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## Georgia Headboat Red Snapper Catch & Effort Data, 1983-2009

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SEDAR 24, South Atlantic Red Snapper Data Workshop, May 2010

In preparation for the SEDAR 24 Data Workshop, Captain Steve Amick offered to provide detailed red snapper catch records from 1983 through 2009. He has operated charter and headboats of varying passenger numbers out of Savannah, Georgia since 1979. He recorded his catch records in personal logbooks at the end of every fishing day, including number of released fish (a data element not available for headboats from the NMFS survey until 2004). Through a cooperative effort with personnel at the Georgia Department of Natural Resources, in April 2010 Captain Amick provided his daily catch records (by month and year, starting in 1983) using a hard copy datasheet template. Data for 1979-1982 were not submitted since this time period covers his initial fishing years in which he was running a wider variety of trips, not as concentrated toward red snapper, and still learning prime fishing areas within the snapper-grouper fishing grounds. Due to time constraints imposed by Data Workshop deadlines, GADNR personnel summed the daily catch records by month/year and key entered into Excel. The following monthly totals will be submitted to the Recreational and Index Work Groups: vessel, trip type ( $\frac{1}{2}$  or  $\frac{3}{4}$  day), number released alive, number harvested (broken down by number weighing <15 pounds and those 15 pounds and greater), number anglers with and without catch, number vessel trips with and without catch. Significant weather events such as hurricanes and tropical storms are also noted. Throughout the time period, Captain Amick typically fished depths of 90-120 feet in the NMFS headboat survey grid 31-80 southeast of Savannah, GA. His vessels included a 30ft T-craft (6 passengers) from 1983-1988, 31ft Morgan (average 9 passengers) from 1989-1992 and 41ft Morgan (average 12 passengers) from 1993 to present.

Trip data represent snapper-grouper fishing trips and do not include those in which the entire trip was trolling, or trips less than 6 hours or nearshore targeting only black sea bass (i.e., those trips in which red snapper are not caught off the Georgia Coast). Trips that were combination trolling and bottom fishing were included. Combined, these data represent ~4,000 snapper-grouper fishing trips in which ~41,000 anglers caught ~46,000 and harvested ~21,000 red snapper.

Table 1 presents various measures of angler, trip and catch statistics for each year from 1983-2009. Data include both ½ and ¾ day trips since only a small proportion were ½ day (1.5%):

- Average Number Anglers per Vessel Trip – sum of total number anglers divided by sum of total number vessel trips
- Total Catch per Angler Trip – sum of total number red snapper caught divided by sum of total number anglers, where total number red snapper caught = number released alive + number harvested <15 lbs + number harvested 15lbs and greater
- Total Harvest per Angler Trip – sum of total number red snapper harvested divided by sum of total number anglers, where total number red snapper harvested = number harvested <15 lbs + number harvested 15lbs and greater
- Harvest 15lb & Greater per Angler Trip – sum of total number red snapper harvested 15lbs and greater divided by sum of total number anglers
- % Released Alive – Sum of total number red snapper released alive divided by sum of total number red snapper caught
- % Vessel Trips with Catch – sum of total number vessel trips with at least one red snapper caught (released and/or harvested) divided by sum of total number vessel trips

Captain Amick has participated in the NMFS headboat survey since 1994 (including a pilot electronic reporting format since 2009) and has been a member of the SAFMC Snapper-Grouper Advisory Panel since June 2000. He provided (in combination with three other captains within his business) ~70% of the red snapper otoliths (n=482) collected in cooperation with GADNR last summer and fall. He and another captain also provided 130 red snapper fin clip samples as part of a cooperative effort with Texas A&M during summer 2009.

Table 1. Annual red snapper catch and harvest per unit of effort from Savannah, GA headboat.

Year	Average Number Anglers per Vessel Trip	Total Catch per Angler Trip	Total Harvest per Angler Trip	Harvest 15 lb & Greater per Angler Trip	% Released Alive	% Vessel Trips WITH Catch
1983	5.92	1.46	1.46	0.035	0.00%	84.62%
1984	5.91	1.16	1.16	0.025	0.00%	76.03%
1985	5.96	1.69	1.69	0.060	0.00%	83.58%
1986	5.97	1.10	1.10	0.037	0.00%	73.33%
1987	5.98	2.05	2.05	0.031	0.00%	90.91%
1988	6.00	1.32	1.32	0.027	0.00%	91.61%
1989	8.94	1.17	1.17	0.026	0.00%	87.95%
1990	8.66	0.64	0.64	0.018	0.00%	76.55%
1991	8.35	0.64	0.61	0.021	4.37%	72.09%
1992	8.38	1.22	0.16	0.033	87.21%	84.68%
1993	12.53	0.83	0.17	0.013	80.18%	86.83%
1994	13.33	0.75	0.26	0.017	64.58%	92.86%
1995	12.65	0.42	0.19	0.013	54.63%	77.78%
1996	11.42	0.28	0.16	0.017	40.34%	67.47%
1997	11.78	0.84	0.14	0.022	83.21%	86.83%
1998	11.62	1.01	0.19	0.042	81.26%	95.15%
1999	12.36	1.46	0.32	0.044	78.31%	92.47%
2000	12.11	2.24	0.26	0.030	88.60%	97.59%
2001	13.47	1.48	0.41	0.023	72.60%	97.30%
2002	12.55	1.31	0.73	0.019	44.29%	99.38%
2003	11.95	0.93	0.40	0.022	56.80%	91.12%
2004	10.91	1.27	0.42	0.034	66.89%	96.89%
2005	12.09	0.93	0.29	0.038	68.49%	95.39%
2006	11.75	0.81	0.24	0.035	70.35%	82.31%
2007	11.69	1.58	0.22	0.032	86.19%	92.65%
2008	8.97	2.30	0.91	0.046	60.41%	97.39%
2009	8.79	1.46	0.85	0.044	41.91%	94.87%

Figure 1. Red Snapper CPUE, HPUE and percent released alive for entire time series, 1983-2009, encompassing all three fishing vessels.

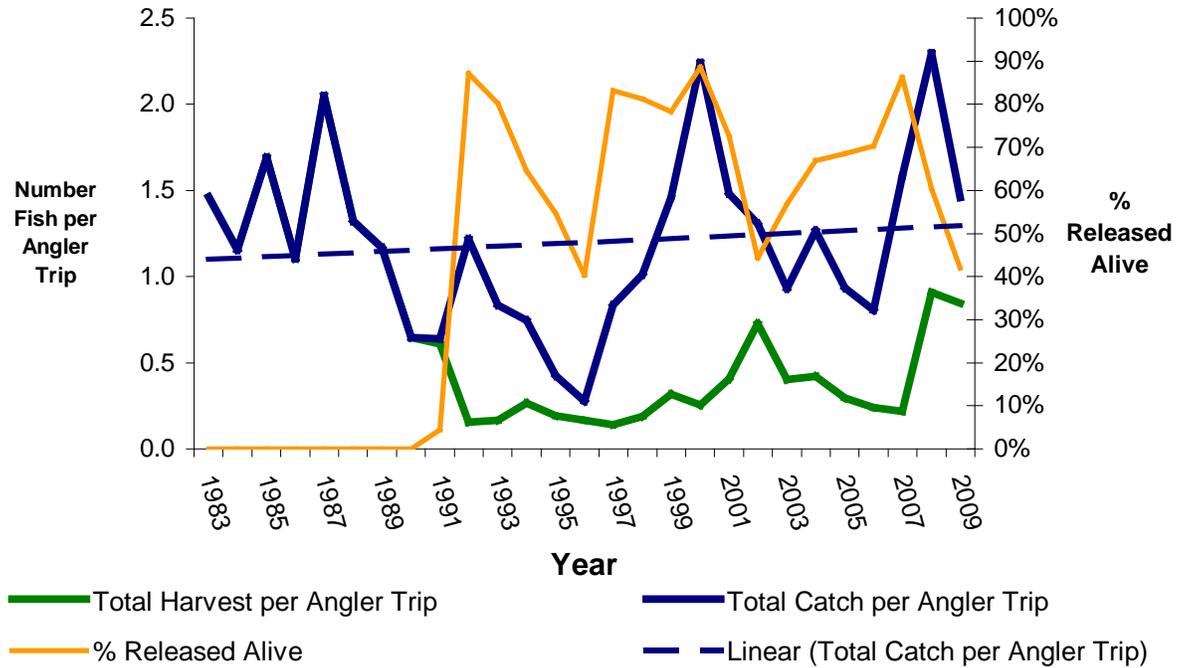


Figure 2. Red Snapper CPUE, HPUE and percent released alive for truncated time series, 1993-2009, in which fishing occurred from only one vessel.

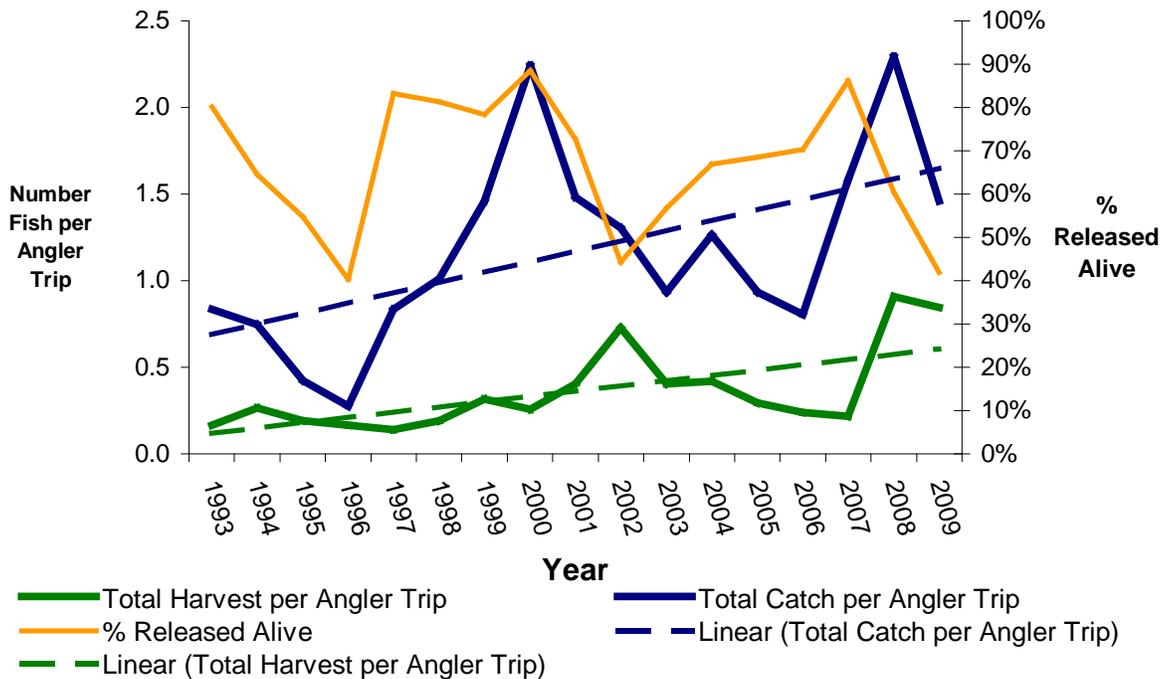


Figure 3. Red Snapper HPUE for total harvest and subset of harvested fish weighing 15 pounds and greater.

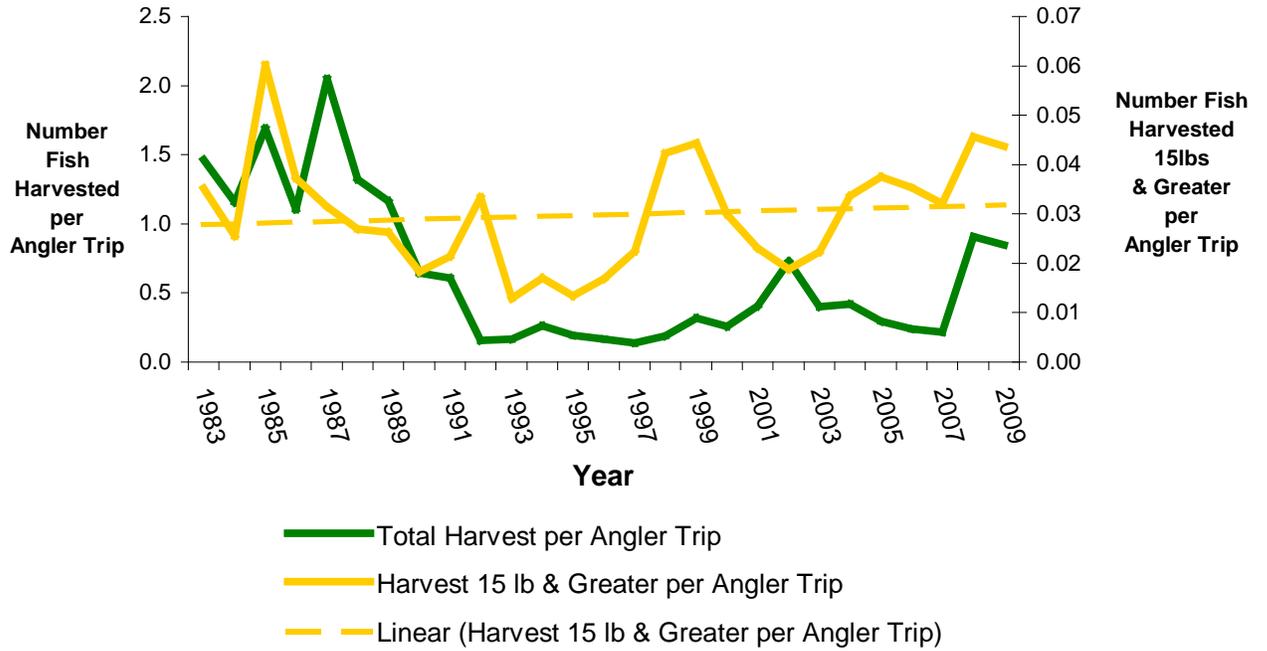


Figure 4. Percent of vessel trips with at least one red snapper caught per trip and average number of anglers per vessel trip.

