in Washington for publication. The first printed report was for the month of September, 1950.

Because it is necessary to observe certain deadlines if the reports are to be issued with any regularity, estimates are made for some dealers who will eventually report. Therefore, "Alabama Landings" as first published should be considered a tentative report and subject to correction. When a report is received from a dealer after the tabulations are complete, that report is filed along with all other reports for the same month. It is planned that one year from the month of the report a corrected report will be made. This will be done by replacing the tax records and estimates by original reports from the dealer wherever this is possible.

Although the Alabama Marine Laboratory is still a one-man staffed organization, the development of this report has not been a one man job. Acknowledgements are due Bert E. Thomas for providing the stimulus in getting the report started, C. H. Lyles for personal assistance and aid in the first months of operation, A. W. Anderson, E. A. Power and others of the U. S. Fish and Wildlife Service for additional guidance and assistance, Nellie P. Landry of the Department's Seafood Office for aid in contacting the licensed dealers, Jean E. Lueth for general assistance in handling the reports as they are returned from the dealers, and the numerous dealers who have made this a truly cooperative venture.

The Organization Of The Florida Marine Fisheries Statistical System

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FISHERIES BIOLOGISTS and economists have for many years realized the value of maintaining accurate records of fish production. Classical examples of research work in fisheries such as the Pacific Halibut investigation, the Fraser River Sockeye Salmon and the California Sardine program were all initiated by a full scale collection of the past and present statistics of the particular fishery being studied.

As has been pointed out by many workers, fisheries statistics are not easy to obtain. The difficulty of collection, together with the expense involved, has led to the neglect of this vital information in many of the fishery areas of the world. The Gulf area (with Florida in particular) is no exception.

Why must we not neglect our collection of these figures? In other words, to what use can the fisheries scientist and the economist put these catch statistics?

To the fisheries biologist they show, (1) the changes in abundance of the important commercial species by area. That is, changes in the numbers of fish caught can be noted and protective measures introduced to maintain the supply of fish for future years. In this respect it might be well to mention that many declines are of a temporary nature and an analysis of catches will indicate that the imposition of restrictive fishing measures is unnecessary. (2) Statistics permit the calculation of the availability of the fish to the fisherman, or, in other words, show the ease with which he can make his catch. This will often provide a truer picture of the stocks of fish available than does the total poundage

of fish produced. (3) An analysis of the catch by size and age composition of the fish, together with the poundage landed, allows the fisheries scientist to estimate the numbers of smaller and younger fish that will grow to a catchable size by the next fishing season.

To the economist fisheries statistics show, (1) the value of the fisheries to the state in terms of dollars and cents (2) the numbers of people wholly or partially dependant for their livelihood on the seafood resources of the state.

Florida commercial fisheries statistics have been collected by two agencies, the U. S. Fish and Wildlife Service, intermittently since 1880 and by the Florida State Board of Conservation, yearly since 1933. Poundages of fish landed by county has been collected at the end of the year, and some information has been gathered concerning the allotment of the catch and boats engaged in fishing. Both agencies readily admit that their coverage has not been adequate, due to the lack of funds or trained personnel who could devote their full time to the problem. It might be well to note that preliminary work done on the setting up of monthly reports has shown that many of the smaller wholesale fish businesses have not in the past kept the records we require. Many kept their purchase slips in a cigar box, and at the end of a year they would not make the effort required to check through all these tickets (if they were not already lost) and add up the required totals. Consequently, many of the figures obtained at the end of the year were gross estimates, and certainly open to serious question as to their accuracy. Monthly reports may not entirely eliminate this difficulty, but will unquestionably improve the accuracy of reports.

With the formation of the Atlantic States Marine Fisheries Commission and the Gulf States Marine Fisheries Commission, attention has been focused upon fisheries problems in the southern states. Papers presented by scientists of both the University of Miami Laboratory and of the U. S. Fish and Wildlife Service have urged the need for the establishment of a sound statistical system for Florida. The Florida State Board of Conservation responded by authorizing the Marine Laboratory to collect the Florida Marine Fisheries Statistics. To aid in the setting up of this system the U. S. Fish and Wildlife Service has provided the full time services of a member of their staff to work in collaboration with the staff of the Marine Laboratory at the University of Miami.

Ideally, fisheries statistics should show landings in great detail. Landings by area caught, by species, by numbers and weight of fish caught by each type of gear and reported by date of capture are all necessary for biological analysis. Realizing that there was not the scientific staff available to collect, or the clerical staff to record and compile this mass of data, it was decided to begin by collecting monthly records of poundage landed by species and area. Later the program can be expanded to include boat and gear data and other refinements. To aid in the collection of statistics the State Board of Conservation passed a regulation requiring all wholesale dealers to return a report monthly of their production by species to the statistical office at the University of Miami Marine Laboratory.

Realizing the extent of the problem, it was decided to look upon the initial phase of our program as educational. That is, the wholesale dealers must be made to realize why accurate collection of the information is of vital interest to them and also that their reports are for research purposes only, and will not be used for tax purposes. With this in mind a bulletin was prepared and sent out to all the wholesale fish dealers within the state in August, 1950. This bulletin was followed by personal interviews of all dealers in which essentially the same information was presented. From there the plan of attack was as follows: Forms

were mailed out at the end of September, 1950, requesting the poundage and the species of fish bought from the fisherman during that month. All reports are returned to the University of Miami Marine Laboratory for processing. Here they are then tabulated and the totals struck for each county. Summaries are then mailed to the U. S. Fish and Wildlife Service in Washington, D. C. for publication and subsequent distribution to the industry and other interested persons.

To keep track of all the dealers and to check delinquent reports, it was necessary to build up a card index file of all the wholesale dealers within the state. On these cards is recorded the name of the firm, names of the manager and bookkeeper, their atittude towards reporting, whether their production is fish or shellfish or both, and other general information of value to us. To match this card index, a large wall chart was prepared, which shows the complete list of wholesale dealers, listed by county, providing a check on the reports received.

The collection of fisheries statistics in Florida presents many problems rather unique to this area: (1) There are, at present, more than 700 wholesale licenses issued in the state each year. This figure is constantly in a state of flux, due to new enterprises starting up and old ones going out of business. There were over 200 such changes during 1949. (2) An interview trip to all the wholesale dealers involves driving 3500 miles. (3) Florida waters produce more than 70 marine species of fish and shell fish of commercial importance. Local names of many of the fishes are still confused, the common name of one species in southern Florida will often refer to an entirely different species in the northern section of the state. (4) Many of the dealers are in business in a small way and it is difficult to convince them of the value of accurate reports of their landings. (5) Fish are often separated and weighed by price rather than by species. For example the silver mullet and the small black mullet bring the same price to the fisherman and are consequently weighed together. Therefore reports on silver mullet landings in the past have included an unknown percentage of the other species.

There are also several other problems common to the collection of fisheries statistics everywhere: namely, (1) Many dealers fear that their reports will be used for income tax purposes or by interests anxious to restrict their fishing. In this respect all our contact with the industry has stressed the fact that landing reports are for research only. (2) Fish caught are not necessarily landed at the port nearest their place of capture and careful checks must be made in order to adjust county totals to their true values.

What has been the response to this initial effort to collect the Florida landings on a monthly basis? In general the dealers have been friendly and cooperative with only a very small fraction raising any serious objections. Almost all the resistance has been of a passive nature in that many dealers have not mailed back their completed forms by the date required. In September (the first month for which figures were requested) only 25 per cent of the dealers reported by mailing in the data as required. By personal interview another 50 per cent of the dealers submitted the required information. Altogether about 75 per cent of the reports were obtained for September, which includes an estimated 80 per cent of the fish landed, since non-reporting dealers were for the most part small operators. It is confidently expected that a considerably greater proportion of the landings will be collected as time goes on and the system is perfected.

These initial results, although not complete, are a definite step towards the establishment of a systematic collection of accurate records on our marine fisheries resources. It might be well to mention that any plan for the obtaining of fisheries statistics is constantly being revised in an effort to obtain more complete information. In this respect it is hoped that the Florida system will not be unique and that adjustment will be made to solve the many problems still remaining until in the near future accurate statistical information will be available to fisheries scientists working for the conservation and, at the same time, utilization of Florida's valuable marine fisheries resources.

The Gulf States Marine Fisheries Commission: A Progress Report

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A HISTORY OF THE EVENTS which led to the formation of the Gulf States Marine Fisheries Commission in 1949, and of its activities prior to this year is outlined in a paper presented to this Institute a year ago. The present account describes the progress made since that meeting. Encouraging advances have been made in interstate cooperation towards the solution of problems of the commercial fisheries in the Gulf of Mexico.

It was at the suggestion of the U. S. Fish & Wildlife Service, the official research agency of the Commission, that the Commission's Committee to Correlate Research and Exploratory Data met with representatives of the Service at the Gulf and Caribbean Institute in November of 1949. At the meeting further details in connection with the vessels *Oregon* & *Alaska* were made available to the Commission conferees by representatives of the Service who were in attendance. A special meeting of the Commissioners and Commission biologists and attorneys was held at New Orleans on January 6th, 1950. The purpose of this special meeting was to discuss possible initial commercial exploratory fishing endeavors to be undertaken by the *Oregon*.

Following the Houston conference by three months, the next regular meeting of the Commission was held at Tampa on January 19th and 20th, 1950. The Commission, in cooperation with the Fish and Wildlife Service, and representatives of the fishing industry, developed and adopted an initial program of Gulf exploratory commercial fishing. The program was initiated in April, following repair and conversion of the motor vessel *Oregon* and the establishing of the Service's Exploratory Fishing and Gear Development Section offices at Pascagoula. Also, at the Tampa meeting, the Commission adopted a resolution urging the Congress to appropriate sufficient funds for continuing scientific research at the Fish and Wildlife Service's Pensacola laboratory. Later these funds were provided and the Pensacola laboratory is continuing its important research activities. Realizing the importance of landing records to the proper utilization of the fisheries of the Gulf, the Commissioners adopted a resolution at the Tampa meeting petitioning the commissions of the several member states to assist and aid in the collection of statistical information and data regarding the quantity and species of fish and marine life taken from the waters of the several states, and to make such statistical information available to the Gulf States