

take care of their own catch of shrimp, which are boiled or fried after they get ashore. These shrimp cannot be kept for a long period of time. Probably in the near future shrimp will be taken directly from the place where they are caught to a mothership, to be processed there.

The U.S.A. is very much interested in the execution of Point 4 of the Program of the President. Surinam is in need of technical assistance which Point 4 offers. Surinam has a small population, little industry, and in consequence scanty means. The food supply could be considerably augmented by bringing fish to the market in greater quantities, at prices which the public can pay. This would improve living conditions substantially.

As long as it is scientifically undetermined to what extent the fishing industry can be extended, one cannot speak about "underdevelopment" as far as the fishery is concerned.

As soon as it is known that there are possibilities, sufficient capital and labor will have to be furnished to exploit them. It is believed that important improvements could be made in the fishery situation in Surinam by establishing fishery societies that would, among other things, concern themselves with the granting of loans for fishing material, and the organizing of auctions.

The construction of a cannery and fish meal factory is indispensable for the development of the fishing industry. Within the next few years the fishery in and around Surinam will probably be expanded considerably. Surinam is now in a transition period. Undoubtedly there is good reason to expect a great future for this country.

Some Economic Aspects Of Charter Boat Fishing In The Miami Area *

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THE PURPOSE OF THIS STUDY was to determine the extent of charter boat fishing in the Miami area, and to assign an economic value to the activity. Two questions were asked: (1) Is charter boat fishing a profitable business? (2) Of what value is charter boat fishing to the economy of the Miami area?

The information used to make the estimates in this study was gathered in many ways. Some of it represents interviews with the charterboatmen themselves, some was derived through consultation with the employees of the Cities of Miami and Miami Beach, and the authorities of Dade County. Other information was obtained from the concerns offering service to the charter boat fleet as well as by personal count and recheck wherever possible. Cross-checks were made wherever the nature of the information made them possible. The Miami Area was defined as that area as far north as, and including, the Dade County Docks at Baker's Haulover; southward along the ocean and bay front to the area known as South Bay, which fronts on the municipality of Coconut Grove.

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In assigning the dollar value to the trade it was not intended that the totals given would represent a total economic value, in the gross sense, of charter boating to the Miami area. More specifically, the totals given represent the current market values of investments in the business itself, and do not represent investments in service activity or in the secondary trades, such as the dockage facilities themselves, which may or may not be dependant on the activity of the charter boat fleet. Any dollar value assigned here is subject to the same variables that govern the total economy of the country. As Dr. Richard A. Kahn has pointed out in his paper entitled *Principles of Evaluation of Fisheries*¹ the value which is assigned at present may not be relatively the same as that value which the industry may grow or decline into nor the same as the historic value. Dr. Kahn says further, "Since prices [referring to the evaluation of fisheries] are values expressed in money and currency, it is impossible as a basis of evaluation, to find prices which would be appropriate and correct under all conditions."² With this in mind, the values assigned here are based on the market values of 1950 and none is less current unless so stated.

Within the Miami Area there are three dockage facilities that can be considered of major importance by virtue of the number of charter boats located there. Haulover Docks, located on Highway A-1-A north of Miami Beach, and under the supervision of the Dade County Park Association, has thirteen charter boats, which range from 36 to 40 feet in length. Some of these are as much as twenty years of age, and all charge \$60 per day as the charter price. Within the City of Miami Beach, and under the jurisdiction of that municipality, are the Chamber of Commerce Docks. This berth has facilities to handle seventeen charter boats and at the time of this study the craft there ranged from 36 to 40 feet in length. All of these charge \$65 per day as the charter price. By measure of size and fame, the largest of the three major facilities is located in the City of Miami Yacht Basin and is known as Pier 5. Under the control of the City of Miami, Pier 5 has facilities for a large number of varied craft and at the time of this study there were thirty-five charter boats located there. It is well to remember that the number of craft engaged in the charter boat trade varies from year to year and from season to season. At the time of this study there were 94 craft counted in the Miami Area, including the three major facilities as well as a number of minor ones. New fleets of charter boats have been known to spring up over night and old ones have broken up just as rapidly. Because the figure of 94 craft represents an observed total at a given time it has been used in determining the values assigned to the fleet.

The initial investment of the charter boat operator is linked to the income that he might expect from his equipment. Newness and appearance of his craft as well as the general appearance of his auxiliary equipment do much to induce prospective charterers to choose his boat over others that are currently for hire. Most prospects survey the craft at the docks the night before, and it is this appearance of the craft coupled with the personality of the owner, an economic intangible, that will direct the choice of the prospect. Some operators are well known and have a good reputation throughout the fishing circles that charter these craft.

1. Richard A. Kahn, *Principles of Evaluation of Fisheries*, U.S. Department of the Interior Commercial Fisheries Report, ECML-2, Washington, D. C., April, 1947.

2. Ibid.

This study found that the majority of the craft used in the charter boat business were not originally designed for such operations and have been subsequently adapted after they were purchased second-hand. The rate of depreciation on such craft is high, representing primarily the decline in market value of the craft. Examination of brokerage scales, covering the market value depreciation, showed that, as an example, a craft of the 26 to 40 foot class which was built prior to 1930 will have depreciated in current market value from 60 to 75 per cent below the original cost. Craft of this class purchased in 1950 are faced with an immediate depreciation of 20 to 25 per cent in market value. This depreciation is in effect a statement of the condition of the market for pleasure craft in Florida waters. Specifically it applies to the Miami area and is current for January 1, 1950.

The purchase of a new craft with the required equipment and the miscellaneous paraphernalia, on the current Miami market, would represent a minimum investment of \$23,000 for a craft of the 40 foot class, while one 32 feet in length, purchased new and fitted for charter boat operations, would represent a minimum investment of \$16,000 under the current conditions. If operations off Bimini are to be undertaken by the operator, investment figures for each class of craft cited would be increased by at least \$1,000. Because of the personal nature of charter boat fishing, the men in the trade are reluctant to divulge information concerning their business. It has been nearly impossible to gain complete information on the extent of investments. As a result, it has been necessary to assign a reasonable average value to the craft for the purpose of evaluation of the entire fleet. This has been done through consideration of age, length and initial investments, based on current values.

The maintenance and operating costs of the charter boat owner depend on a number of variables. Location at Pier 5, for instance, will require payment of a yearly dockage fee of \$200, while location at the Chamber of Commerce Docks will represent a fixed charge of \$240. The monthly dockage fee varies with the season of the year, being the greatest when the most tourists are in the area. Other fixed charges against income are represented in the necessity for hauling the craft and painting it periodically. Other charges are for engine maintenance, depreciation, license fees and taxes. These represent an average fixed charge of \$1,500 per year for a craft whose initial value was \$19,000 and which is being depreciated over thirty years (an unusually long period) to a scrap value of \$700. In addition to the long period for depreciation, other fixed charges were considered as minimal, so that the result would show as small a fixed charge a year as possible.

Variable costs in the operation of a charter boat are easier to determine. Survey showed that fuel for one trip ran an average of \$10 and the salary for the mate the same, the mate not being paid on non-chartered days. To this \$20 can be added the cost of oil, ice, and bait which would bring the variable cost for a day on which the boat is chartered to \$25.60. Since the average price charged throughout the fleet for one charter day is \$60, this variable represents a constant of 42 per cent of gross income. These figures are used in the preparation of a break-even chart for varying numbers of days of operations (Fig. 1).

Weather considerations for charter boat fishing activity in the Miami area were surveyed and it was found that during the eight months from September through April there has been for the last four years, an average of 32

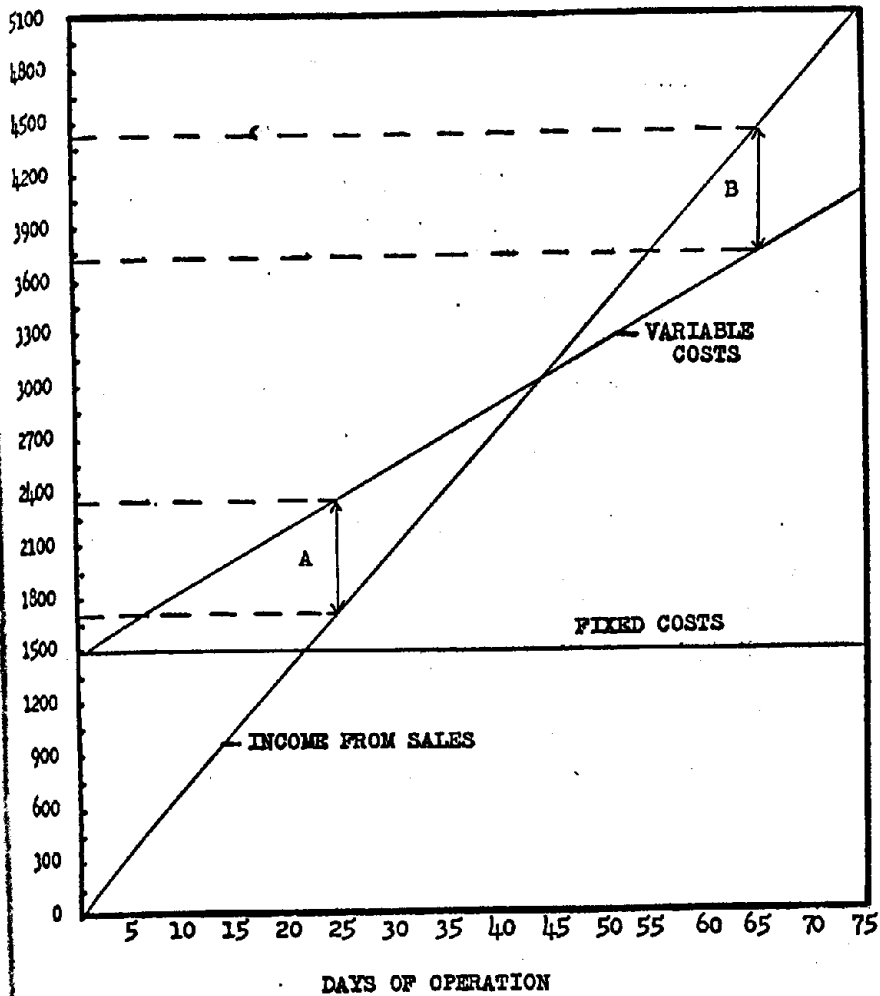


FIGURE 1
BREAK-EVEN CHART

THE VARIABLE COST LINE, also representing total costs, crosses the income from sales (charter trips) line during the 44th day of operations. "A" is the loss potential for only 25 days operation while "B" shows the profit potential for 65 days operations.

days a year during which the weather prevented fishing. This is the result of small craft and hurricane warnings alone. Rain was not given consideration because of the nature of the weather in the Miami area. For the eight months of greatest charter boat activity, and with an average of \$60 per charter trip, this represents a loss potential of roughly \$1,900 in gross income per operator per year. The expenses incurred by charter boat operators in seeking haven during hurricanes and for the repair sometimes necessary as a result of hurricanes can not be charged at a fixed rate against income since it will vary so widely between the individual owners.

In attempting to determine the break-even point in operating a charter boat it was necessary to assign an average length and value to one craft of a hypothetical nature. It is felt that the figures are representative. Assuming the fixed costs to be \$1,500 per year for the average length and age craft, with the representative variable costs being 42 per cent of gross income, it can be seen from plotting this on a break-even chart (sometimes called a graphic profit and loss statement) that the point at which total income equals total expenses comes during the 44th day of operations at the end of which the operator will realize a dollar net income of \$31.20. At the end of the 45th day of operations, the charter day following the one in which expenses equaled income for the year, it can be seen that the operator will realize a net total dollar income for the 45 days of \$66. Some operators will realize a larger net income than others since their equipment does not represent a fixed charge as high as the 25 days operations necessary to break even that has been assigned to the average craft. The break-even point of others will move much further to the right since theirs is much newer and more expensive equipment. For the hypothetical average craft presented, the accumulation of days of operation would represent income figures about as follows:

50 days operation	4 days net income or \$ 240
75 days operation	19 days net income or \$1,140
100 days operation	33 days net income or \$1,980
150 days operation	62 days net income or \$3,720

These figures can be broken down into monthly incomes to show that for 150 days operation the operator would receive an average monthly income of \$310, while for 100 days the income would be reduced to \$165 per month. It can be seen from this that for charter boats to be profitable it is necessary for the owner to operate well over 100 days during the year. In this connection it should be remembered that no fixed charge has been applied to cover any withdrawals from the income to meet the needs of subsistence. The study showed that a few operators make a good income from the charter boat business, but that by and large the average operator is merely keeping his boat from year to year. Many operators are eating their depreciation each year, represented by the withdrawals for subsistence.

In assigning a dollar value to the primary investment in the whole of charter boat fishing in the Miami area, several of the things already mentioned must be taken into consideration. The fact that the numbers engaged in the business are constantly fluctuating can change the total investment figure by as much as 3 per cent with the probable figure being plus or minus 1½ per cent at any given time. In order to estimate the total value of the primary investment in terms of current market value it was necessary to determine an average age for the craft in the area. The study showed an average age of 10.47

years. Along with age it was necessary to determine an average length for the craft in the trade. It was found that the boats averaged 38 feet in length. Using the price of a new 38 foot craft on the Miami market, \$17,000, multiplied by the 94 observed craft, would give an investment figure of a rounded \$1,410,000. This figure, depreciated by the average age of the craft, would represent a reduction of \$510,000 and would set the current market value of the Miami charter boat fleet at \$902,000 plus \$188,000 for non-depreciable equipment, for a total investment on the current market of a rounded \$1,110,000. This would place an average of \$11,700 for each of the 94 craft surveyed. Comparison of these figures with studies made of the Middle Atlantic Bight in 1948 shows only slight variations in values assigned.³

To determine the total income figure for the entire charter boat fleet in the Miami area was impossible as a factual survey. Well substantiated opinions from dockmasters and individuals in the trade, as well as those associated with it, showed that the greatest number of operators are just breaking even each year. If this is the case and a subsistence wage of \$150 per month is assigned as a fixed charge against operations, it can be seen that to break even under these conditions, the operator must be chartered at least 95 days.

By considering this fixed subsistence charge in the light of the income fate of the trade, it can be assumed that an average of slightly less than 100 days per year is applicable to each craft. This being the case, the gross income for the trade would be a rounded \$560,000 per year. The frequently asserted statement that charter boating is not generally profitable would appear to be true. The only consideration that can not be evaluated is the type of life that the trade affords. There is strong evidence that this non-monetary income derived from the pleasures associated with the work is a large consideration upon entering the trade. Some operators say that charter-boating is an avocation rather than a vocation with them.

Based on the previous premises, approximately \$177,000 will be spent each year from the primary trade for their subsistence needs. Another \$94,000 will be channeled to the Miami merchants through the \$10 paid to the mates for each trip. For gas, oil, bait, and ice another \$140,000 will be spent annually, while \$22,000 will be spent by the operators for the services they need for maintenance and repair. At least 36,000 people are carried yearly on the charter trips. It would be impossible without a very complete survey to determine how many of the 36,000 came to Miami for charter fishing alone. It will be remembered that these figures are presented for consideration only within the limits that have been placed on them. The validity of the figures concerning incomes to the Miami merchants rests entirely upon the accuracy of the estimated average number of trips per craft per year.

Charter boat fishing in the Miami area is typical of this type of operation as it appears in other areas of the country. It is almost entirely dependent in the Miami area on the tourist trade. Indications point to an expansion in the numbers of tourists who may come into the Miami area as more and more efforts are made to bring the tourist into Florida for summer as well as winter seasons. This expansion may or may not help the lot of the individual operator.

3. See: Raymond J. Butler and Harlan S. Spear, *A Survey of the Sports Fishery of the Middle Atlantic Bight in 1948*, United States Department of the Interior, Fish and Wildlife Service, Special Scientific Report—Fisheries No. 7, p. 2.

Whatever the position of the trade may be in the future is dependent upon one group of people—the tourist who comes to the Miami area whether expressly to go deep-sea fishing or not.

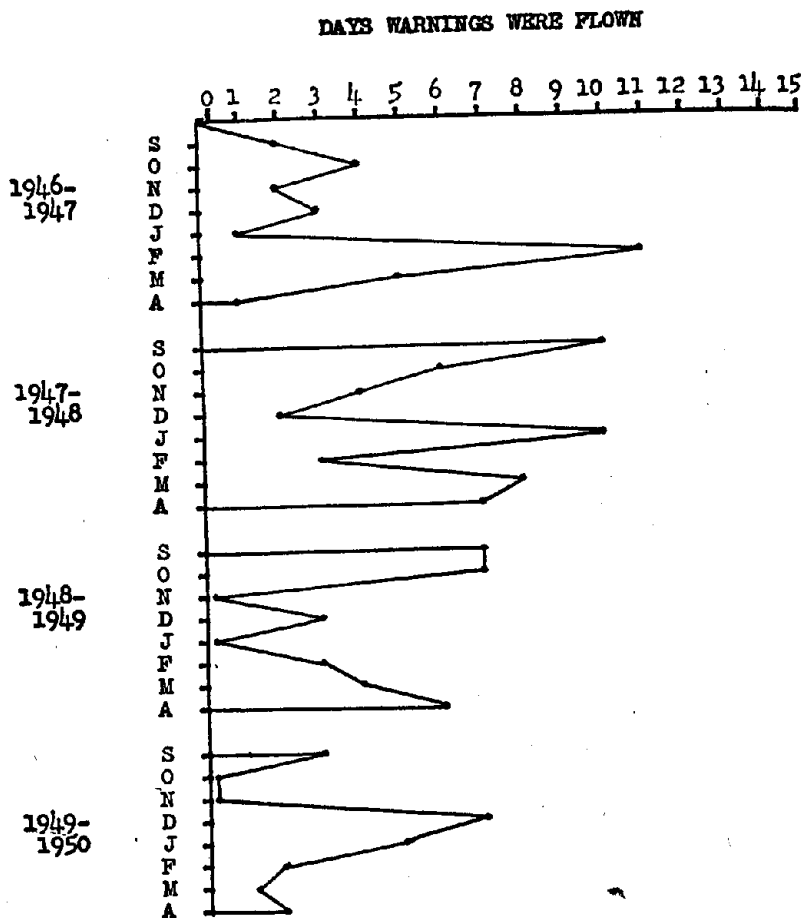


FIGURE 2

FREQUENCY OF SMALL CRAFT WARNINGS

SMALL CRAFT WARNINGS from September through April for 1946 to 1950. Hurricane warnings are included. Small craft warnings are hoisted by advisory from the U. S. Weather Bureau when the winds are expected to exceed 25 miles per hour.