

SUMMARY MINUTES OF THE ELEVENTH MEETING
INTER-AMERICAN TROPICAL TUNA COMMISSION
San Pedro, California
5 February, 1959

The eleventh meeting of the Inter-American Tropical Tuna Commission, being the regular annual meeting for 1959, convened at the Hacienda Hotel in San Pedro, California, commencing at 9:30 a.m. on 5 February 1959.

The following Commissioners were present:

For Costa Rica:

Sr. Col. Fernando Flores B.
Sr. Victor Nigro

For the United States of America:

The Honorable Eugene D. Bennett
The Honorable Robert L. Jones
The Honorable Lee F. Payne
The Honorable Arnie J. Suomela

Members of the National Section of Panama being unable to attend, the Government of Panama was represented by:

Sr. J. Luciano Duque
Consul General of Panama in Los Angeles, California

Dr. M. B. Schaefer, Director of Investigations and fourteen members of the scientific staff were in attendance.

The following special observers were present from other Governments:

Mexico - Sr. Fernando Najjar Ruiz,
Jefe de la Oficina Mexicana de Pesca
Secretaría de Marina
San Diego, California

Peru - Sr. Oscar Guillón G.
Consejo de Investigaciones Hidrobiológicas
del Peru

Also present were members of the staffs of various scientific organizations in California, members of the fishing industry, and others.

In the absence of the Commission's Chairman, Sr. Juan L. Obarrio of Panama, the Honorable Lee F. Payne of the United States of America, was designated Chairman, pro tem.

Mr. Payne opened the meeting, introducing Commissioners Flores of Costa Rica and Jones of the United States, who had been appointed to the Commission since the last meeting, and introducing and welcoming Sr. Duque of Panama who was represent-

ing his Government in the absence of the regular Panamanian Commissioners. Mr. Payne also introduced and welcomed the observers from Mexico and Peru.

The provisional agenda, which had been prepared and circulated in advance of the meeting, was unanimously approved and adopted. Thereafter, there were taken up the several items on the agenda.

Discussion of the present status of the fishery and of the fish stocks, and of current research results

At the request of the Chairman, Dr. Schaefer presented data and slides illustrating the current condition of the fishery and of the fish stocks. It was shown that the geographical distribution of the fishery had been substantially modified in 1958, due to changes in the distribution of the tunas in response to unusual oceanographic conditions. The total harvest of yellowfin tuna declined slightly from the previous year, but the total harvest of skipjack increased substantially. Both species of tropical tunas continued to be fished at intensities below those corresponding to maximum sustainable catch.

Corresponding to a shift in fishing effort away from the equatorial region and toward the extremes of the fishery, related to oceanographic conditions having modified the tuna distribution, the tropical bait species (the anchoveta in particular) were employed to a lesser extent than formerly, while there was a corresponding increase in the use of the bait species of more temperate waters, such as the northern anchovy, California sardine, southern anchovy, and southern sardine.

The various researches being conducted on the population structure, migrations, reproduction, behavior, and ecology of the tunas and baitfishes, and on physical, chemical, and biological oceanography were presented, and illustrated with slides, by Dr. Schaefer and several members of the scientific staff.

A number of questions about the details of some of the researches were asked by the Commissioners and others present and were answered by the staff.

Approval for publication of the Annual Report for 1958

Copies of the draft of the Annual Report for the year 1958 had been sent to the Commissioners for review prior to the meeting. No changes were proposed.

It was moved, seconded, and unanimously approved that: The Annual Report for the year 1958, as drafted by the Director of Investigations be approved for publication.

It then being 12:00 noon, the meeting was recessed until 2:00 p.m.

Upon reconvening at 2:00 p.m. moving pictures were shown depicting various operations aboard oceanographic research vessels and commercial fishing vessels, after which the discussion of the remaining items on the agenda was resumed.

Program of Investigations for fiscal year 1959-1960

The Director of Investigations had circulated prior to the meeting the following outline of proposed investigations during fiscal year 1959-1960, corresponding, with few modifications, to the forecast made at the previous annual meeting:

1. Collection, compilation and analysis of catch statistics, logbook data and related information for tunas and baitfishes.
 - a. Continue routine collection and compilation of current data, including computation of established statistical indices.
 - b. Continue research based on these data to study changes in abundance and yield in space and time, including the continuing development and application of theoretical models.
2. Investigations of the life history, biology, and population structure of the yellowfin and skipjack tunas.
 - a. Continue market measurement program at San Diego, San Pedro, Peru and Ecuador.
 - b. Further research on age and growth from size frequencies, including areal and temporal variations.
 - c. Continued research on changes in abundance of age-groups in space and time, by the combination of data on size-frequencies and catch-per-unit-of-fishing-effort; including the preliminary estimation of variations in year-class strength and of mortality rates.
 - d. Research on the application of blood-typing to the elucidation of population structure of tunas in the Eastern Tropical Pacific.
 - e. Studies of tuna migrations.
 - (1) Tagging
 - (a) Continued full-scale tagging operations aboard commercial fishing vessels from California, Peru, and Ecuador, throughout the year.
 - (b) Tagging from chartered commercial vessels to obtain data for areas and seasons of inadequate coverage by routine fishing cruises.
 - (c) Analysis and publication on tagging results through 1958, with particular reference to estimating rates of "diffusion" of fish from tagging locations, and rates of total mortality.
 - (2) Inference of migration patterns from changes in abundance of size groups in contiguous areas, correlated with direct measurements by tagging.
 - f. Studies of tuna maturation, spawning, and early life history.
 - (1) Continuation (and possible completion) of collection and analysis of data on maturity of gonads of tunas in commercial catches.
 - (2) Determination of fecundity (number of eggs spawned) in relation to size for the yellowfin and skipjack.

- (3) Continuing study of collections of juvenile tunas collected incidentally to tagging, oceanographic, and other cruises.
- (4) Systematic sampling for larval and juvenile tunas in the sea area off Cape Blanco, Costa Rica from our Puntarenas laboratory to assess seasonal variations in occurrence.
- (5) Continued study of planktonic larvae. No special cruises for the purpose are planned, but material will be obtained on a series of cruises sponsored by the Tuna Oceanography Project of the Scripps Institution, and on other cooperative cruises.

g. Studies of schooling habits of tunas.

- (1) Continued collection and analysis of data on species and size composition of schools, collected by scientists on tagging cruises.

h. Feeding habits of tunas.

- (1) Completion of studies now underway on the stomach contents of tunas, by time and area strata, from commercial landings. Decision as to further investigations to be made after evaluation of these data.

3. Oceanography and tuna ecology

a. Continuing study of existing oceanographic and meteorological data for:

- (1) General description of the circulation of the Eastern Pacific.
- (2) Correlation of seasonal and annual variations in meteorological, oceanographic, and biological features with results of tuna fishing.

b. Completion of analyses of data from "Eastropic", "Scope", and "Scot" expeditions.

c. Collection of additional data on physical, chemical, and biological oceanography by means of:

- (1) Participation in cruises of Scripps Tuna Oceanography Project, and cooperation in analysis of data.
- (2) Participation in an expedition of the Scripps Institution to the region of the Panama Bight southerly to Chile in the late summer of 1959 (now being planned).
- (3) Cooperation with scientists of the Consejo de Investigaciones Hidrobiológicas of Peru.

~~d. Continuation and expansion of collection of sea temperature data at selected points along the mainland and on outlying islands, in cooperation with other agencies.~~

e. Continuation of collection and analysis of quasi-synoptic sea surface temperature data from tuna fishing vessels. The utility of thermographs compared with the use of ordinary thermometers to be evaluated, and a

decision made on whether to continue the use of the former.

- f. Continued studies of zooplankton organisms, especially chaetognaths, as indicator organisms; particular emphasis on vertical distribution to elucidate relationships with physical and chemical factors.
- g. Further investigations of "island effects" from analysis of existing data, and planning for additional studies.

4. Research on baitfishes.

- a. Continued studies in the Gulf of Nicoya, Costa Rica, including:
 - (1) Completion of study of hydrography of the Gulf.
 - (2) Monitoring of the anchoveta population.
 - (3) Completion of preliminary study of biology on herring (Opisthonema)
- b. Continued studies in the Gulf of Panama and adjacent areas off the coast of Colombia on the life history, biology, and ecology of the anchoveta stocks.
- c. Continued collection of data and materials from other areas by tuna vessels and by special field trips.
- d. Compilation and analysis of statistical data from tuna logbooks on the abundance and yield of anchoveta stocks in major baiting areas.
- e. Continuation (and possible completion) of studies of eggs, larvae, and juvenile stages of anchovetas, based primarily on material from the Gulf of Panama.

The financial support for the research program, recommended by the Commission at its previous meeting, in the amount of \$378,345, appeared likely to be closely approximated by the contributions of the member governments, since the U.S. Budget Bureau had approved appropriations in the amount of \$372,700.

After a brief review of the recommended program, it was moved, seconded, and unanimously approved that the program of investigations, prepared and recommended by the Director of Investigations for fiscal year 1959-1960 be approved and adopted.

Research program and budget for fiscal year 1960-1961

The Director of Investigations had circulated, prior to the meeting, detailed recommendations for the fiscal year 1960-1961, together with estimates of the funds required. The program is essentially a continuation of the program of the previous year, with some changes of emphasis in the various projects, which were described in detail in the proposal circulated, and which were discussed by the Commission. The budget for this research program, in the amount of \$386,700, calls for a small increase in funds. The increase does not represent any increase in the scope of the research, but is required to offset partially the increasing costs of goods and services. Indeed, the research program is actually being somewhat decreased, due to the increasing participation by other agencies making possible some curtailment of the Commission work in certain aspects of biological oceanography.

It was noted that the budget estimate previously circulated had included an additional item of \$10,000 for the Commission's contribution to an employee retirement plan, being sponsored by several of the International Fisheries Commissions of which the United States is a party. The plan, however, failed to receive majority approval by the staff of this Commission, in consequence of which it was suggested that this item be deleted from the recommended budget. The Commissioners unanimously concurred with this suggestion.

An inquiry was made by the United States Section whether the proposed program and budget had been circulated to the members of the Advisory Committee to that Section, and whether they had any comments. It had been so circulated, and members of the Advisory Committee in attendance expressed their full approval of the program and the budget.

It was then moved, seconded, and unanimously approved that the Commission approve the general program of investigations prepared by the Director of Investigations and previously transmitted to the Commissioners, and that to conduct these investigations there is recommended for the period 1 July 1960 through 30 June 1961 a budget of \$386,700.

Proportions of contributions by member governments for fiscal year 1959-1960

At the request of the Chairman, Dr. Schaefer presented statistics of the utilization, during 1958, of the tropical tunas (so defined by the resolution of the 1953 annual meeting) by the three member governments:

United States of America	- 299,674,000 pounds
Costa Rica	- 763,000 pounds
Panama	- none

Therefore, in accordance with the formula adopted by the Commission at its 1953 meeting, the contributions of the three member governments to the joint expenses should be:

United States of America	- 99.8%
Costa Rica	- 0.2%
Panama	- minimum contribution of \$500

It was moved, seconded, and unanimously adopted that: Contributions to the joint expenses of the Commission for fiscal year 1959-1960 shall be in the following proportions: United States of America 99.8%; Costa Rica 0.2%; Panama - minimum contribution of \$500.

Adherence of other Governments to the Convention

Mr. Bennett of the United States inquired about the extent of participation of other nations, not now parties to the Convention, in the tuna fishery of the Eastern Tropical Pacific. It was indicated by the Director of Investigations that the approximate current utilization of tunas by such governments was as follows:

Mexico	- about 2,000,000 pounds per year
Ecuador	- about 3,500,000 pounds per year
Peru	- about 8,000,000 to 10,000,000 pounds per year
Colombia	- less than 1,000,000 pounds per year

The mutual advantage to the present member governments and to governments not now parties to the Convention of the latter participating in the sponsorship of the scientific research of the Commission was pointed out. It was noted that the Convention is open to adherence by all nations having an interest in the fishery. It was further noted that, although the several nations having an interest had previously been invited to join, it might now be appropriate to extend a further invitation.

It was then moved, seconded, and unanimously approved that the Commission should request the Foreign Offices of the present member governments to communicate with the governments of nations having an interest in the tuna fishery of the Eastern Pacific Ocean in order to invite them to adhere to the Convention.

Election of officers for the next year

Mr. Robert L. Jones, of the United States of America, was nominated as Chairman of the Commission for the ensuing year. This nomination was seconded, and he was unanimously elected.

Sr. Don Juan L. Obarrio, of Panama, was nominated as Secretary of the Commission for the ensuing year. This nomination was seconded, and he was unanimously elected.

Place and time of the next annual meeting

It was noted that, in accordance with the practice of holding annual meetings in turn in each of the member countries, the next annual meeting should be held in Costa Rica.

Considering other commitments of some of the members of the Commission, it was determined that late February would be the most convenient time of year.

It was, therefore, moved, seconded, and unanimously approved that the next annual meeting of the Commission be held in San José, Costa Rica on 23 February 1960.

Memorial resolutions respecting Dr. Bell M. Shimada and Mr. Townsend Cromwell, members of the Commission's scientific staff who lost their lives in line of duty on 2 June 1958, and respecting Mr. Montgomery Phister, Advisor to the United States Section of the Commission, who passed away on 26 December 1958, were proposed, seconded, and unanimously adopted. Those resolutions are reproduced here:

MEMORIAL RESOLUTION RESPECTING

DR. BELL M. SHIMADA AND TOWNSEND CROMWELL, ESQUIRE

Whereas, Dr. Bell M. Shimada and Townsend Cromwell, Esquire, were senior scientists on the staff of the Inter-American Tropical Tuna Commission since its early days

Whereas, their devotion to their researches and their outstanding abilities resulted in scientific contributions of great importance both to advancing basic knowledge in oceanography and marine biology and to the conservation of the living resources of the sea.

Whereas, their scientific studies are of far reaching importance to the welfare of the fishing industries of the Americas.

Whereas, these men lost their lives in the performance of their duties for the Commission. Now, therefore, be it

Resolved: That in the passing of Dr. Bell M. Shimada and Townsend Cromwell, the Inter-American Tropical Tuna Commission has lost two of the most important members of its scientific staff, marine science has lost two of its leaders, and the fishing industry of the Americas has lost two of its finest friends and supporters. Be it further

Resolved: That a copy of this resolution be incorporated in the Minutes of the Commission's Meeting, and copies thereof sent to their families and their associates.

MEMORIAL RESOLUTION RESPECTING

MONTGOMERY PHISTER

Whereas, Montgomery Phister, Esquire, was a leader for many years in the fishing industry of the Eastern Pacific Ocean, and

Whereas, he was at all times a staunch advocate of international cooperation in the wise and efficient management of the fishery resources of the sea, and

Whereas, he was one of those primarily responsible for the creation of the Inter-American Tropical Tuna Commission, having been instrumental in urging the United States Government to undertake the original negotiations leading to the Convention establishing it and was active in securing the advice and consent of the United States Senate to its ratification and was an indefatigable worker in securing appropriations in order to maintain its scientific work, and,

Whereas, he rendered valuable service to the Commission as an official advisor from its beginning. Now therefore be it

Resolved: That in Montgomery Phister's passing the Commission has lost a stalwart supporter, the fishing industry of the United States an outstanding leader, and those who are engaged in the development of the fisheries in the Eastern Pacific Ocean a warm, understanding and valued friend. Be it further

Resolved: That the annual meeting of the Inter-American Tropical Tuna Commission at San Pedro, California this 5th day of February 1959 be adjourned out of respect for and in memory of Montgomery Phister. And be it further

Resolved: That a copy of this resolution be incorporated in the Minutes of the Commission's Meeting and copies thereof sent to his family and to his associates.

The Chairman ordered that these resolutions be spread on the minutes of the meeting. He then declared the meeting adjourned in memory of Dr. Bell M. Shimada, Mr. Townsend Cromwell, and Mr. Montgomery Phister, at 3:55 p.m.