

Final Draft May 25, 1999

Pelagics Advisory Panel Meeting 8.30 am-5.00 pm 14-15th April 1999 Ilikai Hotel, New Zealand Suite, 1777 Ala Moana Blvd., Honolulu

# Introduction

Council Chairman Jim Cook opened the meeting at 8.30 am and introduced the new Pelagics AP chairman, Bill Mossman. Mr Cook also requested the Pelagics AP to pay particular attention to the agenda item concerning the Multilateral High Level Conference to establish a management regime for highly migratory species in the Central West Pacific. He emphasized the Management Commission to be established from these conference series would set a total allowable catch (TAC) for the CW Pacific.

# 1. 1998 4<sup>th</sup> quarter report for Hawaii and American Samoa longline fishery reports

Russell Ito and Paul Dalzell reported on the 4<sup>th</sup> 1998 4<sup>th</sup> quarter report for the Hawaii and American Samoa longline fisheries. Paul Dalzell noted that 1998 marked the third year of log book data for this emerging fishery. The fishery appeared to be in a period of stasis after rapid expansion in 1996 and 1997. The American Samoa longline fishery had significantly revived fishing activity in the territory, with landings rising from less than 100,000 lbs in 1995 to almost 1 million lbs in 1997, comprised mainly of albacore for the canneries in Pago Pago. Russell Ito showed the catches and catch rates for the Hawaii longline fishery. He also presented maps showing the spatial distribution of catches and fishing effort. He noted the large amount of fishing effort in the US EEZ waters to the south of Hawaii, particularly around Palmyra & Kingman Reef. Swordfish CPUEs rose in 1998 and returned to pre-1994 levels.

There was some discussion by the Pelagics AP on purse seine and longline activity in the US EEZ waters, particularly whether purse seiners have an impact on American Samoa longline catches. It was noted that the purse seiners do not target albacore but skipjack and yellowfin. Questions were also asked about the availability of purse seine data and how can it be accessed. Some Pelagics AP members noted that the purse seine fleets generated 80% of the Pacific Ocean tuna catches but were relatively few in number, compared to the more numerous longline and troll vessels. The observer coverage of purse seiners was discussed; it was noted that the Forum Fisheries Agency (FFA) was aiming for 20% coverage of purse seine fleets.

# 2. Akule and opelu study

Kevin Weng reported on the results of his MSc thesis study at UH on catch and fishing effort data for two coastal small pelagic fishes, akule and opelu. Mr Weng explained that his study suggested that Hawaii stocks of both species were only moderately exploited. His work also showed some correlation between akule CPUE and rainfall. The study also showed that akule had greater site fidelity and might be more susceptible to localized depletion from heavy fishing.

Pelagics AP discussion noted that the original Pelagics AP request for action on akule was generated by concerns on the effect of fishing whole schools with purse seines on the population gene pool. Mr Weng stated that the natural history of fishes such as akule and opelu would suggest that catching entire schools would not affect the gene pool. It was noted that catches of entire schools of akule in Guam reduced subsequent availability. In Hawaii anecdotal evidence suggested that in some bays catches of entire schools were rapidly replenished.

3. Status of bigeye and yellowfin tuna tagging around the Hawaiian Islands

David Itano reported on the results of ongoing tagging program for bigeye and yellowfin tuna in the Hawaiian archipelago. Yellowfin and bigeye had been tagged in approximately equal numbers over the past 12 months. The recapture rate was around 8.5%, with most recaptures coming from around Hawaii, although one recapture had been made from a purse seiner in Mexico.

# 4. Shark incidental catch in the Hawaii longline fishery and issues related to shark finning

Dr Mike Laurs from the Honolulu Laboratory reported on the statistics concerning the catches of sharks in the Hawaii longline fishery. Approximately 100,000 sharks were caught each year. In the past most were simply cut free, but an increasing amount were now retained for finning. In 1998 about 60 % of sharks were retained, nearly all were finned but a few such as makos and threshers were landed whole. Approximately 80% of sharks caught were alive at the time of the longline haul. Dr Laurs noted the various research projects, 8 in all, that were being conducted at the NMFS HL on the blue shark, which formed 90-95% of the longline shark catch. Dr Laurs also noted that there was no indication of a long term decline in the CPUE of blue sharks in the North Pacific.

Discussion by the Pelagics AP on the longline shark catches initially concerned the accuracy of data reporting through logbooks and their verification by the observer program. There was also discussion about directed shark fisheries in the rest of the Pacific (Japan, Mexico, PNG, Solomon Is) and the value of fins form the Hawaii longline fishery (approx. \$1 million). The meeting also noted the increase in finning on vessels targeting tuna, due to increases in the demand for blue shark fins. Tuna- targeting vessels fish in areas with large blue sharks, the fins of which are more valuable.

Mike McCoy briefly reported on the NMFS/Council shark socio-economic project. The project report will contain information on fleets catching sharks (as bycatch and incidental catch) and at the markets for shark fins. The report will also contain indications of the importance of sharks to the various fisheries. There was discussion in the meeting about the terms of reference for the this project, and whether it will contain any information on socio-cultural attitudes to sharks among the various islands of the Western Pacific Region? Some AP members expressed dissatisfaction with the explanation given concerning the setting of the terms of reference of the NMFS/Council study. Specifically, there was concern that the study would not address the recommendation of the Native and Indigenous Rights that a tax be imposed on shark finning to provide funding to develop markets for shark products to encourage full utilization. These products were to include culturally significant items such as shark teeth and skin. Council Executive Director Kitty Simonds informed the AP that the study terms of reference did contain socio-cultural aspects of shark utilization in the Pacific Islands and this would be included in the final document from this project.

The AP members were also informed that a Council intern was assisting Mr McCoy to review the potential uses and markets for sharks and particularly blue shark, other than just the fins. The terms of reference for this work, developed by Council staff, included drafting a report reviewing all information relating to markets for shark products globally, and in the Asia-Pacific region, including listing fishing companies and firms in the Asia-Pacific region that deal in sharks and shark products.

The information contained in these reports will be important if the Council decides to develop regulations concerning shark finning. The meeting noted that a bill had been introduced into the Hawaii legislature to require landing of whole sharks and would prohibit the landing of fins only. The bill failed in the Senate Committee on Water, Land and Hawaiian Affairs, but was reactivated by being appended to another bill in the crossover to conference.

5. Mitigation of longline-seabird interactions in the Hawaii longline fishery

Paul Dalzell opened this session with an overview of the seabird-longline interactions in the Hawaii longline fishery. He noted that the Council had voted to proceed with regulations at the 99<sup>th</sup> Council

meeting in Guam/NMI that would implement mandatory mitigation measures for the Hawaii longline fleet.

Laura Torre of Garcia and Associates (Council contractors) presented a qualitative analysis of the results from their study of mitigation methods under actual fishing conditions in the Hawaii longline fleet. This study looked evaluated the performance of *tori* lines, towed buoy systems, blue-dyed bait, offal discards and night sets. Ms Torre also presented preliminary results which showed that blue dyed bait did not have any negative influence on CPUE of target species.

Dr Chris Boggs described a NMFS project conducted in February to evaluate the performance of tori lines, blue dyed bait and weighted  $\rightarrow$  nocks=. The bait on the longline was attached with large safety pins rather than hooks so that they presented no risk to seabirds. The results suggested that on sets the blue dyed bait and weighted  $\rightarrow$  nocks= were 90% effective at mitigating interactions versus only 70% for the *tori* line. The NMFS study also showed that the majority of interactions involved juvenile birds. Dr Boggs noted that the NMFS study was conducted under ideal experimental conditions and that the Garcia study was essential to understand the performance of mitigation methods under actual fishing conditions

Pelagics AP discussion on the mitigation studies initially focused on whether the greatest danger to birds was on the set or on the haul. The various studies in Hawaii and elsewhere demonstrated that the longline set involved more fatal interactions. Most hookings of seabirds were through the bill or the neck. The ages of dead birds taken during the Garcia project are being recorded to obtain an indication of the age distribution of fatal interactions. Concern was expressed about adding extra weight to hooks being used for swordfish fishing and the dangers this presented to fishermen. The Garcia project was also including fishermens comments on the mitigation methods to determine which might be the most acceptable to them.

#### 6. Bycatch of turtles in the Hawaii longline fishery

Turtle bycatch in the Hawaii longline fishery was presented by Dr Pierre Kleiber from the NMFS Honolulu Laboratory. He explained the statistical methods required to generate take and kill estimates for the longline fishery, and the confidence intervals around the point estimates.

Initial discussion by the Pelagics AP requested further clarification about the methods to raise take levels to the number of turtles actually killed by the fishery. Questions were asked about the impact of the weight given to the results of the Mediterranean Sea study on turtle post hooking mortality and how it influenced the results of the turtle bycatch data. Dr Kleiber stated that this was the only study available on which to base post-hooking mortality estimates. He explained that the number of turtles animals

hooked internally were given a 29% probability of dying following release. Turtles hooked externally or tangled were not thought to die on release. For turtles hooked but with no information on whether the hooking was internal or external, the ratio of internal to externally hooked turtles was used to adjust the 29% probability level.

Clarification was sought on the role of light sticks in increasing interactions between turtles and longliners but analyses indicated no significant relationship. This stemmed from an East Coast study which suggested some correlation, but Dr Kleiber felt that this study was flawed.

Dr Kleiber counseled the Pelagics AP not to make simple extrapolations to the entire fleet from take rates as these are bogus and misleading. The takes of turtles is stratified in time and space through the differential fish species targeting of different vessels. Dr Kleiber also responded to questions concerning post-hooking survival of turtles, and the survival rate of externally hooked turtles. Dr Kleiber noted that there was increasing evidence that both externally hooked and internally hooked turtles survived for several months following hooking, based on satellite tagging studies.

Dr Jeff Polovina presented a summary of a study on the ecology of loggerhead turtles which combined information from satellite tag data on hooked-and-released turtles, and form remotely sensed oceanographic data on temperature, sea surface height and chlorophyll content of the sea water. Dr Polovina showed how the distribution of loggerheads was correlated with the location of the two boundaries of the frontal system of the sub-tropical convergence zone to the north of Hawaii. This may have some management implications and could be used to develop seasonal closed areas to mitigate turtle-longline interactions. The Pelagics AP was told that future turtle tracking studies will use improved satellite tags that will have a longer battery life and indicate diving behavior.

### 7. Marine debris; sources and impacts on habitat and protected species

Rusty Brainard from the Honolulu Laboratory gave a presentation to the Pelagics on the impact of marine debris on coral reefs and protected animal species in the Hawaiian Islands. Mr Brainard showed a video concerning the accumulation of net fragments from gill net and trawl fisheries to the north of Hawaii. He also outlined concerns with plastic smaller marine debris and its impacts on seabirds and turtles. He showed how oceanographic conditions create seasonal patterns in the volumes of marine debris arriving at the Hawaiian islands. Mr Brainard outlined NMFS HL response to the problems associated with net fragments and coral reefs. This included net removal, damage prevention, public awareness, identifying marine debris sources, tracking net fragments and high resolution satellite imaging to expedite at-sea interception and removal.

# 8. Status of the area closure for large pelagic fishing vessels around the islands of American Samoa

Paul Dalzell reported on the background to the American Samoa longline closure and the history of this management measure. American Samoan fishermen had originally asked the Council to implement a 100 nm longline closed area around the islands of Am. Samoa. Facing opposition to this from NMFS, Am. Samoan Council members had agrees to a 50 nm closure around the southern islands of American Samoa and 30 nm around Swains Island in the north of the EEZ.

Charles Karnella noted that this framework measure had been rejected by the NMFS SWR Administrator, who had suggested that a smaller 30 nm closure around the southern islands and no closure around Swains Island may be acceptable.. This decision was received with deep disappointment by the Council who felt that the American Samoa measure had been disapproved to protect the future of the US purse seine fishery.

Pelagics AP discussion sought clarification on how much South Pacific Tuna Treaty considerations for the US the purse seine fishery had influenced SWR Administrators decision. Clearly it had had some influence, since it was referred to in the disapproval letter. There was concern that the tuna resource within the US EEZ around Am. Samoa could be depleted by the time the people of the territory decide their political future, and that there needs to be some measure in place to protect tuna resources for local exploitation.

# 9. Update on issues relating to blue marlin, and blue marlin stock assessment

Paul Dalzell presented a brief overview of Council initiatives with respect to blue marlin. He noted current activities stemmed from a request at the 94<sup>th</sup> Council Meeting in December 1997 for a more equitable allocation of blue marlin catch for charter vessel operators in the Kona charter vessel fishery. This had led to a Council recommendation for a blue marlin stock assessment as a necessary precursor to any Council action. Mr Dalzell stated that the IATTC would have completed a standardization of blue marlin CPUE by mid-1999. Dr Mike Laurs stated that the NMFS Honolulu Laboratory was hoping to collaborate with the Secretariat of the Pacific Community=s Oceanic Fisheries Program through the annual Standing Committee on Tuna and Billfish. He also noted that the Interim Scientific Committee on Tuna and Tuna-like species in the North Pacific had also formed a marlin research group to facilitate marlin stock assessment.

Discussion by the Pelagics AP focused on whether the implementation of HACCP regulations had had an impact on blue marlin sales from charter vessels through the Honolulu auction. Apparently, it had not. HACCP regulations stated that there should be a continual drop in temperature of a fish following capture and that these conditions were being observed by fishermen. The Pelagics AP heard that there had also been a big increase in catch and release of blue marlin in the Kona charter vessel fishery.

(At this point on the agenda, the meeting adjourned for the day at 5.00 pm)

# 10. Progress of the Multi-lateral High Level Conference process to implement a management convention for tunas in the Central-West Pacific

Paul Dalzell outlined for the Pelagics AP the progress on the Multi-lateral High Level Conference process to implement a management convention for tunas in the Central-West Pacific. This process will ultimately implement a management commission for tunas etc in the CW Pacific. The process had begun in 1994, with second and third meetings in 1997 and 1998 respectively. The fourth conference was convened in Hawaii in February 1999, with the fifth meeting also scheduled for Hawaii in August-September 1999.

Paul Dalzell noted that the area to be managed under the new commission contained all of the WP Region. He also outlined what the new management commission would do once implemented. The most important impact with respect to the Council would be the development of total allowable catch for the four principal tunas, skipjack, yellowfin, bigeye and South Pacific Albacore.

The Pelagics AP voiced concerns about the development of a management commission under MHLC and the involvement of local and indigenous fishermen in the negotiation process. Some Pelagics AP members voiced little confidence in optimistic stock assessments for tunas, given that local fishing conditions continue to deteriorate. Some Pelagics AP members also suggested that Guam, NMI and American Samoa should be allowed to participate in the MHLC in the same manner as French territories.

It was noted that the large fishing nations participated in MHLC had delegations which included the large fishing fleets and processors in their delegations. The US had not so far included small-scale fishermen in its delegation. The Pelagics AP heard that the Council was making a special effort to include representation from the territories in the US delegation. It was noted that this did not include Native Hawaiian representation until the 4<sup>th</sup> MHLC when the Office of Hawaiian Affairs requested participation in the US delegation. The discussion under MHLC also touched on the American Samoa closed area disapproval and the possibility that large fishing concerns may continue intimidate small island local fisheries to achieve their own ends.

#### **11.** Revisiting the longline limited entry program

Mr Isaac Harp opened this agenda item by noting that there were 164 limited entry permits available for the Hawaii longline fishery, but currently only 114 of these were being used by permit holders to fish. Mr Harp referred to the Mau Zone limited entry bottom fish fishery where 20% of the permits (2) were set aside for use by Native Hawaiian Community Development Programs. Mr Harp advocated a similar arrangement for the Hawaii longline limited entry program. Further, he felt that many of the permits were obtained for speculative purposes rather than for genuine fishing ventures and suggested that a ×use ir or lose it= provision be developed for the program. This may free up 20% of the longline permits. Another possibility to issue more permits specifically for Native Hawaiian Community Development Programs.

Pelagics AP discussion initially focused on what means could be used to finance permit purchase from those permit holders not currently using them. It was generally agreed that issuing additional permits was not a realistic option. The Office of Hawaiian Affairs has business programs which might available for buying out permits, and there were Federal programs that also might possibly be a source of financing. The Pelagics AP also discussed how many Native Hawaiians were actively seeking permits to enter the longline fishery, how many permits were currently held by Native Hawaiians, and whether had anyone had explored this initiative with Office of Hawaiian Affairs (OHA). Apparently OHA was not as interested in fisheries development, putting more priority on other business opportunities.

#### 12. Revisiting the longline closed area boundaries

Mr Harp also led discussion on this agenda item. He noted that some fishermen felt that the 75 nm longline closed area boundary around Oahu, and the 50 nm boundary around the remaining Hawaiian Islands were inequitable. They had also voiced concern that the reason for the windward side 25 nm reduction in the longline boundary in winter for bigeye fishing was flawed, ie that seasonal rough weather prevents trollers from fishing far offshore in the winter months off the northern coasts. Mr Harp suggested that the boundaries be a uniform 75 nm throughout the MHI, with a 50 nm reduction in winter on the windward side.

In response to questions concerning troll/handline fishing patters around the MHI, Paul Dalzell showed some maps prepared by HDAR, which showed the average catch of bigeye and yellowfin during spring, summer, fall and winter for the years 1990-1991 (before the longline closure), and 1992 - 1996 (after the longline closure). The Pelagics AP discussed if there was any evidence of gear interactions, but there did not appear to be any other than the recent interactions on the Cross Seamount, which was a special case. The Pelagics AP also discussed exploring a flexible approach to small longline vessels, ,particularly since small vessels making only short trips could deliver high quality bigeye tuna.

In the Winter longliners did fish just outside the 25 nm longline closure. The Pelagics AP again also tried to determine if there were any interaction effects between longliners and small vessels. Again there appeared to be no evidence of this although longliners might intercept fish before they come close to shore and therefore interact competitively with the troll/handline vessels. An economic study was thought necessary to evaluate the impact on longliners of altering the closed area boundaries. It was noted that the 50/75 nmi boundary had effectively denied 60% of the productive longline fishing grounds within the EEZ to the longliners.

The Pelagics AP discussed investigating the possible fishing performance of different sized longline vessels, although it was noted that the Council had made some investigations on this topic when establishing the original longline closed areas. The advantage of many small longliners was noted given the greater number of people they would employ versus a few large longline vessels, as was the case in American Samoa. The American Samoa scenario was only possible, however, because of low wage expectancy in the Territory. One possibility was for longline vessels < 50 nm to fish within the closed area, but other Pelagics AP members believed that a conscious decision had been made to minimize longline fishing effort on yellowfin within the near shore waters of Hawaii. It was suggested that if a study was to be conducted off of Waianae to obtain a thorough review. The Pelagics AP asked if the Council could look at the various possibilities and list their pros and cons

#### 13. Enforcement issues

Mark Mitsuyasu reviewed Council policy and actions on VMS deployment on foreign fishing vessels transiting the US EEZ in the Western Pacific. He noted that under MHLC there was a move to universal VMS deployment on all fishing vessels.

Pelagics AP discussion included the need to deploy VMS on fishing vessels in American Samoa through >piggy backing= on the Hawaii VMS program. The continued evasion of the US purse seine fleet to deploy VMS was discussed.

# 14 a. Revision of catch HDAR commercial catch reporting

Alan Rabacal and Reggie Kokubun from HDAR presented the revisions being planned to the present C3 catch data reporting form. This single form would be replaced with a suite of individually designed forms for the range of fishing activities in Hawaii.

It was noted that as the dealer reporting system comes on-line, then the fish sales data presently required from fishermen can be discontinued and the catch forms used purely for biological purposes. Concern was expressed about the sales data falling into the hands of the State tax authorities. It was noted that in Japan it was illegal for fishing agencies to provide catch data forms to the tax authorities.

There was also concern that a fisherman might be issued with 5-6 different data books when applying for a license. However, the number of books required can be determined through asking the fishermen what are the main gears being used. There was also concern about the fata from the charter fishery, ie aku caught for bait, but not reported, and game fish caught but released. There was also discussion about the need to record charter trips where there was no catch but still receives a charter fee. Other issues discussed by the Pelagics AP included the cumbersome nature of buying a commercial fishing license (could it be bought through other locations apart from HDAR, eg auction, fish dealers, snail mail, internet?), having one license cover all the crew on a commercial fishing vessel, then use of a federal logbook in lieu of a state catch form, and whether it was appropriate for US Customs officials to be checking for DLNR fishing licenses. There was also concern about HACCP regulations forcing commercial fishermen to sell for cash to small supermarkets and restaurants. These were regarded, however, as enforcement issues.

#### 14 b. Comprehensive data amendment

Mr Mark Minton explained the development of the comprehensive data amendment and the need to close loopholes for data reporting by presently un-permitted fishing activities in the remote island territories of the Western Pacific Region. This would be achieved through a federal permit and logbook system. He added that this amendment would also require Hawaii limited entry longline permit holders to report their catches wherever they land them. This was being taken care of in California through an informal arrangement to pass on Hawaii and Cal. Fish & Game log books to the NMFS Honolulu Laboratory, but needed to be formalized through a Memorandum of Understanding.

Discussion on this topic by the Pelagics AP focused on the need to improve communications on this initiative to fishermen in the island territories of the Western Pacific Region, including translation into languages other than English.

15. Recreational fishery reporting and formation of a recreational fisheries data task force

Paul Dalzell explained the development of a Recreational Fisheries Data Task Force to advise the Council on the way to improve the reporting of recreational fishing data. He explained the terms of reference and the suggested composition of the task force.

The Task Force will be comprised of active and retired small boat-fishermen (recreational, part-time commercial, and subsistence) spokespersons for the recreational and sports fishing sector and fisheries management and data specialists.

The objective of the Task Force will be to provide advice to the Council on the best ways to collect information on recreational, part-time commercial and subsistence fishing activities in Hawaii, including levels of participation, catch and fishing effort.

#### 16. Review of Council program plan

Mark Mitsuyasu reviewed the draft Council Program Plan, which is a benchmark for Council progress, the development of budgets, and for other agencies to support Council needs. He asked the Pelagics AP to forward comments on this document to the Council office.

# 17. Public comment

Glenn Tennoy from Tropic Seafoods asked for the Council to revisit the longline closed area around the MHI. He proposed that longliners be allowed within the closed area on weekdays, and would use shorter longlines. Mr Tennoy stated that the longliners were unable to take advantage of seasonal abundance of yellowfin close to the MHI. He also proposed a 25 nm closure and the need to allow smaller longline vessels to fish closer to shore.

Pelagics AP discussion ranged between the possibility of some new arrangement for vessels < 50ft to fish within the longline closed area, to permitting longliners fishing closer to shore reinitiating the problems originally experienced in the early 1990s prior to the longline area closure. Other voices on the Pelagics AP felt that a reduction in the present boundaries would be unacceptable to commercial trollers and charter vessels. The main issue was competition for blue marlin and yellowfin tuna, species crucial to the survival of the charter fishery, whether real or perceived. Some on the Pelagics AP advocated an even bigger (100 nm) closure. It was also stated, however, that the longline fishery had had a beneficial trickle-down effect for the whole fishing industry and expanded marketing opportunities for small vessel fishermen. There was also reiteration that there was not much data available on how any changes in the closed area boundaries would affect small vessel and the longline fisheries.

There was also discussion by the Pelagics AP that not all of the longline closed area was fished by trollers and that these were areas that could be fished by longliners. There was some criticism of HDAR catch forms and their complexity, with the suggestion that no useful data would be collected from these. There were some advocates of letting the longliners into the closed area to see what would happen. It was noted that the fishing xcommunity= in Hawaii was fractionalized into longliners and small

boats, but each fed the market. Longliners are providing a public service by filling a market demand that can not be supplied by the small vessels. On letting longliners into the closed area it was reiterated that small vessel fishermen in Hawaii had consciously decided to minimize fishing effort on yellowfin by advocating the closed area. The Pelagics AP also considered that there were about 100 longline vessels versus 4000 small vessel fishermen. The conclusion on this topic was for the Council to evaluate different scenarios for the longline closed area.

# 18. Recommendations

The Pelagics AP recommendations arising from the agenda were as follows:

- 1. Improve fisheries enforcement activities in all areas of the Western Pacific Region in response to declines in pelagic fisheries catch rates.
- 2. Recommend all fishing vessels over 50 ft in length entering the US EEZ in the Western Pacific to be required to carry Vessel Monitoring Systems.
- 3. Urge Council to make every effort to convince NMFS to revoke its decision on the American Samoa closed area, and to return to the original 100 n.mi. closed area and this would include Swains Island. (Unconditional support for this recommendation by the entire Pelagics AP)
- 4. Urge participating members of the Council to write to their federal representatives to defend, protect and preserve fisheries resources as they are the only major resources in the small islands of the Western Pacific.
- 5. Ask the Council to make a recommendation to the Federal Government to approve the MHLC convention, especially Part VIII article 31 (Recognition of the special requirements of developing States).
- 6. Ask the Council to require all US purse seiners to honor the terms of the Tuna Treaty and implement VMS and to share the information with the Council members and its scientific committees
- 7. Require observers on longline vessels to tally the number of billfish that are alive at the time of landing

- 8. Recommend to the Council to identify funding to provide technical assistance for management of shark fisheries, and the marketing of shark products from the NMI, Guam and American Samoa.
- 9. Recommend to the Council that it investigates the impact of large-scale pelagic fisheries on small scale near-shore pelagic fisheries in the WP Region.
- 10. The Council request MHLC5 strongly encourage reduction of purse seine fishing that concentrates on undersized tunas and/or has a high non-tuna bycatch component.
- 11. Request the Council to establish 30 longline permits for a Native Hawaiian communitybased economic development program, without exceeding the existing number of permits in the limited entry program.
- **12.** Request that the Council to include a study of circle hooks in ongoing mitigation efforts to minimize interactions with protected species.
- 13. Request that the Council immediately undertakes an in-depth economic impact analysis by area of recreational fisheries in the Western Pacific Region, and that this analysis include a thorough review of similar studies undertaken in Texas, Florida, California, Costa Rica, Puerto Rico, Mexico and Panama, and their management implications
- 14. Recommend that the Council inform the State Department that in all fisheries management decisions, including the negotiations of US treaties, the interests of local fishermen within the jurisdiction of the Council be given equal consideration.
- 15. Request that the Council undertake a review of the current state-of-the-art in hightechnology tagging, and consider the opportunities these technologies provide for improving our understanding of highly migratory PMUS, particularly blue marlin, bigeye and yellowfin tuna and with regard to management options.
- 16. Recommend that in studying the effects of blue dyed bait on CPUE, the experimental methods include alternating on a one to one ratio dyed and undyed bait on longlines. Continue to evaluate mitigation methods.
- 17. Recommend that the Council make an effort to have fishermen, including indigenous fishermen, represented at MHLC negotiations.

Other recommendations made by the AP were as follows:

- 1. Promote fisheries development programs for the Mariana Islands to improve efficiency of small vessel fisheries.
- 2. For any seafood product to be labeled as Hawaii seafood they must be caught and landed by a Hawaii State registered or US documented vessel holding a valid State of Hawaii commercial fishing license. (Hawaiian Pelagics AP members voted 8-5 in favor)
- **3.** Recommend to the Council to identify funding to investigate the potential of longline fishing and ika-shibi fishing within the NMI and Guam EEZ.
- Request that the Council evaluate what are the potential affects to fisheries of the CO<sub>2</sub> sequestration in the Pacific Ocean with immediate concern for Keahole Point, Hawaii. Experiments are scheduled for summer months in the year 2000.
- 5. Request that the Council recommend to DLNR to explore a minimum size of aku for commercial sale because of fishermenes concern about the exploitation of juvenile fish.
- 6. Recommend that the Council requests NMFS to maintain a database and historical record on the overall vessel characteristics of federally permitted vessels.

(*The meeting adjourned at 5.45 pm*)