Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Ecosystems & Habitat

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

Robert Schroeder (Council staff) provided the SSC with a progress report on the draft Coral Reef Ecosystem FMP and review process for NMFS/Secretary approval. Optimistically, the earliest date the Council could take final action would be its October 1999 meeting.

Carolyn Stewart (Council contractor) presented key aspects of the current Aliving@ version of the draft FMP. In addition, Miles Anderson (Council contractor) presented an update of progress on the GIS mapping that is being used as support for EFH and HACP requirements of the FMP. He briefly summarized the evolution of new remote sensing technologies, which could potentially be used to produce very high quality GIS maps in the near future. There are several federal and state agencies and the US Coral Reef Task Force which appear to have overlapping objectives with respect to GIS information data gathering and map production**. The SSC encourages the GIS consultant to fully utilize existing sources and attempt to coordinate his activities with other GIS efforts, to the extent possible.**

The SSC reviewed the 6 objectives of the Plan as proposed by the Plan Team at its Feb 99 meeting. It expressed some concern regarding the applicability and potential vagueness of the wording of this plan as an Aecosystem@ fishery management plan and suggested that perhaps the word Aresources@ could be substituted for the word Aecosystem@. Chuck Birkeland (CRE-PT Chairman) noted the importance of the use of the term Aecosystem@ for the plan. The SSC recognized that there will be further changes incorporated in the draft as a result of the SSC discussion and subsequent Plan Team meetings. Carolyn reviewed the 9 Proposed Management Measures, with their alternatives. **The SSC reviewed and commented on the present draft and looks forward to reviewing the next version at its next meeting. The**

SSC supports the overall intent of each measure as presented, subject to some clarification and modification by the Plan Team.

It was the consensus of the SSC that Management Measure 1 deals with the most pressing coral reef issues and as a matter of expediency should be implemented as possibly the sole measure of the initial FMP. Other measures should be added through the amendment process. The SSC suggests combining measures 5 and 6 and measures 2 and 9, and in measure 2 to separate Alive rock@ and Aother marine species@ in separate measures. The Team should also take into consideration the other comments/suggestions made by the SSC regarding revisions to the draft FMP. These included the following: consider use of high-resolution mapping technologies to monitor sensitive areas; standardize resolution of maps for all island areas; reevaluate the list of management unit species based on what is appropriate; consider terrestrial derived impacts to EFH (e.g., sedimentation); define Asustainable production@; describe types of aquaculture that may occur in the EEZ and ecosystem impacts; provide more evidence for impacts of anchoring in all areas of region (US Navy may have some information); evaluate impacts of banning anchoring on fishermen; consider feasibility of mooring buoys in EEZ (clarify authority); regarding gear impacts to habitat quantify Asubstantially destructive@; clarify what is being prohibited-- gear hardware or method of use; define Amarine protected area@ (MPA) and use term consistently; identify the range of zoning types for MPAs; define Apassive fishing gear@; clarify in all major sections of draft FMP that it is the US Pacific Islands EEZ that is being managed.

(J:\71SSC\71SSCrpt ... 05Dec00)

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Crustaceans

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

Kurt Kawamoto summarized information on the 1998 NWHI lobster fishing season. Sam Pooley provided information on economic conditions in the fishery and regulatory impacts. Robert Schroeder provided information on lobster fisheries in the other areas (MHI,AS, GU, NMI). JoAnne Kushima discussed some data management developments for HDAR.

Robert Schroeder outlined the bank-specific harvest guideline measure. Alvin Katekaru described the submission of the regulatory package to NMFS-Headquarters (April 8) and the revision currently on-going to the package (regulatory flexibility analysis). The public comment period and cooling off period may be truncated to meet the season opening (1 July). If the package does not pass headquarters approval, the archipelago-wide harvest guideline will not be allocated between fishing grounds for the 1999 season.

Gerard DiNardo summarized the estimation of the 1999 bank-specific exploitable population size. Alvin Katekaru pointed out that the FMP=s 13% harvest rate would be used to derive the bank-specific harvest guideline for each of the four bank/areas. Figures for 1999 remain provisional until approved by NMFS.

DiNardo illustrated the spatial distribution of the fishery in 1998 and the impact of the lower confidence limits of the average CPUE in the Aall other areas@ on the 1999 harvest guideline. Alvin Katekaru responded to a question concerning the Aoverage@ at Maro Reef that it was only a guideline, not a quota, and that in general the guidelines were being met.

Gerard DiNardo summarized 1998 and 1999 commercial and NOAA ship Towsend Cromwell tagging, with the expectation of receiving returns during the 1999 commercial fishery season. Observers will be responsible for retrieving the tags. Expansion of the tagging experiment to cover slipper lobster at Maro Reef in 2000 is anticipated. In response to a

question, Alvin Katekaru clarified that NMFS will be seeking 100% observer coverage, subject to the number of vessels participating in the fishery (expected to be 4-8 vessels) and the demands of the longline fishery.

Robert Schroeder explained the Marine Mammal Commission (MMC) objections to the lobster fishing at French Frigate Shoals (FFS) and potential prey competition with the endangered Hawaiian monk seal. The more recent letters from the MMC suggested closing additional western banks. Alvin Katekaru explained that NFMS is conducting an informal Section 7 Consultation on this issue. There is particular concern because fishing occurred at FFS in 1998, the first time in about 6 years. If headquarters agrees with the MMC, then under the ESA, NMFS could close these areas to lobster fishing.

Robert Schroeder pointed out that there was a combined CPT/CAP report. **Sam Pooley provided a summary of CPT/CAP recommendations, which the SSC endorsed as noted below *(additional SSC comments in bold)***.

1) Strongly recommend that all vessels in the lobster fishery carry scientific data collectors, and encourage NMFS-PIAO to immediately begin coordinating placement of data collectors with vessel owners participating in the 1999 NWHI fishery.

2) Support continued coordination between the state, industry, Council and NMFS as rule making is developed for HB1180 (License for imported marine life) to prevent adverse impacts to the NWHI lobster fishery. **The SSC encourages the Council to go on record during the public hearing period.**

3) Recommend the OY control rule of 13% constant harvest rate be used for biomass above B_{MSY}, linearly declining harvest rates be used from B_{MSY} to MSST, and closure of fishery when $B_{MSY} \leq$ MSST; research assessment cruises would continue to monitor the population even when the fishery is closed.

4) Recommend that the NMFS Honolulu Laboratory analyze the bycatch and incidental catch from the summer lobster assessment cruises, 1984-present, to describe the amount, composition, and temporal trends of this catch.

5) Recommend that lobster fishing in Pacific Remote Island Areas require a permit from NMFS-PIAO, NWHI logbook, and if live lobsters are landed to notify the Hawaii Dept. of Agriculture Quarantine Branch. **The SSC recommends replacing ANWHI logbook@ with AFederal logbook@, and Aif live lobsters are landed@ with Abefore live lobsters are to be landed@.**

6) At the next meeting of the Crustaceans Plan Team/Crustacean Advisory Panel, in coordination with NMFS enforcement, evaluate proposed logbook revisions, call-in reports, and the adequacy of the information they collect.

7) The Advisory Panel and Plan Team did not concur with the recommendations of the MMC to close French Frigate shoals to fishing due to possible competition by monk seals for lobster prey (with one exception, AP member I. Harp).

8) Recommend the Council encourage NMFS to accelerate research efforts on monk seal diet to determine the importance of lobster and lobster-trap bycatch to seals.

9) Recommend the Council encourage the development of a cooperative NMFS-industry tagging program. **The SSC commends NMFS (Gerard DiNardo) for the development and implementation of a cooperative NMFS-industry lobster tagging program.**

(J:\71SSC\71SSCrpt ... 05Dec00)

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Bottomfish

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

Bob Moffitt outlined improvements to the Bottomfish Annual report modules and updated the SSC on catch and effort trends in the region. He noted that for Guam the CPUE of the combined shallow and deepwater bottomfish complex had dropped below 50% of the initial values, and suggested that was probably coming from the shallow-water species, mainly due to charterboat fishing. He noted that for Hawaii the drop in onaga landings in the Mau Zone was partly because of the departure of one highliner. The archipelago-wide CPUE for hapuupuu is now above the 20% level. For CNMI, there was a notable drop in red-gilled emperor landings. The SSC took note that future reports would be using CPUE estimates, and Deriso recommended that NMFS continue to collect length frequency data so that relative spawning stock size can to be calculated. **The SSC calls the Council=s attention to the fact that the combined bottomfish CPUEs for Guam are below the 50% level and that the situation should be investigated.**

The SSC concurred the with the Plan Team=s recommended list of species to be added to the BMUS (see BPT report).

The SSC heard updates on the progress of the Mau Zone permitting process, the request for delisting of onaga and ehu, and the continuing genetic analysis of onaga and ehu and hapuupuu. **The SSC noted that there was no evidence of separate stocks for ehu in Hawaii, and that based on current sample size onaga stocks in Hawaii could not be differentiated from those in Am. Samoa. The SSC calls attention to the Council that to**

conclude the analysis additional samples are needed from the Mau Zone, Kauai and American Samoa.

Walter Ikehara updated the SSC on the State=s MHI Bottomfish Management Plan and noted that it would be possible to identify and survey the noncommercial sector. He noted the effectiveness of the US Coast Guard=s assistance in surveillance and support to DOCARE=s enforcement of closed areas. **The SSC encourages the Council to commend the Coast Guard for its assistance to the State on monitoring and enforcement of the bottomfish closed areas.**

The SSC concurs with the following Plan Team Recommendations (or modifications thereof):

American Samoa: 1) encourage DMWR to proceed with collection of SPR-related data; and 2) Recommend DMWR provide additional samples of onaga.

Guam: 1) encourage DAWR to confirm and analyze results of the offshore creel survey expansion, since the aggregate CPUE indicator may be reflective of local depletion; 2) encourage DAWR to fine tune the database computer program to allow integrating of offshore and inshore survey expansion data and to provide staff training; 3) encourage DAWR to complete the baseline survey of the red-gilled emperor; and 4) encourage DAWR to establish mean fish size, percent immature and SPR indicators for the deep- and shallow-water bottomfish complexes.

Hawaii: 1) recommend that the Council, for the purposes of helping enforcement, seek clarification of the jurisdictional and compliance aspects of the State of Hawaii=s Administrative Rule 13-94 on MHI Bottomfish as it applies to the area closures within the US EEZ; and 2) that the Council encourage and assist the State to implement a survey of permit holding non-commercial bottomfishermen to estimate recreational catch[1].

CNMI: 1) that NMFS and the Council assist DFW in assessing the bottomfish stocks in the southern islands of the commonwealth. 2) establish baseline parameters for the Guam/Northern Marianas deep-water bottomfish complex; 3) that NMFS assist DFW in establishing baseline parameters for the Guam/Northern Marianas shallow-water bottomfish complex by a sampling program on the DFW vessel; and 4) that NMFS/WPacFIN develop and implement software to separate fishery statistics for the main islands and Northern islands fisheries.

---

[1] . The Recreational Fisheries Data Task Force will consider reporting of recreational data by all small boat fisheries in Hawaii, including bottomfish (see Pelagics SSC report)

Region-wide: 1) that the Council locate a funding source for bottomfish research similar to the PFRP funding program; 2) that Council staff and NMFS continue to assist local agencies in the establishment and /or improvement of appropriate data collection systems to meet the new SFA requirements.

(J:\71SSC\71SSCrpt ... 05Dec00)

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Program Planning (SFA Amendment)

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

Bycatch

Paul Dalzell addressed the partial disapproval of the Comprehensive SFA amendment with respect to bycatch, specifically of bycatch in the Pelagics and Bottomfish fisheries. Dalzell reviewed the recent meeting with NMFS headquarters staff, in which they highlighted what they believed to be the following deficiencies in the SFA amendment.

More discussion on measures taken to acquire better bycatch data was required in the document. Low bycatch in a fishery is not sufficient justification for taking no action. More discussion was required on the measures taken in the past to reduce bycatch and what incentives can be implemented to reduce bycatch even further. Additional information was required on turtle bycatch and the identification of measures to minimize this bycatch (e.g., circle hooks, closed areas). The SFA amendment omitted information on longline fishery interactions with seabirds and discussion of the possible alternatives to minimize these interactions. Although seabirds were not included in the Magnuson Act, the recent support by the US of the FAO International Plan of Action to reduce longline-seabird interactions meant that this should now be addressed in FMP amendments. Similarly, another FAO International Plan of Action for Shark Fishery Management, which the US had supported meant that the waste associated with shark finning should be addressed.

Dalzell also reviewed material that had been drafted following the partial disapproval notice on hook and line selectivity to show that fishermen in the Western Pacific do as much as they can to avoid taking bycatch species. It was noted that the NMFS PIAO was tasked with helping Council staff address the disapproved sections of the Comprehensive SFA amendment.

The SSC also reviewed the discrepancies between the Magnuson definition of bycatch, which is very specific and includes only fish caught but not used, compared with the NMFS

definition of bycatch in its 1998 publication, Managing the Nation=s Bycatch,, which includes all discards, fish killed but not caught through contact with fishing gear, and all protected species interactions. There was discussion by the SSC about the possibility of incidental catches being labeled bycatch by NMFS. This was driven by concerns from recreational fishermen about catches of species such as marlin which are taken incidentally by pelagic longliners. The SSC noted that this is essentially an allocation issue.

The SSC concurred with the activities of the Council to address the partial disapproval of the Comprehensive SFA amendment with respect to bycatch, The SSC is alarmed at the prospect of NMFS including incidental catch in the bycatch category.

Communities

Don Schug reviewed the rejection statement of the NMFS. Discussion centered around the purpose of designation of fishing communities. It was stated that measures could be invoked to conserve a fish stock that a fishing community is dependent upon.

The SSC recommended that Hawaii fishing communities be classified by island.

Overfishing

Robert Schroeder reviewed the reasons for the disapproval of how the Council addressed the overfishing provision in its SFA amendment. NMFS said that SPR could not be used as a proxy for MSY since it is not a measure of stock biomass; NMFS also wanted more explanation with regard to the use of control rules.

Don Kobayashi=s presented an alternate approach for the bottomfish FMP. The precautionary threshold would be set as 50% of initial CPUE and the overfishing threshold as 25% of initial CPUE. This approach seems to comply with the National Standard Guidelines and NMFS implementing rules.

Gerard DiNardo presented a revised approach for overfishing in the Crustaceans FMP, noting that information is available on stock size, size composition, effort, spawning stock biomass, and fishing mortality (F). MSY can be estimated using F and spawning biomass. Currently, MSY is estimated at 222 mt, F_{MSY} at 0.72 (for a six month season), and B_{MSY} at 121 mt (which is the target threshold warning level). The present fishing mortality level is based on the OY control rule-- the constant (13%) harvest rate strategy (F_{MSY}=0.13).

Sam Pooley noted that OSY is a socioeconomic concept, but the current NMFS definition does not consider such aspects. John Hampton disagreed with the NMFS definition of MSY stock size as the long-term average size of the stock. **The SSC would like to**

express its objection to the current NMFS interpretation of the rules for defining overfishing. Basing overfishing on MSY is not necessarily precautionary.

The SSC notes that fisheries under the Council=s jurisdiction are well managed and not overfished. This has been accomplished using the SPR indicator. The SSC encourages the Council to continue to collect percent mature and age-structure information in carrying out its assessments and making management decisions.

The rejection of SPR as a proxy for MSY in determining a minimum stock size threshold (MSST), may, under some circumstances (particularly where data are limited), promote (or even force) uncritical use of simple CPUE time series to estimate MSY and related parameters. The stated reason for the rejection of SPR (letter of 3 Feb 99 from W. Hogarth) is that it Adoes not provide a measure of stock biomass@. This is not correct C SPR indexes exploited stock biomass using CPUE, but further qualifies the index by incorporating information on percent maturity. This tends to make SPR more an index of spawning biomass than exploited stock biomass. While there may be problems in relying on SPR to indicate stock status, these problems would not be solved by discarding the information on percent maturity and thus relying only on the CPUE information. **In data-limited situations, SPR is probably a superior indicator than an index of biomass at MSY based only on a CPUE index, the latter of which may be difficult to derived.**

The SSC recommends that a meeting be held with (non-NMFS) SSC stock assessment scientists and Andy Rosenberg (possibly with scientists from other regions) regarding divergent interpretations of MSY-based overfishing definitions, considering the Council=s disapproved overfishing criteria.

(J:\71SSC\71SSCrpt ... 05Dec00)

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Pelagics

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

Hawaii and American Samoa longline fishery report

There are now 7 years of reliable logbook data on the Hawaii longline fishery. Changes in the number of participants and targeting are clearly evident in this record. There has been a pronounced increase in tuna targeting and bigeye tuna is now the dominant target species in the catch. Swordfish has correspondingly declined in importance. Sets outside of the EEZ and in the NWHI have also increased. Catch rates of all target species remain high.

The American Samoa longline fishery appears to have stabilized somewhat. Albacore catches in 1998 were low in response to both market forces and possible changes in the habitat.

Akule & Opelu

Kevin Weng from the University of Hawaii Oceanography Department presented the results of his Masters thesis results on akule and opelu fisheries in the Main Hawaiian Islands. Both species appear to be harvested well below MSY and there is no evidence that MSY has ever been exceed in the 30-year history of these fisheries. It was emphasized that there is little contrast in the data and that the statistical confidence in the results is low. There is some indication that akule have higher site fidelity than opelu and that recruitment of akule is improved by periods of high rainfall.

Bigeye and yellowfin tagging in Hawaiian waters

Over 12,000 fish have been tagged and released since 1995 in both this current project and a previous tagging project focused on the Cross seamount. Releases have comprised about

equal numbers of both species from Midway Island to the Cross Seamount. Recaptures have occurred throughout the Main Hawaiian Islands, around inshore FADs and offshore weather buoys, and near topographic features. Preliminary analysis of the data indicates that important fishery parameters such as fishing mortality and movement rates can be accurately estimated from the data.

Sharks

a. Update on catch trends in the Hawaii longline fishery

Shark catches in the Hawaii longline fishery have averaged approximately 100,000 fish per year. Approximately 95% are blue shark and most are caught by vessels targeting tuna. Finning has increased to 60%. Catch rates remain high and are higher than most target species. A time series of blue shark catch rates in the Japanese longline fishery was presented and was relative stable since 1971.

b. New gear to target coastal sharks

Notification of intent to deploy bottom longline gear to catch coastal sharks was submitted to the Council. The target species for this proposed fishery are claimed to be included in the pelagics FMP by NOAA General Counsel. Further, the gear is not listed as an illegal gear because the definition of longline gear covers only lines that are Asuspended@ in the water column. The SSC felt that this fishery has a high potential to interact with monk seals in the NWHI, that the target species may not be able to support a high level of exploitation, and that the fishery needs to be carefully regulated. **The SSC recommends that bottom longline gear be banned from the nearshore waters of the NWHI under both the pelagics and bottomfish FMPs and that the pelagic and bottomfish plan teams adjust their respective FMPs to more accurately reflect the species and gear to be regulated in consultation with the Coral Reef plan team.**

The SSC also endorsed the Pelagics Plan team recommendations on this agenda item.

Seabird interactions in the Hawaii longline fishery

a. Update on trends and numbers

Analysis of the NMFS observer data from 1994-1998 was presented. A statistical model was used to estimate total take and to identify potential opportunities for mitigation. A large number of independent variables were evaluated for their ability to Aexplain@ the variability

in observed bird take. Most of these variables were of little use in predicting take. A measure of distance of longline set from nesting site and longitude are potentially useful predictors of Black-footed albatross take, and a similar distance measure and calendar year were useful predictors for Laysan albatross take. It appears that Blackfooted and Laysan albatross takes have been fairly stable at approximately 2000 and 1500 birds respectively for the last 6 years

b. Mitigation projects

Preliminary results from the Garcia and Associates field study of the effectiveness of potential mitigation techniques were presented. Towed buoys, dyed bait and tori poles were all effective in reducing attempts by albatross to take bait and possibly in reducing mortality. Use of weighted hooks is probably not an effective technique because fishers consider it dangerous. 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 appears to be an acceptable mitigation method to some components of the fleet since it is it is less intrusive than towed deterrents, which require constant care and attention from the crew to be effective.

Results of NMFS experiments conducted on the Townsend Cromwell were presented. Dyed bait and weighted hooks were more effective than tori poles in reducing albatross contact with longline bait. Young birds (~1 year old) appear to take bait more frequently than older birds.

The SSC endorsed the Plan Team recommendations concerning longline-seabird mitigation, subject to some minor changes in wording. These recommendations now read as follows:

1. The Council should, as soon as possible, promulgate measures to reduce seabird mortalities in the Hawaii-based longline fishery using a combination of area restrictions and proven techniques (e.g. blue dyed bait, night setting, towed deterrents, etc) which deter hooking and mortality of albatrosses.

ii. The above measures should be based on defined zones of high interaction rates. Within these zones a phased approach should be taken beginning with mitigation measures and followed upon by complete closure should mitigation measures prove to be inadequate.

iii. The Council should ensure that all participants of the Hawaii-based longline fishery are informed that the future of the fishery is in serious jeopardy if the numbers of albatross mortalities are not markedly reduced.

iv. In addition the Council should aggressively pursue cooperative international efforts to reduce albatross interactions with longline fisheries.

c. Blackfooted albatross population dynamics workshop

The workshop was extremely useful in reviewing all sources of mortality and in placing longline-induced mortality in the context of albatross life history and population growth. The workshop participants recommended:

1. Complete, develop and curate a relational database for banding records.

2. Encourage further analyses of existing data sets and conduct further modeling at a population dynamics modeling laboratory.

3. Design and implement a population-monitoring program at breeding sites to address the effects of long term mortality.

4. Obtain information and make best estimates of fishing effort and mortality from the Pacific Halibut and non-US longline fisheries in the Northern Pacific Ocean.

3. Design, implement and develop a longline fishery-monitoring scheme to test mitigation measures and to gather mortality data.

6. Undertake comparative studies with Laysan (*Phoebastria immutabilis*) and Japanese Black-footed albatrosses.

7. Hold a workshop in Honolulu, Hawaii, at the Second International Albatross Conference between 8 - 12 May 2000.

The SSC endorses these recommendations.

d. Section 7 consultation for Short-tailed albatross.

One Short-tailed albatross was observed near the Townsend Cromwell in 1997. Individual birds have been observed repeatedly at Midway for several years, but no mortality or successful breeding has been observed. The NMFS biological assessment concludes that the activities of the Hawaii-based longline fleet will have no impact on the populations of the Short-tailed albatross. The USFWS dissents from the NMFS biological assessment and a Section 7 consultation has commenced.

Turtles and longline fishery interaction

a. Update on trends and numbers

There were 42 observed takes of loggerhead turtles in 1998. The trend in loggerhead takes has been hovering around 400 per year since 1994. The most significant determinant of

loggerhead take appears to be related to distance from some sea-surface temperature isotherm. No significant covariates of leatherback, olive ridley, or green turtle take could be identified. The most recent biological opinion has reset the trigger level upward for all species. Current levels of turtle takes and kills are comfortably below trigger levels.

b. Ecology of loggerhead turtles

The largest number of loggerhead turtle interactions are associated with the 17 and 20 SST isotherms. These isotherms are indicators of 2 major oceanographic fronts. The swordfish targeting component of the longline fishery generally overlaps both isotherms during the first quarter of each year, but is mainly south of the 17 degree isotherm in the second quarter. These distributions suggest some sort of turtle bycatch reduction strategy involving time and area closures related to the distribution of certain SST isotherms.

c. Mitigation possibilities

There are not many likely candidates for measures to reduce interactions with turtles. The statistical analysis suggests that there is no association with light sticks. There is limited information on the use of circle hooks. Better mechanisms to release turtles after hooking were discussed. The albatross study also suggested that dyed bait may also decrease interactions with turtles. **The SSC recommends investigation of blue-dyed bait as a means to reduce turtle interaction by analysis of the Garcia and Associates data from the albatross study.**

Marine debris

Cut from the agenda due to time constraints

H. American Samoa longline area closure

Charles Karnella reported that the 50/30 n.mi. area closure for the American Samoa pelagic fishery had not been approved. The administrative record did not support approval of the recommended management measure. Inadequate information was provided to justify an area closure at this time. Additional information was required on the impacts of alternative measures such as different sized area closures.

The document did not adequately demonstrate that the recommended measure was consistent with National Standards 4 (allocations must be fair and equitable), 5 (economic efficiency must be considered) and 7 (benefits must outweigh costs). It was suggested that National Standard 8 be used to support the recommended measure if it could be demonstrated that the fishing community would be adversely impacted if action is not taken. The recent

downturn in fishing conditions in American Samoa, with only 10 locally based alia longliners may make it more difficult to argue for the need for an area closure.

International meetings

Cut from the agenda due to time constraints

Revision of HDAR commercial catch reports

Alan Rabacal of Hawaii Division of Aquatic Resources (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. The C3 form is inadequate for management since there is no provision for recording effort. The new forms have new data fields for recording information such as fishing effort and loss of fish through discarding, or attack by predators such as sharks, dolphins and seals. In the future HDAR envisages capturing economic information presently recorded on the C3 form through the new dealer reporting system, which was established last year. Mr Rabacal noted the useful input he had received from the Pelagics Plan team, and **the SSC encouraged HDAR to continue the good work in developing the new data reporting systems**.

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 noted that this stemmed from an SSC recommendation during the 70th meeting. Mr Dalzell explained that the focus of the task force will only be small boat-based recreational fishing, and not include shoreline recreational fishing. The targets for the task force were pure recreational fishermen, and Aexpense@ fishermen who sold a portion of their catch to cover fishing costs.

He explained the terms of reference and the suggested composition of the task force. The Task Force would consider all boat-based recreational fishing, and not just pelagic catches. 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. Mr Dalzell noted that the next Council meeting will discuss the appointment of a chairman for the Task force.

Chuck Daxboeck asked which institution would archive the recreational data. Mr Dalzell explained that it was anticipated that existing data infrastructure would be used as much as possible. This was also a topic that would be a discussion topic for the emergent task force. **The SSC noted and encouraged Council progress in developing a task force to deal with recreational data issues.**

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.

Mr Minton noted that originally this regulatory amendment was to cover all FMPs. However, both the Bottomfish and Crustaceans FMPs do not include the remote island territories as fishing grounds, and these need to be added through separate amendments for each FMP.

Mr Minton suggested that the HDAR Tuna Handline Trip Report would serve as an adequate federal logbook proxy for trolling and pelagic handline fishing in the remote island territories. **The SSC supports the Pelagics Plan Team recommendation to adopt the HDAR tuna handline trip report form as a logbook for non-longline fishing activities in the US Pacific Remote Insular Territories, noting that some minor modifications may be necessary.**.

Pelagics Advisory Panel 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 community-based 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 high-technology tagging, and consider the opportunities these technologies provide for improving our understanding of highly migratory PMUS, particularly blue marlin, big-eye 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, not based on agenda items, 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 N.MI and Guam EEZ.

4. Request that the Council evaluate what are the potential affects to fisheries of the CO_2 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 fishermen=s 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 SSC noted that some of the Pelagics AP recommendations indicate that AP members are not sufficiently informed on many issues such as progress with archival tag technology and the development of a management regime for tunas and other HMS in the

Central-West Pacific. **The SSC noted a need to improve communication on these and other issues to the AP and public at large.**

Pelagics Plan Team Recommendations

Pelagics Plan Team recommendations arising from each annual report module and for the region as a whole were as follows:

American Samoa

i. Integrate creel survey and federal logbook data to provide a more complete picture of the domestic longline fishery, (to be included in next years report).

ii. Add CPUE comparison between creel survey and log book data (for Table 3) in future modules.

iii. Continue to work with WPacFIN to improve and implement algorithms that better represent all fisheries in American Samoa.

Guam

Recommendations

i. Breakdown the time series of landings to reflect charter and non charter pelagic fishery sectors

ii. Compare time series CPUE between charter and non-charter pelagic fishery sectors for consideration for inclusion in the annual report.

iii. Include CPI in the first table in the Guam module that includes revenues.

Hawaii

i. For the next plan team meeting, draft a focus report on Hawaii blue marlin catch rates and average sizes by various sectors and areas of the state. Also look at the dynamics of CPUE in relation to harvest totals.

ii. Draft a breakout sub-module on Hawaii pelagic charter boat sector.

iii. Make a comparison of troll and longline CPUE for mahimahi and ono in the same manner as is now done for skipjack pole-and-line and troll CPUE data.

iv. Include Chair and additional member of the Pelagics AP to represent the longline and small vessel fisheries in Hawaii at the Plan Team meeting.

International Module

i. The tables in the module should include data from the whole Pacific. Maps should be extended to include important catches and the legend should be placed so that it does not obscure areas of important catches.

The 1998 Annual report region-wide recommendations by the Pelagics Plan team were as follows:

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

ii. The Council should seek funding to conduct a survey of Hawaii smallBscale fisheries. This survey is needed to evaluate the significance of nonBcommercial components of these fisheries.

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 distantBwater fisheries.

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 distantBwater fisheries. NMFS HL will conduct a stock assessment of blue marlin.

22. 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

vi. Plan team asks that when the Council rejects or modifies a Plan Team recommendation, that this be noted in the annual report without modifying the original recommendation wording.

On other agenda item topics, the Pelagics Plan Team recommendations were as follows:

New gear for targeting coastal sharks

i. The Plan Team recommend to the Council that bottom longline gear not be permitted for taking PMUS in the US EEZ around the Hawaiian Islands

ii. The Plan Team recommends that the Council re-evaluate which shark species it wants to be managed under the Pelagics FMP. The Plan Team thinks that PFMP should be clarified to include only pelagic sharks. Such sharks could be defined as follows: blue shark, dusky shark, silky shark, oceanic white-tip shark, two species of mako sharks, three species of thresher shark, salmon shark, crocodile shark, and whale shark. Other sharks are occasionally pelagic (such as hammerheads and sandbar sharks) but Plan Team does not believe these should be included in the PFMP.

Council regulatory action for mitigating longline-seabird interactions

See above, section E. b. (Mitigation projects).

Mitigation possibilities for longline-turtle interactions

The Plan Team recommended that the NMFS Honolulu Laboratory should simulate the effectiveness and fishery impacts of using an isotherm-based area closure as a means of reducing turtle bycatch.

Marine debris

The Plan Team recommended that a deposit on light sticks be investigated to encourage longline vessels to return light sticks rather than discard them at sea.

Recreational fisheries data task force

The Plan Team endorsed the Recreational Data Task Force planning meeting recommendations

Comprehensive Data Amendment

The Plan Team recommended using the prototype HDAR Tuna Handline Trip Report as a log book for non-longline pelagic fishing within the US remote insular territory EEZs. This form has provisions for reporting a variety of fishing gears.

The SSC reviewed both the AP and PT recommendations. **The SSC supports all the PT Annual Report recommendations and the PT endorsement of AP recommendations 8, 9, 12, 13, 14, 15, 16, arising agenda items, and recommendation 6 not associated with an AP agenda item.**

WESTERN
PACIFIC
REGIONAL
FISHERY
MANAGEMENT
COUNCIL

Recommendations to the Council from the 71st Meeting of the Scientific and Statistical Committee

Precious Corals Fishery

18-20 May 1999
Council Office Conference Room
Honolulu, Hawaii

A. Proposed State regulations for black corals

Francis Oishi, HDAR staff, indicated that the State of Hawaii is moving forward with a change in the administrative rules regarding pink, gold and black corals. He presented data and described why the State is adopting a 3/4 inch minimum size diameter for black corals.

B. Adjustments to measures in the FMP

Don Schug, Council staff, briefly described the contents of the 5th working draft of regulatory adjustments to the precious corals FMP.

C. Plan team/Advisory panel recommendations

Frank Parrish, Acting Plan Team Chair, presented the recommendations of the plan team and Hawaii members of the advisory panel. Discussion about a recommendation to prohibit the use of non-selective gear clarified that this gear could destroy habitat and adversely impact precious coral settlement. There was also discussion of changes in estimates of growth and maturity of black coral and how this relates to the difference in the minimum size limits proposed by the State and recommended by the plan team.

The SSC endorsed the plan team recommendations. Also, the SSC regrets that the Council and State of Hawaii have not resolved the lack of consistency in the proposed size limitations. It was suggested that the FMP include specific guidelines on measuring the diameter and height of black coral. The SSC noted that the proposed changes in reporting and recordkeeping requirements need substantive editing.