

**WESTERN  
PACIFIC  
REGIONAL  
FISHERY  
MANAGEMENT  
COUNCIL**

**DRAFT REPORT  
Pelagics Advisory Panel Meeting  
5-6 April 2000, 8.30am-5.00 pm  
Ala Moana Hotel,  
Hibiscus Number 1 Ball Room,  
410 Atkinson Drive, Honolulu, HI 96814**

**Introduction**

Bill Mossman opened the meeting at 9.00am and welcomed AP participants.

**Hawaii and American Samoa longline fishery reports**

The first agenda item was the overview of the 1999 fishing year for the Hawaii and American Samoa longline fisheries.

Russell Ito presented the 1999 year in review for the Hawaii longline fishery. He noted that 119 vessels had been active in the fishery, making 1700 trips and setting 19.1 million hooks (a new record) and with a catch valued at around \$47 million. In general vessels were making longer trips and traveling further to maintain high CPUEs. As usual, about 30% of the Hawaii fleet fished initially in the year from California, moving further west and south as the year progressed, and returning to Hawaii in the second half of the year when it became more feasible to fish from Hawaii. These boats were targeting mainly swordfish and as a consequence CPUE did not vary much throughout the year as fishermen follow the swordfish migration.

Striped and blue marlin catch rates were significantly lower than the long term averages, while bigeye and albacore catches were similar to or even higher than the long term averages in 1999. Yellowfin CPUE was also depressed in 1999, while blue shark was similar to the long term average. Ito also showed the time series of shark catches which followed more or less the same trajectory as that of swordfish. In response to a question on the drop in shark catch after 1993, Ito noted this relationship between swordfish fishing and shark catch. In essence, a drop in swordfish targeting results in a drop in shark catch.

The increase in trip length was thought to be due to the entry into the fishery of larger vessels with greater capacity. The new closed area to protect turtles had affected the swordfish fleet which had to fish on the eastern and western margins of the closed area. Swordfish prices had recovered from the 1998 low when the NGO boycott was in effect. In response to questions

concerning El Niño and swordfish catches, Ito noted that the 1992-93 ENSO event had brought an extension of the Kuroshio current close to Hawaii and this was thought responsible for high swordfish catch rates. During the 1990s, there was an increasing trend from swordfish targeting to tuna targeting. However, the volume of swordfish trips may be artificially low since the California based longliners fill out Cal Fish & Game logbooks as opposed to NMFS Hon Lab logbooks. It was noted also that swordfish fishing techniques had changed with fewer light sticks being employed than used previously. There was also discussion about the designation of a trip being a swordfish, tuna or mixed trip, and how much of this was due to the captain's discretion. It was also noted that the average size of swordfish in 1999 was very large, 188 lb on average. Questions were asked concerning swordfish catch and purse-seining. It was noted that seiners rarely catch swordfish but did catch blue marlins.

Paul Dalzell then reviewed the year in fishing for the smaller longline fleet in American Samoa. This fishery was comprised principally of small 28-40ft alia catamarans, with hand deployed and retrieved longline gear. The canneries in Pago Pago provided a ready market for the tuna catch, particularly of albacore.

Dalzell showed that the longline fishery in American Samoa had recovered during the latter half of 1999, with a record high catches in the 3<sup>rd</sup> and 4<sup>th</sup> quarters. However, Dalzell showed that there was decline in albacore catch per unit of effort (CPUE) during the four year life of the fishery and that other species were now making up more than 30% of the catch. Overall annual tuna CPUE had declined steadily since 1996. In addition, there was a similar decline in annual longline CPUE in neighboring Western Samoa over the past six years as fleet size had expanded exponentially.

In the discussion that followed it was asked if the role of sub-sea volcanic activity between the Manu'a and Rose Atoll was responsible for the drop in albacore catch rates. Dalzell did not think it was, but it could not be ruled out altogether. There was some comment also on safety of alia catamarans as fishing platforms. In Western Samoa, there had been many accidents and loss of life through small 28-30 ft alia being swamped and sinking while far from land. Newer larger alia entering the fishery in both Samoas were thought to be far more seaworthy.

### **Tagging of bigeye and yellowfin in Hawaii**

Dave Itano explained that the objectives of the Hawaii tuna tagging project (HTTP) were to investigate interactions between longline and troll/handline fisheries, obtain information on age growth, mortality and exploitation rates, movements and vulnerability to fishing around aggregations

Tag releases for the HTTP and the previous seamount tagging efforts stand at 17433 (9391 bigeye, 8042 yellowfin). Recapture rates are very close for both species with an overall recapture rate of 11.44%, driven mostly by short term recaptures from seamounts and FADs. Tagged tuna have ranged from 20 to 143 cm (yellowfin) and 29 to 133 cm (bigeye), but the mean size of tag

releases has been 58 and 61 cm respectively. Many of these fish were tagged over a year ago and are now appearing in the catches of longline and inshore handline vessels that target large tuna. Bigeye recaptures by longline during the past two months have been reported relatively close to the areas where the fish were tagged, well within the Hawaii EEZ. The only recapture reported from the international fishing community came from a yellowfin tuna, tagged near Midway Atoll on September 17, 1998 and caught by a Japanese longliner on January 2, 2000. The fish was caught 1100 nautical miles to the southeast of Midway, just outside the western EEZ surrounding Johnston Atoll.

During a tagging cruise in March, a 100 lb yellowfin tuna was tagged with a new style "pop off" archival tag that is designed to transmit depth, temperature and position data to the ARGOS satellite array at a later, pre-determined date. The HTTP assisted the National Marine Fisheries Service in Honolulu to deploy the tag, which was loaned to NMFS by Australian researchers (CSIRO Hobart). Hopefully, the tag will offer another view of yellowfin behavior around Hawaii.

The main field work of the HTTP is winding down and the March effort will likely be the last offshore tagging cruise planned. The proposed two year tagging period has been accomplished. However, one last tag release trip to Midway Atoll, at the far western end of the Hawaiian archipelago will be conducted in April. In addition, small scale tagging of FAD associated tuna close to the main islands will continue under funding from the Hawaii State FAD Program.

Locally, the Hawaii State Division of Aquatic Resources will be assisting the program by conducting monthly tagging trips off the Big Island of Hawaii in their new research vessel. The project coordinator visited Kona DAR personnel during March and trained them in the tagging technique while supplying them with data forms and tagging equipment. The Hawaii State FAD program is administered jointly by the DAR and the University of Hawaii.

### **Economic and Social Aspects of Charter Fishing Patronage in Hawaii**

Ed Glazier presented an interim report on charter vessel patronage in Hawaii. Ed explained the methodology of the project which involved distribution of 1700 questionnaires to charter vessel skippers, who then asked patrons to complete and return them to the NMFS Honolulu Laboratory. In pre-test trials the project had achieved a 60 % return rate. For the actual project the return rate at present was about 14%. This was thought typical of this type of survey but Glazier thought it may improve during the peak holiday season later in the year.

Glazier presented profile information on the charter patrons, i.e. race, gender, income bracket etc. There were several similarities of the profiles to an earlier survey of this type conducted by NMFS in the 1980s. According to the survey, most people made the trip to Hawaii for a vacation regardless of the fishing opportunities. Catching fish was, however, high on the reasons for taking a charter trip although collateral aspects of the trip such as crew friendliness and comfort were also important.

In the ensuing discussion Glazier was asked if there were differences in responses between Japanese and American patrons. In Guam and the NMI all charter patrons were Japanese or Korean. Glazier was also asked if charter skippers charged a fee to release fish? Some skippers will ask for a fee. Glazier was also asked if any of the charter skippers had faced a law suit or if there had been any accidents on the vessels surveyed. Accidents did occur but were not common, and in many cases involved crew rather than patrons. Charter vessels had to carry insurance by law. It was noted, however, that charter skippers were unlikely to give out a questionnaire to patrons who had visibly had a bad trip. Glazier was asked if the study could be extended to American Samoa, Guam and NMI. It could but would need additional resources. Glazier was also asked if there were any numbers which showed what percentage of visitors to Hawaii went charter fishing. In Guam this information was obtained from exit surveys of tourists at the airport.

### **Economic studies of Hawaii recreational fisheries**

Sam Pooley reported on the various studies conducted by the Pelagics Fisheries Research Program that involved recreational fisheries. These included Ed Glazier's report which catalogued all previous recreational studies in Hawaii and the Western Pacific Region, two studies of small vessel and charter fisheries by Marcia Hamilton, two sociological studies by Julie Walker and Marc Miller, and an input-output model of Hawaii's fisheries sectors by several authors including Pooley. He also mentioned a study in progress by Ted McConnell which would look at the value of recreational fisheries in Hawaii.

Pooley noted how the input-output model could give the multipliers needed to generate the true value of Hawaii's recreational and commercial fisheries. However, he noted the difficulties in the interpretation of this data. It was suggested that a synthesis of all the various studies was needed to allow laymen to easily interpret the often complex results of economic modeling.

### **Multi-lateral High Level Conference 6**

Paul Dalzell briefly reviewed the outstanding issues which still need to be resolved before the articles of a convention to establish a management authority for tuna and tuna like fisheries in the Central & Western Pacific. Questions to Dalzell asked how MHLC was started and could Hawaii opt out of the convention. Dalzell noted the paper by Mike Lodge in the AP documents gave an excellent account of MHLC and its history. Dalzell noted that the inclusion of Hawaii was a matter for the State Department, which was likely to see no advantage in keeping Hawaii out of the this management arrangement.

### **Report of the Recreational Fisheries Data Task Force (RDTF)**

Richard Shiroma summarized the foundation and progress to date of the RDTF. There had been four full TF meetings and two special working groups to tackle various technical issues. There were three recommendations

1. The Council should conduct a ‘quick fix’ mail and phone survey to estimate the total pelagic catch for Hawaii.
2. The Council and TF need to organize an education outreach program to encourage voluntary reporting of recreational fishery data.
3. The potential of the Div. of Boating & Ocean Recreation and the US Coast Guard data bases for assisting in generating recreational catch data should be investigated.
4. Beyond the recreational data issues the TF should continue to represent the interests of recreational fishermen in Hawaii.

### **Changing the recreational/commercial fisheries paradigm**

Bill Mossman explained a plan to establish a continual means of gathering data from the recreational sector of Hawaii. It may have application elsewhere in the Pacific, but at this point this is for Hawaii. Recent revisions to the Magnuson Act had increased the Council's attention toward recreational catch data collection and more recently the MHLC has increased the urgency of collecting recreational catch data. Although the commercial catch data in Hawaii was well documented, the corresponding recreational catch does not exist at all because it had never been established.

The “sell one fish equals commercial” rule was the underlying cause of nearly all the problems being faced by recreational fishermen and was the primary reason that a continual recreational catch reporting system does not exist in Hawaii today. The great majority of recreational fishermen fished mainly on a subsistence basis, but whenever a catch is plentiful enough portions are sold to make expense money; fuel, ice, and bait. Even though the opportunity to sell a catch occurred only infrequently for the majority of fishermen the sell “one fish equals commercial” rules requires that Hawaii’s recreational fishermen purchase the same State commercial fishing license that is required for the full-time commercial fishermen, comply with the state department division of aquatic resources rules for commercial fishing, register their boats as CF for commercial fishing and comply with the Coast Guard equipment requirements that were developed for the full-time commercial industry.

These requirements are threatening the recreational fishermen who were brought up in a society which also allowed the sale, trade or barter of a part of their recreational fish catch. This was generation to generation, and this really constitutes a life style tradition. Therefore, these people were very reluctant to participate in a program that basically prohibits their customary practices. The DLNR data appear to support this observation of the more than 15,000 recreational boats registered in Hawaii. Less than 1500 opted to buy a state commercial fishing license and reported their catch and presumably followed the other rules for commercial fishing.

The other 13,500 recreational boats chose not to. There is no account of what they caught and in

fact nor of how many in that 13,500 actually do fish. It is estimated that 70 to 90 percent of this large number actually fish during the year at one time or another. The problem lies in this very large group. The stringent safety requirements imposed by the Coast Guard on commercial fishing started back in 1988. It was brought on by the fact that commercial fishing had become one of the most hazardous occupations in the United States. This was a national statistic based on the data from the full-time commercial fishing industry from all over the U.S. fishery. These fishermen who make their living from fishing often brave bad weather to catch their quotas in short open seasons and many have to go long distances to get to their fishing ground.

This indeed is a very hazardous occupation and deserves the Coast Guard attention that it receives. However, it would not be in the public interest to automatically apply the safety standards developed for the full-time commercial fishermen or the fishing industry to the recreational fishermen. Recreational fishermen fish as a hobby for recreational purposes, goes out far less often than the full-time commercial fishermen, and fishes closer to shore for shorter periods of time than full-time commercial fishermen. He is not compelled to go out when the weather is bad because he doesn't depend on fish sales for a living. He fishes in areas frequented by other fishermen where visual contact and radio contact can be maintained with other boats in the area. Lastly, he does not sell all of his catch all the time, he only sells part of his catch some of the time.

The Hawaii recreational fishermen are being unfairly forced to meet standards that were created for the full-time commercial industry and being deprived of their true recreational fishing status. The Coast Guard and the State regulations that establish the sell one fish equal commercial requirements have set unnecessary and unfair barriers that prevent the Hawaii recreational fishermen from maintaining their recreational fishing status while practicing their cultural, traditional and customary option of being allowed to sell part of their catch. This is the situation that has prevented the establishment of a statewide recreational fish catch reporting system.

Due to the lack of such a system the Hawaii recreational fishermen are now in severe jeopardy of not getting their fair share of the eventual Hawaii total allowable catch quota that will be imposed by the MHLC. There is a need for a continual system for gathering recreational catch data. This plan will satisfy the recreational catch data requirements and is built around the concept that will attract the recreational fishermen to join in and report their catches because they can see something in it for them. Mossman felt it implicit that there be exemptions for the Hawaii recreational fishermen from the sell one fish equals commercial rule.

This will allow implementation of much needed recreational catch reporting system and establishment of a clear distinction between recreational and commercial fishing that recognizes the cultural and customary practices that exist in Hawaii. These exemptions would allow recreational fishermen who only occasionally sell their catch to become legal and therefore more willing to participate in reporting their catch. This is the group to which attention needs to be paid because it is by far the largest group of fishermen in this state.

Mossman outlined the proposal. He referred to the DBOR registration form and noted that by

asking the question about pleasure craft owners selling fish established the recreational fishing group that sells fish. With minor modifications to the registration form, the other boaters that fish but never sell their catch could also be included. Thus, the total number and identification of all recreational fishing boats in Hawaii could be established. These boats could then be required to submit catch reports and because boat registration is mandatory to operate a boat in Hawaii inserting this recreational catch report as a requirement of registration will result in a very high degree of compliance.

The main thing here is this approach would give a continual recreational catch report that should not cost the boaters any more than they're paying now. It will also eliminate the need to establish a recreational fishing license which upsets many people and also provides added benefits and incentives to recreational fishing boat owners for maintaining a recreational fishing status and thus help build a motivation for reporting their catches. Boats registered as recreational fishing or RF would be issued a special boat HA number with RF. This unique identification would be required of all recreational boats that are used to fish. It also serves as the recreational fish sales authorization for the boats that choose to sell part of their catch. This proposal was based on a vessel rather than an individual fishing reporting system as is the case with the DAR commercial fishing license.

The RF catch report would be submitted per boat that is duly registered as RF. The DAR commercial fishing license system will not be affected. All fish landed by an RF boat would be reported to DAR and may be used for any purpose except that the value of fish sold should not exceed \$4,000 per year. This sales limit is basic to this proposal and is designed to do away with the sell of one fish equals commercial rule and establishes a more acceptable cut off point for commercial fishing that respects the Hawaii cultural practices. This incentive is critical to the proposal.

Fish buyers will be authorized to buy fish from the RF boats and must include the seller's name and RF boat registration numbers in their purchase record data. The buyer data transmitted to DAR electronically from fish dealers will be used to tally the individual RF boat catch totals to enforce the \$4,000 limit. RF boat owners need not report fish sales and would be notified by the DAR when the \$4,000 limit was reached. At this point the RF boater would have to stop selling his catch or go out and get a CF registration and buy a commercial license. It should be noted here that the DAR is in the final stages of establishing an electronic dealer reporting system that would accommodate these transactions.

Also, a means of reporting has been suggested that appears to be very promising wherein the catch report is submitted via digital cell phone, a digital receiving station with a recorded prompting menu designed to be answered by a person at the appropriate numbers of your phone. It provides a continual source of recreational catch data needed for MHLC purposes and any other fisheries management requirements. Effectively it precludes the need for a recreational fishing license. It provides the total number of recreational fishing boats in Hawaii and it also provides the basis for a simplified survey method. It establishes distinctive thresholds of \$4,000 below which fishing is considered recreational and above which it is considered commercial.

Only those Coast Guard regulations that pertain to recreational boating would apply to compliant RF boats whereas all boats who sell more than \$4,000 worth of fish will be considered commercial boats and should be registered as CF, acquire the state commercial fishing license and are subject to commercial fishing rules of the Coast Guard and the DAR. This proposal would allow the RF boats to maintain a recreational status while still being able to sell up to \$4,000 of fish per year.

It also addresses the cultural aspect of Hawaiian recreational fishing that must be preserved and legalized. Only then would the Hawaii recreational fishermen come out of the shadows of part-time commercial fishing and participate in a recreational catch reporting system that was urgently needed. But it also relieved the recreational fishermen from several significant expenses involving equipment and licensing that are peculiar to commercial fishing. Lastly and most importantly the system was free and was part of the boat registration system.

During the discussion Manny Duenas of the Guam Fishermen's Cooperative noted the equivalency program that was established for part time commercial fishermen in Guam with the USCG. Mossman was asked how was the \$4000 threshold arrived at. Mossman stated that this was based on numerous conversations with fishermen and there seemed to be a strong consensus on this figure. Rick Gaffney noted that Mossman's proposal had not been reviewed by the full TF and this should be conducted before it was taken further. Mossman was asked if any commercial fishermen had been asked to be on the TF as he had concerns about recreational fishermen competing with commercial fishermen, plus the quality of fish being sold was also a concern. Mossman responded that this was the reason to have a threshold. It was noted that recreational fishermen were already selling fish and that this proposal would simply formalize this process. The DLNR dealer reporting system should eliminate non-reported sales but 'backyard' sales will likely still continue.

### **Electronic logbook reporting**

Sam Pooley reported on the introduction of electronic logbooks in the Hawaii longline fishery. A The electronic logbook for the Hawaii longline fishery was developed by a longline fisherman, Tim Timmoney. The NMFS Honolulu Lab liked the system which included error checking, as this saved time on keypunching of the data. NMFS Enforcement and USCG had not yet developed clear policy on the acceptance of this system. Pooley also referred to the DLNR data reporting system which was now on line and should ultimately involve 80% of all commercial fishery transactions being automatically reported electronically to DLNR.

### **Hawaii longline fishery issues**

### **Seabird mitigation/Biological opinion**

Paul Dalzell reported that the framework measure under the Pelagics FMP to implement a



management regime for albatross/longline interactions. The regime would mandate three different measures:

1. Obligatory protected species workshops for longline vessel operators and owners
2. Release of hooked albatross in a manner to maximize long term survival
3. All vessels fishing above 25 deg N to use 2 out of 6 prescribed technical or operational mitigation measures.

Dalzell stated that the document was under review by NMFS and he expected them to publish a proposed rule in the near future. However, there was a complicating factor in the form of the biological opinion for short-tail, albatrosses which would be explained by Kathy Cousins.

Kathy Cousins referred to the Biological Opinion being drafted by the USFWS on the short-tailed albatross under the aegis of the Endangered Species Act. According to Cousins only two sightings had been made of a short-tail in the areas fished by the longline vessels. In neither case was there any interaction with the vessels in question. Cousins noted that the FWS were estimating incidental take of short-tails in the Hawaii fishery to be comparable with the situation in Alaska. This is most unlikely since short tails are more abundant in Alaska which is part of their natural foraging range, and short-tails, unlike most other albatrosses were a coastal bird rather than foraging on the open ocean.

U.S. Fish and Wildlife Service stated that short-tailed albatrosses have been seen on Tern Island in two instances. One in 1979 and one in 1993, and for this reason they would like the boundary for using seabird mitigation measures be 23 degrees north latitude versus Council choice of 25 deg north. Other issues discussed in this Section 7 consultation had to do primarily with the mandatory versus menu choice for seabird mitigation measures and their concerns focused around monitoring and enforcement.

There was concern about the mitigation actions that the FWS were requesting compared with those outlined in the framework measure. Cousins stated that NMFS headquarters had advised the PIAO that changes to management documents such as the framework measure, requested by other agencies, must be minor, while the measures suggested by FWS would entail a major revision of the document.

Cousins mentioned the desire of USFWS to establish a colony on Midway, but was concerned that the female bird nested at the end of the Midway runway and was thus in jeopardy from planes taking off and landing.

## **National Plan of Action-seabirds**

Kathy Cousins next outlined the process which would generate a National Plan of Action for seabird/fishing vessel interactions. The international plan of action for seabirds was a policy document. It suggested that each region first determine if there is a seabird problem in their fisheries. Once they had determined that there was a problem they were instructed to go through a series of steps to try and assess and solve the problem. She noted that the steps involved for the NPOA-seabirds were modeled on what this Council had done to deal with the albatross interactions in the Hawaii longline fishery.

The national plan of action for seabirds also called for collaboration between the National Marine Fisheries Service and the Fish and Wildlife Service. The Fish and Wildlife Service was encouraged to participate, review and recommend changes to bycatch programs to collaborate the mitigation research and to review bycatch data. Cousins noted that in Alaska, the Fish and Wildlife Service completed the analysis of bycatch data for seabirds whereas in this region National Marine Fisheries Service, Honolulu laboratory is responsible for this task. The Fish and Wildlife Service was encouraged to collaborate in outreach programs as well as other activities such as participating in national and international meetings.

Cousins stated that the national plan of action was not sufficiently directive, meaning that reducing seabird bycatch in longline fishery should be done in fishery management plans and the structure of fishery management in the U.S. required that this management originated with the regional fishery management councils.

After the national plan of action was published in the Federal Register for public comment, there were several criticisms from non-governmental organizations. First, the national plan of action failed to set the goal of eliminating seabird bycatch. NMFS response to that was that neither the national plan of action nor the international policy would eliminate all seabird bycatch. It would be ideal to have zero bird bycatch but the key word was to call for a reduction. For some fisheries, like Alaska, complete elimination may be impossible, but major reductions were possible

The national plan of action also failed to mandate specific mitigation measures and establish implementation deadlines. However, the international plan of action recognized that effective mitigation must be tailored to specific fisheries and the U.S. national plan of action was consistent with this view. There was indeed a timeline. Within one year and annually thereafter National Marine Fisheries Service regions and Council with Fish and Wildlife assistance would be begin preparing coordinating an annual implementation report.

However, this Council was already way ahead of this schedule because it had already made an assessment and had suggested mitigation measures. Assessments of all longline fisheries should be completed within two years, and within four years the national plan of action itself should be reviewed and revised as appropriate.

The next criticism was that the national plan of action for seabirds fails to address funding needs. However, the national plan of action was a policy document, not a budget document.

A further and final criticism was that the national plan of action for seabirds failed to promote sufficient national coordination. NMFS responded that it was committed to continue to coordinate with the implementation of the national plan of action, nationally and internationally in consultation with the Fish and Wildlife Service, Department of State, the U.S. Coast Guard, longline fishing industry, the Council and the public at large.

### **Turtle area closure**

Charles Karnella reviewed the law suit brought against the Department of Commerce by the Center of Marine Conservation and Turtle Island Restoration Network and which had resulted in a large area closure of international water to the north of the Hawaiian Islands for a period of 180 days. The suit was brought by a group of environmental NGOs which claimed that the recent biological opinion was inadequate and that NMFS had not completed a Environmental Impact Statement (EIS). NMFS capitulated on the matter of the EIS and promised to do a thorough job. The judge agreed that the biological opinion was sufficient but still went ahead and closed a large area of ocean between 150E and 168E W and above 28E N.

The judge's order was dated 23rd of November, which meant that by the 23rd of December 1999 NMFS had to have a regulation to close that area to longline fishing for vessels that were operating with Hawaii longline permits. That action was gazetted in the Federal Register closing the fishery, starting December 23rd as an emergency rule under the Magnuson-Stevens Act. Magnuson-Stevens emergency regulation remain in effect for no more than 180 days and they can be renewed once. In conjunction with that, NMFS had to prepare an environmental assessment. The judge had also required NMFS to publish new rules requiring the longline vessels to carry line cutters so if turtles were captured the vessel crew could cut the line as close to the turtle as possible to maximize the turtle's chance of survival. This rule was published towards the end of February. NMFS also had to prepare an environmental assessment in conjunction with that action.

In addition, the judge asked NMFS to prepare an analysis of the temporal and spatial interactions between the fishery and sea turtles and develop primary closures that would be of maximum benefit for the sea turtle. The judge also stated that a panel would be appointed and members of that panel will consist of persons appointed by each party to the lawsuit. The plaintiffs would appoint one person, the government would appoint one person and NMFS would appoint one person. That panel had been appointed. The people who are on that panel are Dr. Michael Sissenwine, who is the NMFS Northeast Science Center Director, Dr. John Hampton, who works for the Oceanic Fishery Program and the SPC who is a member of the SSC and Dr. Larry Crowder, who is a university professor affiliated with Duke in N. Carolina. The panel met at the end of March.

NMFS had made the results of the analysis of prime area closures for sea turtles available to this panel. The panel had two weeks in which to look at this information over and have their meeting and discussions and then provide to the NMFS their individual recommendations on the best time and/or area closures to reduce the take of sea turtles. The National Marine Fisheries

Service then will have an additional two weeks to evaluate its analysis and those recommendations from the panel and come up with a proposal for the time and/or area closure that would be the most beneficial to sea turtles, taking into consideration the economic effects to the fishery.

Karnella was asked when the Council and NMFS draft an FMP was an Environmental impact statement a biological opinion on turtles also included? Karnella noted that the biological opinion had been completed and was deemed adequate, but the EIS was not current and the judge had taken steps to protect turtles during the drafting of a new document. Further, an EIS is a descriptive document and does not mandate action.

It was noted that the lawsuit was directed at leatherback turtles which commonly exceed 7-8ft in length and weigh over 2000 lbs. How was it possible to dip-net an animal of this size onboard a longliners? Clearly this measure, included in the FR notice in February, was for smaller turtles. Some of the closure options discussed by the panel were quite severe including a full closure of the fishery for a month, or a permanent closure of the fishery above 31 deg N. Either action would destroy the fishery. Further, the Hawaii fishery represented about 18% of the fishing effort in the closure area but foreign effort would not be accounted for. In all the Hawaii fishery was thought to account at most for 10-12 leatherback mortalities per year.

Further by closing the area there will be no more information on that area of sea with respect to turtle abundance. The NMFS Honolulu Laboratory's turtle tracking project has stopped since the closure and the only information to compute mortality rates is an old study from the Mediterranean Sea. The Hawaii longline vessels were now fishing either side of the closed area. So far the closure had not had a severe effect on the fishery, but if swordfish catches declined and vessels were denied a large area of ocean to search for better CPUEs then the impacts might be severe. The meeting also discussed whether economic sanctions could be brought against countries that eat sea turtles, since it is the slaughter of nesting females and raiding of nests that has promoted most of the population decline. Some action had been sought with respect to foreign shrimp imports and the use of turtle excluder devices in shrimp trawlers by foreign fleets.

## **Sharks**

### **Shark catches in the Hawaii longline fishery**

Mike Laurs presented an update on shark catches in the Hawaii Longline fishery. Total catches were about 90,000 sharks which is close to the long term average. Almost 70,000 sharks were retained, most for finning. Vessels targeting tuna continued to account for much of the finning activity. Vessels targeting swordfish or a mix of swords and tuna fished further north and tended to catch smaller less valuable blue sharks and hence finned less frequently than the tuna targeting vessels.

### **Shark fishery management in Hawaii**

Paul Dalzell reviewed the draft amendment to the Pelagics FMP which implemented management initiatives for shark catches in Hawaii. Dalzell reviewed the various shark management issues from the last SSC and Council meeting. He noted that the Council had acted to implement a fleet-wide harvest guideline in the longline fishery of 50,000 sharks, and to ban the use of demersal longline gear to target PMUS in the Hawaii EEZ.

Dalzell explained that the management unit currently contained many coastal shark species, and although it would be logical to transfer these species to the Coral Reef Ecosystem FMP, they would remain under the Pelagics FMP to effect the demersal longline ban. Once the Coral reef FMP was implemented then these coastal sharks could be transferred and parallel legislation adopted under this FMP. Dalzell noted that the amendment had been drafted principally by Council contractor Kit Dahl with the assistance of PIAO staff, particularly Marcia Hamilton. Dalzell also acknowledged Hamilton's contribution to the American Samoa framework measure.

### **National Plan of Action-Sharks**

Ray Clark talked briefly about the National Plan of Action of Sharks, the lead on which was the Office of Sustainable Fisheries at NMFS HQ. The draft NPOA is currently being circulated within NMFS. During February, the PIAO made comments on the NPOA which will be incorporated before the document is made available for public review. According to Karnella, the person that was employed to coordinate the development of this plan has since left and a replacement had yet to be identified.

### **Pelagic Shark workshop- Monterey**

Paul Dalzell spoke about the background to the Ocean Wildlife Campaign's recent Pelagic Shark Workshop in Monterey and about concerns in general for sharks and shark populations. Dalzell noted that there were over 20 countries represented at the meeting with over 70 papers, presentations and posters. There was a great deal of discussion concerning catch rate trends, especially for the blue shark. Dalzell noted that in general the Pacific-based scientists were more optimistic about the exploitation of blue sharks, even in the Atlantic.

There was a great deal of information presented on the biology and life histories and demography of pelagic sharks but only one example of a stock assessment, for a porbeagle stock of the north east coast of the US and Canada. Other various presentations of note, including a genetics study which found no differentiation between blue shark populations in different ocean basins, and a study on artificial bait as a means to reduce shark bycatch.

### **Shark workshop 2000- Honolulu**

Kevin Kelly presented a concise overview of Shark-workshop 2000, held in Honolulu the week immediately preceding the OWC meeting in Monterey. Kelly noted that the organizers of the workshop 2000 were focused mainly on shark finning while other scientists and conservationists

saw it as only one of many issues, although the publicity it generated was sometimes a convenient vehicle to publicize other shark conservation concerns. From a global perspective, finning of blue sharks in the Pacific is of relatively minor importance compared to management of other conservation issue such as whale, basking and white sharks, which have been very badly depleted. Interestingly, the representative from FAO, Ross Shotton, was not very complimentary about the International Plan of Action for sharks

### **Area closure for large pelagic fishing vessels around the islands of American Samoa**

Paul Dalzell presented the revised framework measure for the large vessel area closure in the American Samoa pelagic fishery, drafted by Council contractor, Paul Bartram. The preferred alternative was for a 50 nautical mile around the main archipelago (Tutuila to Rose Atoll) and a 30 nm closure around Swains Atoll. He noted the larger and safer vessels in the 30 to 45 ft range were being built in Samoa and purchased by Samoan fishermen. Safety concerns were now less of an issue. He noted that good catch rates continue further away from Tutuila within and outside the 50 nm proposed closure.

The role of fish in the maintenance of Fa'a Samoa, Samoan culture and practice is well documented. Fishing effort by small boat Alia fishermen is often stimulated by pending cultural and ceremonial obligations and fishermen who are able to contribute maintain their status and support their chiefs and villages. A measure which supports the local growth of the small boat fishery in ways that spread the benefits to a larger number of small boat fishermen in their respective communities will have broader benefits to the territory.

Dalzell noted that in Bartram's document the 100 nautical mile are option was rated more highly than the 50/30 nm. This simply reflected what the fishermen wanted. Wallace Thompson, AP members and American Samoa Fono representative for Swains confirmed the notion that American Samoa fishermen wanted a 100 nm closure. He added that bigger boats were entering the fishery and more would follow. Tokelau now had three 45 ft alias that had voyaged to the three islands in the archipelago from Apia. It was thought that a mothership freezer boat could call at Toleklau's three atolls and Swains Island to collect fish for the Pago canneries, thus expanding the range of the fishery in American Samoa and adjacent EEZ.

Thompson noted the purse seine fishery which was against the closed area applying to all pelagic vessels including purse seiners. The purse seine fishery had powerful political support. There were plans to expand the American Samoa airport runway to be able to accommodate larger aircraft which could air freight out high value fish such as bigeye. There was also discussion of a small closed area around Tutuila and Manu'a to protect small scale recreational troll and subsistence fisheries. This would need a separate framework measure to be implemented.

### **National Plan of Action-Fishing Capacity**

Marcia Hamilton explained the background to the NPOA on fishing capacity. The objective was

to achieve 15% reduction in over-capitalized fisheries by 2004. Hamilton outlined the work plan which included milestones in 2000 for assessment of fisheries from a qualitative and quantitative perspective. Hamilton also presented the Council with a draft qualitative assessment of all fisheries under Council jurisdiction for over-capacity, potential for overfishing and economic inefficiency.

AP discussion on fishing capacity initially touched on charter vessels at Honokohau. Vessels berthed at this harbor were about the only way a mainlander could own a berth in Honokohau. Some owners owned charter vessels for tax write-off purposes. Would the analysis to be conducted by NMFS consider these aspects of capacity and questions of allocation. Hamilton thought not, and it may be a weakness of the study that it did not consider allocation questions. Under Magnuson, fisheries were managed at MSY, and over capacity was a fleet size that exceeded MSY.

Hamilton was also asked if the efficiency model used to analyze capacity also accounted for the number of jobs provided by fishing. Apparently, economists do not see unemployment as a valid reason for excess capacity. The objective was to have the most efficient fleet, with the least number of vessels. Ultimately the information on capacity will be used to develop buyback schemes to reduce overcapitalized fisheries. Hamilton was asked in underutilized fisheries would be subsidized but she thought not.

The fate of buyback vessels was usually the breakers yard. It is not desirable usually to buyout vessels from one fishery only to have them enter another fishery. There was discussion about getting some of the bought-out East Coast longline vessels into the Pacific for locations such as American Samoa or Guam and NMI.

Hamilton explained that efficiency was not an issue for recreational fisheries, where greater, rather than less participation was desirable. Expansion of recreational fishing tracks the health of the economy. Other parameters also influence efficiency in recreational fishing, i.e. the charter vessel fishery is not efficient if it can not deliver blue marlin. Charter fleet expansion in Hawaii was limited by berths available. In public small boat harbors, 30% of the berths were reserved for charter vessels. In private harbors this may rise to 50%. Trailer boats were also limited by the number of people allowed to fish off a given boat ramp.

### **Data amendment**

Paul Dalzell presented an update on amendment to implement a permit and logbook program for pelagic fishing in the EEZ waters of the Pacific Remote Island Areas. This included Palmyra, Jarvis, Howland & Baker, Johnson, Wake and Midway Islands. Dalzell noted how the document originally started out implementing permits and logbooks for bottom-fishing and crustaceans, but this would initially require an amendment to extend these FMPs to the PRIAs. Dalzell noted that revisions to the DLNR troll and handline reporting forms would be acceptable in place of a NMFS log book. It was noted that fishing trips already completed to Palmyra could not be easily pulled from the DLNR database due to the statistical coverage not extending that far south.

## **Marine Debris**

Paul Dalzell explained how Council attention had become focused on marine debris, principally from fishing sources. This included netting from trawl and gillnet fisheries in the North Pacific and Bering Sea, and from light stick discards from longline fisheries. Dalzell noted that the rouge nets washed up on the NWHI where it was estimate there was a total of 6000 mt of net fragments on the reefs there. Light sticks were a danger to young albatross which were fed by their parents and whose food included plastic objects such as light sticks, lighters and floats. Dalzell explained that the parents probably swallow these items which may be covered in flying fish eggs, and regurgitate them to the chick. Unlike adult albatrosses, chicks could not regurgitate solid articles such as plastics and they died from starvation, dehydration, peritonitis or poisoning from the plastic toxins.

An international conference is planned for August 6-11 in Honolulu, HI at the Convention Center. The Council has been working with industry and the other Pacific Councils to identify industry representatives to participate in the conference. In the near future formal invitations will be sent out to participate in the conference. It is important that industry participate in conference to ensure its input on the formulation of the conference recommendations that will go to Congress.

Discussion included the use of re-useable battery powered light sticks, which worked out to be cheaper in the long run than disposable light sticks, and that some recreational monofilament line is recycled by one company in Hawaii.

## **Blue marlin research**

### **MSY**

Paul Dalzell explained that the Inter-American Tropical Tuna Commission (IATTC) scientists had recently completed a stock assessment on blue marlin. The scientists had standardized Japanese longline fishing effort from the 1950s to the present accounting for changes in targeting by depth for deeper swimming bigeye tuna. A dynamic production model had been fitted to the standardized data which had generated a series of MSYs for blue marlin under several different exploitation scenarios. In summary the results suggested that average catches of blue marlin (21,000 mt) were similar to the predicted MSY, which ranged from 17,400-19,100 mt. The switch to targeting of deeper swimming tunas in the 1980s by Japanese and other longline vessels had effectively reduced the number of hooks which might also catch blue marlin.

### **Electronic tagging**

Paul Dalzell noted that this agenda item sprang from a previous AP recommendation. He explained that the University of Hawaii's Pelagic Fisheries Research Program was host to a



major international Symposium on Tagging and Tracking Marine Fish with Electronic Devices, February 7-11, 2000, at the East-West Center in Honolulu. Over 100 scientists and electronics manufacturers from a dozen countries assembled to present the current state of the art in this rapidly developing field and to discuss their latest results. Results from all of the oceans of the planet were presented. The species discussed included tropical cephalopods (squids, octopii and cuttlefish), salmon, tunas, marlins, cod, reef fishes, sea basses and sharks from habitats ranging from shallow inshore waters to the deep ocean. The Symposium proceedings will be published in 2000 as book by Kluwer Press.

A few marlin have been tagged with pop-up devices in both the Atlantic and Pacific oceans. Although some long distance movements have been documented, the reporting rate is much lower, around 50%, than for the same devices used on tunas. Again, it is not known whether this difference is due to differences in survivorship of the fish, difference in attachment technique, or failure of the tags.

Discussion on tagging of blue marlin in Hawaii noted that two groups of researchers submitted similar proposals to the PFRP, which recommended that they join forces. However, the principals had not been able to get along in the past, but the meeting was informed that these problems had been resolved and a single submission to PFRP was likely. It was noted that previous work had been conducted using pinger sonic tags on blue marlin to track them for a few hours after catch and release. The limiting factor for tracking these tags was human endurance.

### **Live releases in longline fishery**

Dalzell noted that this agenda item was also a recommendation from the 1999 AP meeting. Dalzell showed a table generated from NMFS observer data which included the disposition of fish caught but not landed and subsequently released. Just over 54% of blue marlin were alive at the time of release. Alive was defined as the animal swimming away from the gear with minimal or no visible signs of physical damage. Other billfish observed included swordfish (22% alive) striped marlin (46% alive), shortbill spearfish (30% alive) and sailfish (30% alive). These data would be incorporated in future pelagic annual reports

## **International**

### **Kiribati-Spain fishing agreement**

Paul Dalzell explained that until recently, the only vessels exploiting tunas and associated species in the Central and Western Pacific were from the Pacific Rim metropolitan countries, and the island coastal states and territories. Late in 1999, 12 vessels flying flags of Spain Panama and Guatemala have recently been licensed by the Government of Kiribati to fish presumably within the Kiribati EEZ and on the high seas beyond. The vessels will be fishing for a Spanish company.

The Spanish deal lies outside the provisions of the 1994 Palau agreement which limited purse seine fleet sizes and set an overall cap of 205 vessel. The Spanish fleet does not exceed the 205 vessel cap but there is no provision for Spanish boats among the fleets from Philippines, Japan, Taiwan, Korea, USA and Pacific Islands. No details of fees or licensing conditions have been disclosed to FFA since licensing fishing vessels is a sovereign right of each coastal state and details do not have to be shared with FFA.

Most countries tend to apply the minimum terms and conditions established originally by the Parties to the Nauru Agreement (Fed. States of Micronesia, Kiribati, Marshall Is., Nauru, Palau, PNG, Solomon Is.) It is known that these vessels currently fish in the Eastern Tropical Pacific (ETPO) and occasionally fish far to the west of the ETPO. They may also want an alternative fishing ground if annual yellowfin and bigeye quotas are reached in the ETPO.

Part of the deal is believed to be the construction of some sort of facility in Kiribati, probably on Kiritimati (Christmas Is.) in the Line archipelago. The Spanish vessels are large, ranging from 1000-3000 gt from their applications to be placed on the FFA Regional Register. Now on the Regional Register these vessels could be licensed by other coastal states. They are believed to be supported by tender vessels that deploy large numbers of untethered FADs, and the fleet fishes in a coordinated manner making each vessel more efficient than individual seiners fishing on free swimming schools.

The entry of Spain into this region was of concern to the AP due to the extensive use of tethered FADs, which tend to have a much higher bycatch than sets on free swimming schools, and the catch of large volumes of juvenile bigeye. Trends in bigeye tuna CPUE in the Pacific longline fisheries are creating cause for concern. Other discussion by the AP concerned the management of FADs. Dalzell noted that this Council did not manage the US Purse Seine fleet, so we can not dictate the numbers of FADs used. Would the Spanish vessels carry observers? Possibly, but only observers from Kiribati, while they fished in the Kiribati EEZ and the high seas. There was also discussion about whether Spain should be asked to join MHLC since their presence in the region was a reality now.

### **Tonga Fishery Management Plan**

Paul Dalzell explained that the Tongan Government had recently published a draft pelagic fisheries management plan, which included the possibility for joint-venture fishing with foreign companies. Fishing companies from Taiwan and Korea were believed to be interested in fishing in the Tonga EEZ. Previously, all foreign longline fishing had been banned from the Tongan EEZ.

### **Future fisheries research projects**

Paul Dalzell reviewed the regional recommendations from the last (1998) annual report, and included an updated status report.

- i. **The HDAR should continue to improve the collection of Hawaii fisheries data so that the data provide useful information on fishing effort.**

Status: HDAR is introducing new catch report forms for Hawaii commercial fisheries with greater emphasis on collecting fishing effort data. Sales reports will ultimately no longer be the responsibility of the fishermen. Fishery transactions will be reported by fish dealers, through a reporting system currently being implemented by HDAR

- ii. **The Council should seek funding to conduct a survey of Hawaii small-scale fisheries. This survey is needed to evaluate the significance of non-commercial components of these fisheries.**

Status: The Council established a Recreational Fishery Data Task Force which has recommended that a phone and mail survey be conducted to generate an initial estimate of recreational catch volume and contingent value for Hawaii's small boat recreational catch.

- iii. **The Council should support an analysis of trends in mahimahi and ono landings and catch rates, and other incidental catches (i.e. opah pomfret rainbow runner etc), throughout the western Pacific region, including data from EEZ and distant-water fisheries.**

Status: PFRP request for funding for study of pomfret and opah deferred until 2001

- iv. **The Council should support an analysis of trends blue marlin landings and catch rates, throughout the western Pacific region, including data from EEZ and distant-water fisheries. NMFS HL will conduct a stock assessment of blue marlin.**

Status: NMFS stock assessment of blue marlin expected in mid 2000. Catch rate trend analysis may be conducted following May 2000 Pelagics Plan Team meeting.

- v. **Because the Hawaii-based longline fishery is expanding in terms of ports of landing, the Council should authorize NMFS to use VMS information to monitor logbook compliance. The Plan Team believes this information to be vitally important for other fishery monitoring and assessment purposes.**

Status: Council policy currently restricts use of vessel position information for purposes other than enforcement.

Dalzell asked the AP to consider these recommendations when developing final recommendations from this AP meeting.

## **Council process**

Mark Mitsuyasu explained the revisions to the Council's operating procedure which would result in a reduced Pelagics Advisory Panel. No AP application had been turned down during the previous round of membership solicitation but the large numbers from Hawaii would be trimmed back

Mitsuyasu also explained the process by which Council members were selected from each region.

## **Other business**

There were no other items for discussion

## **Recommendations**

### **Recommendations arising from AP Agenda in 1999. Carried forward or modified for 2000 AP report**

1. The AP recommends that HDAR improve the collection of Hawaii's offshore recreational fisheries catch and effort data.
2. The AP strongly urges the Council to convince NMFS to approve the framework adjustment to the Pelagics FMP which would implement a 100 n.mi. area closed to pelagic vessels > 50ft in length, and which would include Swains Island.
3. The AP asks the Council to direct council staff to draft letters for council members 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.
4. The AP requests that the council continue to support a synthesis of economic studies on recreational fisheries in Hawaii with the goal to identify appropriate economic multipliers, and to ensure 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.
5. The AP 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.

### **Non agenda Recommendations arising from AP 1999. Carried forward or modified for 2000 AP report**

1. The AP recommends that for any seafood product to be labeled as Hawaii seafood they must be landed in the State of Hawaii by fishermen holding a valid State of Hawaii commercial fishing license.
2. The AP requests that the Council recommend to DLNR to explore a minimum size of aku for commercial sale because of fishermen's concern about the exploitation of juvenile fish.

#### **New recommendations arising from 2000 AP**

1. The AP asks the Council to investigate current or future federal or state vessel buy out programs for the possible vessel relocation to the Pacific insular areas in order to assist in the emerging island fisheries industries.
2. The AP asks the Council to investigate the impact and legal issues concerning untethered FADs in the Central-West Pacific.
3. The AP expresses strong concern about the recent entry of the Spanish purse seine fleet to the West-Central Pacific, and request the State Department to convey these concerns to the MHLC, with respect to the impact of the Spanish fleet and other possible new entries.
4. The AP requests the Council to continue to improve the various information and communication services on its website
5. The AP requests the Council to investigate a longline closed area for Tutuila and Manu'a of 12 n.mi offshore to protect nearshore recreational and subsistence pelagic fisheries in American Samoa.
6. The AP requests the Council to consider the creation of a recreation advisory panel, and the panel to include charter vessel fisheries.
7. The AP recognizes the value of observer programs and supports the NMFS PIAO efforts to secure additional funding to maintain or increase coverage for pelagic fisheries.
8. The AP requests the Council to ensure that the US MHLC representation understands that the value of skipjack tuna goes beyond its use for consumption, but is essential for the success of sport fishing targeting blue marlin.
9. The AP requests the Council to continue its efforts to obtain funding to investigate the increased utilization of blue sharks.
10. The AP requests the Council to recommend that the boundary above which longline-albatross mitigation measures be used remain at 25 deg N, and not as recommended in

the USFWS BO at 23 deg N.

11. The AP requests the Council to ask NMFS to quantify what effect the turtle area closure to the Hawaii longliners has had on reducing turtle mortality rates from longline fishing within the closed area.
12. The AP requests the Council to request the Dept of Defense to examine alternatives to practice bombing the island of Farallon di Medinilla in CNMI.