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# Production, Costs, and Earnings By Boat Size: Florida Spanish Mackerel Fishery

by James C Cato, R. Allen Morris and Fred J. Prochaska

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## Introduction

A survey of 13 Spanish mackerel fishermen was conducted during February 1977, to determine production practices, costs and returns. Fishermen were selected from a representative cross-section of the industry provided by fish house records. Written questionnaires were obtained through personal interviews with captains fishing along the Florida East Coast. Preliminary results were presented at a mackerel workshop attended by industry members to insure that the study was representative of industry fishing operations.[1]

The objectives of this bulletin are to (1) provide individual fishing firms basic economic information with which they can compare their own operations, and (2) provide economic information to support industries, such as credit institutions, for the Spanish mackerel fishery. To accomplish these objectives, production practices, costs and returns were analyzed on an industry average basis. The estimates are

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[1]University of Miami, Fishery Systems Workshop on King and Spanish Mackerel, April 1977.

given for two classes of boats. The small class consists of boats ranging from 20 to 22 feet in length. The large class ranged from 30 to 55 feet in length. Estimates for the small class are representative of the South Atlantic Spanish mackerel net fishery. These boats fish the entire year on the South Atlantic coast of Florida. The large boats fish both the East and West coasts of Florida following the Spanish mackerel through their migratory runs. Landings and production practices shown for the large boats therefore, are representative of the Spanish mackerel net fishery on both the South Atlantic and Gulf Coasts. Ranges in individual estimates are presented in addition to industry averages. Individual fishermen can compare their operations to the average and range for specific cost and return items to determine where changes in their own practices may be profitable.

## SMALL BOATS

### Production Characteristics

#### Captain

The average age of the captain on small boats was 45.6 years (Table 1). The captains averaged slightly over 27 years fishing experience. Seventy-one percent of their incomes were derived from fishing. Fifty-seven percent of the fishermen interviewed earned 100 percent of their income by fishing.

#### Boat and Engine

The average boat was 21.1 feet in length and had a beam of 7.4 feet with a fish carrying capacity of approximately 4,860 pounds (Table 1). Individual boat lengths ranged from 20 to 22 feet. Eighty-six percent of these boats were fiberglass construction with the remainder of steel construction. Horsepower rating ranged from 105 to 250 with an average of 164. All engines were gasoline powered with an average of 1.3 years. The oldest engine was 3.5 years old.

Table 1. Production and financial characteristics of Florida Atlantic Coast Spanish mackerel small boat fishing, 1976.[a]

| Item | Average | Range | |
|---|---|---|---|
| | | Low | High |
| Captain: | | | |
| Age (years) | 45.6 | 30 | 60 |
| Experience (years fishing) | 27.3 | 6 | 45 |
| Income from fishing (percent) | 71.2 | 15 | 100 |
| Boat: | | | |
| Length (feet) | 21.1 | 20 | 22 |
| Width (feet) | 7.4 | 6.6 | 8 |
| Hull fabrication: | | | |
| Fiberglass (percent) | 85.7 | | |
| Steel (percent) | 14.3 | | |
| Carrying capacity (pounds of fish) | 4,857.1 | 2,500 | 6,000 |
| Age (years) | 5.5 | .5 | 10.0 |
| Engine: | | | |
| Horsepower | 164.3 | 105 | 250 |
| Fuel type: | | | |
| Diesel (percent) | 0.0 | | |
| Gasoline (percent) | 100.0 | | |
| Age (years) | 1.3 | .5 | 3.5 |
| Fishing characteristics: | | | |
| Number of trips | 182.7 | 150 | 200 |
| Distance (miles one way) | 15.4 | 8 | 20 |
| Average hours per trip | 9.3 | 5 | 12 |
| Production inputs: | | | |
| Fuel (gallons)[b] | 2,825.0 | 800 | 6,000 |
| Oil (quarts) | 298.3 | 20 | 500 |
| Percent with spotter plane | 14.5 | | |
| Ice (pounds) | 56,112.9 | 23,300 | 120,000 |
| Nets: | | | |
| Number per boat | 8.7 | 4 | 19 |
| Yards (average per boat) | 4,683.3 | 2,000 | 7,600 |
| Yards replaced per boat | 2,594.2 | 1,600 | 3,750 |
| Crewmen[c] | .6 | 0 | 2 |
| Investments (present value): | | | |
| Engine | 2,982.1 | 2,000 | 5,000 |
| Hull | 2,742.9 | 1,000 | 4,000 |
| Electronics | 435.0 | 100 | 500 |
| Nets | 12,500.0 | 5,000 | 20,000 |
| Other gear | 21.4 | 0 | 150 |
| Percent with loans | 0 | | |
| Percent with insurance | 28.6 | | |

[a]Based on a survey taken from captains of seven Spanish mackerel boats on the Florida Atlantic Coast during February 1977.

[b]This was the average gasoline consumption per boat. No diesel powered boats were in the small boat class.

[c]These boats have crewmen on board for some trips during the year. The result is an average of .6 crewmen per boat.

## Fishing Characteristics

The number of fishing trips ranged from 150 to 200 averaging almost 183 trips per boat in 1976 (Table 1). Fishing time on each of these trips averaged 9.3 hours. Thus the average fishermen spent 1,702 hours actually fishing in 1976 which is probably slightly less than a normal year because of severe weather during the fall of 1976. Additional time is spent on shore for gear and vessel maintenance. Most of the time away from the dock was spent actually fishing since travel time was relatively short. The average one-way distance traveled was 15.4 miles with a range of 8 to 20 miles. Each boat maintained an average of nearly nine nets with a total average yardage per boat of 4,683 or 538 yards per net. The large number of nets results from the need for several mesh sizes and different types of nets during the year and the fact that some nets are always being repaired. A total of 2,594 yards of netting were replaced during 1976 by the average boat.

## Investments

Present value of hull and engine totaled $5,725 at current market values (Table 1). Average hull investment of $2,743 accounted for 48 percent of the total. The range in present value of investment was wide for both engines and hulls. Present value of individual boat hulls ranged from $1,000 to $4,000 while the range for engines was from $2,000 to $5,000. In addition, the average boat had electronic equipment presently valued at $435. Nets represented the largest investment item with the average investment per boat of $12,500. Present value of investment in nets ranged from $5,000 to $20,000. Average investment per yard of nets was $2.67. Nets represented 67 percent of the total investment of the average fishermen. Total investment in the engine, hull, electronics, nets and other gear was $18,681.

None of the captains interviewed had loans outstanding on their equipment. Only 29 percent reported having insurance. This low level of indebtedness, in addition to the relative high cost of insurance, may explain why these fishermen carry their own risk.

## Costs and Earnings

### Average Catch and Revenues

Fishermen represented by the survey, landed an average of 58,360 pounds of Spanish mackerel per boat (Table 2) with a range from 20,000 to 100,000 pounds. The average Spanish mackerel catch was sold at dockside for $10,548 in 1976. Spanish mackerel account for 40.4 percent of total landings and 39.5 percent of value of landings for these boats.

Bluefish landings averaged 27,355 pounds valued at $3,565. A large variety of other species of fish were also caught with an average reported weight of 58,829 pounds per boat worth $12,584. These included sand perch, sheepshead, pompano, spot, mullet, trout, jacks and drum as well as some catches of "mixed fish" reported. No species breakdown was possible. Total pounds landed per boat averaged 144,544 pounds valued at $26,697 in 1976. The range in value of landings was from a low of $16,200 to $49,000 annually.

### Costs

Total cost for the average boat in 1976 was $10,755 (Table 3). Total variable cost represented 62 percent of the total. A large variable cost item was for fuel with an average of 2,825 gallons of gasoline consumed at a cost of $1,711. Average expenditure for oil (other than oil change) was $244, payment to the spotter plane was $303 and raingear and gloves cost $274. Ice was a large expenditure at $563 annually.

Repair and maintenance on the hull, electronic equipment, and nets averaged $1,783 in 1976. Electronic equipment consisted primarily of C.B. radios and fathometers. Engine repair and maintenance totaled $1,756. This includes both repair, maintenance and replacement since most engines were replaced annually.

Total fixed costs for 1976 averaged $4,121 (Table 3) or 38 percent of total costs. The largest item was depreciation on nets which totaled $3,238. Depreciation was $419 on the hull and $170 on the electronic equipment. Overhead was the remaining fixed cost item at $295. Overhead consisted of miscellaneous items such as boat registration, bookkeeping fees and dockage fees.

Table 2. Average catch and revenues for Florida Atlantic Coast Spanish mackerel small boats, 1976.[a]

| Item | Average | Range in data[b] | |
|---|---|---|---|
| | | Low | High |
| Spanish mackerel | | | |
| Pounds | 58,360.00 | 20,000 | 100,000 |
| Dollars | $ 10,547.86 | 3,600 | 18,000 |
| Bluefish | | | |
| Pounds | 27,354.86 | 4,000 | 50,000 |
| Dollars | $ 3,565.36 | 480 | 7,000 |
| Other fish | | | |
| Pounds | 58,829.57 | 1,200 | 250,000 |
| Dollars | $ 12,584.32 | 600 | 25,000 |
| Total | | | |
| Pounds | 144,544.43 | 105,000 | 400,000 |
| Dollars | $ 26,697.54 | 16,200 | 49,000 |

[a]Based on surveys taken from captains of seven Spanish mackerel boats on the Florida Atlantic Coast during February 1977.

[b]Range data do not add to total reported in the table because highs and lows were recorded for individual operations which were not necessarily the same for each species.

Table 3. Average costs and net returns for Florida Atlantic Coast Spanish mackerel small boats, 1976[a].

| Item | Average | Range in data[b] Low | Range in data[b] High |
|---|---|---|---|
| | dollars | | |
| COSTS: | | | |
| Variable costs: | | | |
| Fuel | 1,711.16 | 480 | 3,714 |
| Oil | 243.91 | 10 | |
| Spotter plane | 302.92 | 0 | 2,116 |
| Raingear and gloves | 273.68 | 39 | 683 |
| Ice | 562.57 | 244 | 1,200 |
| Repair and Maintenance | | | |
| Hull | 608.19 | 144 | 1,300 |
| Electronic equipment | 134.56 | 0 | 350 |
| Nets | 1,040.67 | 600 | 2,000 |
| Engine[c] | 1,756.09 | 1,450 | 2,500 |
| Total variable cost: | 6,633.75 | | |
| Fixed Costs: | | | |
| Depreciation: | | | |
| Hull | 418.89 | 200 | 667 |
| Electronic equipment | 169.72 | 50 | 233 |
| Nets | 3,237.68 | 1,600 | 5,000 |
| Overhead | 294.64 | | 900 |
| Total fixed cost: | 4,120.93 | | |
| Total Cost: | 10,754.68 | | |
| NET RETURNS[d] | 15,942.86 | | |

[a]Averages based on records from seven boats ranging in size from 20 to 22 feet in length.

[b]Range data do not add to total cost in this table because highs and lows were recorded for individual operations which were not necessarily the same for each cost item.

[c]Since engines for boats were generally replaced each year, total engine expenses are included as one item rather than in two items for repair and depreciation.

[d]These boats have crewmen on board for some trips during the year. The result is an average of .6 crewmen per boat. Data on the exact percentage of each crewman's share per boat were not available. In addition, crewmen were sometimes family members. Net returns to the boat include both the captain's share and that of the crewmen during the trips crewmen were on board.

## Net Returns

Comparing total cost of $10,755 with total revenue of $26,698 gives a net return of $15,943 per boat in 1976 (Table 3). The management, labor and capital inputs provided by the captain must be considered to fully evaluate net returns (or profits). Hours of labor provided by the captain is conservatively estimated at 1,702 hours when only actual fishing time is considered. Crewmen on Spanish mackerel large boats spent 1,880 hours at sea and earned $11,464 in 1976.[1] Captains of small boats could at least earn this amount annually working on a large boat and the value of their labor income could be valued at $11,464 (See footnote d, Table 3). Present value of investment averaged $18,681 per firm. At a 7.5 percent rate of interest, returns to capital investment are estimated to be $1,401. Returns to capital investment and the captain's labor while fishing total to $12,865. This leaves $3,078 as a return to the captain's management functions and other labor activities while on shore.

# LARGE BOATS

## Production Characteristics

### Captain

Average age of the captain on large boats was 45.5 years (Table 4) with a range from 25 to 61 years. The captains averaged nearly 34 years of fishing experience. Ninety-two percent of their incomes were derived from fishing. Eighty-three percent of the fishermen interviewed earned 100 percent of their income by fishing.

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[1] See cost and earnings section of Spanish mackerel large boat analysis later in this bulletin.

Table 4. Production and financial characteristics of Florida Spanish mackerel large boat fishing, 1976[a].

| Item | Average | Range in data Low | High |
|---|---|---|---|
| Captain: | | | |
| Age (years) | 45.5 | 25 | 61 |
| Experience (years) | 33.7 | 10 | 50 |
| Income from fishing (percent) | 91.7 | 50 | 100 |
| Boat: | | | |
| Length (feet) | 42.3 | 30 | 55 |
| Width (feet) | 13.9 | 11 | 16 |
| Hull fabrication: | | | |
| Fiberglass (percent) | 66.7 | | |
| Wood (percent) | 33.3 | | |
| Carrying capacity (lbs. of fish) | 29,166.7 | 15,000 | 50,000 |
| Age (years) | 4.3 | .5 | 10 |
| Engine: | | | |
| Horsepower | 552.2 | 282 | 871 |
| Fuel type: | | | |
| Diesel (percent) | 50.0 | | |
| Gasoline (percent) | 50.0 | | |
| Age (years) | 1.8 | .5 | 4.5 |
| Fishing characteristics: | | | |
| Number of trips | 159.3 | 100 | 220 |
| Distance (miles one way) | 21.8 | 12 | 30 |
| Average hours per trip | 11.8 | 8 | 20 |
| Production inputs:[b] | | | |
| Fuel (gallons) | 13,483.3 | 5,000 | 30,000 |
| Oil (quarts) | 323.8 | 100 | 800 |
| Percent with spotter plane | 83.3 | | |
| Ice (pounds) | 169,091.7 | 60,000 | 239,400 |
| Nets: | | | |
| Number per boat | 8.8 | 5 | 15 |
| Yards (average per boat) | 4,200.0 | 3,000 | 6,000 |
| Yards replaced per boat | 840.0 | 600 | 1,200 |
| Crewmen | 3.0 | 1 | 5 |
| Investments (present value): | | | |
| Engines | 16,000.0 | 3,000 | 30,000 |
| Hull | 31,000.0 | 6,000 | 63,000 |
| Electronic equipment | 778.1 | 270 | 4,850 |
| Nets | 22,125.0 | 12,000 | 50,000 |
| Other | 1,128.0 | 270 | 4,650 |
| Percent with loans | 83 | | |
| Percent with insurance | 83 | | |

[a]Based on a survey taken from captains of six Spanish mackerel boats on the Florida Atlantic Coast during February 1977.

[b]Average gasoline consumption was 13,900 gallons. Average diesel consumption was 13,067 gallons.

## Boat and Engine

The average boat was 42.3 feet in length and had a beam of 13.9 feet with a fish-carrying capacity of approximately 29,167 pounds (Table 4). Individual boat lengths ranged from 30 to 55 feet. Sixty-seven percent of these boats were fiberglass construction with the remaining 33 percent having wooden hulls. Horsepower rating ranged from 282 to 871 with an average of 552. One-half of the engines were diesel. Average age of the engine was 1.8 years. The oldest engine was 4.5 years old.

## Fishing Characteristics

The number of fishing trips ranged from 100 to 200 averaging approximately 159 trips per boat in 1976 (Table 4). Fishing time on each of these trips averaged 11.8 hours. Thus, the average fishermen on large boats spent 1,880 hours at sea in 1976 which is probably slightly less than a normal year because of severe weather conditions during the fall of 1976. This does not include time spent at sea moving to new fishing locations since these boats fish out of several ports each year. Additional time is spent on shore for gear and vessel maintenance. The average number of crewmen per boat (other than the captain) was three with a range of one to five. The average one-way distance traveled was 21.8 miles with a range of 12 to 30 miles. Each boat maintained an average of nearly nine nets with total average yardage per boat of 4,200 or 477 yards per net. A large number of nets are necessary due to different mesh size requirements and the necessity that some nets are constantly being repaired or replaced. An average of 840 yards were replaced per boat in 1976.

## Investments

Present value of hull and engine totaled $47,000 at current market values (Table 4). Average hull investment of $31,000 accounted for 66 percent of this total. The range in present value of investment is

wide for both engines and hulls. Present value of individual boat hulls ranged from $6,000 to $63,000 while the range for engines was $3,000 to $30,000. Nets represented the second largest investment next to hulls with an average value of $22,125 or $5.27 per yard. The range was from $12,000 to $50,000. In addition, the average boat had electronic equipment presently valued at $778 per boat. Miscellaneous investments of $1,128 added to the hull, engine, electronics, and nets gave a total investment of $71,031.

Eighty-three percent of the captains interviewed had both loans outstanding on their equipment and had insurance. The fact that the present value of investment in large boats as compared to small (3.8 times greater) probably explains the high levels of indebtedness and insurance coverage for this class of boats as compared to the small boats.

## Costs and Earnings

### Average Catch and Revenues

Spanish mackerel fishermen represented in the survey, landed an average of 425,000 pounds of Spanish mackerel per boat in 1976 (Table 5). The range was from 100,000 to 700,000 pounds. The average boat sold Spanish mackerel worth $76,000. Spanish mackerel accounted for 82 percent of the total 516,083 pound catch. Total sales amounted to $96,365 with a range of $34,660 to $147,250 for individual firms. Bluefish catch per boat was 52,500 pounds valued at $6,767. Mixed species of fish accounted for 38,583 pounds valued at $13,598.

### Costs

Total cost for the average large boat in 1976 was $74,536 (Table 6). Total variable cost was $61,070 which represented 82 percent of the total. Fixed cost amounted to $13,466. The largest variable cost item was crewshares at $34,392 or 46 percent of total cost and 56 percent of total variable cost. The average crewmen earned $11,464. Other labor costs were $3,347. These expenditures were for shore labor primarily for removing

Table 5. Average catch and revenues for Florida Spanish mackerel large boats, 1976[a].

| Item | Average | Range in data[b] Low | High |
|---|---|---|---|
| Spanish Mackerel | | | |
| Pounds | 425,000.00 | 100,000 | 700,000 |
| Dollars | $ 76,000.00 | $ 18,000 | $ 126,000 |
| Bluefish | | | |
| Pounds | 52,500.00 | 25,000 | 100,000 |
| Dollars | $ 6,766.67 | $ 1,000 | $ 15,000 |
| Other fish | | | |
| Pounds | 38,583.33 | 10,000 | 100,000 |
| Dollars | $ 13,598.33 | $ 1,200 | $ 37,500 |
| Total | | | |
| Pounds | 516,083.33 | 197,000 | 798,100 |
| Dollars | $ 96,365.00 | $ 34,660 | $ 147,250 |

[a]Based on surveys taken from the captains of six Spanish mackerel large boats (30 to 55 feet in length) on the Florida Atlantic Coast during February 1977.

[b]Range data do not add to totals in this table because highs and lows were recorded for individual operations which were not necessarily the same for each species.

Table 6. Average costs and net returns for Florida Spanish mackerel large boats, 1976[a].

| Item | Average | Range in data[b] Low | High |
|---|---|---|---|
| COSTS: | | | |
| Variable costs: | | | |
| Fuel | 6,726.50 | 2,400 | 15,600 |
| Oil | 174.98 | 46 | 400 |
| Crew share[c] | 34,391.66 | 9,339 | 50,513 |
| Other labor | 3,346.67 | 0 | 13,500 |
| Spotter plane | 8,645.77 | 0 | 14,725 |
| Rain gear and gloves | 1,172.98 | 250 | 3,410 |
| Ice | 1,907.39 | 900 | 2,594 |
| Repair and Maintenance | | | |
| Hull | 800.00 | 358 | 1,302 |
| Engine | 2,082.37 | 94 | 5,000 |
| Electronic equipment | 243.00 | 40 | 750 |
| Nets | 1,579.17 | 75 | 5,000 |
| Total variable cost: | 61,070.49 | | |
| Fixed Costs: | | | |
| Depreciation: | | | |
| Hull | 1,727.78 | 200 | 3,000 |
| Engine | 2,279.17 | 750 | 6,000 |
| Electronic equipment | 315.63 | 112 | 838 |
| Nets | 6,277.83 | 2,500 | 8,000 |
| Insurance | 917.50 | 0 | 1,625 |
| Interest | 1,725.00 | 0 | 5,525 |
| Overhead | 187.50 | 0 | 680 |
| Boat registration | 35.42 | 15 | 51 |
| Total fixed cost: | 13,465.83 | | |
| Total Cost: | 74,536.32 | | |
| NET RETURNS: | 21,828.68 | | |

[a]Based on surveys taken from captains of six Spanish mackerel large net boats (30 to 55 feet in length) on the Florida Atlantic Coast during February 1977.

[b]Range data do not total in this table because highs and lows were recorded for individual operations which were not necessarily the same for each cost item.

[c]Crewshare includes cost of groceries.

or "picking" fish from the net after reaching shore. Spotter plane costs were next at $8,646. Spotter planes normally receive about ten percent of the revenue generated from fish located by the plane. Fuel costs amounted to $6,277. Repair and maintenance costs on the hull, engine, electronics and net totaled $4,704 while ice, rain gear and gloves accounted for costs of $1,907 and $1,173, respectively.

Total fixed costs of $13,466 consisted primarily of depreciation to hull, engine, electronic equipment and nets with nets the largest cost of $6,278 (Table 6). Hull depreciation was $1,728 and engine depreciation was $2,279. Electronic equipment includes C.B. and V.H.F. radios, fathometers, and in some cases LORAN and automatic pilots. Other fixed costs included insurance, interest on loans, overhead and boat registration at $918, $1,725, $188 and $35, respectively, (Table 6).

## Net Returns

Comparing total costs of $74,536 with total revenue of $96,365 gives a net return of $21,829 per boat in 1976 (Table 6). The management, labor and capital inputs provided by the captain must be considered to fully evaluate net returns (or profits). The captains labor input would receive $11,464 assuming his labor was rewarded at the same level as the average crewman. Average investment per large boat was $71,031. Return to investment at a 7.5 percent rate of interest would be $5,327. Total returns to the captain's labor while fishing and capital investment total to $16,791. This leaves $5,038 as a return to the captain's management functions and other labor activities while on shore.

## Summary

A personal interview survey of the captains of 13 Spanish mackerel boats was conducted during February 1977, along the Florida Atlantic Coast to determine production practices, costs and returns. These data were collected for seven small (20 to 22 feet) boats and six large (30 to 55 feet) boats. Production and financial characteristics concerning the average captain, boat, engine, fishing practices, production inputs and investment levels were defined in detail for each boat class. The present value of investment, costs, revenues and net return levels are shown in Table 7.

Present value of the investment in small boats was $18,681. Nets accounted for 66.9 percent of the total investment at $12,500. The engine and hull represented 16.0 and 14.7 percent, respectively. Average investment level in the large boats was $71,031 with the major components of hull, nets, and engine representing 43.6, 31.2 and 22.5 percent, respectively.

Total revenue generated by the small boats in 1976 was $26,698 while the large boats sold fish valued at $96,365. Total costs for the average small boat was $10,755 of which 61.7 percent was variable cost and 38.3 percent fixed cost. Total cost of operating the average large boat was $74,536. Variable costs represented 81.9 percent and fixed costs 18.1 percent of the total.

Net return to the captain of the average small boat was $15,943. Of this total, $11,464 was allocated as a return to the captain's labor, $1,401 as a return to the investment in the boat and gear and $3,078 as a return for management abilities. Net return to the average large boat was $21,829. Returns to the captains fishing labor was $11,464, return to capital investment was $5,327 and return to the captain's management functions was $5,038.

Table 7. Comparative analysis of small Florida Atlantic Coast Spanish mackerel boats and large Florida Spanish mackerel boats, 1976.

| Item | Vessel Size: 20-22 feet small | | 30-55 feet large | |
|---|---|---|---|---|
| | dollars | percent | dollars | percent |
| Present Value of Investment | | | | |
| Engine | 2,982 | 16.0 | 16,000 | 22.5 |
| Hull | 2,743 | 14.7 | 31,000 | 43.6 |
| Electronics | 435 | 2.3 | 778 | 1.1 |
| Nets | 12,500 | 66.9 | 22,125 | 31.2 |
| Other Gear | 21 | .1 | 1,128 | 1.6 |
| Total | 18,681 | 100.0 | 71,031 | 100.0 |
| Total Revenue | 26,698 | | 96,365 | |
| Costs | | | | |
| Total variable cost | 6,634 | 61.7 | 61,070 | 81.9 |
| Total fixed cost | 4,121 | 38.3 | 13,466 | 18.1 |
| Total cost | 10,755 | 100.0 | 74,536 | 100.0 |
| Net Return to Captain | 15,943 | 100.0 | 21,829 | 100.0 |
| Labor[a] | 11,464 | 71.9 | 11,464 | 52.5 |
| Investment[b] | 1,401 | 8.8 | 5,327 | 24.4 |
| Management[c] | 3,078 | 19.3 | 5,038 | 23.1 |

[a]Actual returns to each crewmen in the large boat class. It was assumed that the captain of boats in each class could earn at least this much for fishing labor on another boat and were allocated this amount as a fair return to their fishing labor.

[b]It was assumed that the investment would earn 7.5 percent in its next best alternative.

[c]Net return minus return to labor and investment.