

2012-2013 Fishing Year Economics of the Wreckfish Fishery

This sheet presents additional information from an economic survey of permitted boats harvesting wreckfish in the area under the jurisdiction of the South Atlantic Fishery Management Council. Cost data was requested for 2012 and collected via a four-page survey form in the summer of 2013 mailed to the owners of the five active vessels. Three completed the form. Of the two non-responses, one completed a similar form in 2010 for the same vessel's activity in the snapper-grouper fishery, so that data was substituted. Data for the other missing vessel was imputed, using data from a similar boat working from the same area. Wreckfish-related fixed costs for each vessel are multiplied by the percentage of boat revenues accounted for by wreckfish. Because the fleet is so small, largely summary information is provided. Landings information is from the wreckfish logbook data set. Price data was derived from the wreckfish dealer reports and broken down by vessel and area to give a more accurate base for evaluating each boat's profits. Quota share sales prices are from the Southeast Regional Office.

Vessel Operations

Total pounds landed (whole)	203,019
Total pounds landed (gutted)	192,523
Average value/lb (gutted)	\$3.64
Total landings revenue	\$701,005
Total variable costs	\$456,230
Total fixed costs	\$126,257
Fleet profit (net revenue)	\$118,518
Total fleet assets	\$1,375,000
Net return (net revenue/landings revenue)	17%
Economic annual return (wreckfish net revenue/assets)	9%

Variable Costs

Crew	\$166,860
Fuel	\$112,115
Bait	\$32,027
Ice	\$12,780
Unloading	\$31,800
Gear repair/replace	\$28,809
Trip repairs	\$19,667
Groceries	\$22,672
Other variable costs	<u>\$29,500</u>
Total variable costs	\$456,230

Fuel Costs

Total gallons fuel used by fleet	28,347
Total number of trips	41
Average gallons used per trip	692
Average price/gallon	\$3.96

Fixed Costs

Annual vessel repairs	\$60,216
Insurance	\$451
Docking fees	\$6,089
Property taxes	\$1,030
Overhead	<u>\$58,470</u>
Total fixed costs	\$126,257

Quota share sales

Percentage of shares sold in 2012	30.2%
Median price per 1%	\$2,178
Mean price per 1%	\$2,365
Commercial fleet quota (pounds)	223,250
Gross value of wreckfish ITQs	\$236,500
Value of wreckfish ITQs/lb with commercial TAC of 223,250 lbs	\$1.06

Comparisons to the Richardson reports

The Richardson (1994) report studied the inaugural year of the wreckfish ITQ and is the only previous costs survey of the program. We modeled many of our survey questions on the questionnaire from this report so that results would be comparable. Values from Richardson and other sources are cited or computed as explained below. The report can be downloaded at <http://www.sefsc.noaa.gov/socialscience/YandleCrossonMRE2014.htm> and cited as

Richardson, E. J. 1994. Wreckfish economic and resource information collection with analysis for management. A report pursuant to National Oceanic and Atmospheric Administration Award No. NA37FF0047-01.

Comparisons to first year of ITQ (Richardson Tables 1 & 7)

	1992-1993	1992-1993 adjusted	2012-2013
Active Vessels	17	17	5
Total Landing Revenue	\$1,952,766	\$3,104,898	\$701,005
Total Costs	\$1,598,092	\$2,540,966	\$581,487
Fleet Net Revenues (Profit)	\$354,674	\$563,932	\$118,518
Net Return	18% ¹	18%	17%
Fleet Assets	\$1,737,536	\$2,762,682	\$1,375,000
Fleet Return on Assets	20%	20%	9%
Price/lb	\$1.71 ²	\$2.72	\$3.65
Net Return/lb	\$.31	\$.49	\$.62
Gross value of ITQs	\$920,000	\$1,462,800	\$236,500 ³
Value of ITQs/lb	\$.51 ⁴	\$.81	\$1.06 ⁵
Discount rate⁶	61%	61%	59%

¹ Richardson (1994), Table 7

² SAFMC Snapper-Grouper Fishery Management Plan, Amendment 20, Table 3-2.

³ Gross value of shares is based on 2012 share sales, which averaged \$2,365 per 1% of fishery.

⁴ Richardson (1994), abstract

⁵ Value ITQs/lb based on 1% of shares/1% of lbs of fishery, which is $2365/2232.5 = \$1.06$

⁶ Discount rate = net revenue (rent) per pound / value of ITQ per lb.