relative length compositions by year and disposition were then calculated. The only gear contained in this data was hand line gear.

Available length samples

The number of trips ranged from 4 in 2008 to 17 in 2007 (Table 1). All years had greater than 3 vessels submitting data, so these data are not considered confidential. Sample sizes ranged from 23 in 2008 to 212 in 2009 for fish that were kept (Table 2). Discard sample sizes ranged from 1 in 2008 to 40 in 2007 (Table 3). Due to the low number of lengths collected for discards, it may be useful to pool the length compositions for all years. Relative length compositions by year and gear are presented in Figure 1 for fish that were kept and Figure 2 for discarded fish. Mean length and weight by disposition are presented in Table 4.

Usefulness for characterizing catch

There were no trip landings supplied in this data to allow trip weighting to correct for any sampling bias. Participation was voluntary and fishermen were paid to take observers from this program, so representativeness remains in question. This is however, the only length composition data for discards available from an observer program, so these data may be useful for providing length compositions for discards.

Literature Cited

Gulf & South Atlantic Fisheries Foundation, Inc. 2010. A Continuation of Catch Characterization and Discards within the Snapper-Grouper Vertical Hook-and-Line Fishery of the South Atlantic United States.

(<http://www.gulfsouthfoundation.org/Reports/Catch%20Characterization%20and%20Discards%20within%20the%20Snapper%20Grouper%20Final%20Report%20Revised%2012-08.pdf>).

Table 1. Number of trips with black sea bass sampled.

YEAR	TRIPS
2007	17
2008	4
2009	5

Table 2. Number of lengths collected for fish that were kept.

YEAR	LENGTHS
2007	123
2008	23
2009	212

Table 3. Number of lengths collected for fish that were discarded.

YEAR	LENGTHS
2007	40
2008	1
2009	39

Table 4. Mean weight in pounds whole weight, mean length as TL in mm and standard deviations by disposition.

DISPOSITION	LENGTH		WEIGHT	
	MEAN LENGTH	STANDARD DEVIATION	MEAN WEIGHT	STANDARD DEVIATION
DISCARD	262.140	38.436	0.573	0.174
KEPT	354.605	55.662	1.354	0.629

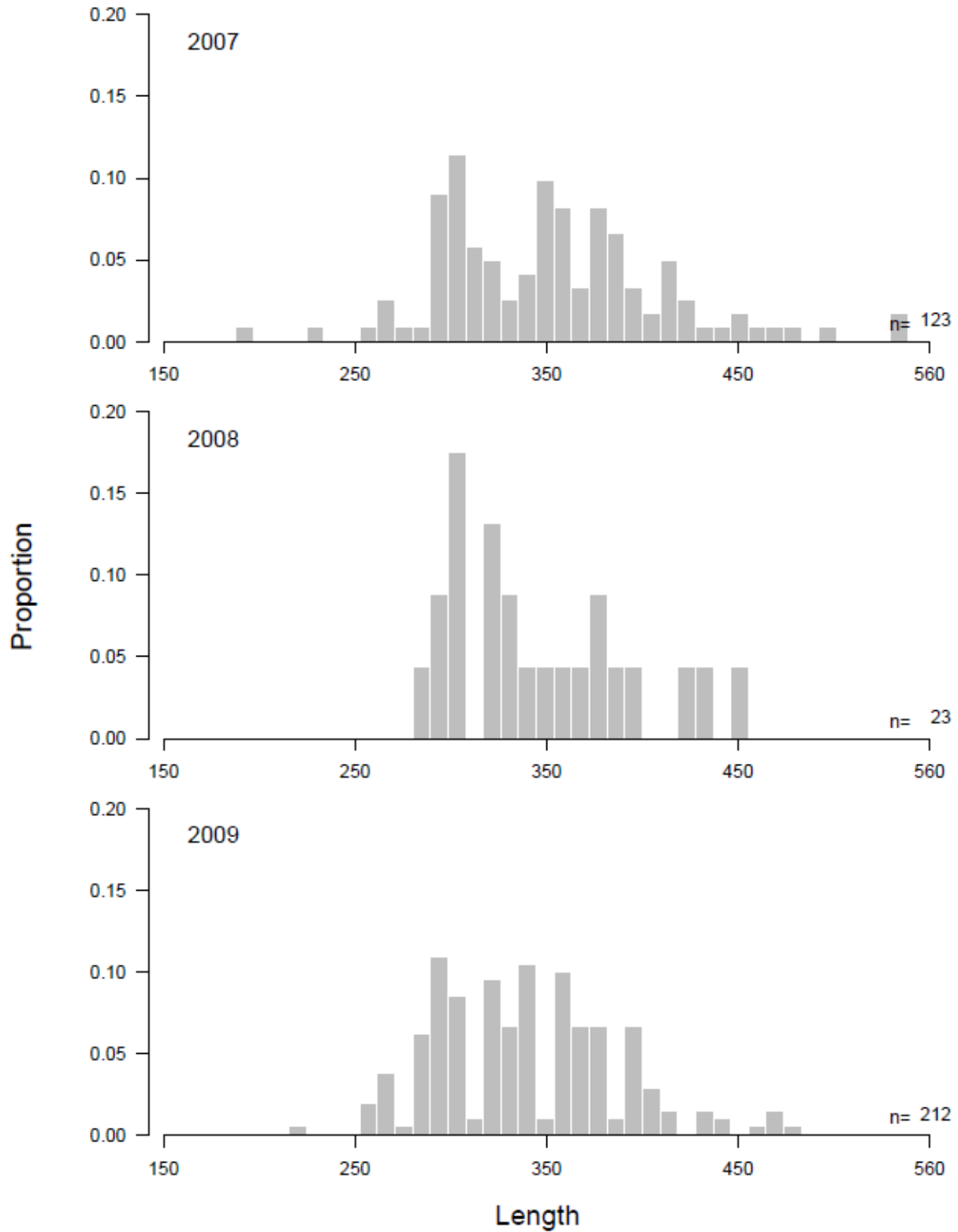


Figure 1. Relative length composition (TL in mm) of commercial length samples (kept) by year for hand line.

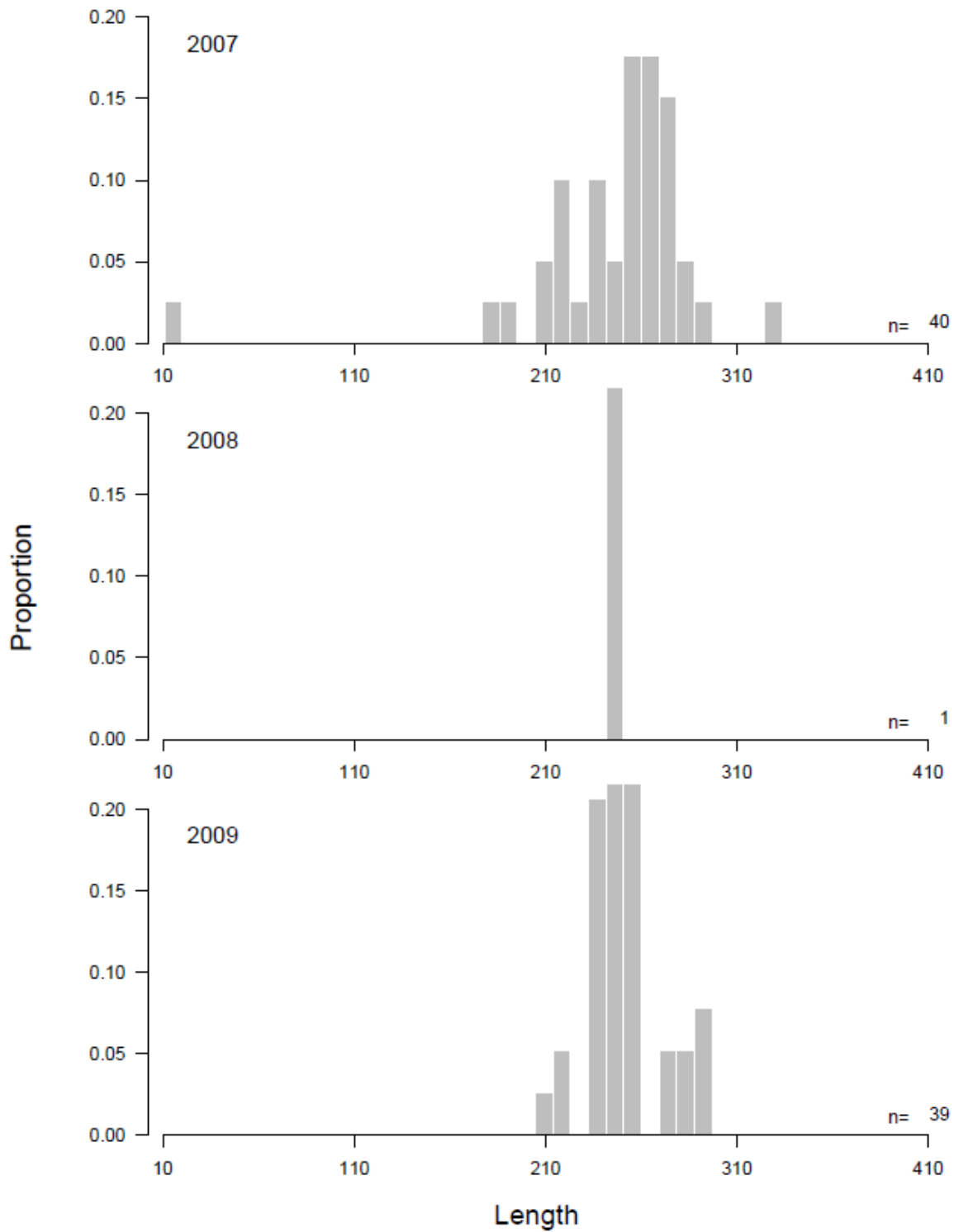


Figure 2. Relative length composition (TL in mm) of commercial length samples (discarded) by year for hand line.