INTER-AMERICAN TROPICAL TUNA COMMISSION SUMMARY MINUTES OF THE THIRTEENTH ANNUAL MEETING

Panama City, R. P. . 23 - 24 February, 1961

The thirteenth meeting of the Inter-American Tropical Tuna Commission, being the regular annual meeting for 1961, convened at 10:25 a.m. 23 February 1961 in the Washington Room of the Panama-Hilton Hotel in Panama City, Republic of Panama.

Attending the meeting were the following persons:

Representatives of Member Governments

Costa Rica: Lic. José Luis Cardona-Cooper, Chairman of the Commission

Panama: Lic. Felipe J. Escobar - Minister of Agriculture, Commerce and Industries

Sr. Juan L. Obarrio - Commissioner

United States of America: Dr. J. Laurence McHugh - Secretary of the Commission

Mr. Eugene D. Bennett - Commissioner Mr. Robert L. Jones - Commissioner Mr. Lee F. Payne - Commissioner

Members of the scientific staff of the Commission:

Dr. Milner B. Schaefer - Director of Investigations

Mr. William H. Bayliff

Mr. Edward F. Klima Scientists

Dr. Malvern Gilmartin

Official Observers from other Governments:

Chile: Sr. Teófilo Reyes, C., Ambassador

Ecuador: Dr. Benjamin Tarán Varea, Ambassador

Japan: Mr. H. Ishida, Ambassador

Mr. K. Sameshira

<u>Mexico</u>: Sr. Rodolfo Ramírez Granados, Jefe de Estudios Biológicos de la Direc-

ción de Pesca

Nicaragua: Sr. Oscar D. Barreto, T., Ambassador

Peru: Sr. José Alvarado Sánchez, Ambassador

Official Observer from the Food and Agriculture Organization of the United Nations:

Dr. T. Sparre - Instituto de Investigación de los Recursos Marinos del Perú

Others:

Mr. L. MacKenzie - International Cooperation Administration, USA.

Lic. F.S. Tapia C. - Panama Representative, American Tunaboat Association

Dr. W. M. Chapman - The Resources Committee, USA. Mr. W.D. Moore, Jr. - Van Camp Seafoods, Inc.

Sr. R.C. Worsley - Agente de Barcos Atuneros (Panama)

Sr. Carlos A. Arosemena - Cooperativa Pesquera Panameña, S.A.

Mr. John Calise - Seine and Line Fishermen's Union

An address of welcome, opening the meeting, and welcoming the Commissioners and others in attendance was made by Minister Felipe J. Escobar. Sr. Juan L. Obarrio, Commissioner of Panama, also welcomed the persons attending the meeting, and expressed appreciation to the observers from Japan that their Government had recently agreed to cooperate with the Commission in providing catch statistics of Japanese flag vessels operating in areas of interest to the Commission. Mr. Lee F. Payne, on behalf of the U.S. Delegation, expressed their pleasure at meeting again in the Republic of Panama. Dr. T. Sparre, observer from FAO, expressed his pleasure at being able to attend, and conveyed the gratitude of FAO to the Commission for its assistance to the project in Peru being carried out under the auspices of the Special Fund of the United Nations. Lic. José L. Cardona-Cooper, Chairman, expressed his pleasure at being again in Panama, spoke of the importance of the work of the Commission, thanked Dr. Sparre for his remarks, and offered the continuing cooperation of the Commission with FAO.

Approval of the Agenda

There had been circulated a suggested agenda for the meeting. There being no requests for additional items, or for any modifications, the suggested agenda was adopted as the agenda for the meeting.

Discussion of research progress and status of the fishery

Dr. Schaefer, Director of Investigations, commenced presentation of information concerning recent developments in the fishery for the tropical tunas and for the bait species, on the condition of the fish stocks, and on the results of research carried forward during the past year. This presentation was illustrated with a number of charts and graphs, in the form of lantern slides.

This presentation, and discussion of various points thereof continued during the remainder of the morning.

The meeting was recessed for lunch at 12:00 noon.

The meeting reconvened at 2:30 p.m.

Dr. Schaefer continued his presentation, and answered further questions from the audience and the Commissioners.

Annual Report for 1960

A draft of the Annual Report of the Commission for the calendar year 1960 had been prepared by the Director of Investigations and had been received by the Commissioners prior to the meeting.

It was moved, seconded, and unanimously adopted that: The Annual Report for the year 1960 is approved, as drafted, for publication.

Research program for 1961-1962

The following outline of the proposed research program had been circulated in advance of the meeting:

The research program proposed for the next fiscal year follows, in general, the program previously conducted with, however, important changes of emphasis, as follows:

1. Decreased research on baitfish at both headquarters and Panama laboratories; initiation of new studies in the Gulf of Guayaguil. Increased efforts to study tuna population structure by blood-typing. 3. Increased emphasis on the monitoring of the effects of the fishery on the yellowfin tuna stocks, both by analysis of catch statistics and by the study of the vital statistics of this species. If regulations should be imposed during this year, the monitoring of their effects will also become important. 4. Oceanographic research will be confined largely to analysis of accumulated data, except for participation in one Scripps cruise in the fall and carrying forward of newly-initiated studies in the Gulf of Guayaquil, and except for such other cooperative work with other agencies as may develop which are especially advantageous to us. An outline of the complete research plan follows: related information a. Continuing routine collection and compilation of current data on catch and fishing effort.

- 1. Collection, compilation, and analysis of catch statistics, logbook data, and
 - b. Calculation of statistical indices of tuna abundance. Special attention to be given to the problem of making comparable the statistical series derived from baitboat data and those derived from purse-seine data, which has become urgent with the rapid shift of the fleets to the latter type of gear.
 - c. Continuing research to measure the effects of fishing on the stocks, and the effects of changes in abundance and distribution of the fish stocks on the operating patterns of the fishing fleets.
 - d. Further development of theoretical population-dynamics models to describe effects of fishing on stock and yield.
 - e. Monitoring of the effects of such regulations as may have been initiated.
- 2. Investigations of life history, biology, population structure, and vital statistics of yellowfin and skipjack tunas
 - a. Studies of population structure and migrations.
 - (1) Tagging Continued tagging operations from commercial vessels on regular fishing trips and from charter vessels, with emphasis being shifted to the latter. Continued analysis of data to measure migration, diffusion, mortality, and growth.
 - (2) Correlation of size-frequency data with tagging results to infer population structure.
 - (3) Conducting of full-scale program of tuna blood-typing to elucidate population structure.
 - Continuation of routine size-composition sampling programs in California, Peru, and Ecuador, with routine processing of resulting data using digital computer programs.

- c. Continuation of research on vital statistics (age, growth, mortality, and year-class strength) from size-composition data in conjunction with data on catch-per-unit-of-effort.
- d. Continued development and application of mathematical models based on vital statistics to compare with the results of models based on catch data alone, to aid in understanding the dynamics of the tuna populations, and as a basis of monitoring the effects of fishing on the stocks and the effects of any regulations which may be imposed on the fishery.
- e. Studies of spawning and early life history.
 - (1) Studies of tuna fecundity and its possible variation in different sub-populations.
 - (2) Continuation of studies of spawning and early development from collection of larvae and juveniles mostly analysis of material already at hand, no new cruises being planned for this purpose, although material will continue to be collected for us incidentally by cooperating agencies.
- f. Behavior of tunas Analysis of data on temporal variations in tuna abundance and distribution in relation to variations of environmental factors, with particular reference to effects on availability to the fishery.

3. Oceanography and tuna ecology

- a. Continued study of accumulated oceanographic and meteorological data to elucidate seasonal and annual variations in physical, chemical and biological factors, and to understand both large and small-scale oceanic processes.
- b. Analysis of data from the Central American "Dome" Cruise of 1959 and the extensive cruise off South America (STEP 1) of 1960.
- c. Participation of one or two scientists in a Scripps cruise to the vicinity of Galapagos Islands in fall 1961.
- d. Initiation of a study of the physical, chemical, and biological oceanography of the Gulf of Guayaquil, to be closely integrated with the work of the Fisheries Institute of Ecuador (under the auspices of the U.N. Special Fund).
- e. Study of indicator organisms (chaetognaths), with special reference to
- f. Further support of Dr. Bjerknes of UCLA to study meteorological and oceanographic relationships in the Eastern Pacific, with special reference to the "El Niño" phenomenon.
- g. Continued cooperation and assistance to other agencies studying fishery oceanography in the Eastern Tropical Pacific.

4. Research on baitfishes

a. Studies in the Gulf of Nicoya - continuation of present routine program of biological and hydrographic observations.

- b. Studies in the Gulf of Panama.
 - (1) Completion of reports on past investigations.
 - (2) Field work to be confined to study of migrations and relative fishing intensity by internal tags recovered in reduction plants.
- c. Studies in the Gulf of Guayaquil (in cooperation with the Fisheries Institute of Ecuador).
 - (1) Studies of physical, chemical and biological oceanography.
 - (2) Studies of biology of anchovetas and other baitfishes.
- d. Routine compilation and analysis of statistical data on baitfish catches.
- e. Completion of study on the fecundity of anchovetas, and study of thread herring in Panama.

At the request of the Chairman, Dr. Schaefer explained the program, with special emphasis on changes from the preceding year. In the ensuing discussion it was particularly noted that the research work of the Commission's staff is of value both to Member Governments and those who are not yet parties to the Convention, and also that much of the research is useful not only for understanding and managing the stocks of tunas and bait species, but other marine resources as well. This is particularly true of the research on oceanography and ecology, the results of which have wide application.

Following the discussion, it was moved, seconded and unanimously approved that: The Commission approves and adopts the research program for the fiscal year 1961-1962 presented by the Director of Investigations.

Cooperation with Special Fund Projects in Peru and Ecuador

The Director of Investigations reported that the agreement with FAO, under which the staff of the Commission and of the FAO-Special Fund projects in Peru and Ecuador cooperate in research as arranged between the Director of IATTC and the Directors of these new laboratories, seemed to be working very well. During the past year, there had been considerable exchange of data and materials with the Institute of Marine Resources Research in Peru, and there had been good cooperation between the Commission, the Scripps Institution of Oceanography and the Institute in Peru, in carrying out the extensive research cruise, STEP I, off northern South America. Dr. Sparre, Director of the Institute in Peru, again mentioned the satisfaction of FAO with the arrangement, and noted the valuable cooperation and data exchange which had already taken place.

In the case of Ecuador, little progress had been made because the Commission's plans for initiating work in the Gulf of Guayaquil are contingent on the establishment of the new Institute of Fisheries Research there. This had not yet been done, and, indeed, a Director for the Ecuador project had not yet arrived in Ecuador. It is anticipated, however, that this will get underway in the relatively near future.

Dr. Chapman, observer for the Resources Committee, noted the importance of the Tuna Commission's cooperative work with these projects, and indicated the probability that other countries as well would look to the Tuna Commission for aid and guidance in various aspects of marine research. He noted that the scientists of countries of Africa south of the Sahara, being familiar with the Commission's accomplishments,

had recently recommended the formation of a similar inter-governmental organization to study the tuna fisheries of the Eastern South Atlantic.

Research program and budget for 1962-1963

The Director of Investigations had prepared and circulated in advance of the meeting recommendations for the research program and budget for the fiscal year I July 1962 to 30 June 1963. A substantial increase in the research budget, to \$535,680, was recommended. This increase will be needed to bring the Commission's research program, especially in its sea-going phases, back to the level where it belongs. Increases in vessel operating costs, personnel, and other goods and services have advanced year by year, and the budget has not increased proportionately. It has, during recent years, been possible to continue substantially the required research program only because of other sources of support for research vessel expenses. It is not expected that these will be available during 1962-63, because of other demands, such as the Indian Ocean Expedition, and the Tuna Commission will, therefore, have to have additional funds if its research is to be continued on the required scale.

After some discussion of the program and budget, it was moved, seconded and unanimously adopted that: The program of research recommended by the Director of Investigations for the fiscal year 1 July 1962 to 30 June 1963 is recommended to the Member Governments, and there is recommended to be appropriated a budget of \$535,680 for its execution.

Proportion of contributions from Member Governments for fiscal year 1962-63

In accordance with the Convention, the Commission had determined that contributions from Member Governments for the joint expenses of the research program should be in proportion. to the quantities of yellowfin and skipjack tuna from the Eastern Tropical Pacific utilized by each nation, with a minimum contribution of \$500. At the request of the Chairman, Dr. Schaefer presented statistics which indicated that the utilization of these species by the Member Nations during the most recent year (1960) was:

United States of America Republic of Costa Rica Republic of Panama

314.08 million pounds 0.77 million pounds none x460

It was, therefore, moved, seconded and unanimously adopted that: <u>The contributions for the joint expenses of the Commission during the fiscal year 1 July 1961 to 30 June 1962 shall be in the following proportion:</u>

United States of America 99.76%
Republic of Costa Rica 0.24%
Republic of Panama - minimum contribution of \$500.00

the proportions to be reassessed if another country or countries adhere to the Convention.

It then being 4:30 p.m., the meeting was recessed until the following morning.

The meeting reconvened at the same place at 10:00 a.m., 24 February 1961.

Election of Officers for the next year

Sr. Juan L. Obarrio, of Panama, was nominated for Chairman of the Commission for the ensuing year; and Sr. Lic. José L. Cardona-Cooper, of Costa Rida, was nominated for Chairman of the Commission

nominated Secretary of the Commission for the ensuing year; both were unanimously elected.

Date and place of next annual meeting

Because of conflicts with other duties, Commissioners of both Costa Rica and Panama indicated that a later date, perhaps in late May, would be more suitable from their standpoint than the February dates which had been selected in recent years. It was moved, seconded, and unanimously adopted that: The next annual meeting shall convene on 24 May 1962.

In accordance with the regular rotation of meeting places among the member countries, the next annual meeting would be held in the United States, and San Diego, California, was considered to be most suitable. It was suggested, however, that should another nation or nations adhere to the Convention, it would probably be desirable to hold the meeting in one of them. It was, therefore, moved, seconded and unanimously adopted that: The next annual meeting will be held in San Diego, California, unless another nation or nations adhere to the Convention during calendar year 1961, in which event the meeting will be held at a suitable location in the first nation to adhere, should that nation desire to have the meeting held there.

Status of the fishery for yellowfin tuna and the possible approaching need for recommendations for conservation action

It had been indicated, during the discussions of the previous day, that with the rapid shift of many vessels from fishing with pole-and-line, using live-bait, to fishing with purse seiners, there is occurring an increase in the exploitation of the populations of yellowfin tuna in the Eastern Pacific, and a decrease in the exploitation of skipjack. It had been indicated by staff studies that the fishery for yellowfin tuna is approaching the level of maximum average sustainable yield, and that overfishing might be imminent. There had been prepared and circulated in advance of the meeting a background paper on this subject, "Present status of the fishery for yellowfin tuna, and the possible coming need for management regulations".

At the request of the Chairman, the studies and conclusions of this paper were reviewed by Dr. Schaefer, the charts and graphs being displayed as projected lantern slides. There ensued extended discussion of some of the technical points, of the celerity with which the Commission might need to take action during this next year, and of the possible types of conservation measures which might be recommended. In the latter connection, it was noted that there are several different means which might be employed to conserve the yellowfin tuna population, and that the choice among these would depend on ease and effectiveness of enforcement and on ancillary economic considerations. It was urged that the fishing industries in the several member nations give careful consideration to this, so that they might provide guidance to their national sections of the Commission in selecting the most appropriate recommendations.

The following Resolution was moved, seconded, and unanimously adopted: The Inter-American Tropical Tuna Commission recognizes the possibility that it will need, in the relatively near future, to make recommendations for joint action by the Member Governments to maintain the stocks of yellowfin tuna in condition to sustain maximum average yields. The Commission may need to call a special meeting, to consider types of regulations, at such date later this year as may be required.

The meeting was adjourned at 12:45 p.m.