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100th Council Meeting Pelagics Standing Committee Report

15 June 1999

Plumeria Room Ala Moana Hotel Honolulu, Hawaii

1. <u>Introduction</u>

Roy Morioka, Pelagics Standing Committee Chairman opened the meeting at 10.00 am.

2. Shark incidental catch in the Hawaii longline fishery

1. Socio economic study of shark finning in the WP Region

Mr Mike McCoy, the contractor for the NMFS-PIAO/WP Council shark finning socio-economic study. Mr McCoy reviewed his report, a summary of which was available for Council members. Mr McCoy explained which fishing fleets in the Central-West Pacific caught sharks which were finned and then landed into ports in the Western Pacific. This included Korean, Taiwanese and Japanese longliners, and US purse seiners, landing fish into Guam, American Samoa and Hawaii. Crews on the Hawaii-based longline fleet also finned sharks and sold the fins in Hawaii. Vessels making port calls into American Samoa and Guam offload their fins directly to buyers. Korean longliners fishing in waters relatively near to Hawaii sell their fins to oil tankers and supply vessels, which then rendezvous with a Hawaii-based vessel that has a longline receiving permit.

Mr McCoy reviewed information on the characteristics of each fleet with respect to shark finning activity. The Hawaii-based longline fleet comprises relatively small vessels, all using ice with limited deck space and limited hold capacity. Mr McCoy also noted that more up-to-date information on the economic characteristics of the Hawaii-based fleet was needed. Mr McCoy stated that longline vessels in Hawaii and elsewhere catch predominantly blue sharks. Purse seine vessels tend to catch a mix of oceanic white tip and silky sharks.

Mr McCoy then reviewed trends in port calls around the WP Region. Port calls by Taiwanese longline vessels in American Samoa have declined by about 50% over the past decade. Port calls by US purse seiners in to American Samoa by contrast have remained steady. Port calls by Taiwanese vessels to Guam have also declined by about 33% due to vessels seeking fishing opportunities elsewhere. However, there had been an increase in Japanese longliner port calls into Guam over the same time period. Mr McCoy explained that the volume of fins landed in the region was directly related to the volume of port calls by the different fleets.

Mr McCoy then summarized information on the sharkfin trade in Asia. He described the characteristics of fins that were in-demand by the Asian restaurant trade. The fin types most in demand had cartilage needles that were long and fat. Blue shark needles were long but rather thin, with the best fins coming from coastal species such as tiger sharks and hammerheads. Mr McCoy noted that a number of factors had contributed to the demand for blue shark fins. This included economic liberalization and social changes in China in the mid-1980s and the loss of traditional Middle Eastern and African supplies as a result of the Gulf Conflict in the early 1990s. Mr McCoy explained that Hong Kong was the center of the global trade in shark fins, importing about 4000 t/year. Oceania, which included the Pacific Islands, Australasia and Hawaii accounted for only about 5% of the Hong Kong demand. Mr McCoy also noted that the recent Asian economic recession in 1998 had depressed the market for shark fins.

Mr McCoy stated that the imports of sharkfin into the US had declined from 250,000 to 50,000 t/yr, although it was unlikely that this represented a decline in demand. It was more likely that this demand was being met by domestic supply from locations such as Hawaii. Mr McCoy reviewed information on the volume and value of fins in the WP Regions and the variables involved such as inexperience in fin recovery and the limited number of buyers, which may mean that fishermen are paid less than the true market value for their fins. Mr McCoy also reviewed the constraints to the utilization of blue shark in Hawaii. This included the short storage life of blue shark, vessel capacity constraints, inadequate deck space, and low product value. Mr McCoy noted that in those parts of the world where blue shark were in demand fishing vessels made 1-3 day trips because of the perishable nature of blue sharks. Blue sharks were difficult to handle, and must be finned alive with heart still beating to drain off the blood.

Mr McCoy finished his presentation by reviewing the volume and value of shark finning in the WP Region. Combining all sources of fins from domestic and foreign fishing vessels gave an annual total of between 237 and 261 tons, worth between \$4.2 and \$5.2 million. The Hawaii-based longline fishery produced in the region of 38 t/year worth between \$950,000 and \$1,140,000. The transhipment of fins through Hawaii amounted to about 132t worth between \$2.4 and \$2.6 million, or about half of the regional total production

Mr McCoy explained that most money from shark fins taken by the Hawaii-based longliners goes to the crews. He noted that this crew bonus from shark finning was an old tradition for fishing crews, and on the various Pacific fleets amounted to about 10-12% of their total compensation. Mr McCoy noted that the propensity of finning was also associated with salary levels, and that on some boats finning activity was confined to the lowest paid crew members. All the money earned by the crew of the Hawaii-based longliners entered the Hawaii economy. Mr McCoy noted that any fishing access agreements negotiated by US Pacific Flag territories might be hampered if there was a blanket ban on shark finning in the Western Pacific region. Mr McCoy finished his presentation by reviewing various management options for regulating shark finning in the Western Pacific.

<u>2. Utilization of sharks</u>

Mr Kevin Kelly, Council intern, reviewed the potential for utilizing sharks caught in the Hawaiibased longline fishery, particularly the blue shark. He noted that few sharks were landed by the Hawaiibased longline vessels. Hold space on the longliners was limited, so that the fishermen preferred to retain only high value species. Most of the products that could be recovered from blue shark were of low value, and repeated attempts to make use of blue shark in the US and Canada had failed. He refereed to the Canadian east coast longline fishery which operated under a full retention management regime, and where blue sharks were marketed mainly as a favor to fishermen.

Mr Kelly reviewed the products that might be recovered from blue sharks and these included the meat, oil, skins for leather, and cartilage, most of which (60%) was in the head. He referred to an Australian processor who was making full use of the blue shark, stating that the only way to get the maximum return on blue sharks was to utilize the entire animal. In summary, however, blue sharks are presently not marketable in Hawaii, but might have potential for developing some value added products. However, this would require financial support from the government to explore this potential.

3. Shark finning

Council Chairman Jim Cook stated that he and the Executive Director, Mrs Kitty Simonds, had attended a meeting at the DEBDT offices, with Maui Diamond Bay Seafoods. This company were constructing a plant on Maui to produce a variety of seafood and other products and were interested in test marketing products developed from blue sharks. These included retort packaged fillets in oil and neutriceuticals manufactured from the sharks liver oil and cartilage. Diamond Bay Seafoods was looking initially at processing about 5000 lbs of blue shark, and would likely apply fro SK funds to assist this work. Mr Cook noted some potential problems with shark supply from Hawaii-based longliners as the sharks had to be fresh for the optimum processing of organs such as the liver.

3. Seabird interactions in the Hawaii longline fishery

<u>1. Mitigation project results</u>

The Hawaii-based longline fishery continues to take relatively large numbers of Laysan and Blackfooted albatrosses. Recent projects to investigate potential mitigation methods by the Council and NMFS Honolulu Laboratory were presented to the Pelagics Standing Committee. Quantitative and qualitative analyzes of the results from the Council study of the effectiveness of potential mitigation techniques, conducted by Garcia and Assoc., were presented by Brian McNamarra and Gail Kaailii.

Towed buoys, dyed bait, tori poles and strategic offal discards were all effective in reducing mortality of albatross to take bait on sets and hauls. Night setting and reduction of vessel lighting at night also resulted in a substantial reduction of mortalities when no other mitigation measures were in place. Night setting would not result in zero mortality rates, however, as Laysan Albatross can feed at night and will also follow lines of light sticks deployed on longlines to search out baits.

Towed buoys and tori poles require active intervention by the crew to be effective deterrents and their use might be difficult to enforce. Dyed bait and strategic offal discards appear to be an acceptable mitigation methods to some components of the fleet since they are less intrusive than towed deterrents, which require constant care and attention from the crew to be effective. It was noted that both these techniques were devised by the fishermen themselves to deal with the albatross problem. Mr McNamara finished his presentation with a review of the recommendations of various mitigation measures which might be used on swordfish-targeting and tuna-targeting vessels in the Hawaii longline fishery

Results of NMFS experiments conducted on the Townsend Cromwell were presented by Dr Chris Boggs. Dr Boggs explained that the longlines were set using large safety pins to secure the bait and thus not harm birds that took the bait. This study looked at the efficacy of blue dyed bait, weighted hooks and tori poles. The observations focused on actual contacts between albatross and the bait, as opposed to the Garcia study which recorded a wider range of behaviors. Dyed bait and weighted hooks were more effective than tori poles in reducing albatross interactions with longline bait. Young birds (~1 year old) appear to take bait more frequently than older birds.

Cmdr Jack Rutz (USCG) asked what type of dye was used to color the baits blue. The dye was a blue food coloring agent. Mr McNamara noted that it was important to properly thaw the baits before dyeing them so that they were uniformly colored by the dye. Some resistance to the blue dye was noted by Mr McNamara on a tuna-targeting vessel. He explained that this may have been the result of using powdered rather than liquid blue dye, which blew and around and stained the ship. Mr Frank McCoy, Council member from American Samoa, asked if dyeing bait blue had much influence on the normal routine aboard a longliner. It did not. Mr Mike Gonzales from the NMFS Office of Enforcement asked if any bait producers were marketing blue dyed bait. This was not happening at present but might be a good opportunity for bait companies, given the size of the Hawaii longline fleet and its demand for bait.

2. Discussion on regulatory alternatives

Paul Dalzell reviewed the sum total of information presently available from the two recent mitigation projects, and the options for managing longliner-seabird interactions. He noted that there was now sufficient information on mitigation methods to develop management alternatives. He also briefly reviewed the potential of methods being tested elsewhere and their possible utility in the Hawaii fishery. This included an underwater setting chute currently on trial in New Zealand. Mr Dalzell noted several basic principals on which the management options were based, which included the spatial distribution of albatross takes relative to fishing effort, the failure of the Council to achieve voluntary compliance by the longline fleet in the past, the need to combine mitigation measures, and that in the future newer methods may be developed that could supercede methods presently being considered by the Council.

Mr Dalzell explained the spatial distribution of albatross takes was mainly confined to vessels targeting swordfish or a mix of swordfish and tunas at latitudes to the north of the Hawaiian Islands. The distribution of bird takes from observer data was distributed in a broad east-west band, marking the boundaries of the sub-tropical convergence zone where biological production was highest. He also showed that there were clusters of bird takes associated with the large breeding colonies on Midway and Laysan

Island in the NWHI. Mr Dalzell noted that above a latitude of 23 deg N. some basic mitigation measures could be mandated such as blue dyed bait and a towed deterrent, recovery of light sticks and release of captured birds.

The Council may also wish to take additional action by developing a special zone within the EEZ around Hawaii in which more stringent regulations may apply. Mr Dalzell reviewed the possible configurations of such a zone, based on the interaction rates from NMFS observer studies, and in particular, the two clusters of takes associated with Midway and Laysan islands. He showed the effects of reducing the interaction rates in this zone on bird takes and catches of target bigeye and swordfish. Eliminating the takes from a relatively small zone within the EEZ could have a substantial potential effect on reducing overall takes. However did not account for the possible shift of effort outside the zone to other high take areas beyond the EEZ.

4. Comprehensive data amendment (final action)

Mark Minton (Council staff) reviewed the proposed regulatory adjustment under the Pelagics Fishery Management Plan for federal permits and log book reporting by troll and handline fishing harvesting pelagic management unit species (PMUS) within the EEZ around the Pacific Remote Island Area (PRIAs), with the exception of Midway. Mr Minton noted that this document had undergone several modifications, following review and advice from the NMFS PIAO and NOAA General Counsel. The regulatory adjustment document concerns pelagic fishing vessels operating within the US EEZ around the PRIAs, and that additional regulatory measures would be required for the remaining FMPs.

The Pelagics Standing Committee adopted the following action items:

Action Item: (1) augment data collection for pelagic fisheries Pacific Remote Island Area (PRIAs) at this time and address data concerns for the bottomfish and crustacean fisheries at a later date

Action Item: (2) direct Council staff to finalize a document to require all troll and handline vessels harvesting PMUS around the PRIAs to have a federal permits and submit a federal logbook.

Action Item:(3) direct Council staff to work with the USFWS to develop a formal memorandum of understanding (MOU) to provide for the exchange of catch data collected by FWS from the charter boat and recreational fisheries at Midway.

The Pelagics Standing Committee meeting finished at 1.00 pm.