

# Comparison of the Economic Impact of the Red Snapper Fishery by Sector in the South Atlantic

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The red snapper fishery in the South Atlantic is in dire need of a full reallocation analysis. Currently, the red snapper fishery is closed and the recreational sector is facing tighter and tighter regulations. There is evidence that the recreational fishery is worth more than the commercial fishery. A recent MARFIN report for the Gulf of Mexico red snapper fishery indicated that if the recreational sector were permitted to purchase red snapper quota from commercial fishermen, they would purchase the entire commercial catch.<sup>1</sup> This result holds until the overall commercial and recreational TAC exceeds 10 million pounds. Under this simulation the commercial fishermen would actually earn more money selling their right than fishing their right. While this result holds for the Gulf of Mexico, it is likely that the result would be similar in the South Atlantic inasmuch as the fisheries are similar. No formal allocation analysis has been conducted for red snapper in the South Atlantic.

In 2009 anglers in the South Atlantic took 166,174 trips and harvested 870,733 pounds of red snapper (Table 1). This total effort includes trips where anglers caught and/or targeted red snapper. The east coast of Florida leads the other South Atlantic states in effort and economic impacts with 150,801 trips generating \$7.4 million in expenditures. This level of expenditures in E. Florida support \$17.3 million in total sales and \$5.3 million in income. The second most important recreational red snapper state is South Carolina with 6,687 trips generating \$1.3 million in trip expenditures with support \$3.2 million in total sales and \$1.0 million in income. In total, across all four South Atlantic states participating in this fishery, red snapper fishing generates \$9.3 million in expenditures supporting \$21.9 million in total sales and \$6.7 million in income.

Table 1. Recreational Effort, Expenditures and Economic Impacts, 2009.

State	Mode	Effort	Expenditures	Impacts	
				Output	Income
East Florida	Shore	1,560	\$66,543	\$157,759	\$48,279
	For-Hire	11,967	\$2,428,989	\$6,095,807	\$1,931,686
	Private Boat	137,274	\$4,888,372	\$11,066,622	\$3,269,763
Georgia	For-Hire	1,584	\$65,563	\$164,538	\$52,140
	Private Boat	2,219	\$31,567	\$71,463	\$21,115
North Carolina	For-Hire	1,238	\$328,133	\$823,486	\$260,953
	Private Boat	3,645	\$176,910	\$400,501	\$118,333
South Carolina	For-Hire	4,769	\$1,192,649	\$2,993,080	\$948,470
	Private Boat	1,918	\$74,997	\$169,782	\$50,164
<b>Total</b>		<b>166,174</b>	<b>\$9,253,723</b>	<b>\$21,943,038</b>	<b>\$6,700,902</b>

<sup>1</sup> Griffin, W.L., R. T. Woodward and H.N. Kim. 2009. Bioeconomic Analysis of the Red Snapper Rebuilding Plan and Transferable Rights Policies in the Gulf of Mexico. Grant ending report. Grant No. NA17ff2873. August 27, 2009. 249p.

In comparison, recreational red snapper fishing in E. Florida dwarfs the entire commercial fishery in the South Atlantic from an economic impact standpoint. The commercial fishery lands 334,807 pounds of red snapper worth \$1.2 million dollars (Table 2). Across just the harvesting sector, this level of landings supports \$1.3 million in total sales and \$577,000 in income. This represents less than 6% of the economic impact generated by the recreational sector in the same fishery.<sup>2</sup> Additionally, income impacts have been used as a proxy for economic value, although a proxy that typically overestimates true economic value.<sup>3</sup> Using income as a proxy for economic value, the recreational fishery supports almost 12 times as much value as the harvesting sector. When converted to income per pound, recreational fishing generates \$7.70/pound of fish harvested while the commercial sector only generates \$1.72/pound, averaged across the entire South Atlantic. While these estimates are only proxies for the marginal value of red snapper harvest, they indicate the allocations should be examined and potentially adjusted.

Table 2. Commercial Landings and Economic Impact from Harvesting Activity Only, 2009.

State	Pounds	Landed Value	Output	Income
East Florida	301,584	\$1,075,272	\$1,087,000	\$491,000
North Carolina	10,222	\$35,278	\$32,000	\$16,000
South Carolina	23,001	\$90,472	\$178,000	\$70,000
<b>Total</b>	<b>334,807</b>	<b>\$1,201,022</b>	<b>\$1,297,000</b>	<b>\$577,000</b>

Table 3 includes shoreside industries in the calculation of commercial economic impacts. Most previous allocation analyses do not include these additional sectors. Additionally, NMFS commercial economic impact model used here is currently being updated.<sup>4</sup> Since that model was first developed, the country's reliance on imports has increased and the processing and wholesaling sectors have shrunk. As a result the multipliers used to generate Table 3 are likely too optimistic. Regardless, even including the processing, wholesaling and retail sectors, recreational fishing generates 2.6 times more income than the entire commercial industry from the harvester to the plate.

Table 3. Commercial Economic Impact from Harvesting, Processing, Wholesaling and Retail, 2009.

State	Output	Income
East Florida	\$4,309,000	\$2,290,000
North Carolina	\$208,000	\$112,000
South Carolina	\$421,000	\$203,000
<b>Total</b>	<b>\$4,938,000</b>	<b>\$2,605,000</b>

<sup>2</sup> It is important to point out that economic impacts are not the appropriate metric for establishing allocations, but can be an important tool to examine the potential distributional impacts of potential shifts in allocation. Economic impacts are a good indicator of potential value in each fishery and can indicate which direction allocations should move.

<sup>3</sup> Edwards, S.F. 1990. An Economics Guide to Allocation of Fish Stocks between Commercial and Recreational Fisheries. NOAA Technical Report NMFS 94. November; and Kirkley, J.E., K.E. McConnell, and W. Ryan. 2000. Economic Aspects of Allocating Striped Bass among Competing User Groups in Virginia. Virginia Sea Grant Technical Report VSG-00-08

<sup>4</sup> Fisheries Economics and Sociocultural Status & Trends Series.  
<http://www.st.nmfs.noaa.gov/st5/publication/index.html>