INTER-AMERICAN TROPICAL TUNA COMMISSION MINUTES OF THE 62ND MEETING

La Jolla, California, USA October 15-17, 1998

The 62nd meeting of the Inter-American Tropical Tuna Commission (IATTC) was held in La Jolla, California, USA, on October 15-17, 1998.

1. Opening of the meeting

The meeting was called to order by the Chairman, .Biol. Harold Müller-Gelinek, on October 15, 1998, at 10:25 a.m. He then called upon the heads of the delegations to introduce themselves and the other members of their delegations. These, and also the observers and IATTC staff members, are listed in Appendix 1 of these minutes.

2. Adoption of the agenda

The Chairman asked if there were any comments on the provisional agenda. After a brief discussion, it was agreed that an item on fish-aggregating devices (FADs) should be added to the agenda after Item 5 of the provisional agenda. The revised agenda is attached as Appendix 2 of these minutes.

3. Review of the 1998 fishing year to date

The Chairman called upon Dr. James Joseph, Director of the IATTC, to present information on this subject. Dr. Joseph said that to date the catch of yellowfin tuna in the eastern Pacific Ocean (EPO) had been about 5 to 10 percent less than it had been during the same period of 1997. He attributed this to the strong El Niño event of 1997-1998 and to the smaller average size of the fish caught during 1998. The El Niño event had virtually ended, and he said that a "La Niña" event (a period with below-normal sea-surface temperatures) might be developing. During La Niña events fishing conditions may be better than average because the fish are confined to waters close to the surface due to the shallow thermocline.

He said that the capacity of the surface-fishing fleet had increased rapidly during recent years, reaching 145 thousand metric tons at the time of the meeting, and that, in response, a working group on fleet capacity had been established at the 61st meeting of the IATTC in June 1998. He reviewed cumulative catch data for the surface fishery for 1996, 1997, and 1998. The cumulative catches of yellowfin, skipjack, and bigeye for 1998 were all less than those for the same period of 1997. The 1998 catches by Ecuadorian vessels were greater than those for 1997, but the reverse was the case for most other nations. Because the catches have declined while the fleet capacity has increased, the catches per capacity ton for 1998 are considerably less than those for 1996 and 1997.

The IATTC staff is especially concerned about bigeye, as large amounts of small bigeye have been caught by purse seiners during the 1994-1998 period. Accordingly, a resolution calling for cessation of fishing for tunas associated with floating objects in the EPO during 1998 af-

ter 45,000 metric tons of bigeye had been caught was passed at the 61st meeting of the IATTC in June 1998. It is unlikely that that amount of bigeye will be caught during 1998.

The IATTC staff is also concerned about yellowfin. Resolutions setting catch limits for yellowfin were adopted for each year, except 1987, of the 1966-1998 period, and restrictions were imposed during each year of the 1966-1979 period. The limits for 1971-1998 consisted of a base amount, plus two to four increments which could be added at the discretion of the Director. For 1998 the limit was 210,000 metric tons, with three increments of 15,000 metric tons each. He said that the staff now thought that the catch of yellowfin in the Commission's Yellowfin Regulatory Area (CYRA) during 1998 should be limited to about 225,000 metric tons (base amount plus one increment), and recommended a restricted period at the end of 1998 to accomplish this. Vessels with observers aboard would be limited to 15 percent yellowfin in their catches made in the CYRA from the beginning of the restricted period through December 31, and vessels which departed from port without observers aboard during the restricted period would be limited to 15 percent yellowfin in their catches, regardless of where they were taken, until they returned to port to unload. He said that the restricted period would have to begin in late November or early December if the catch of yellowfin were to be limited to 225,000 metric tons.

The representative of Mexico asked about enforcement of the yellowfin regulation. Dr. Joseph said that each nation would have to enforce the regulations for the vessels of its fleet, and that the governments should think about establishment of a permanent international compliance group, similar to International Review Panel, to discuss infractions reported by observers and other pertinent matters. The representative of Mexico asked how much time would elapse between announcement and commencement of the restricted period. After some discussion, it was agreed that if the date of commencement of the restricted period were announced 1 week ahead of time the governments would have sufficient time to carry out the steps necessary to restrict the fishery.

Everyone agreed with the recommendation for regulation of the fishery to protect yellowfin, and a resolution to this effect (Appendix 3 of these minutes) was adopted.

4. Review of the International Dolphin Conservation Program (IDCP) to date

The Chairman called upon Dr. Joseph to present information on this subject. Dr. Joseph said that the IATTC had first gotten involved in trying to solve the tuna-dolphin problem in the EPO during the 1970s. It had placed observers on boats of the fleets of all nations participating in the fishery, and had held seminars at which techniques developed by the most experienced and skillful fishermen were passed on to other fishermen, inspected purse seines to see that the safety panels were properly aligned, *etc*. In 1992 the La Jolla Agreement, establishing the International Dolphin Conservation Program (IDCP), was adopted. The IDCP called for, among other things, 100-percent observer coverage of Class-6 vessels (capacity greater than 400 short tons (363 metric tons) of tuna), establishment of an International Review Panel (IRP) which, among other things, reviews data on infractions collected by observers and makes recommendations for Dolphin Mortality Limits (DMLs) for the entire fleet and for individual vessels. This program has been extremely successful, reducing the annual mortalities from about 133,000 animals in 1986 to less than 5,000 animals during 1993-1997. The numbers of sets on dolphin-associated schools

of tuna has stayed about the same during the 1986-1998 period, while the mortalities per set and the total mortalities have dropped precipitously. Preliminary data for 1998 indicate that, relative to 1997, the number of sets will have increased by 29 percent, the mortality per set will have decreased by 43 percent, and the total mortality will have decreased by 26 percent. The new Agreement on the International Dolphin Conservation Program which was adopted at the 35th Intergovernmental Meeting in February 1998 has been signed by representatives of 10 nations and ratified by one nation. It will go into effect as soon as three more ratifications by nations and/or regional economic integration organizations are obtained. The principal differences between this agreement and the La Jolla Agreement are that the new agreement specifies that there be mortality limits for each stock of dolphins, in addition to the overall limit for all stocks of dolphins combined, and that the new agreement is legally binding, whereas the La Jolla Agreement was not. If certain criteria are met, the U.S. definition for "dolphin-safe" will change in March 1999, and after that tunas caught in sets in which dolphins were not killed which are imported into the United States can be labeled "dolphin safe."

Mr. Alfonso Rosiñol of the Cámara Nacional de la Industria Pesquera of Mexico stated that, although the IDCP had been outstandingly successful, the response of the U.S. government had been extremely slow, which had caused great hardship to businesses in various nations which wanted to export tuna to the United States.

5. Consideration of modifications to the IATTC Convention

The Chairman called upon Dr. Robin L. Allen, Assistant Director of the IATTC, to introduce a document, Functions of the Inter-American Tropical Tuna Commission and its Convention. Dr. Allen said that at the 61st meeting of the IATTC in June 1998 a resolution calling for the establishment of a working group "to review the functions of the IATTC and its Convention and, if necessary, formulate possible amendments to the Convention" had been adopted. The meeting of the working group would take place after the IATTC meeting had adjourned. He reviewed the contents of this document, which described the functions called for by the Convention and those currently carried out by the Commission.

The Chairman asked if there were any questions or comments. The representative of Taiwan (Republic of China) expressed his appreciation for being invited to the meeting, and said that Taiwan wished to become a member of the IATTC. Taiwan has 50 to 60 longliners operating in the EPO, which catch more than 5,000 metric tons of tunas and billfishes per year, so it its adherence to the IATTC would be advantageous to all concerned. A statement to this effect is attached as Appendix 4 of these minutes. The representatives of several member nations expressed support for Taiwan's participation in the work of the IATTC.

The representative of the European Union said that that organization wished to adhere to the IATTC, and the representatives of several member nations expressed support for that. A resolution concerning modification of the Convention to permit regional economic integration organizations to adhere to it (Appendix 5 of these minutes) was adopted.

A resolution welcoming Taiwan's commitment to participate in the work of the IATTC, and recommending that the governments find appropriate mechanisms to achieve that goal (Appendix 6 of these minutes) was also approved. The representative of Taiwan presented a state-

ment (Appendix 7 of these minutes) regarding a proposal to implement the resolution encouraging its participation.

6. Fish-aggregating devices

The Chairman opened this agenda item for discussion. The representative of Venezuela suggested that a working group be formed to discuss possible regulation of fish-aggregating devices (FADs). Everyone agreed, and representatives from nearly every delegation volunteered to become members of the working group. It was agreed that the working group would meet during the evening of October 15 and that the representative of Venezuela would preside at that meeting. The members of the working group requested that the IATTC staff prepare additional information on FADs, which would be presented the following morning.

The Chairman called upon Dr. Joseph to present additional information on FADs. Dr. Joseph said that the capacity of the tuna fleet and the catches of yellowfin tuna had fluctuated greatly during the 1971-1998 period. The fleet size increased rapidly during the late 1970s, and during that period many vessels switched from fishing for dolphin-associated tunas to fishing for tunas associated with floating objects. This caused the catches of yellowfin to decrease, and many vessels ceased fishing or shifted their operations to the western Pacific Ocean. The decreased fishing effort permitted the stock of yellowfin to recover during the mid-1980s. From the mid-1980s to the mid-1990s the vessels directed more of their effort toward dolphin-associated fish and less toward fish associated with floating objects, which was conducive to greater catches of yellowfin. During the past two years or so, however, the size of the fleet has increased, and more effort is being directed toward fish associated with floating objects. It appears likely that, if nothing is done, the events of the late 1970s will be repeated.

Dr. Joseph then called upon Dr. Martín A. Hall, a member of the IATTC staff, to talk about discards of unmarketable tunas and the bycatches of other species. Dr. Hall said that the IATTC staff has used data collected at sea by observers to estimate the total discards and bycatches by Class-6 vessels. The discards of yellowfin and skipjack are greatest in sets on fish associated with floating objects ("log sets"), intermediate in sets made on free-swimming schools of tuna ("schoolfish sets"), and least in sets on fish associated with dolphins ("dolphin sets"). The same is true for bigeye, except that virtually no bigeye are caught in dolphin sets. During 1997 the greatest bycatches of fish of direct economic importance were wahoo (478,000 individuals), mahi-mahi (477,000 individuals), and yellowtail (132,000 individuals). He said that it is possible to estimate the "ecological cost," in numbers of wahoo, mahi-mahi, or any other species, of saving one dolphin.

The Chairman asked if there were any comments or questions. The representative of Costa Rica asked if the IATTC staff had any data on the total weights of the bycatches. Dr. Hall said that converting the numbers of fish to weights would require data on length frequencies and weight-length relationships, and that the staff was working on making such conversions. The representative of Spain said that he supported this type of study and possible regulation of the use of FADs. He then asked several questions. He asked if the average size of yellowfin in dolphin sets had decreased. Dr. Joseph answered that it had not, and Dr. Hall added that small yellowfin are rarely taken in dolphin sets, as they cannot swim fast enough to keep up with the dolphins. He asked whether the biomass of juvenile yellowfin had decreased, and what was the av-

erage maximum sustainable yield of yellowfin. Dr. Joseph said that there appears to be no relationship between the number of recruits and the abundance of spawners within the range of abundance of spawners observed. He said that the average maximum sustainable yield of yellowfin for the EPO during the 1986-1994 period was more than 260,000 metric tons, but probably less during 1997-1998. He asked if the average size of spawning yellowfin had decreased. Dr. Joseph replied that it had not, but that both the spawning biomass and the average size of the yellowfin in the catch had decreased due to increases in the numbers of log sets and schoolfish sets. He asked what would be the effects of elimination of fishing on FADs. Dr. Joseph said that the catches of yellowfin in schoolfish sets and dolphin sets would increase, and that the catches of bigeye and skipjack in schoolfish sets would also increase. However, the increase in the catches of skipjack in schoolfish sets would probably not be enough to make up for the elimination of the catches of skipjack in FAD sets. He asked about predator-prey effects, and Dr. Joseph said that, although the staff was currently engaged in such studies, there was not yet enough information to answer the question. Dr. Hall said that it would be useful to know more precisely what the species and size composition of a school before it is set on.

The representative of Mexico said that the events of 1997-1998 are similar to those of the late 1970s, and action should be taken quickly. The Chairman said that the working group on FADs had met during the evening of October 15, but had not finished, and would have to meet again during the period of the 62nd IATTC meeting. The representative of Ecuador said that the use of tender vessels in the EPO should be prohibited, that elimination of the use of FADs would cause great economic hardship on the owners of some vessels, particularly small ones, that all FADs should have identifying codes attached to them, and that modification of fishing gear to reduce the amounts of fish discarded would be helpful. The representative of Mexico said that these were useful ideas, and worthy of careful scrutiny. He added that skipjack apparently do not need protection. Skipjack are recruited mostly from the central and western Pacific. Their apparent abundance fluctuates greatly from year to year, but this is not related to the use of FADs. The representative of the United States said that he was not convinced that the use of FADs is deleterious, and urged that the nations be more deliberate in their actions, as they had been in the formulation of a resolution for bigeye at the 61st IATTC meeting. The representative of Mexico pointed out that the FAO Code of Conduct for Responsible Fisheries calls for application of the precautionary approach. The representative of the United States said that he also favored the precautionary approach, but that he still believed that no action should be taken until the situation had been looked at more carefully. The Chairman said that the matter should be discussed at greater length in the meeting of the working group.

A draft proposal, which included recommendations for limiting the number of FADs a vessel could carry, prohibiting the use of tender vessels to deploy, maintain, repair, and pick up FADs at sea, prohibiting transshipment of tunas at sea, prohibiting the use of purse seiners with carrying capacities greater than 1,800 metric tons in the EPO, and establishment of a working group for the study and determination of measures for regulating the fishery for tunas associated with floating objects, had been distributed. After some discussion, a resolution, including provisions for prohibition of the use of tender vessels, prohibition of transshipment of tunas on the high seas, and limitation of the number of FADs a vessel could carry (Appendix 8 of these minutes) was approved.

7. Proposed amendment to the financial regulations to increase the permitted carryover of unobligated funds from 12.5% to 25%

The Chairman called upon Dr. Allen to discuss this subject. Dr. Allen said that the fiscal regulations of the IATTC require that it not carry over more than 12.5 percent of the unobligated funds which are allocated for one fiscal year into the next fiscal year. This provides funds for only six weeks of operations at the beginning of the fiscal year, which may be insufficient if the contributions from one or more member nations are delayed. He recommended that the limit for the carryover be increased to 25 percent. After a brief discussion, the Commissioners agreed to this change, effective October 1, 1998.

8. Report of the working group on limiting the growth in capacity of the purse-seine fleet in the eastern Pacific Ocean

The Chairman called upon Dr. Joseph to discuss this subject. Dr. Joseph first reviewed the report of the chairman of the IATTC Working Group on Limiting the Growth in Capacity of the Purse-Seine Fleet in the Eastern Pacific Ocean, which had been distributed to the attendees. Annex 3 of that document specifies allocations for 1999 for 11 nations, ranging from 499 metric tons for Honduras to 49,500 metric tons for Mexico. It specifies that, in addition, up to 32 U.S. vessels licensed to fish in the western Pacific Ocean could make one trip of not more than 90 days in the EPO each year. Annex 4, an alternative suggested by Spain, specifies that vessels of nations other than the United States which are licensed to fish in the western Pacific Ocean could also make one trip of not more than 90 days in the EPO each year. Annex 3 had been approved by the representatives of all the nations in the working group except Colombia and Spain. A lengthy discussion, with several interruptions, followed. The following points were made during this discussion: whatever agreement was reached for 1999 would not affect agreements made for subsequent years; historical catches in the Exclusive Economic Zones of coastal states should be a consideration in allocating vessel capacities; historical participation in the fishery should be taken into consideration in allocating vessel capacities; the rights of coastal states which are developing nations should be a consideration in allocating vessel capacities among nations. The representatives of Costa Rica and El Salvador made statements which appear as Appendices 9 and 10 of these minutes. The representative of Mexico pointed out that if the fleet is too large the regulations for yellowfin will have to be implemented early in the year, which will cause hardship for everybody. A resolution, which appears as Appendix 11 of these minutes, was approved.

In response to requests by the governments of Colombia, Nicaragua, and Panama, statements by them are included as Appendices 12, 13, and 14 of these minutes.

9. Report of the working group on bycatch

The Chairman called upon Dr. Allen to present information on this subject. Dr. Allen said that a working group on bycatches in the purse-seine fishery for tunas was established in response to a resolution passed at the 58th meeting of the IATTC in June 1997. Its objectives are "(1) to define the relationships among bycatch and target species with special reference to the sustainability of the catches of all such species, (2) to develop gear technology that is effective in reducing bycatch to the maximum extent possible, [and] (3) to formulate and evaluate manage-

ment schemes for reducing bycatch." He said that the immediate concerns of the group would be ecological studies, including modeling, and technology and fishing techniques, and that the IATTC staff is already involved in both. Members of the IATTC staff have been involved for many years in studies of the food web in offshore waters of the EPO, and further studies in collaboration with other organizations are currently in progress. The IATTC staff has recently conducted tests with a sorting grid, to be attached to a purse seine, which would permit small tunas to escape while retaining the larger ones. Dr. Allen then read the conclusions of the chairman's report for this group, which were as follows:

- "1. Small purse-seine or longline vessels take significant quantities of unmarketable fish of some species. In these cases the ecological significance of bycatches of large purse seiners can be evaluated only if data on the other components of the fishery are also available. In light of this, the Commission may wish to widen the mandate of the group.
- 2. It is not likely that all facets of any bycatch problem can be solved simultaneously. The working group therefore seeks guidance from the Commission on priorities indicating which species or groups of species ought to be the main focus of its investigation."

Dr. Allen then called upon Dr. Hall to describe the sorting-grid experiments. Dr. Hall said that these experiments were carried out with captive yellowfin in a tank at the IATTC's laboratory in Achotines, Panama. The sorting grid consisted of a rectangular frame with vertical bars of PVC pipe 10 cm (4 inches) apart. This distance was selected because it corresponded to the greatest width of the largest fish in the tank. When the fish were induced to swim toward the sorting grid they all passed readily through it, and most of them were not injured in the process. He pointed out that a sorting grid, even if it works, would not completely solve the bycatch problem, as some bycatch species, *e.g.* billfishes and sharks, are too large to pass through a sorting grid which would retain marketable tunas.

The Chairman asked if there were questions or comments on this subject. The representative of the United States said that he was pleased to see that gear experiments were underway. He noted that fishermen were responsible for previous important bycatch-avoiding innovations, such as backing down and safety panels, and said that he thought that fishermen should participate in whatever further experiments the IATTC might conduct. He said that he thought that, since the IATTC's principal concern is tuna, the highest priority should be given to reducing the bycatches of tunas. After that, attention should be directed toward endangered or threatened species, such as sea turtles and seabirds. Dr. Allen said that he agreed with the necessity to involve fishermen, as well as others, in the process, especially if and when management measures were contemplated.

10. Other business

The Chairman called for suggestions on regarding other business to discuss. The representative of the United States said that the 1997 amendments to the U.S. Marine Mammal Protection Act of 1972, among other things, may, depending on findings by the U.S. Secretary of Commerce concerning depleted stocks of dolphins, permit tunas caught in "sets or other gear deployments in which"..."no dolphins were killed or seriously injured" to be marketed in the United States as "dolphin safe." This would have to be supported by the presence of "an ob

server approved by the International Dolphin Conservation Program on board the vessel during the entire trip" and a "tracking and verification program." ("Tracking" consists of keeping track of batches of tunas which have been caught in sets in which dolphins were killed and in sets in which dolphins were not killed.) The amendments will take effect when (1) the U.S. Secretary of Commerce certifies that sufficient funding is available to undertake studies of the effects of fishing for dolphin-associated tunas on the dolphins and (2) the U.S. Secretary of State certifies that "a binding international agreement to establish an International Dolphin Conservation Program" has been adopted and is in force. Tuna caught by encircling schools associated with dolphins can be imported into the United States as soon as the bill takes effect. The new definition of dolphin-safe will take effect in March 1999 unless the Secretary of Commerce determines that "the intentional encirclement of dolphins with purse seine nets [has] a significant adverse effect on any depleted dolphin stock." He then introduced Dr. Robert Brownell of the U.S. National Marine Fisheries Service (NMFS). Dr. Brownell said that the new law specifies that the studies of the effects of fishing on dolphin-associated tunas on the dolphins will consist of "abundance surveys," which would be carried out during 1998, 1999, and 2000, and "stress studies," which will include "(A) a review of relevant stress-related research and a 3-year series of necropsy samples from dolphins obtained by commercial vessels; (B) a 1-year review of relevant historical demographic and biological data related to dolphins and dolphins stocks, ...; and (C) an experiment involving the repeated chasing and capturing of dolphins by means of intentional encirclement.". The abundance surveys, which will be conducted with research vessels and aircraft, have been scheduled for August-November 1998, 1999, and 2000. The results of these will be combined with the results of the estimates of the relative abundances of the various stocks of dolphins made by the IATTC staff. He then called upon Ms. Barbara Curry of the U.S. NMFS to discuss the stress studies. She said that the design of the program was based largely on the recommendations of a group of experts on the effects of stress on animals which had met in 1997. Samples of tissues of dolphins which are killed during fishing operations will be collected at sea for histological analysis. Dr. Brownell said that a final determination with regard to "whether the intentional ... encirclement of dolphins with purse seine nets is having a significant adverse impact on any depleted dolphin stock" will be made between July 2001 and December 2002.

The Chairman called for questions and comments. The representative of Costa Rica asked about stress studies in other fisheries, specifically harbor porpoises accidentally caught in the fishery for cod in the Atlantic Ocean. Dr. Brownell said that the purse-seine fishery for tunas in the EPO is unique because the overwhelming majority of the dolphins are released alive, whereas in other fisheries virtually all the accidentally-caught marine mammals are killed. The representative of the United States said that carrying out the stress studies would require international cooperation. Initially, five experts on necropsy will be placed on Mexican purse seiners (in addition to the observers). Eventually observers will take at least some of the tissue samples. All the costs of the program will be paid by the United States. The representatives of Mexico and Peru said that they would cooperate fully with the program.

A statement by the Commission for the Conservation of Southern Bluefin Tuna is included as Appendix 15 of these minutes.

11. Adjournment

The Chairman thanked the delegates, IATTC staff members, and interpreters for their hard work, and adjourned the meeting on October 17, 1998, at 2:30 p.m.