

INTER-AMERICAN TROPICAL TUNA COMMISSION
c/o Scripps Institution of Oceanography
La Jolla, California 92037

February 5, 1971

Ref.: 1342.154.160a

TO: All Commissioners,
Attendees of 23rd Annual Meeting of IATTC,
and all interested persons

FROM: Director of Investigations

SUBJECT: Minutes of 23rd Regular Annual Meeting

Transmitted herewith are the minutes of the 23rd Annual Meeting of the Inter-American Tropical Tuna Commission, held in San José, Costa Rica on January 5, 6, 7 and 20, 1971.

All member countries were represented by one or more regular Commissioners throughout the entire meeting except Panama who attended only on the 5, 6 and 7th of January. Panama was informed by telephone of all substantive actions taken by the Commission. Agreement on these actions was received from Panama by telephone on the 26th of January, 1971 at 11:00 hours PST.

The Commission took the following actions:

1. Established a Committee to be convened and chaired by Mexico to examine the problem of dumping and to make suggestions on how such dumping can be avoided.
2. Agreed to the continuation of the experimental quota of 120,000 short tons for 1971, but authorized the Director of Investigations to increase it in two increments of 20,000 short tons each, if in his opinion this action would not endanger the stock of yellowfin.
3. Instructed the Director of Investigations to close the fishery for yellowfin tuna in the Commission's Regulatory Area during the period from January 1 through February 16, 1971, only if the annual catch rate falls below 3 short tons per standard day's fishing.
4. Agreed that the 6,000 ton small boat allowance could be taken by vessels under 400 short tons carrying capacity.
5. Agreed that the terms of the Commission's resolution for the regulation of the yellowfin tuna fishery in the Commission's Regulatory Area during 1971 shall not apply after February 16, 1971.
6. Agreed to an austerity budget in the sum of \$719,514 for FY 1972/1973.

7. Postponed the determination of the proportion of contributions for the FY 1972/1973 appropriations until the next annual meeting.
8. Agreed to vote on the approval of the annual report for 1970 by mail after April 1, 1971.

9. Voted the office of Chairman to Japan, but the person to fill this office would be designated by Japan at a later date. Elected Commissioner Joaquín Mercado of Mexico as Secretary.
10. Agreed that the next Annual Meeting be held in Tokyo, Japan from the 13th through the 17th of January, 1972.

Inter-American Tropical Tuna Commission
La Jolla, California
February 5, 1971

INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISION INTERAMERICANA DEL ATUN TROPICAL

SUMMARY MINUTES OF THE TWENTY-THIRD REGULAR
ANNUAL MEETING

RESUMEN DE LAS MINUTAS DE LA VIGESIMA TERCERA
REUNION ANUAL ORDINARIA

January 5, 6, 7 and 20, 1971

San José, Costa Rica

Chairman: José Luis Cardona-Cooper,
Costa Rica

Secretary: Joaquín Mercado,
México

A G E N D A

23RD REGULAR ANNUAL MEETING

January 5, 6, 7 and 20, 1971

San José, Costa Rica

Chairman: Sr. José Luis Cardona-Cooper, Costa Rica

Secretary: Sr. Joaquín Mercado, México

1. Opening of meeting by the Chairman.
2. Consideration and adoption of Agenda.
3. Current research and research results.
4. The 1970 fishing year (Background Paper No. 1).
5. Condition of the yellowfin stock and quota for 1971
(Background Paper No. 2).
6. Revision of Research Program 1971/72.
7. Recommended Research Program and Budget for 1972/73.
(Background Paper No. 3).
8. Proportions of contributions.
9. Discussion of Annual Report for 1970.
10. Election of Officers.
11. Place and date of next Annual Meeting.
12. Other Business.
13. Adjournment.

The twenty-third regular annual meeting of the Inter-American Tropical Tuna Commission for the year 1971 convened in plenary session in the Roof Garden Room of the Gran Hotel de Costa Rica, San José, Costa Rica at 10:35 hours January 5, 1971. The following persons were in attendance:

CANADA

Commissioners
Robert L. Payne
E. Blyth Young
Advisors
G. F. M. Smith
Eric Kremer

COLOMBIA

Observer
Pedro Manuel Revollo

COSTA RICA

Commissioners
José Luis Cardona-Cooper
Fernando Flores B.
Milton H. López González
Francisco Terán Valls.
Advisors
Mario Q. Rodríguez R.
Héctor Guevara Urbina
Arturo Volio G.
Juan B. Ramírez Steller
Eduardo Bravo P.
Stewart Meigold S.
José Luis Moreno
Dr. Raúl H. Canessa
Jorge Arguedas Truque
Salvador Lara B.

ECUADOR

Observers
José Morillo
Cristobal Flores

EL SALVADOR

Observers
Telémaco Blandino Corrales
Carlos A. Fuentes
Armando Estrada Dardano

GUATEMALA

Observer
Mario A. Saavedra Paz

HONDURAS

Observer
Diego Bárcenas García

JAPAN

Commissioners
Fumihiko Suzuki
Tomonari Matsushita
Shoichi Masuda
Advisors
Masanori Shioya
Ryuichi Tanabe
Shojiro Shimura
Katsuya Maehara

MEXICO

Commissioners
Arturo Díaz Rojo
Joaquín Mercado
Pedro Mercado S.
Amin Zarur Menez
Advisors
Félix Ifigítez
Gilberto Nuza Moreno
Jesús Nieto
Oscar Zavala Jiménez
Jorge Echániz R.

NICARAGUA

Observers
Antonio Flores Arana
Guillermo Lugo Alaniz

PANAMA

Commissioner
Juan L. de Obarrio

UNITED STATES

Commissioners
William Holmstrom
William M. Terry
D. P. Loker
Advisors
Donald L. McKernan
Wilvan G. Van Campen
John W. Bligh, Jr.

UNITED STATES (Continued)

IATTC STAFF

Advisors

Gerald V. Howard
George B. Gross
O. A. Schultz
Gordon C. Broadhead
August Felando
Janous J. Marks
John J. Royal
Michael J. Mattera
Anthony Pisano
Charles R. Carry
O. E. Kerns, Jr.
F. Robert Insinger
Anthony V. Nizetich
Carl Moreno

James Joseph
Director of Investigations

Bruce M. Chatwin

ICCAT - MADRID

Observer
O. Rodriguez Martin

FAO

Observers
D. Sahrhage
Ivo Tilic
Jakob Magnusson

Observers

Vincent Gann
George Ledesma
George G. Alameda
Arturo Ulloa
Lester Balingier
Theodore F. Bugas
Edward A. Ryan
Bill Gillis, Jr.

INTERPRETER

Carlos Diez

AGENDA ITEM I - OPENING OF THE MEETING BY THE CHAIRMAN

The meeting was called to order at 10:35 hours by Mr. José Luis Cardona-Cooper, Chairman of the Inter-American Tropical Tuna Commission. In his opening remarks, the Chairman welcomed all of the delegates, advisors and observers to Costa Rica and expressed the desire for a fruitful as well as successful meeting. He next introduced the Minister of Agriculture of Costa Rica, Sr. don Fernando Batalla Escobar and then asked the heads of delegations to introduce themselves, as well as members of their own delegations.

Commissioner E. Blyth Young of Canada introduced himself and his fellow Commissioner, Mr. Robert L. Payne as well as his two advisors, Dr. G. F. M. Smith and Mr. Eric Kremer.

Panama was represented by Commissioner Juan L. de Obarrio.

Commissioner Joaquín Mercado introduced his fellow Commissioners, Messrs. Amín Zarur Menez, Pedro Mercado and Arturo Díaz Rojo as well as their advisors, Messrs. Félix Iñiguez, Gilberto Nuza Moreno, Jesús Nieto, Oscar Zavala Jiménez and Jorge Echániz.

Commissioner Holmstrom of the United States introduced Commissioners Donald P. Loker and William M. Terry and expressed the regrets of Commissioner Driscoll, who

was unable to attend this meeting. He then introduced the members of the U. S. delegation.

Commissioner Fumihiko Suzuki introduced his fellow commissioners Dr. Tomonari Matsushita, and Mr. Shoichi Masuda, as well as their advisors, Mr. Masanori Shioya, Dr. Ryuichi Tanabe, Mr. Shojiro Shimura and Mr. Katsuya Maehara.

The Chairman, then speaking as a Commissioner from Costa Rica introduced his fellow commissioners Messrs. Fernando Flores, Milton H. López and Francisco Terán, as well as their advisors and observers.

The Chairman then asked that anyone attending in the capacity of Observer, to please introduce themselves.

Mr. Pedro Manuel Revollo, observer from Colombia, introduced himself.

Mr. José Morillo of Ecuador, introduced himself and his colleague from Ecuador, Mr. Cristobal Flores. Both were attending the meeting in the capacity of observers.

Messrs. Telémaco Blandino Corrales, Carlos A. Puentes, Armando Estrada Dardano, observers from El Salvador, then introduced themselves.

Next, Mr. Mario A. Saavedra Paz, observer from Guatemala introduced himself.

Mr. Diego Bárcenas García represented the government of Honduras as an observer.

Messrs. Antonio Flores Arana and Guillermo Lugo Alaniz introduced themselves as observers from Nicaragua.

Dr. Dietrich Sahrhage of FAO Rome introduced himself and his fellow observers from FAO Mr. Ivo Tilic and Dr. Jakob Magnusson.

Mr. O. Rodriguez Martín, Executive Secretary of the International Commission for the Conservation of Atlantic Tuna introduced himself as an observer from that Commission.

The Chairman then introduced the Honorable Ambassadors of Japan, Canada, Colombia, Ecuador, Perú, Chile, Guatemala and the Republic of Panamá who were attending the meeting as observers.

The Chairman then introduced once again the Minister of Agriculture of Costa Rica, Sr. don Fernando Batalla Escobar, who addressed the meeting. In his address to the audience, the Minister recalled the early history of the Commission and Costa Rica's active participation in its establishment and subsequent operation. He pointed to the success of this Commission in maintaining an international resource at a high level of production and its effectiveness in preventing over-fishing. He called on all delegations to continue this successful program and to strive to maintain this God given resource at a level of optimum production. He wished all of the members present the best of luck for a productive meeting and wished them also every success in their deliberations.

AGENDA ITEM II -- CONSIDERATION AND ADOPTION OF THE AGENDA

The Chairman, who then read the agenda, pointed out that this year's draft agenda followed quite closely the pattern of previous years. He indicated that the agenda had been in the hands of the Commissioners for some time and asked for comments on it. After some discussion, Commissioner Holmstrom of the United States moved that the agenda be adopted. This was seconded by Commissioner López of Costa Rica and was carried. The agenda as adopted was approved.

AGENDA ITEM III - CURRENT RESEARCH AND RESEARCH RESULTS

The Chairman called upon the Director of Investigations to discuss this topic. The following is a brief summary of the review presented.

1. Statistics of the Fishery and Population Dynamics

The Commission's statistical system and how it is utilized in the overall program of conservation was reviewed. Catch data for 1970, in addition to historic data, were presented.

A detailed review of the studies relating to dynamics of the yellowfin tuna fishery was not given during this review but was deferred until Agenda Item 5.

It was explained that even though the major share of the effort of the staff is directed towards research on yellowfin tuna, some effort is nevertheless directed towards studying the biology and dynamics of skipjack tuna. A discussion of the fisheries for skipjack tuna in the eastern Pacific was given. It was observed that the abundance of skipjack in the eastern Pacific varies rather sharply from year to year and that skipjack taken in the eastern Pacific were most likely part of a larger population centered offshore. It was explained that unlike yellowfin tuna, the fishery for skipjack tuna does not seem to affect the future abundance of the species in the eastern Pacific. Due to this fact and the high variability and abundance of skipjack in the eastern Pacific it was explained that it would be very desirable to be able to predict future abundance of skipjack. The Commission staff has been involved in such studies during the past year which might lead to accomplishing this. A brief review of these studies was given.

The third species of tropical tunas captured in the eastern Pacific, it was explained, is bigeye. Unlike the longline fishery, which captures principally bigeye tuna in the eastern Pacific, the surface fishery historically has taken the species only incidental to the capture of other tropical tunas. The staff, it was explained, maintains separate catch records for surface caught bigeye. It was also explained that the staff maintains a modest biological program directed to this species, a program which includes the collection of catch and effort statistics, size composition samples and some tagging. It was also explained that the staff has done a considerable amount of work on longline fishing for bigeye in cooperation with scientific colleagues from Japan. This work was described briefly.

A brief review of recent efficiency changes, which affect the Commission's measure of abundance was given. It was explained that the purpose of these studies was to develop abundance measures of yellowfin and skipjack tuna, which are independent of efficiency changes in the fleet of purse seine vessels. A discussion was given on recent research which the staff is involved with, concerning their

efforts to adjust the measure of abundance for recent changes in efficiency. Two approaches which the staff has taken to resolve this problem were discussed. The first concerns an empirical model, which is based solely upon the rate of successful to non-successful sets. The second, which was reported during the last year's annual meeting, is a stochastic model of the purse seine process. A description was given of this latter model, which offers the possibility of developing abundance measures for the two species, which also accounts for efficiency changes.

2. Studies of Size Composition of the Catch

The Commission maintains a continuing series of information on the length composition of tunas in the catch taken from the eastern Pacific Ocean. These data are collected at major ports where tuna captured in the eastern Pacific Ocean are landed. It was explained that they are used to estimate growth rates, to monitor changes in the average size of the fish being captured and to compute numbers of fish available to the fishery, which resulted from spawnings during a single season. A detailed discussion of growth rates estimated from longline caught fish and surface caught fish was given. It was stated that these growth rates did not differ and that fish could be followed from the surface fishery into the longline fishery based on size composition data.

3. Population studies

In this review it was explained that in order to manage fisheries in the most efficient manner, some knowledge of the population structure of the resource under exploitation is necessary. It was further explained that, to define unit populations is desirable. This is so, because such unit populations may, and indeed often do, have their own characteristics of growth and mortality, and these characteristics may differ from adjacent subpopulations. The Commission has employed a number of techniques to identify such unit populations and these techniques, it was explained, include studies of the size and shape of tunas, serological studies and tagging experiments. A brief review of progress in each of these studies was given.

A. Morphometrics

It was explained that a considerable amount of research in this field had been accomplished during the year. A sampling program which designates the number of samples and locations from which these samples are to be taken was developed. In addition, variability and sampling techniques among individuals was established, as well as variability in fish due to the manner in which they were handled after capture. The definition of characters to be measured was also established. It was reported that to date 15 samples have been collected.

Serological studies

A review was given of the serological and bio-chemical characters which are being used for these purposes. Two well defined genetic systems were described. Additionally a brief review of sampling problems was given and it was explained that much larger samples than originally thought were needed to detect differences in groups of fish, if such indeed existed. Nearly 3,000 samples of tuna were collected in 1970 and have been analyzed to date.

C. Tagging

After a brief review of the objectives and goals of the tagging program being conducted by the scientific staff was given, it was stated that approximately 700 tagged tuna which were released in 1969 were recovered throughout the year 1970. These tag returns provided valuable information concerning the movement of yellowfin tuna throughout the eastern Pacific Ocean as well as estimates of shedding rates. Of significance was the fact that for the first time fish tagged within the Commission's Regulatory Area were captured to the west of that area. A review of tagging during 1970 was also given and it was indicated that 6,100 yellowfin tuna and 548 skipjack tuna were tagged and released during the year throughout the eastern Pacific Ocean. It was stated that very few of these tagged fish had been recovered to date.

4. Spawning and early life history studies

It was stated in the review that the Commission staff is concerned with studies of the spawning and early life history of tunas because such studies are useful for a number of purposes. For a species of tunas such as the ubiquitous skipjack some knowledge of when and where they spawn might provide useful clues for determining exploitation strategies. In other cases such things as larval survival and spawning success may provide clues which will enable the staff to predict the magnitude of recruitment to the fishery. The results of studies of spawning and early life history of tuna like fishes in the eastern Pacific Ocean, as reflected by larval distributions, were presented. Two such studies, the Mazatlan study and the International EASTROPAC Expedition, which the Commission was involved with, were discussed.

5. Feeding habits of tuna

It was explained that earlier studies of the feeding habits of yellowfin tuna and skipjack were confined to samples taken from relatively inshore areas. With the expansion of the fishery to areas beyond 1,000 miles off the coast, it is of interest to examine and compare the feeding habits of fish taken from those offshore areas with earlier results based on fish taken from the inshore areas. A discussion of these relative differences was given and it was indicated that samples from the offshore area were comprised of fish and squid primarily with very few crustaceans, whereas crustaceans are much more dominant in the diet of fish taken in the more inshore regions.

6. Oceanography and Tuna Ecology

Tunas are pelagic animals and spend their entire life in oceanic waters. Because of this they are profoundly influenced by their environment. Therefore, the Tuna Commission is deeply concerned with the oceanography and ecology of the eastern Pacific Ocean. It was explained that the Tuna Commission, because of its size, is not capable of undertaking large oceanographic programs by itself. Therefore, it has been the policy of the Commission to contribute to the fund of oceanographic knowledge obtained by other agencies interested in the eastern Pacific Ocean. During the past year the oceanographic staff of the Commission consisted of one oceanographer and one technician, whereas previously it consisted of three oceanographers, two technicians and one draftsman. Though the staff has been reduced rather sharply, it still manages to accomplish a rather large amount of

oceanographic research. A brief review of this research was given, and thereafter the Chairman called for comments.

Commissioner Zarur of Mexico questioned whether this staff had attempted to use information other than that obtained from catch and effort statistics to monitor the abundance of the yellowfin stocks. The Director of Investigations replied that tagging data as well as larval distribution data was utilized to substantiate estimates derived from catch and effort statistics, but that the best estimates to date were those derived from the catch and effort statistics themselves. He further replied that technology to date does not allow the use of acoustical gear for monitoring the abundance of yellowfin tuna in the eastern Pacific and that further tagging experiments are necessary to obtain reliable estimates of abundance.

AGENDA ITEM IV - THE 1970 FISHING YEAR

The Chairman called upon the Director of Investigations to review Agenda Item IV. The Director indicated that Background Paper No. 1 dealt fully with the subject. He then proceeded to review very briefly the contents of this Background Paper. During 1970, 141,774 short tons of yellowfin tuna and 52,668 short tons of skipjack were captured in the Commission's Regulatory Area. The vessels of 10 countries, Canada, Ecuador, Japan, Mexico, Colombia, Costa Rica, Panama, Peru, Spain and the U. S. A. participated in the tuna fishing in the CRA. By the end of 1970 the combined international fleet attained a capacity of slightly more than 72,000 short tons. All of this capacity was active at some time in the CRA during 1970. This compares to a capacity of about 46,000 to 47,000 short tons during the period 1965 to 1967. After the closure to unrestricted yellowfin fishing during 1970 a portion of this capacity fished in the area west of the CRA and took approximately 29,800 tons of yellowfin and 6,300 tons of skipjack. Also in 1970 a substantial share of the total fleet which fished in the CRA participated in the Tropical Atlantic Tuna fishery. Twenty-six U. S. purse seiners comprising 20,061 capacity tons or 27.8% of the international eastern tropical Pacific Ocean fleet were active in these two ocean fisheries in 1970.

A total of about 45,600 capacity tons were diverted during part of the closed yellowfin season to fishing areas outside of the CRA in 1970. That is, 63.3% of the total U. S. fleet active in the CRA in 1970. It was also reported that 7 vessels from the eastern Tropical Pacific fleet made exploratory fishing voyages to the western tropical Pacific during 1970.

It was indicated that by 1972 more than 90,000 tons of fish carrying capacity could be active in the eastern Pacific fishery.

AGENDA ITEM V - CONDITION OF THE YELLOWFIN STOCK AND QUOTA FOR 1971

The Chairman called upon the Director of Investigations to review agenda item V. The Director indicated that the subject was covered in great detail in Background Paper No. 2 and then proceeded to review the contents of this Background Paper by stating that at the 1968 Annual Meeting the Commission asked its staff to report back at the 1969 Annual Meeting with specific proposals for programs of experimental fishing designed to ascertain empirically the maximum sustainable yield of yellowfin tuna. To comply with this request the staff presented alternative schemes of experimental fishing at the 1969 meeting.

The particular scheme chosen by the Commission provided for a catch quota of 120,000 short tons per year during 1969, 1970 and 1971. However, it was agreed that if the annual catch per day's fishing measured in standard purse seine units should fall below 3 short tons per day at any time before the completion of the three year period, the catch would be curtailed to correspond to the then current level of sustainable yield. The rationale for selecting such an experimental overfishing program was then reviewed by the Director. After this review, the Director next spent some time discussing the current knowledge concerning the population structure of yellowfin tuna in the eastern Pacific Ocean. He indicated that because of the expanding fishery offshore, further knowledge on this subject was necessary. He reviewed the current research of the scientific staff designed to obtain this knowledge. Specifically, there were tagging studies, studies of body shape and form and serological studies. Though the studies are yet incomplete, he did indicate that they show for the first time some exchange of fish in the Commission's Regulatory Area with fish to the west of the Regulatory Area. He next reviewed the progress of the experimental fishing program during 1969 and 1970 and compared the observed results with expected results. He pointed out that although the catch per day's fishing did not decrease as much as expected, it nevertheless, did decrease and concluded on the basis of this and other information that the experiment to date was progressing moderately well, and in his opinion should be continued during 1971. He pointed out that the actual catches made during 1969 and 1970 exceeded the recommended quota of 120,000 tons and that the average catch for the two years was probably nearer to 135,000 tons. On the basis of this, he suggested that at a minimum at least 120,000 short tons should be taken during 1971 unless the catch rate per day's fishing should fall to 3 tons. At the conclusion of this review, the Chairman then called for questions from the delegates.

Commissioner Loker of the United States questioned whether there was a possibility that the fishery which has been developing further offshore could be related to a movement of fish from the inshore areas to the offshore areas because of some changes in the environment that might be related to water temperature, abundance of food or some other factors.

Dr. Joseph replied that there was no evidence to indicate this, but it was most likely not related to a movement of fish offshore.

January 6, 1971

Commissioner Díaz Rojas of Mexico, commenting on Background Paper No. 1 clarified that of the total bluefin catch from the eastern Pacific of 4,100 tons taken during 1970, Mexico caught less than 100 tons. He also noted that the catch of yellowfin made by Mexican flag vessels would certainly have been higher during 1970 if three of their vessels had not sunk during the year.

Commissioner Díaz Rojas of Mexico asked the Director of Investigations to comment on the problem of dumping of yellowfin tuna taken during the closed season. The Director of Investigations commented that yellowfin tuna dumped due to regulations and reported in logbooks for 1967 was approximately 3,000 tons, for 1968 about 5,000 tons, for 1969 about 1,333 tons and for 1970 about 430 tons. He indicated that other theoretical estimates were made by Commission's scientists on the basis of vessels actually fishing during regulated trips. Estimates ranged from about 8,000 to 17,000 tons of yellowfin tuna dumped. The 17,000 ton estimate

assumed that no effort was made by fishermen to avoid yellowfin tuna, and the 8,000 ton estimate assumed that pure schools of tuna were avoided. The 17,000 ton estimate is most likely high, and so probably is the 8,000 tons. Therefore, in the Commission's opinion, dumping is somewhere between that reported in the log-books and 8,000 tons.

There then followed a rather extended and detailed discussion of the dumping problem, and ways in which it could be overcome. After this discussion, Commissioner Díaz Rojas of Mexico suggested that a special committee be set up to examine this problem and to make suggestions on how it could be avoided.

There was some discussion as to whether the Director of Investigations should convene such a committee. It was concluded that it was not within the responsibility of the scientific staff to call such a meeting, nor to chair it, but only to assist such a committee in a technical capacity.

Commissioner Holmstrom moved that such a committee be called and chaired by Mexico. The motion was seconded by Costa Rica and was carried.

Commissioner Terry of the United States called upon the Director of Investigations to comment on the various aspects of invoking the 3 ton per day proviso in the experimental fishing program. Specifically he asked, how accurate such an estimate would be, and how it would be computed. The Director of Investigations replied that it would be necessary to predict when the catch per day's fishing would fall to three tons some weeks in advance of it actually attaining that level in order to be able to close the fishery at such a time, so as to ensure that any special country allocations plus the last open trip, as well as the 15% incidental catch could be taken after the closure date, and that the total catch would stay within the then current equilibrium yield. He further commented that to estimate this value in advance would require that some estimate of the catch per capacity tonnage at sea would have to be made and this related to catch per day's fishing as estimated from logbook records. He stated that both estimates are subject to a great deal of error and that when the two are combined the error is even greater. Therefore, when the three tons per day is estimated, it could in reality lie within very wide limits and because of this error, it is necessary to have a second check on fishing and that the second check has been in the form of an overall quota.

After some further discussion concerning the status of the stocks and the progress of the experiment, the United States delegation presented the following motion: "That the Inter-American Tropical Tuna Commission decide to recommend to the member governments an annual catch limit for yellowfin tuna in 1971 of 140,000 short tons, provided: (1) that if the annual catch rate is projected to fall below 3 short tons per standard day's fishing, measured in purse seine units adjusted to levels of gear efficiency previous to 1962, as estimated by the Director of Investigations, the unrestricted fishing for yellowfin tuna in the regulatory area shall be curtailed so as not to exceed the then current estimate of equilibrium yield and shall be closed on a date to be fixed by the Director of Investigations; (2) that the Director of Investigations may increase this limit by no more than two successive increments of 10,000 short tons each, if he concludes from re-examination of available data that such increase will offer no substantial danger to the stock."

January 7, 1971

After a rather lengthy discussion of the motion presented by the United States, the Mexican delegation seconded it. However, qualifying their support with the following statement: "With respect to the motion of the delegation of the United States placed before the session of the 6th of January of the present year, we ~~assume that the motion of the United States means that the capture for the year 1971 will have as a basis 140,000 short tons, plus 20,000 short tons that can be utilized according to the scientific criteria of the Director of Investigations of the Inter-American Tropical Tuna Commission. We also understand that the proposed increase and any other change or changes that may occasionally come up will be considered, analyzed and distributed, as it has been the custom, in the corresponding Inter-governmental Meeting, as it is not a matter that concerns the Ordinary Annual Meeting of the Inter-American Tropical Tuna Commission. We accept the motion of the delegation of the United States under these conditions."~~

Commissioner Juan Obarrio of Panama approved the motion as amended by Mexico and made the following statement: "Hoping that maximum caution will be exercised and the best control methods will be used so that the maximum capture will not be, in reality, over the recommended limit."

Commissioner López of Costa Rica approved the United States motion but made the following statement: "Authorize the Director of Investigations, at any moment that there is evidence that the mathematical projections of the yield per standard day of fishing and the total catch of yellowfin tuna indicate in his opinion that it will reach a yield level of 3 tons per day (standard) of fishing, to recommend at the end of the free fishing season, with the necessary previous advice so that during the period of restricted fishing the catches of the vessels that have left on fishing trips before the closing of the normal fishing season, plus the catch of 15% incidental and that assigned by the Commission for 1971, can be carried out without reaching a lower limit of the yield of 3 tons per standard day of fishing."

Commissioner Suzuki of Japan approved the U. S. motion, but commented that if the catch per day's fishing, which is a lower safeguard, does not reach 3 short tons per day during 1971, it is entirely possible that the total catch for that year may amount to 160,000 short tons. He further commented that on the basis of the scientific evidence presented, it appeared that the sustainable yield of yellowfin in the eastern Pacific was most likely somewhere between 80,000 and 130,000 tons and that if indeed 160,000 tons were taken, this would very likely result in substantial overfishing, and that all of the countries concerned would have to be prepared to fish subsequently at a much lower level in order to restore the stocks to the optimum level at which they could support a maximum yield.

Commissioner Young of Canada approved the United States motion as amended by the other delegations, but commented that he was only doing so, because the Director of Investigations had commented that he would be very conservative in allotting any additional increments of 10,000 tons.

At this time, 11:20 hours, Chairman Cardona-Cooper recessed the Tuna Commission meeting until after the 10th Inter-governmental Meeting on the conservation of yellowfin tuna.

January 20, 1971

The Chairman reconvened the meeting on 20 January 1971 at 21:00 hours in the main conference room of the Banco Central de Costa Rica in San José de Costa Rica. He began the meeting by stating that Agenda Item V was still under consideration. He referred to a resolution (Appendix I) from the 10th Inter-governmental Meeting on the conservation of yellowfin tuna which recommended that a catch limitation of 120,000 short tons be established but that the Director of Investigations be authorized to increase this by 2 successive increments of 20,000 each if this action would not endanger the stocks.

A draft of two Commission resolutions (Appendices II and III) concerning recommendations for conservation measures, including the suggested recommendations transmitted by the Inter-governmental meeting was read paragraph by paragraph.

After some discussion, the delegate from the United States moved that both resolutions be accepted in their entirety.

Mexico seconded this proposal, but with the stipulation that "this recommendation is approved temporarily by CIAT and can be confirmed, changed or amended, taking as a base the final resolution to be adopted at the Inter-governmental meeting that will be held in Mexico City on February 16, 1971".

Both of the resolutions with the stipulation by Mexico were approved by all national sections.

AGENDA ITEM VI - REVISION OF RESEARCH PROGRAM 1971/1972.

The Chairman called upon the Director of Investigations to discuss this item on the Agenda. The Director of Investigations explained that a background paper on this subject had not been prepared for this meeting because no word had been received from the U. S. on the amount which they will be able to provide to the Tuna Commission for 1971/72. It was therefore assumed that the austerity budget in the amount of \$629,915 would be the amount that the Commission would have to operate with for that fiscal year and therefore, at this time no adjustments would need to be made to the austerity budget for 1971/72 which was presented to the Commission last year. All national sections agreed with this action.

AGENDA ITEM VII - RECOMMENDED RESEARCH PROGRAM AND BUDGET FOR FISCAL YEAR 1972/73

The Chairman again called upon the Director of Investigations to elaborate on this item. The Director referred to Background Paper No. 3 which had been prepared earlier and had been in the hands of the Commissioners for some time. The Director explained that during the last few years conditions in the fishery had changed rather remarkably. The most important of these being changes in the efficiency of the vessels themselves and changes in the distribution of the area in which these vessels operate. These changes have affected the Commission's estimates of abundance of yellowfin tuna. If the Commission is not able to directly quantify these effects, the conservation program becomes less effective as the basis for management decisions become more empirical and less scientific. Without a strong scientific basis for management decisions the risks of making the wrong decisions increase. The wrong decisions can result in losses to the fishing

industry by either underestimating yellowfin abundance or overestimating fishing mortality. To continue making sound management decisions, the Commission requires solutions to the problems mentioned above. To obtain solutions in a timely manner, new research is needed. This new research is in the form of a comprehensive tagging program. Such a program would envision releasing tagged tunas in a systematic fashion over a grid of carefully selected strata of time and space. To accomplish such work would require considerable research at sea. To be able to conduct at sea research would require a substantial increase in the Commission's budget. For this reason the Commission staff proposed a budget for fiscal year 1972/73 of \$1,255,725 dollars. This would be an increase of \$625,810 over the expected level of expenditures in fiscal year 1971/72. The Director explained that nearly all of this increase would go to vessel charters for the purposes of tagging tunas. The remainder would go to government pay raises, in-grade increases and promotions. In addition, an item for the amount of \$51,580 was included for a reorganization of the Commission's basic data system.

The Director further explained that at the 22nd Annual Meeting of the Commission held in Ottawa, Canada, the Commission instructed the Director to prepare two budgets in the future. The first should be a recommended version, which indicates the needed research, regardless of the probability of obtaining such funding. The second should be an austerity version designed to maintain the research at current or slightly augmented levels. In keeping with these instructions, the Director of Investigations submitted an Austerity Budget for Fiscal Year 1972/73 in the amount of \$719,514. This is an increase of \$89,599 in excess of the expected level of expenditure during 1971/72. This increased expenditure, it was explained, would be for government pay raises, in-grade increases and promotions, in addition to a re-organization of the Commission's basic data system, which would account for \$51,580.

After asking for the floor, the delegate of the United States commented that they recognized the need for the recommended budget, but because the fiscal climate in the United States was not favorable to an increased level of spending at this time, they could not approve the recommended budget of the Commission staff. They further commented that they did not question the desirability of the tagging and additional work recommended by the staff, but because of the austere budget conditions within the U. S., they would propose that the Austerity Budget in the amount of \$719,514 be approved.

The Commissioner from Japan seconded the proposal of the U. S., but added that it was the responsibility of the Director of Investigations to submit a recommended budget each year, in addition to an austerity budget.

The Commissioner from Mexico agreed with the U. S. proposal, but added that tuna tagging is extremely important to the objectives of the Commission and every effort should be made in the future to support such work.

Costa Rica also agreed with the proposal of the U. S., but hoped that in future years fiscal conditions would change and the Commission would be provided with adequate funds to carry forward its recommended research.

Canada approved of the U. S. proposal also.

AGENDA ITEM VIII - PROPORTIONS OF CONTRIBUTIONS

The Chairman called on the Director of Investigations to review this item. The Director indicated that a Background Paper had not been prepared on this item because data on the utilization of tuna captured during 1970 were preliminary and further, there were certain questions concerning how the proportion of contributions should be computed for Japan.

Commissioner Terry of the United States proposed that since the data were preliminary and since the 72/73 budget would not be approved for some time yet, the determination of the proportion of contributions for fiscal year 1972/73 should be postponed until the next annual meeting.

The motion was seconded by Mexico and carried unanimously.

AGENDA ITEM IX - DISCUSSION OF ANNUAL REPORT FOR 1970

The Chairman then called on the Director of Investigations to review this agenda item. The Director of Investigations indicated that since the Annual Meeting fell so early in the new year it was not possible to prepare as in past years a draft of the Annual Report for presentation at the present meeting. He indicated that a draft of the Annual Report would be prepared and mailed to all Commissioners by April 1, 1971.

The Chairman, commenting on these remarks, indicated that the Annual Report could be approved by mail. All national sections agreed unanimously with this action.

AGENDA ITEM X - ELECTION OF OFFICERS

After explaining the general practice followed in the past by the Commission for electing officers, the Chairman called for nominations for Chairman for the year 1971.

Commissioner Terry of the United States, noting that the Japanese were new members to the Commission, but commenting on their extremely important contributions to the success of this Annual Meeting, nominated one of the Japanese delegates as Chairman. This was seconded by Canada and carried unanimously. Commissioner Matushita of Japan accepted for the Japanese delegation, thanked the other national sections for their confidence in the Japanese, and stated that one of the Japanese Commissioners would be designated as Chairman.

The next item of business being the election of Secretary, the Chairman called for nominations. Commissioner López of Costa Rica noted that though the Secretaryship had gone to Mexico last year in Canada, an individual was not named as secretary until this meeting. Because of the fine job secretary Mercado did during his short time in office, Commissioner López nominated Commissioner Joaquín Mercado as Secretary. This was seconded by the United States and carried unanimously.

AGENDA ITEM XI - PLACE AND DATE OF NEXT ANNUAL MEETING

After reviewing the procedure followed by the Commission in the past to

establish the place and date of the annual meetings, and commenting on the recent locations of annual meetings, the Chairman opened this item of the agenda for discussion.

~~The Commissioner from Japan, indicated that Japan would be honored to serve as host for the 1972 Annual Meeting of the Tuna Commission and suggested that Tokyo would be most suitable. Mexico moved that the meeting be held in Japan during 1972. This was seconded by Canada and carried unanimously.~~

The Chairman then asked for comments on a suitable date for the 1972 Annual Meeting and asked the Director of Investigations to comment briefly on suitable meeting dates. The Director responded by saying that because of the increasing fleet size and the rate at which this fleet is capable of capturing yellowfin tuna, if a quota were set at a somewhat lower level than in 1970 and 1971 the recommended closure date could likely fall very early in the year. Therefore, a meeting date should be set early enough in the year, so that action could be taken to stay within any such recommended quota. The Director indicated that some time during the month of January, preferably prior to the last week of January would be adequate. After some discussion of a possible meeting date the Commissioner from Japan suggested the 13th to the 17th of January, 1972. This date was approved by all national sections.

AGENDA ITEM XII - OTHER BUSINESS

Commissioner Díaz Rojas of Mexico suggested the desirability of appointing a Committee to review the rules of procedure for the Inter-American Tropical Tuna Commission and to update them if necessary. He indicated that such updating might be desirable since the Commission now consists of 6 member nations, whereas originally it consisted of only two.

Commenting on the remarks of Commissioner Díaz Rojas, Commissioner Terry of the United States suggested that it might not be necessary to establish a special committee to do this, but in fact, it could be done by mail. He moved that all delegations review the Rules of Procedure and suggest any modifications to them by mail, to the Chairman. This in turn could be discussed at some future annual meeting. This was seconded by Japan, and carried unanimously.

Commissioner López of Costa Rica suggested that it might be desirable to consider changing the name of the Inter-American Tropical Tuna Commission to something with a broader context because with the entrance of Japan into the Commission the concept of Inter-American has changed.

The Chairman suggested that it might not be appropriate to discuss this at the present meeting, but that all National Sections should be prepared to comment on the Costa Rican proposal at the forthcoming annual meeting.

The Commissioner from Costa Rica presented the following motion: "The delegation of Costa Rica moves that the Director of Investigations and his scientific personnel make a study in order to examine the biological effect caused by an annual capture in a short period of time compared to the biological effect caused by a capture which is accomplished during the whole year".

The motion was seconded by Mexico and carried unanimously.

AGENDA ITEM XIII - ADJOURNEMENT

Commissioner Terry of the United States thanked the Costa Rican government for providing such excellent facilities to the Commission for its meeting and further congratulated the Chairman on his conduct of the meeting.

All other delegations endorsed the remarks of the United States.

In his closing remarks the Chairman thanked all of the Commissioners for their kind remarks and for their participation in this meeting. He also congratulated the scientific staff on their program of research and thanked the interpreter, señor Carlos Diez for his excellent services. With this, the Chairman declared the 23rd Annual Meeting of the Commission closed at 23:45 hours, January 20th, 1971.

RESOLUTION

The 10th Inter-governmental Meeting on the Conservation of Yellowfin Tuna

- A) Accepts with gratitude the invitation of the delegation of Mexico to meet again in Mexico City on February 16, 1971, further to consider conservation regulations for yellowfin tuna in 1971 and to find solutions to problems raised by the regulatory system;
- B) Recommends to IATTC that as an interim measure it establish in principle an annual total catch limitation of 120,000 short tons, with the understanding that this amount can be increased by 20,000 short tons and by an additional 20,000 tons divided into two equal increments and recommends further that the Director of Investigations take into account these possible increases in determining the beginning of a closed season, the increases contemplated to be distributed according to decisions at the above mentioned meeting;
- C) Accepts temporarily a special allocation during the closed season of 6,000 short tons for the vessels of each country under 400 tons capacity;
- D) Accepts the 15% incidental catch of yellowfin tuna in the catch of other species during the closed season;
- E) Declares that this temporary resolution will be effective through February 16, 1971.

RESOLUTION

The Inter-American Tropical Tuna Commission

Taking note that its 21st annual meeting at San Diego, California on March 18, 19 and 22 of 1969 the Commission recommended the initiation of a three year program of experimental fishing designed to test present assessments of the yellowfin tuna stock, and

Taking note that the apparent changes in the stock during 1969 and 1970 have been within the limits set for continuation of the experiment, and

Taking note that although the Commission's resolutions adopted at the 21st and 22nd annual meetings make provisions for continuation of one experimental catch quota in 1971 certain provisions of the resolutions relating to the catch of yellowfin tuna after the season closure are limited to the years 1969 and 1970 only.

Concludes that it is desirable to continue the program of experimental fishing during 1971

But, however, because the participating countries desire to discuss further, at a later date, provisions for regulating the catch after the closed season is in force

Therefore recommends to the High Contracting Parties that they take joint action during the interim period from January 1, 1971 to February 16, 1971, to:

- 1) Establish the annual catch limit (quota) on the total catch of yellowfin tuna for the calendar year 1971 at 120,000 short tons from the regulatory area defined in the resolution adopted by the Commission on May 17, 1962; provided that this catch limit of 120,000 short tons can be increased by the Director of Investigations by 20,000 short tons and thereafter by an additional 20,000 short tons, divided into two equal increments, if he determines that such increases will not endanger the stock.
- 2) Reserve a portion of the annual yellowfin tuna quota for an allowance for incidental catches of tuna fishing vessels when fishing in the regulatory area for species normally taken mingled with yellowfin tuna, after the closure of the unrestricted fishing for yellowfin tuna. The amount of this portion should be determined by the scientific staff of the Commission at such time as the catch of yellowfin tuna approaches the recommended quota for the year.
- 3) Open the fishery for yellowfin tuna on January 1, 1971; during the open season vessels should be permitted to enter the regulatory area with permission to fish for yellowfin tuna without restriction on the quantity until the return of the vessels to port.
- 4) Close the fishery for yellowfin tuna in 1971 at such date as the quantity already caught plus the expected catch of yellowfin tuna by vessels which are at sea with permission to fish without restriction reaches 120,000 short tons, or 140,000 or 160,000, if the Director of Investigations so determines such amounts should be taken, less the portion reserved for incidental catches in Item 2 above and for the year 1971 only, the portion reserved for vessels of 400 short tons and less capacity provided for in Item 6 below, such date to

be determined by the Director of Investigations.

In order to not curtail their fisheries, those countries whose Governments accept the Commission's recommendations but whose fisheries of yellowfin tuna are not of significance will be exempted of their obligations of compliance with the restrictive measures,

Under present conditions, and according to the information available, an annual capture of 1,000 tons of yellowfin tuna is the upper limit to enjoy said exemption.

After the closure of the yellowfin tuna fishery, the Governments of the Contracting Parties and cooperating countries may permit their flag vessels to land yellowfin tuna without restriction in any country described in the preceding section which has tuna canning facilities until such time as the total amount of yellowfin tuna landed in such country during the current year reaches 1,000 short tons.

In order to avoid congestion of unloading and processing facilities around the date of the season closure and the danger that vessels may put to sea without adequate preparations, any vessel which completes its trip before the closure may sail to fish freely for yellowfin tuna within the regulatory area on any trip which is commenced within 10 days after the closure.

- 5) For 1971 only, permit each vessel over 400 short tons capacity, (determined from tables prepared by the Commission on the basis of existing information and additional data provided by the various governments, which relate capacity to gross and/or net tonnage) fishing tuna in the regulatory area after the closure date for the yellowfin tuna fishery to land an incidental catch of yellowfin tuna taken in catches of other species in the regulatory area on each trip commenced during such closed season. The amount each vessel is permitted to land as an incidental catch of yellowfin tuna shall be determined by the Government which regulates the fishing activities of such vessels; provided, however, that the aggregate of the incidental catches of yellowfin tuna taken by all such vessels of a country so permitted shall not exceed 15 percent of the combined total catch taken by such vessels during the period these vessels are permitted to land incidental catches of yellowfin tuna.
- 6) For 1971 only, permit the flag vessel of each country of 400 short tons capacity and less fishing tuna in the regulatory area after the closure date for the yellowfin tuna fishing to fish freely until 6,000 short tons of yellowfin tuna are taken by such vessels or to fish for yellowfin tuna under such restrictions as may be necessary to limit the catch of yellowfin tuna by such vessels to 6,000 short tons; and thereafter to permit such vessels to land an incidental catch of yellowfin taken in the catch of other species in the regulatory area on each trip commenced after 6,000 tons have been caught. The amount each vessel is permitted to land as an incidental catch shall be determined by the Government which regulates the fishing activities of such vessels; provided, however, that the aggregate of the incidental catches of yellowfin tuna taken by such vessels of each country so permitted shall not exceed 15 percent of the total catch taken by such vessels during trips commenced after 6,000 short tons of yellowfin tuna have been caught.
- 7) The species referred to in Items 2, 5 and 6 are: skipjack, bigeye tuna,

bluefin tuna, albacore tuna, bonito, billfishes and sharks.

- 8) Obtain by appropriate measures the cooperation of those Governments whose vessels operate in the fishery, but which are not parties to the Convention for the establishment of an Inter-American Tropical Tuna Commission, to put into effect these conservation measures.

RESOLUTION

THE INTER-AMERICAN TROPICAL TUNA COMMISSION

Considering the resolution pertaining to the conservation of yellowfin tuna in the eastern Pacific Ocean, from the 10th Inter-governmental Meeting for the Conservation of Yellowfin Tuna

Instructs the Director of Investigations to close the fishery for yellowfin tuna in the Commission's Regulatory Area during the period from January 1 through February 16, 1971, only if the annual catch rate falls below 3 short tons per standard day's fishing, measured in purse seine units, adjusted to levels of gear efficiency previous to 1962, so as not to exceed the then current estimate of equilibrium yield.

And further resolves that the terms of the Inter-American Tropical Tuna Commission's resolution for the regulation of the yellowfin tuna fishery in the Commission's Regulatory Area during 1971 shall not apply after 16 February 1971.