

## CMP Framework 4— Additional Analysis for Action 4

### Atlantic Cobia Closure Analysis

Commercial landings of Atlantic cobia (New York through Georgia) for 2005 through 2014 were provided by the Southeast Fisheries Science Center (SEFSC) on December 24, 2015. Landings for 2015 were provided from SEFSC on April 26, 2016, however, 2015 landings are preliminary. Landings for each year were cumulatively summed from January through December, and the dates when 75% of the ACL (37,500 lbs) and the ACL (50,000 lbs) were met were determined. Table 1 provides the predicted dates when the ACL and 75% of the ACL were met.

Table 1. Predicted dates when 75% of the ACL (37,500 lbs) and the ACL (50,000 lbs) were met with the historic Atlantic cobia commercial landings for 2005 through 2015. The Atlantic cobia stock is defined from the waters of New York through Georgia, and 2015 landings are preliminary.

Year	Total Annual Landings	Date 75% of ACL was met	Date ACL was met
2005	29,290	None	None
2006	31,990	None	None
2007	32,037	None	None
2008	33,739	None	None
2009	42,385	3-Nov	None
2010	56,393	19-Sep	9-Nov
2011	33,963	None	None
2012	42,176	25-Oct	None
2013	53,108	28-Aug	22-Nov
2014	69,197	6-Aug	11-Sep
2015*	53,364	5-Sep	16-Nov

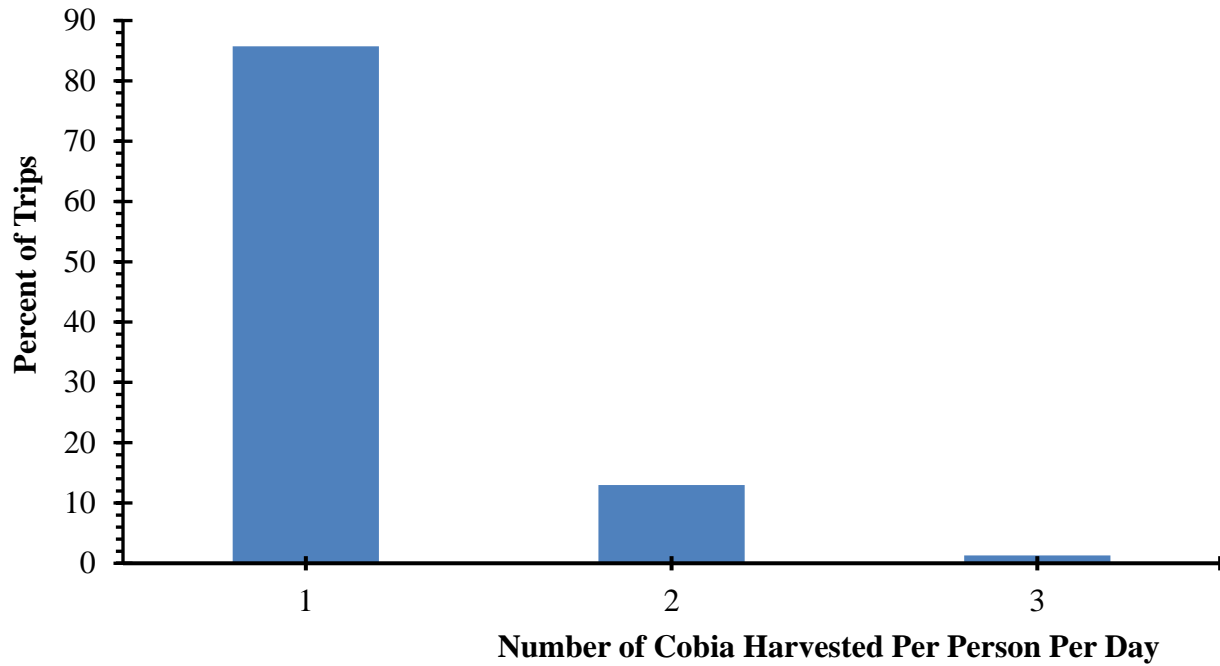
Commercial cobia landings by trip were explored to determine the number of trips impacted by the closures from the ACL being met. Essentially, if the commercial sector was closed when the ACL was met how many trips and pounds would have been lost due to the closure. The SEFSC provided the commercial landings by trip for North Carolina through Georgia on April 25, 2016. Greater Atlantic Regional Fisheries Office provided the cobia commercial landings by trip for New York through Virginia on June 1, 2016. Using the closure dates from table 1 the number of trips that would have been lost from the closures when the ACL was met are summed up in Table 2. The pounds from these impacted trips from the closure were also included in Table 2.

Table 2. Historic Atlantic cobia landings from 2005-2015 and the predicted dates when the Atlantic cobia ACL (50,000 lbs) was met for each year. Also, the number of trips and pounds that occurred after the closure date. The Atlantic cobia stock is defined from the waters of New York through Georgia, and 2015 landings are preliminary.

Year	Total Annual Landings	Date ACL was met	Number of Trips Impacted from Closure	Pounds (lbs ww) from Impacted Trips
2005	29,290	None	None	0
2006	31,990	None	None	0
2007	32,037	None	None	0
2008	33,739	None	None	0
2009	42,385	None	None	0
2010	56,393	9-Nov	145	6,393
2011	33,963	None	None	0
2012	42,176	None	None	0
2013	53,108	22-Nov	67	3,108
2014	69,197	11-Sep	111	19,197
2015*	53,364	16-Nov	76	3,364

#### Commercial Harvest of Cobia per person per day

Atlantic cobia Trip Intercept Program data from 2010 to 2015 were provided from the Southeast Fisheries Science Center on September 2, 2016. These data were collected by port agents that interviewed fishermen and measured their catch. It provided information on the length and numbers of fish species landed, gear used, and information on the fishing trip (e.g., dates, location, soak time, number of lines, number of traps). An examination of the cobia harvested per person per day was displayed in Figure 1. The majority of the trips (86%) harvested one cobia per person per day. Only 13% of the trips harvested two cobia per person per day, and one percent of the trips harvested more than 2 cobia per person per day.



**Figure 1.** Distribution of the cobia harvested per person per day in the Atlantic region from the commercial Trip Intercept Program from 2010 to 2015 (n = 77 trips). The Atlantic region is defined from New York through Georgia.