

MINUTES OF THE 53RD MEETING OF THE
INTER-AMERICAN TROPICAL TUNA COMMISSION

Cumaná, Venezuela
June 7-8, 1994

Agenda Item 1 - Opening of the meeting

The 53rd Meeting of the Inter-American Tropical Tuna Commission (IATTC) was called to order by the Chairman, Commissioner Carlos Giménez of Venezuela, at 10:15 a.m. on Tuesday, June 7, 1994, at the Hotel Los Bordones in Cumaná, Venezuela. In attendance were representatives of member governments of the IATTC, with the exception of Nicaragua and Vanuatu, and observers from five nations, three international organizations, and four non-governmental organizations (NGOs). The attendees are listed in Appendix I.

A welcoming address was given by the Chairman; the text of his speech is attached as Appendix II.

Agenda Item 2 - Adoption of agenda

The Chairman called for modifications to the Agenda (Appendix III). None were proposed, so it was adopted unanimously as presented.

The Chairman suggested a work schedule of 9:00 a.m. to 5:30 p.m., with a lunch break from 12:00 to 2:30 p.m. This was agreed to by all members.

Agenda Item 3 - Review of current tuna research

The Chairman asked Dr. James Joseph, Director of the IATTC, to make this presentation.

Dr. Joseph explained that this review is customarily included in the agenda in order to keep the Commissioners apprised of the research being undertaken by the IATTC staff and to seek their advice and comments. He explained that at this time only a brief review of some of the topics would be given, but that much of the research would be discussed under other agenda items.

In 1993 the IATTC research program was in its 43rd year. The studies necessary to provide scientific advice to the governments concerning the conservation and management of the tuna and tuna-like species of the eastern Pacific Ocean require broad-based research and expertise in a wide variety of disciplines. To this end the scientific staff of the Commission is recruited internationally, and currently about 10 nations are represented.

In 1976 the Commission's responsibilities were expanded to include the scientific study and management of the dolphin stocks taken incidentally in the fishery for tunas.

The Commission maintains offices and laboratories in Ecuador, Mexico, Panama, the United States, and Venezuela, where basic data on the biology of the tunas and tuna-like fishes and the effects of exploiting them are collected and analyzed. Observers are trained and placed aboard fishing vessels at

some of the field offices, and the field personnel prepare the data collected by the observers for entry into the IATTC's data base.

Dr. Joseph spoke on the relationship between spawners and recruits in tunas, explaining that the ability to predict levels of recruitment, especially for yellowfin, would permit much more efficient management of the fishery, but that to date no link had been found between the number of spawning adults and the resulting levels of recruitment. He presented data confirming that, in the case of yellowfin in the eastern Pacific Ocean, the estimated number of recruits in each year class has been independent of the size of the spawning stock which produced those recruits. This makes it impossible to predict the strength of a given year class, which for yellowfin varies by a factor of about 3.

Dr. Joseph further explained that the IATTC staff is attempting to find ways of predicting recruitment, and that this research follows two different approaches. The first, aimed at improving the estimates of spawning stock size, involves a two-year program to collect information to define at what size and with what frequency spawning occurs in yellowfin. This information, coupled with better estimates of the fecundity of individual fish, would improve the estimates of the true annual fecundity of the species. Dr. Joseph showed slides illustrating the distribution of spawning adults and the sizes and temperatures at which they spawn, and explained that the analyses will probably be completed in the near future.

The second approach is a search for an understanding of the mechanisms that control growth and survival of post-larval tuna. He described the work being conducted at the IATTC's Achotines Laboratory in Panama, where a brood stock of black skipjack is being maintained. The fish, about 50 cm long, have been spawning for several months, and fertilized eggs have been collected and successfully hatched on a regular basis. The offspring have survived in the laboratory for up to 10 days, and Dr. Joseph described a number of important experiments which have been conducted.

Dr. Joseph also described a 5-year cooperative program involving the Government of Panama, the Overseas Fisheries Cooperation Foundation (OFCF) of Japan, and the IATTC, which will expand both the facilities and the research conducted at Achotines Laboratory. He spoke of the exchange of scientists among the three parties involved, and described the new facilities planned for the Achotines Laboratory, which the OFCF would be funding.

Agenda Items 4 and 5 - The 1993 fishing year and status of tuna stocks

The Chairman, noting the similarity of the two agenda items, asked Dr. Joseph to present them together.

Dr. Joseph began his presentation by noting that Background Papers 1 and 2, distributed to the attendees at the meeting, dealt with these subjects in detail, and that he would therefore only touch on a few of the principal points presented in these documents.

During 1993, and so far in 1994, the total capacity of the international fleet operating in the eastern Pacific Ocean had changed very little relative to 1991 and 1992: it has stood at about 112 thousand short tons during 1993 and 1994, of which about 65 thousand tons, on average, was at sea at any given time. The 1993 catches of yellowfin and skipjack were about 262 and 92 thousand tons, respectively, and current information indicates that the catches of both species will be approximately the same in 1994. In both 1993 and 1994 Mexico has been the leading producer of tuna, accounting for about 40 percent of the total catch, followed by Venezuela, Vanuatu, Ecuador, and the United States, in that order.

In 1993, about 53 percent of the total catch of yellowfin was taken in association with dolphins, a reduction of about 26 percent relative to 1992; the remainder was caught in schools associated with floating objects or in unassociated schools.

Dr. Joseph next discussed the status of yellowfin, recalling that from 1966 through 1979 annual limits on the total harvest of yellowfin were implemented. These limits were conservative, due to the constant seaward expansion of the fishery, and were precautionary in the sense that they were usually set at a level lower than the stock could probably support, since the expanding fishery was exploiting an ever-larger portion of the stock. Provisions were made to allow the staff a degree of discretion in adjusting the limits in response to current events in the fishery.

In the late 1970s, due to changing political and economic circumstances, the nations of the region could no longer agree on implementing the recommended catch limits, and the resulting unrestricted fishing led to a sharp decline in the abundance and catches of yellowfin. As a result, vessels began to leave the fishery, and a strong El Niño event in 1982 and 1983, which made the already reduced stock of yellowfin less available to the fishery, resulted in many more vessels either leaving to fish in other areas or being idled. From 1982 through 1985 fishing effort was less than during 1977-1980, allowing the stock to recover. In 1983, as the El Niño subsided and the stock grew, the Commission staff predicted that yellowfin fishing would improve, which it duly did. By 1986 many vessels had returned to the fishery, and the fishing was even better than expected: annual catches of yellowfin exceeded 300 thousand tons.

The staff's analyses offer two explanations for this better-than-expected fishing. The first was that the fishery concentrated on larger yellowfin. During the period of overfishing in the late 1970s the average size of the fish in the catch fell from about 25 pounds to about 11 pounds, but with the greater abundance of large fish in 1984-1985 it rose again to about 30 pounds. This increased the yield per recruit by about 30 percent, resulting in a 30-percent greater yield from the same number of fish. The larger yellowfin were mostly caught in association with dolphins, since they are infrequently found associated with floating objects or in unassociated schools.

The second reason for the increased yield was a substantial increase in the recruitment of young fish into the fishable population, which accounted for an additional 25 to 30 percent increase in the catch.

Analyses of both production models and age-structured models indicate that if recruitment stays constant at current levels and the average size of the fish in the catch does not change, the population of yellowfin in the eastern Pacific Ocean can, on the average, sustain maximum catches of about 315 to 325 thousand tons. At present the fleet in the eastern Pacific is capable of taking about 250 to 300 thousand tons of yellowfin.

If the average size of the fish in the catch decreases or recruitment is reduced, the potential catch will also fall. Recruitment appears to be independent of the fishery, and is currently impossible to predict, but the average size of the fish in the catch can be altered by changing the focus of the fishery. Large fish associate with dolphins, but small fish do not. As long as the proportion of fish caught in association with dolphins does not change, yield per recruit will stay high. If this mode of fishing is curtailed and effort is switched to unassociated schools or fish associated with floating objects, the average size of the fish will decrease to about 10 pounds and yield per recruit will fall substantially. This will result in a 25- to 50-percent decrease in the total yield of yellowfin.

Because of the uncertainties, the staff recommended a conservative catch limit of 250 thousand short tons, but with the possibility of increasing this limit by 100 thousand tons in four increments of 25 thousand tons each.

Dr. Joseph then explained that normally a review of the other principal species of tunas taken in the eastern Pacific--skipjack, bluefin, and bigeye--would be presented, but that because of time constraints he would review only bluefin and bigeye. He referred the attendees to Background Papers 4 and 5, which cover species other than yellowfin.

Turning first to bluefin tuna, Dr. Joseph explained that the bluefin fished in the eastern Pacific are part of the same stock fished in the western Pacific. He noted that during the last decade catches had decreased substantially in both areas, particularly the eastern Pacific. He mentioned three important points: (1) the low catches in the eastern Pacific are due in a large part to reduced effort; (2) recruitment of young fish to the Japanese fishery does not appear to be decreasing; and (3) catches of small fish are high in the western Pacific.

Dr. Joseph mentioned that scientists from the IATTC and the National Research Institute of Far Seas Fisheries of Japan had participated in three workshops over the past several years to study the biology and fisheries for bluefin, and a fourth workshop is planned for early 1995. Preliminary analyses of the data generated at these workshops indicate that if small bluefin could be protected, the Pacific-wide yield of this species could most likely be increased.

Dr. Joseph concluded his presentation with a brief review of the fishery for bigeye. He explained that the longline fishery is responsible for most of the catch, that the data indicate that the stock of bigeye is in good condition, and that increases in effort have resulted in corresponding increases in catch. In terms of yield per recruit, the longline fishery captures fish near the optimum size.

Agenda Item 6 - Review of tuna-dolphin research and extension programs

Dr. Joseph introduced this subject by outlining the background to the IATTC's Tuna-Dolphin Program. He noted that during the 1960s and early 1970s most of the vessels which fished in the eastern Pacific Ocean for tunas associated with dolphins flew the U.S. flag, but that during the mid-1970s more nations became involved in the fishery, and the problem of dolphin mortality in the fishery, and the solution to it, thus became international. In 1976 the Commission decided to undertake a program to study the problem and to seek to reduce the mortality. This program, which involved placing observers on tuna vessels to gather data and identifying, developing, and transferring to the international fleet equipment and techniques effective in reducing dolphin mortality, did not begin until 1980, and did not include all national fleets involved in the fishery until 1986.

He then introduced Dr. Martín Hall, Chief Scientist of the IATTC's Tuna-Dolphin Program, to review the program.

Dr. Hall outlined the history of the fishery in the eastern Pacific Ocean from the late 1950s to the present, and discussed briefly the different methods used by fishermen to detect tuna schools, with emphasis on the association between yellowfin tuna and dolphins. Information on the fishery is gathered by the IATTC's international observer program and the Mexican and U.S. national observer programs. In 1993, observer coverage of the fleet was virtually complete. The data collected by the observers are used to produce estimates of the incidental mortality of dolphins in the fishery and of their relative abundance, to

study various aspects of their biology, to identify situations that cause dolphin mortality in order to help fishermen in their efforts to reduce that mortality, to study the interactions between tunas and dolphins and tunas and floating objects, and to study the ecological impacts of fishing operations.

The incidental mortality in 1993 was 3,609 dolphins, the lowest level in the history of the fishery and 77 percent less than the 15,539 mortalities which occurred in 1992. During the 1986-1993 period, mortality has declined by 97 percent, mostly due to improvements in fishing gear and techniques, and the average mortality per set (MPS) by 96 percent, from about 13 to 0.5 animals. The number of sets on dolphins was about the same in 1992 as in 1986, but dropped in 1993 by 35 percent. The total number of sets of all types declined by 10 percent in 1993 due to low tuna prices, especially early in the year. In 1994, up to late May, both MPS and effort have fallen slightly, so the mortality may be even less in 1994 than it was in 1993.

Dr. Hall next reviewed trends in abundance for the major dolphin stocks involved in the fishery. The estimates of relative abundance for 1993 were not significantly different from those of preceding years. In general, most of the stocks have remained fairly stable since the early 1980s; the only exception is the northern stock of common dolphins which, after apparently stabilizing during the 1987-1990 period, declined in 1991 and has remained at a lower level since then. As the incidental mortality of this stock has been very low in recent years, there was no readily-apparent explanation for this decline. However, studies performed by the U.S. National Marine Fisheries Service (NMFS) have shown major increases in this stock in waters off the California coast, apparently the result of a massive migration to the north that was perhaps linked to some oceanographic process. The most recent analyses of the data, however, have shown a correlation between some of the indices of abundance and some measures of effort directed toward tunas associated with dolphins. This causes some concern, as it reveals a possible bias that was not present in previous analyses and that needs to be addressed.

The term "relative mortality" is used to describe the proportion of a population that dies in a period of time, and it is the only valid measure of the biological impact of any given level of mortality. For dolphins the net recruitment rate to a population has been conservatively assumed to be about 2 percent of the total number of animals. If mortality rates are below this level, a population can be expected to increase, and *vice versa*. The relative mortalities in 1993 for the stocks of dolphins involved in the fishery in the eastern Pacific were all below 0.16 percent, with an average of 0.04 percent (total incidental mortality of 3,609 dolphins divided by the estimated total population of 9,576,000 individuals). The fact that these levels are so far below the conservative estimate used is an assurance that even if the estimates of abundance and mortality are significantly in error due to methodological errors, poorly-understood mortality sources, reporting errors, *etc.*, the size of the dolphin populations will still be increasing.

Dr. Hall described current research aimed at reducing dolphin mortality further. Some modifications of the purse-seine gear proposed by fishermen are being considered for testing in the near future, and a search for alternative ways of catching large tunas not associated with dolphins is being carried out jointly with the U.S. NMFS and other organizations. In another experiment, dolphins and tunas were fitted with radio- or acoustic-tracking devices to study their behavior. Time-depth recorders were also fitted to some of the dolphins to monitor their diving patterns. The information obtained has confirmed some ideas (*e.g.* dolphin groups are flexible, with individuals (or groups) joining or leaving larger aggregations frequently) and shed new light on some activities (*e.g.* dolphins make deep dives at sunset and dawn, and shallower dives during the night, perhaps feeding on prey coming up with the deep-scattering layer). Both dolphins and tunas spend most of their time at or above the thermocline, and dolphins spend a large proportion of their time submerged. Also, it appears that the aggregating behavior of tunas and dolphins is quite flexible, with both species coming together or separating easily, but more data are needed before final

conclusions are reached. Current research by the IATTC staff and others on the diets of tunas, dolphins, and other associated species may help in gaining an understanding of the interactions of the dolphins and tunas with one another and with other components of the ecosystem.

Agenda Item 7 - Review of International Dolphin Conservation Program

At the end of Dr. Hall's presentation, the Chairman asked Dr. Joseph to review the progress of the International Dolphin Conservation Program (IDCP) established by a resolution of the 50th IATTC Meeting, held in June 1992 in La Jolla, California, USA, and by the Agreement for the Conservation of Dolphins reached at the Intergovernmental Meeting held at the same time.

Dr. Joseph pointed out that the International Review Panel (IRP), established by the Agreement to develop means of implementing the IDCP and monitor compliance, had met seven times since its creation: an *ad hoc* meeting and six regular meetings, the most recent having concluded the day before in Cumaná. He also explained that the schedule of dolphin mortality limits (DMLs) set up by the Agreement was now in operation.

At the first meeting of the IRP, held in October 1992, the overall DML for 1993 of 19,500 dolphins was divided among 106 qualified vessels, each of which received an individual DML of 183 animals. Dr. Joseph noted that the final mortality figure for 1993 was 3,609 animals, far below the limit set by the Agreement. Only 66 of the 106 vessels assigned DMLs actually fished for tunas associated with dolphins; the average mortality per vessel was about 50 dolphins, and no vessel reached or exceeded its individual DML. At the fifth meeting of the IRP, held in January 1994, the adjusted 1994 overall DML of 9,300 animals was divided among 73 vessels, for an individual DML of 127 dolphins for 1994.

Dr. Joseph reported that the IRP had also developed a set of infractions and sanctions, intended to standardize and harmonize efforts to ensure compliance with the objectives of the Agreement, which it recommended to governments for consideration.

He next described the efforts of the IRP to develop multinational measures to ensure compliance with the Agreement by all nations involved in the fishery, whether party to the Agreement or not. Possible measures included diplomatic actions, public opinion actions, operational restrictions, and economic sanctions. He also mentioned that the IRP urged nations to take action to prevent vessels from changing flags in order to avoid the restrictions imposed by the Agreement.

Dr. Joseph explained that a major share of the IRP's work had consisted of reviewing the activities of individual vessels in order to monitor their compliance with the Agreement. This involved examining reports on the vessels' activities prepared by the IATTC and the Mexican national program from the data collected by observers aboard the vessels. Any potential infraction is reported to the flag nation, along with supplemental explanatory information, and the flag nation is invited to comment to the IRP on what action it might take or had taken.

Dr. Joseph completed his review of the IDCP by noting that it so far had been extremely successful, in that mortality had already been reduced to below the level originally set for 1999. He added that, despite this achievement, efforts were still being made to prohibit fishing on dolphins altogether, and cautioned that such a ban would carry its own ecological costs. The principal problems are growth overfishing of yellowfin tuna and large bycatches of other components of the ecosystem to which tunas and dolphins belong. He described once again the reductions in the productivity of yellowfin that would result if fishing

effort were transferred to the small tunas caught in schools not associated with dolphins, and then called upon Dr. Hall to speak on the issue of bycatch.

Dr. Hall presented some of the information collected by the observers concerning the effects of different types of sets on various components of the offshore pelagic community. Two issues are relevant here: 1) discards of tunas (undersized individuals of the target species and species of no commercial value), and 2) bycatches of other species.

With respect to the former, Dr. Hall said that sets on floating objects result in average discard rates of 28.6 percent, while sets on unassociated tunas and on dolphins have discard rates of 3.5 and 0.9 percent, respectively.

As regards bycatches of other species, the information collected to date reveals that the bycatch rates for sets on floating objects are much greater than those for sets on dolphins: some examples are mahi-mahi (2,000 times higher), sharks and rays (12 times higher), wahoo (almost 3,000 times higher), billfish (11 times higher), yellowtail (130 times higher), and sea turtles (5 times higher). Bycatches in sets on unassociated tunas fall in between these values: compared with dolphin sets, the rates for mahi-mahi are 9 times higher, sharks and rays 4 times higher, wahoo 2.5 times higher, billfish 2.5 times higher, yellowtail 120 times higher, and sea turtles 2 times higher.

Dr. Hall explained that the IATTC staff had started looking at the spatiotemporal distributions of the bycatches, in an attempt to determine why the bycatches are sometimes aggregated and sometimes nearly uniformly distributed. Maps were shown expressing bycatch rates per 100 sets and per 1000 tons of tuna caught, by season, type of set, *etc.* Other studies include estimation of average group size of the species caught, size distributions, and species composition of the bycatches. Examples were shown of this work and of the resulting information on the ecology of the offshore pelagic community of the eastern Pacific Ocean.

At the conclusion of Dr. Hall's presentation the Chairman opened the floor to discussion of Agenda Items 3 through 7.

The United States asked how dolphin mortality in 1994 to date compared to that of 1993. Dr. Joseph answered that the mortality-per-set ratio in 1994 was just under 0.5, about the same as in 1993, and the number of sets being made on dolphins was also about the same. If both these factors remained steady for the rest of the year, dolphin mortality by the end of 1994 should be about the same as in 1993. However, conditions in both the fishery and the ocean could change, as could the level of fishing effort, and all this would probably be reflected in the final mortality for 1994.

Venezuela noted that the United States had classified two stocks of dolphins involved in the fishery as depleted, and asked Dr. Joseph to clarify whether this meant that the survival of these populations was in question or whether the definition was legalistic. Dr. Joseph explained that the U.S. Marine Mammal Protection Act defines a stock as "depleted" when its abundance is below the level of Optimum Sustainable Population (OSP), at which the annual net replacement to the stock is at a maximum. For spotted and spinner dolphins in the eastern Pacific, the OSP was defined as when the stock was at 60 percent of its abundance prior to exploitation; using this definition, the U.S. NMFS had classified the eastern spinner and northeastern spotted dolphins as depleted, and U.S. vessels were thereby prohibited from fishing on these stocks. Dr. Joseph added that, at current levels of stock abundance, the mortality generated by the fishery posed no threat to the survival of either stock of dolphins.

In answer to a question about whether the amount of bycatch and the variety of species it contained depended mostly on the mode of fishing, *i.e.* on schoolfish, floating objects, or dolphins, or on geographical location, Dr. Hall stated that the amount of bycatch is due almost entirely to the mode of fishing, but that the amounts and species compositions of the bycatches are somewhat different in different areas.

There being no further questions, the Chairman moved on to the next agenda item.

Agenda Item 8 - Recommendations for 1994

The Chairman introduced this item, noting the staff's recommendation for a yellowfin catch limit of 250 thousand tons for 1994, with four increments of 25 thousand tons each. After a short discussion, Panama proposed acceptance of the recommended limit, and it was approved by all members present.

The Chairman asked Dr. Joseph to draft a resolution to reflect this decision.

Agenda Item 9 - Recommended research program and budget for FY 1995-1996

The Chairman asked Dr. Joseph to present the budget for FY 1995-1996.

Dr. Joseph noted that the 1995-1996 budget was about the same as the budget approved the previous year. He called attention to the fact that in recent years the approved budget had not been completely funded by the governments, only about 78 percent of what was approved being received. This was illustrated by the following table:

FY	Approved	Received	Percentage of approved budget received
1988-89	3,525,000	2,846,000	80
1989-90	3,525,000	3,049,000	86
1990-91	3,706,020	3,204,882	86
1991-92	4,403,307	3,243,263	74
1992-93	4,423,824	3,016,731	68
1993-94	4,743,000	2,997,261	63
1994-95	4,865,250		
1995-96	4,866,767		

Dr. Joseph expressed concern over the fact that the amount of money the IATTC was receiving through the budget was decreasing while its responsibilities, particularly with respect to dolphins, were increasing.

At the conclusion of Dr. Joseph's presentation, the Chairman postponed action on the budget and recessed the IATTC meeting until after the Intergovernmental Meeting which would convene the following morning (June 8).

The IATTC meeting was reconvened on Wednesday, June 8, at 3:15 p.m. Chairman Giménez began by calling for approval of the draft resolution for yellowfin conservation, and it was duly approved (Appendix IV).

The United States moved that the budget be approved as presented; Japan seconded the motion, which was approved by all members present.

Dr. Joseph asked for the floor, and noted that Commission decisions required the consent of all members. He said he would therefore seek the approval of the two absent members, Nicaragua and Vanuatu, and would advise the other members only if such approval were withheld.

Agenda Item 10 - Place and date of next meeting

The Chairman noted that, in addition to the regular meeting, a special meeting would be held in La Jolla in October, in conjunction with the Intergovernmental Meeting, to discuss revisions of the overall DML for 1995.

Dr. Joseph recommended that the next regular meeting also be held in La Jolla. This would give the representatives of the member governments a chance to visit Commission headquarters, and also give the IATTC staff the opportunity to meet the Commissioners and other people affected by and interested in their work. He noted that meetings held in La Jolla were hosted by the IATTC and not by the United States, and would thus not affect the sequence of rotation among member governments.

It was unanimously agreed that the next regular meeting of the IATTC would be held in La Jolla in early June of 1995, and that Dr. Joseph would notify the members of the exact dates.

Agenda Item 11 - Election of officers

Costa Rica nominated the United States section to provide a Chairman for the meeting in June 1995, and this was approved by all members present. The nomination was accepted with thanks.

The United States proposed that the Chairman of the current meeting also serve as Chairman of the special meeting in October. This proposal was agreed to by all national sections, and accepted with thanks.

Agenda Item 12 - Other business

The Chairman reminded the meeting of the recent death of Ms. Marlène Kanas, who had attended several meetings on behalf of the Association Robin des Bois, a French environmental organization. He asked for approval of a joint resolution from both the IATTC and the Intergovernmental meeting recognizing her contribution to the Commission's work and, having obtained the members' approval, instructed Dr. Joseph to send copies of the resolution to Ms. Kanas' family and to the Association Robin des Bois.

The representative from the Food and Agriculture Organization (FAO) of the United Nations thanked the IATTC for the invitation to observe the meeting, and on behalf of the FAO congratulated the Commission on the rapid progress in reducing dolphin mortality in the tuna fishery in the eastern Pacific. He also thanked the Commission and its member countries for collaborating with FAO in studies of interactions of tuna fisheries of the Pacific Ocean.

In his closing remarks, the Chairman noted the Commission's many achievements in managing the tuna fishery of the eastern Pacific. He said that nobody had expected such outstanding success in reducing

dolphin mortality, and that the governments should be congratulated for their determination and their efforts. However, he stressed that special recognition should be given to the industry, because the success of the program and the protection of the resources depended ultimately on the fishermen.

On behalf of the Governor and people of the state of Sucre, he thanked the Commission for choosing Cumaná, the capital of the Venezuelan tuna industry, as the venue for its 53rd meeting.

Colombia noted that, although it was not yet a member of the IATTC, it expected to become one very soon, and expressed his appreciation to Venezuela for a splendid meeting and for the warm hospitality shown by the government of Venezuela and particularly by the people of Cumaná. All the attendees joined Colombia in applauding the government of Venezuela.

Agenda Item 13 - Adjournment

The Chairman closed the meeting at 4:05 p.m. on June 8, 1994.

Appendix I.

INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISION INTERAMERICANA DEL ATUN TROPICAL

53rd MEETING - 53ª REUNION
Cumaná, Venezuela
June 7-8, 1994 - 7-8 junio, 1994

ATTENDEES -- ASISTENTES

MEMBER COUNTRIES -- PAISES MIEMBROS

COSTA RICA

LUIS PARIS CHAVERRI, Comisionado
HERBERT NANNE ECHANDI, Comisionado
Instituto Costarricense de Pesca y Acuicultura

JAIME BASADRE, Comisionado
MANUEL FERNANDEZ
Sardimar, S. A.

ARTURO BEECHE
Beeche Puntarenas, S.A.

FRANCE

DANIEL GAERTNER
ORSTOM

JAPAN

KATSUMA HANAFUSA
International Affairs Division
KIYOSHI KATSUYAMA
Marine Resources Division
Fisheries Agency

YASUO SATO
SALLY J. CAMPEN
Federation of Japan Tuna Fisheries
Cooperative Associations

PANAMA

JUAN DE OBARRIO, Comisionado

LUIS A. DORATI
Caribbean Fishing Trading, S.A.

CIRIACO GAMECHO
Atunbi S.A.

UNITED STATES

HENRY BEASLEY, Commissioner
National Marine Fisheries Service

MARY L. WALKER, Commissioner

BRIAN HALLMAN
Department of State

PAUL NIEMEYER
MICHAEL TILLMAN
National Marine Fisheries Service

MARTIN HOCHMAN
National Oceanic and Atmospheric
Administration

MICHAEL DUNN
Mitsubishi Foods (MC) Inc.

ED STOCKWELL
StarKist Foods Inc.

VENEZUELA

CARLOS GIMÉNEZ, Comisionado
SARPA, Ministerio de Agricultura y Cría

JEAN-FRANCOIS PULVENIS, Comisionado
SANTOS VALERO
Ministerio de Relaciones Exteriores

ALFREDO ZULOAGA, Comisionado
Instituto de Comercio Exterior

ROBERTO ORTISI, Comisionado
Avatun

HUGO ALSINA
CARLOS ATILANO
ORLANDO FLORES
WILLIAM MIJARES
SARPA, Ministerio de Agricultura y Cría

LUIS MARCANO BARRIOS
Senado de Venezuela

JOSE JAVIER ALIO
JESUS MARCANO
FONAIAP

HUGO ANCIETA
Marmen C.A.

GERMAN ANDRADE
Eveva-Propisca

JOSE MARIA BENGEOA
Albatún S.A./Inversiones Berlioli S.A.

ELIO CANNAVO
Cannavó C.A.

JON CELAYA
Avatún

MANUEL ELDUAYEN
Atunanca

GUIDO ESTEFANELLI
LORENZO RAVAGO
RAUL ROMERO
Fenapesca

HANS-PETER KLEIN
WOLFGANG YAÑEZ
Trustuna C.A.

LUIS ENRIQUE NUÑEZ
GERARDO SANTOS
Pesquera Morro de Puerto Santo, C.A.

GIOVANNI OMBRA
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MAURICIO PAGAVINO
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DOMENICO PINTO
JOSE PINTO
SALVADOR SPINALI
Pesquera Pezatún S.A.

MIGUEL ROBLES
Alimentos Margarita

ROBERTO SAVELLI

JOSE RAFAEL ZERPA
Colegio de Ingenieros de Venezuela

NON-MEMBER COUNTRIES -- PAISES NO MIEMBROS

COLOMBIA

ALEJANDRO LONDOÑO GARCÍA
ALBERTO VILLANEDA JIMÉNEZ
ADOLFO RINCON PRIETO
Instituto Nacional de Pesca y Acuicultura

LUIS LOPEZ MARRUGA
Frigopesca, S.A.

ALFONSO PAZ TENORIO
Frigomarina Ltda.

ARMANDO HERNÁNDEZ RODRÍGUEZ
Asociación Nacional de Industriales

ALVARO BUSTAMANTE STEER
ALVARO NAVARRO COLEY
ALVARO BUSTAMANTE CRUMP
AMERICO RODRIGUEZ
Atunes y Enlatados del Caribe, S.A.

HUGO DOMINGO MARINO VILLA
GUILLERMO DAW ALVAREZ
HORTENSIA HERNÁNDEZ MARTÍNEZ
Frigogan

JHONNY ORDOSGOITIA OSORIO
Aserbuques Ltda.

ESPAÑA

JESUS MIRANDA DE LARRA
Ministerio de Agricultura, Pesca y Alimentación

MEXICO

DAMASO LUNA CORONA
Secretaría de Relaciones Exteriores

RICARDO BELMONTES ACOSTA
GUILLERMO COMPEAN JIMENEZ
Secretaría de Pesca

DANIEL AVILA ARANDA
RAMIRO ROJO LOPEZ
RICARDO LOPEZ GOMEZ
MIGUEL SOTELO BURGOS
Cámara de Diputados, Comisión de Pesca

REPUBLIC OF CHINA

ANDREW WU
Oficina Económica y Cultural de Taipei, Caracas, Venezuela

RUSSIAN FEDERATION

VALERY TSOUKALOV
Fisheries Committee

SERGEI LEONTIEV
Research Institute of Marine Fisheries and
Oceanography

INTERNATIONAL ORGANIZATIONS -- ORGANIZACIONES INTERNACIONALES

DANIEL GAERTNER
ICCAT

JACEK MAJKOWSKI
FAO

CARLOS GIL
Unión Europea

NON-GOVERNMENTAL ORGANIZATIONS -- ORGANIZACIONES NO GUBERNAMENTALES

GLENDIA MEDINA
HECTOR LOPEZ ROJAS
Fudena

JUAN CARLOS CARDENAS
Greenpeace Latin America

TRACI ROMINE
Greenpeace International

ALEJANDRO VILLAMAR
Red Mexicana de Acción Frente al Libre Comercio

IATTC -- CIAT

JAMES JOSEPH
MARTIN HALL
BERTA JUAREZ
NICOLAS WEBB

Director
Tuna-Dolphin Program--Programa Atún-Delfín

Appendix II.

Address of Biólogo Carlos E. Giménez B., Director-General of SARPA

Welcome to our country, and an especially warm welcome to Cumana. This is the oldest city in Venezuela, the fishing capital of the nation, and the most important center of the tuna industry in South America. These are reasons enough for the choice of Cumana as the location for this important meeting, in the certainty that the people of the city will, freely and with dignity, show hospitality to all the esteemed delegates from our sister republics, with their common interests in matters regarding the exploitation and conservation of, and trade in, the tunas of the eastern Pacific Ocean.

This is an appropriate moment for reflection: first, I would emphasize the invaluable work of scientific research and multinational coordination carried out by the IATTC in the field of management of tuna fisheries since its creation in 1950 at the initiative of Costa Rica and the United States and, second, the slight effect that the Commission's recommendations have unfortunately had in recent years, despite their solid scientific basis; a situation which might possibly be explained by a lack of genuine identification with the efforts and actions taken to optimize the fishery. The tuna fishery in the eastern Pacific Ocean is one of the few which has a suitable management plan and a system of effective controls.

The Commission has the responsibility of managing the tuna and tuna-like resources of the eastern Pacific Ocean; its general objectives are, among others, to study the biology of the tunas and tuna-like species in the area and recommend appropriate conservation measures that will enable the stocks of fishes to be maintained at levels which will allow constant maximum catches.

In 1976 the Commission was assigned the additional responsibility of studying the dolphins and other marine mammals captured incidentally in the tuna fishery. It is explicitly stated that tuna production should be maintained at a high level, which implies a substantive change in the basic objective.

The international program designed to reduce the incidental mortality of dolphins captured in association with tunas in the fishery in the eastern Pacific arises from the agreements reached in San Jose, Costa Rica, in September 1990 and La Jolla, California, in January 1991, and in April of 1992 was formalized as an intergovernmental program among the IATTC and the governments of Mexico, Spain, and Venezuela. Upon Venezuela's entry into the Commission, this was reduced to the IATTC, Mexico, and Spain. The program's objective is the progressive reduction of dolphin mortality in the eastern Pacific, and its goal is to aim towards reducing it to close to zero in a time frame of seven years, at the end of which the mortality must be less than five thousand animals; it also establishes a series of mechanisms which ensure the implementation of the measures, in the form of Dolphin Mortality Limits, the International Review Panel, and other necessary mechanisms.

If Mexico joins the IATTC, the intergovernmental Agreement would be reduced to being between the IATTC and Spain, in which case it would be appropriate to review the Agreement, since Spain is not currently participating in the fishery. It would then be necessary to establish a program similar to the intergovernmental one within the Commission and, if this was not feasible due to limitations of the Convention, initiate such modifications of the Convention as will allow the implementation of such a program, including the participation of observer nations. Such an arrangement would simplify the current state of management agreements, with horizontal and hierarchical arrangements for obtaining permits for participation, Dolphin Mortality Limits, certificates required by governments and market structures,

Review Panel decisions, the Advisory Committee, *etc.*, which of course make the management of the matter very complex.

The IATTC's basic objective, as stated before, is to implement appropriate conservation measures so that the stocks of fish can be maintained at levels which will permit the maximum sustainable catch. When the IATTC in 1976 defined high level of catch as the objective, and initiated in 1990 the issuance of certificates of "dolphin-safe" fishing for those vessels which carried observers and statements of participation for those vessels which were included in the international observer program, it was, one way or another, allowing the fishery to direct itself towards a practice which the Commission itself should discourage on the basis of scientific evidence and agreed objectives.

Fishing aimed at smaller specimens certainly does not generate the sustained maximum catch. It is a fact that this practice becoming widespread, impelled by commercial considerations, and it is therefore advisable that the international fisheries body, in other words the Commission, direct the efforts necessary to establish the validity of the results of its research by implementing management measures and thus subordinate all other objectives to that of rational management. The term maximum sustained catch, or maximum sustained yield, is not necessarily the same as high level of catch. Tuna production in the eastern Pacific will be maintained at a maximum level if we catch a number of individuals of a size that guarantees the maximum catchable biomass. Given that tunas are at a high level in the food chain, this must, in order to guarantee maximum levels of exploitation, have consequences for those species which tunas eat as well as those which are their natural competitors. This is of course one of the Commission's firm objectives, and the possibilities for management of the resource could include the need to coordinate measures which will guarantee the rational exploitation of the small clupeiform or cephalopod species on which tunas feed, as well as the monitoring of competitor species, such as certain marine mammals.

The objective of maintaining dolphin populations in perpetuity can be achieved, either by the monitoring and maintenance of a population at a basic level or at a significantly higher level. However, if we decide to make the maintenance in perpetuity of the dolphin populations compatible with the maximum catch of tuna, we necessarily have to consider dolphins as competitors for tunas, and an excessive population of dolphins can jeopardize precisely the objective of maximum catch. Therefore, it is not the same thing to have as an imperative the maintenance of tuna production at maximum levels as at a high level. We would have to go back to the original objectives of the Convention and base ourselves on universal criteria for the management of natural resources. In this respect we have to define the extent of the term high level of catch in such a way that it will not allow, and much less induce, the fishery for juvenile tunas, given the effect that this could have on the populations of yellowfin tunas and the reduction of the tunas' contribution to feeding the world's population. We cannot dodge our responsibility of being the main source of direction for an activity which becomes every day more difficult to manage due to the unexpected variables which appear in a constantly changing situation which must be of concern to us all.

The phenomenon of the association of tunas with dolphins exists in several seas and has been especially studied and monitored in the eastern Pacific Ocean. Inexplicably, the only tuna in dispute commercially is that which comes from this area.

I believe that we should work towards the rational management of all animal and vegetable species, without singling any one out for special treatment, and admit that the main natural resource is man, is humankind. Making these objectives compatible should be our fundamental objective.

The 1984 Second World Fishing Congress, organized by FAO, is clear in this respect, and the framework of reference discussed within that organization on so-called responsible fishing lends weight to that type of definition.

The success evidenced by the program in the objective of reducing the incidental mortality of dolphins, and in the establishment of measures which guarantee that goal, could be a good framework for expanding the objectives of the Convention, and therefore brings up the need to initiate a process which will legalize in each of the nations the proposals, suggestions, recommendations and implementation in the light of the successful experience in the two years of the program. The expansion of objectives through the Convention would allow the countries affected to act on the basis of the results of the program. The Agreement showed on the one hand that success can be achieved in matters of conservation through multilateral approaches, and that there should therefore be no mechanisms which obstruct the flow of trade between producer and client nations other than those which can be implemented by sovereign right within the framework of the GATT for those countries signatory to it. However, the intergovernmental program should oblige the countries, if not juridically, which would be most preferable, then morally and ethically at least.

In conclusion, I would like to say that it has been the turn of Venezuela, in the person of Francisco Herrera Terán, to hold the office of President this year, sharing it in these last moments with me. It is not merely for politeness' sake that I wish to highlight the work done by Mr. Herrera Terán, since I know the effort and dedication which he brought to the role of President of the IATTC.

Ladies and gentlemen, it is a great pleasure for Venezuela to invite you to feel as if you were in your own home. Thank you very much.

Appendix III.

AGENDA

53rd MEETING OF THE INTER-AMERICAN TROPICAL TUNA COMMISSION

June 7-8, 1994

Cumaná, Venezuela

1. Opening of the meeting
2. Adoption of agenda
3. Review of current tuna research
4. The 1993 fishing year
5. Status of tuna stocks
6. Review of tuna-dolphin research and extension programs
7. Review of International Dolphin Conservation Program
8. Recommendations for 1994
9. Recommended research program and budget for FY 1995-1996
10. Place and date of next meeting
11. Election of officers
12. Other business
13. Adjournment

June 1994

Appendix IV.

RESOLUTION

The Inter-American Tropical Tuna Commission, having responsibility for the scientific study of the tunas and tuna-like fishes of the eastern Pacific Ocean, and for the formulation of recommendations to the High Contracting Parties with regard to these resources, and having maintained since 1950 a continuing scientific program directed toward the study of those resources,

Notes that the yellowfin tuna resource of the eastern Pacific supports one of the most important surface fisheries for tunas in the world, and

Recognizes, based on past experience in the fishery, that the potential production from the resource can be reduced by excessive fishing effort, and

Recalls that from 1966 through 1979 the implementation of a successful conservation program maintained the yellowfin stock at high levels of abundance, and

Notes that from 1980 through 1993, excepting 1987, although no conservation programs were implemented, conservation measures were recommended to the Commissioners by the scientific staff, and in turn such measures were approved by the Commissioners for recommendation to their respective governments, and

Observes that, although the stock of yellowfin is currently at a level of abundance greater than the optimum, nevertheless it can be over-exploited,

Concludes that, if conditions warrant, a limitation on the catch of yellowfin tuna should be implemented during 1994.

The Inter-American Tropical Tuna Commission therefore recommends to the High Contracting Parties that a quota of 250,000 short tons be established for the 1994 calendar year on the total catch of yellowfin tuna from the CYRA (as defined in the resolution adopted by the Commission on May 17, 1962), and that the Director should be authorized to increase this limit by no more than four successive increments of 25,000 short tons each if he concludes from examination of available data that such increases will pose no substantial danger to the stocks, and

Finally recommends that all member states and other interested states work diligently to achieve the implementation of such a yellowfin conservation program for 1994.

June 1994