



## **Report to the Council from the 96<sup>th</sup> Meeting of the Scientific and Statistical Committee**

Council Office Conference Room  
1164 Bishop Street, Suite 1400  
Honolulu, HI 96813

September 25-27, 2007

### **New Role of the SSC**

#### **5. The New Role of the SSC**

##### **A. MSA Five-year Research Plan**

Council staff reviewed the new MSRA text on five-year research plans, which provides a larger SSC and Council role in determining research priorities. Potential research categories suggested to the SSC were: stocks; ecosystems; human communities and protected species. SSC members provided Council staff with individual comments on the categories, research issues within each category, and the process for developing priorities or related considerations.

**The SSC recommends that Council staff draft a preliminary research plan based on their input as well as that of the Council.**

##### **B. Annual Catch Limits**

Council staff provided a presentation on MSRA text regarding annual catch limits (ACLs) and accountability measures (AMs). Also discussed was a workshop held by NMFS on this topic September 20-21, 2007. At the workshop and in subsequent discussions, a set of issues emerged that were appropriate for SSC consideration. The SSC was asked for comments and recommendations that would assist NMFS and the Council in addressing these issues.

1. What can the Council do to address overfishing of shared stocks (State/Commonwealth/Territorial/International)?

The MSRA recognizes state authority except in certain cases under which pre-emption may occur (when the majority of a fishery occurs in Federal waters). Regarding internationally shared stocks the MSRA calls for Councils to “develop recommendations for domestic regulations to address the relative impact of fishing vessels of the United States on the stock”. In recognition of these shared authorities the SSC made the following recommendations.

**The SSC recognizes that shared stocks are a reality in the Western Pacific and recommends that the Council implement limits and accountability measures for those resources directly under its authority and in accordance with any U.S. international obligations that may apply. In addition the Council should work with local authorities to encourage responsible management of their respective portions of shared fisheries.**

**Regarding stocks where local authorities share management, it is desirable to have consistent management across local and federal waters. It was noted that the State of Hawaii currently does not have authority to set ACLs or quotas in state waters but is developing proposed legislation that would allow the state to mirror federal ACLs as they are established.**

2. Which stocks need ACLs? It was proposed by NMFS in the ACL workshop that one way is to distinguish OY (optimum yield) stocks (target) from Ecosystem Component stocks (non-targets and discards), with ACLs anticipated only for OY species. However the designation of stocks as OY or EC stocks will be highly problematic as these definitions are fuzzy. The SSC suggests the following approach which allows each stock to be considered separately for management based on risk of overfishing, and considers ACLs for all MUS.

**The SSC recommends that all management unit species (MUS) be ranked by a risk assessment process (e.g. Ecological Risk Assessment, which can be tailored for local conditions), such that the highest-risk species are prioritized for earliest ACL development. Risk assessments should be reviewed regularly and revised as needed. The two-bin approach (OY and Ecosystem Component categories) suggested at the ACL workshop should not be used as a basis for developing risk assessments and ACLs.**

**The SSC further recommends that the risk assessment process for MUS be initiated by PIFSC as soon as possible and be conducted in cooperation with the Council, SSC and Plan Teams. The SSC recommends that the first MUS to be assessed should be striped marlin so that the process can be tested and refined as necessary.**

3. Risk assessment. The SSC reviewed the list of variables (lower vulnerability factors and higher vulnerability factors) that have been proposed by NMFS to assess stocks in terms of the probability of overfishing and consequences of overfishing. Market values appear on NMFS' proposed list however the SSC noted that relative prices may be more important than normative prices in assessing vulnerability; which fish on the line are more valuable than others is the real determinant. In addition, some low-value fish are caught in very high numbers.

**The SSC is concerned with the assumption that lower value species are less vulnerable and higher value species are more vulnerable. The SSC recommends that economic considerations be taken into account, but cautions against assuming that low value necessarily equates to reduced vulnerability. The cultural and economic importance of the species to local/regional markets and non-market fish distribution channels should also be considered.**

4. Definition of a stock complex. The SSC reviewed the proposed list of four criteria (occur in the same geographic area, be caught in the same fisheries (e.g., caught by the same gear), have similar life history characteristics, and have similar vulnerability to the fishery) that NMFS suggested were necessary to define a stock complex. The SSC was concerned that requiring all of these criteria makes the definition of a complex too stringent and difficult to apply. For example, some groups won't necessarily all be caught using the same gear and share similar vulnerability levels and life histories, yet there may be good reasons being defined as a complex. In some cases such as reef fish, identifying a complex is the only option. Further, if a complex met all four criteria, there would not be a need to define them as a complex.

**The SSC recommends that stock complexes not be required to meet all four criteria. Any rationale for setting an ACL for a complex should be clearly defined and could draw from one or more of the listed criteria. If an ACL is identified for a complex, the catch should be monitored by species. And if some species are used as indicators for a complex, it makes sense to utilize low productivity species.**

5. Dealing with data-poor situations. The SSC discussed several possible approaches presented by NMFS at the ACL workshop (simple equilibrium approaches, index approaches and the approach described by Restrepo et al.) for setting ACLs in data-poor situations. The SSC is concerned that relying on Restrepo et al.'s approach in data-poor situations would mean setting ACLs at a proportion of current catch, with limits on catch instead of limits on effort in general. However early in a fishery, a little effort can result in lot of catch. Over time, the same effort can mean catch goes down. If effort is ramped up to get that amount of catch, problems develop. Rather than setting catch limits, it may be better to maintain effort limits and then monitor resulting catch. If the ACL is set at 75% of recent catch levels, for example, it is guaranteed that fishery management will entail considerable cost and effort. If effort is limited and catch goes down, then that provides information and suggests something other than fishing may be an influence. The tacit assumption with catch limits is that it's all being driven by fishing, which is not correct. The SSC also believes that the approach to setting limits in data-poor situations should be flexible and transparent so it is understandable to fishing communities.

**The SSC expressed concern with relying on Restrepo types of controls and recommends that all available approaches (including those presented by NMFS) be accepted if well documented. These would include Bayesian Belief Network-based meta-assessments which have been successfully used in data-poor situations. This approach utilizes a probability model enhanced by the incorporation of other stock assessment results and has been successfully used as an exploratory method for identifying stocks at risk in the absence of landings data.**

**The SSC also suggested that cyclical (pulse) fisheries are ill-suited to catch controls. If an ACL is necessary, then one approach is to maintain effort (input) controls with catch limit set to a high pulse level and then let effort management deal with rest of the time. Another approach to ACLs for pulse fisheries is to use multi-year averaging to manage if have there is enough data to capture the cycles over time.**

### **C. Stock Assessment Reviews and the Two-tier System**

The SSC heard a presentation on the latest incarnation of a two-tier process for development of stock assessments, a revised process called WPSAR. The process is called two-tier because independent review is required.

**The SSC recommends implementing the revised WPSAR process as presented at its 96<sup>th</sup> meeting. The SSC suggests that Dr. Robert Skillman be approached to be the panel chair for the first year. The SSC may suggest additional panel members.**



## Report to the Council from the 96<sup>th</sup> Meeting of the Scientific and Statistical Committee

Council Office Conference Room  
1164 Bishop Street, Suite 1400  
Honolulu, HI 96813

September 25-27, 2007

### Data Collection

#### 6. Data Collection

##### A. Federal MUS Fishery Permitting and Reporting Options (ACTION ITEM)

Council Staff listed five options for improving data reporting and collection in the Central and Western Pacific Region. It was noted that at the 122<sup>nd</sup> Council meeting, it was determined that the different regions under the Council's jurisdiction should develop their own data collection strategy. The bottomfish data collection program instituted by the Guam Fishermen's COOP was provided as an example. Nevertheless, significant data gaps remain for many of these fisheries. The SSC has commented on these gaps in the past with respect to all fisheries components, and has provided recommendations to the Council as recently as its last meeting. With respect to bottomfish, the SSC has previously recommended that all non-commercial trips taken by permit holders be reported in the interest of gaining complete scientific information.

Several options for resolving these gaps were discussed, including no action, requiring federal reporting of all federal management unit species catch in both state and local waters, and permitting for all fishery participants in state and federal waters.

It was noted that the option of "No Action" actually implies that the various regions would continue to develop and refine their existing data collection methodology independently. The comment was also made that option 2 (Comprehensive catch reports from all waters) would be duplicative of existing state and territorial efforts. The relative merits of the other options were extensively discussed, in particular how they duplicate existing data collection protocols, and whether or not existing data protocols are collecting data that are suitable for use in developing MSA mandated ACLs/AMs.

In light of the significant data requirements to develop ACLs, the SSC will need as much information as possible from all segments of the fishery for both state/territorial and federal waters. Thus, **the SSC supports Option 5 (i.e., region-wide permits and catch reports) and notes that such an option will require a serious Federal government commitment of human and financial resources. The SSC also believes that fishery**

**participants' compliance should be facilitated by an appropriate social science design, planning, and educational element with the goal that the requirements of this option are acceptable and achievable at the local level. This would include addressing the problem of dual permit and reporting requirements.**

#### **B. Western Pacific Recreational Fishery Data Collection Plan (ACTION ITEM)**

The Marine Recreational Information Program is being implemented to collect recreational fishery data, but serious concerns remain regarding sampling strategy as well as data quality issues. Because most MRIP priorities are East Coast-centric, efforts to develop a list of Hawaii-centered priorities are necessary in order to address these concerns. The SSC listened to various potential priorities for collecting recreational fishery data in the Western Pacific Region. These include the need for a HI-based statistician, a night/evening/sunrise pilot sampling project, the development of a boat-based survey, improving WPacFIN creel surveys, improving the Random Digit Dialing telephone survey, and a project to study the accuracy of visual and tactile estimates of fish weight by fishermen. With respect to the RDD, the Council staff noted that a problem with that survey was a communication gap between the local fishermen and the surveyors, who are typically from the US mainland.

The SSC discussed the merits of the projects listed in the data collection plan. Concerns were expressed about the effectiveness of the Random Digit Dialing portion of the survey. **The SSC has no objections to the proposed projects of the Western Pacific Recreational Fishery Data Collection Plan.**



## **Report to the Council from the 96<sup>th</sup> Meeting of the Scientific and Statistical Committee**

Council Office Conference Room  
1164 Bishop Street, Suite 1400  
Honolulu, HI 96813

September 25-27, 2007

### **Insular Fisheries**

#### **7. Insular Fisheries**

##### **A. Bottomfish Management**

##### **1. Bottomfish Risk Assessment Model (Action Item)**

The SSC heard a presentation by Jon Brodziak on the bottomfish risk assessment model being developed by PIFSC. The model was updated based on comments from the last SSC. The model simulated a number of bottomfish biomass trajectories to generate a risk based total allowable catch analysis. Brodziak noted a continued downward projection in bottomfish production.

**The SSC recommends the addition of a phase plot analysis that would allow managers to quickly assess stock status and look at simulations over longer time horizons.**

The SSC notes the prevalence of infeasible trajectories in the simulations presented by NMFS PIFSC. This is an inevitable result when managing by way of constant catch control. **The SSC asserts that these difficulties would be overcome if effort controls (constant harvest rate) were used instead.**

The SSC is encouraged by the convening of the CPUE standardization workshop to be held in November 2007. It is anticipated that the workshop will address CPUE-related issues raised in previous assessments.

**The SSC recommends the results of the workshop be incorporated into ongoing simulation efforts and the next bottomfish stock assessment.**

The SSC looks forward to reviewing the next iteration of the risk-based assessment model at its meeting in February.



## **Report to the Council from the 96<sup>th</sup> Meeting of the Scientific and Statistical Committee**

Council Office Conference Room  
1164 Bishop Street, Suite 1400  
Honolulu, HI 96813

September 25-27, 2007

### **8 .Rights-based Management**

Seth Macinko from the Department of Marine Affairs University of Rhode Island gave a presentation on rights-based management. The SSC heard this presentation with interest. Dr Macinko cautioned the SSC on the inappropriate uses and meanings of rights-based management by economists as opposed to the legal community, and the practical and philosophical issues related to ITQs. The latter include inadequate consideration of fisheries impacts on ecosystems, and potential for inappropriate initial allocation of ITQ privileges.

#### **9 Pelagic Fisheries**

##### **A. Longline Management**

##### **1. Hawaii Swordfish Fishery Effort Options (Action Item)**

Paul Dalzell made a presentation on the components of a Draft SEIS in response to an HLA proposal to modify the current swordfish longline management regime. This included the following topics under which the SSC has made comments:

##### *Topic 1: shallow-set effort limit*

**The SSCs preferred position on having turtle populations influence fishing effort limits would be to base effort set limits on the current status of the swordfish population. This option would imply that turtle mortalities are still controlled by hard caps on the level of total turtle takes. Therefore another option needs to be added to the list under this topic.**

**Another suggestion is that the current fleet composition should be taken into account, such as the number of vessels that have moved into the tuna fishery and no longer target swordfish, or do so on a seasonal basis only.**

##### *Topic 2: Fishery participation*

**Due to potential social impacts, as reflected by fishermen's concerns with previous set certificate allocation, the options in this topic should be considered by the Council in the SEIS.**

##### *Topic 3: Sea turtle interaction hard caps*



**The SSC favors retention of hard caps for turtles. However, this issue is beyond the scope of the proposed action. Therefore the SSC recommends eliminating this issue from consideration.**

*Topic 4: Sea turtle interaction assessment methodology*

**The SSC favors the continuation of a 1-year Incidental Take Statement. However, this issue is beyond the scope of the proposed action. Therefore the SSC recommends eliminating this issue from consideration.**

*Topic 5: Time/area closures*

**This issue is beyond the scope of the proposed action. Therefore the SSC recommends eliminating this issue from consideration.**

*Topic 6: Sea turtle avoidance incentives*

**The SSC favors no individual avoidance incentives. However, this issue is beyond the scope of the proposed action. Therefore the SSC recommends eliminating this issue from consideration.**

*Topic 7: Observer coverage*

**The SSC favors the continuation of 100% observer coverage. However, this issue is beyond the scope of the proposed action. Therefore the SSC recommends eliminating this issue from consideration.**

**1(a) Turtle population assessment**

Melissa Snover presented draft assessment results on the potential impacts of the HLA proposal. The SSC heard the presentation with interest and offered the following comments which they felt should be considered in a further revision.

**The SSC believes that the draft model has the following limitations:**

- **The model uses a questionable geographic structure where a putative northern sub-stock has not been verified and in fact is inconsistent with known nesting populations in Japan. A pre-publication manuscript can be provided to the author on request.**
- **The model uses post-hooking-release mortality probabilities that are not empirically determined and in fact inconsistent with best available and published estimates.**
- **The model does not account for known environmental factors influencing the population dynamics such as sea surface temperature.**

- **This model does not incorporate density-dependence and the model assumes only exponential growth, which limits its applicability in this case. Furthermore the population growth rate used in the model is lower than estimated for other turtle populations.**
- **The model does not account for sampling error because it is not fitted to observed data. Therefore the model cannot be validated.**
- **The model is only applicable to time series with either monotonically decreasing or increasing trends but many of the Japanese nesting populations show oscillating trends.**
- **The model involves arbitrary assumption of a 3 year running-sum width that is not consistent with the known remigration interval for loggerheads in the Pacific (ca. 5 yr) and the weights used are highly sensitive to choice of window width**
- **The analysis errs when fractional individuals are rounded up to whole individuals. The fractions should be dealt with in a probabilistic framework and folded into the quasi-extinction probabilities.**
- **The assumption that adults are taken in the HI fishery is incorrect; they are juveniles and hence survival to adulthood needs to be incorporated into the calculations.**
- **Overly conservative assumptions were made throughout the analysis in the name of adopting the precautionary approach, however, this biases the final output. In fact, the precautionary approach calls for the use of best science in the construction of parameter estimates while acknowledging uncertainty.**
- **The SSC recognizes that clarification of the regional population structure of the Japanese loggerhead stock is essential for development of robust management procedures for this stock and for evaluating the potential impact of anthropogenic hazards such as pelagic longline fisheries. However, published literature does not support any conclusion about regional population structure, mainly due to limited sampling of nesting populations in Japan. The SSC suggests that the Council's Turtle Advisory Committee consider a comprehensive genetics study of the nesting population structure of the Japanese loggerhead stock. This study should comprise sampling from at least 15 nesting populations covering the full geographic nesting range of the Japanese stock.**

The SSC looks forward to reviewing a revised version of this analysis at its next meeting.

## **2. Annual Catch Limit Options**

This item was discussed under item 5B of the SSC agenda

## **3. Marianas Islands Longline and Purse Seine Closed Area Options (Action Item)**

There is emerging interest in the development of locally based longline fishing in the waters of Guam and CNMI. Further, there is the potential for purse seine vessels to begin fishing in the US EEZ of the Mariana Archipelago. Consequently there is concern regarding gear interaction and catch competition between these larger scale fisheries and existing locally based small scale fisheries. Three sets of options were presented for possible management actions to mitigate such interactions. In all cases the options involved exclusion zones at varying distances around Guam and the islands of CNMI in increments of 25 nmi. up to 100 nmi. In discussion it was mentioned that there are some unfortunate mismatches between the proposed exclusion boundaries and location of some banks that are popular fishing spots for the locally based fisheries.

**The SSC suggests that the Council consider at least one additional option of a 30 nmi distance which would protect popular banks from large-scale fisheries. This 30 mile distance would not be onerously far offshore for possible development of local longline fishing and yet would fully encompass historic fishing grounds for the troll fishery.**

**The SSC also suggests that closed area exclusion zone options for longliners and purse seiners be consistent for Guam and CNMI.**

**With respect to the possibility of purse-seining in the US EEZ around the Marianas, the SSC suggests that the Council direct staff to investigate options for limiting the use of FADs.**

#### **4. American Samoa Program Modifications (Action Item)**

The Council recommended that a review of the American Samoa longline fishery management program be conducted and that this review address the following issues:

**Issue 1.** Maintenance or modification of the current 50 nautical mile area closure for pelagic fishing vessels greater than 50 ft around the islands of the American Samoa archipelago.

**The SCC considered 4 closure options and supported Option 2 that would provide an opportunity to assess the management action over the next 2 years.**

*Option 2: Temporarily modify the area closure to 25 nm for 2 years. Under this alternative, the Council would temporarily reduce the area closure from 50 nautical miles to 25 nautical miles. The Council would also review the status of the fishery every two years to determine whether the closure should be maintained at 25 miles or return back to 50 nautical miles.*

**Issue 2.** Review options to develop a near-shore longline area closure around Tutuila Island to protect the FADs from longline gear conflict.

The SSC considered options to address potential conflict between troll fishermen and longline vessels operating in the waters near 9 FADs. The SSC noted that the Council had decided against implementing any closure around FADs and instead had recommended that the American Samoa DMWR deploy 1-2 FADs around Pago Pago for the exclusive use of vessels utilizing non-longline gear. **The SSC did not object to the Council position and noted that this was best reflected in Option 4.**

***Option 4: Previous Recommendation: Deploy new FAD or FADs specifically for trollers. Under this alternative, new FADs would be deployed by DMWR for exclusive use of non-longline fishing vessels.***

**Issue 3.** The reopening of the application process for American Samoa longline limited entry permits.

The SSC determined that this was not an issue for the SSC to consider.

**Issue 4.** Whether the Council should review individual permit applications that had been denied.

The SSC determined that this was not an issue for the SSC to consider.

**Issue 5.** Whether the RA should have greater discretion in reviewing and approving permit applications that may have initially been denied, based on guidance from the Council.

The SSC determined that this was not an issue for the SSC to consider.

**Issue 6.** Explore options to revive the alia longline fishery.

This issue is being addressed through a larger project pertaining to fisheries development in American Samoa and so was not considered further by the SSC.

**Issue 7.** Consider eliminating the use-or-lose provision for permits in the American Samoa longline limited entry program. The intention of the issue was to preserve the potential for future revival of the alia fishery.

**The SSC considered 4 options and supported Option 1 in combination with Option 2 requiring a landing status report, which would incorporate associated information from fishermen on why they had or had not met the landing requirements.**

***Option 1: No Action. Under this option the Council would not eliminate the provision requiring American Samoa longline limited access permit holder to make a minimum landings over three consecutive years in order to retain their permit. Under this option each permittee will continue to be required to maintain for three consecutive calendar years, a minimum landing of at least 1000 lbs for Class A and Class B permits and 5000 lbs for Class C and Class D permits.***

***Option 2: Recommend a landing status report be conducted at the end of calendar year 2007. Under this option, at the end of calendar year 2007, NMFS would determine the number of vessels by size class that have not made the requisite minimum landings for permit retention and report the information back to the Council in 2008.***

**Issue 8.** Modify the American Samoa longline limited entry permit regulations to clarify that the only foreigners that can hold limited entry permits are Samoans.

**SSC believes that the issue of foreigners holding Am Samoa limited entry permits is a matter for Council deliberation.**

## **B. Non-Longline Management**

### **1. American Samoa Purse-Seine Closed Areas Options (Action Item)**

Paul Dalzell presented two alternatives concerning purse seine closed areas in American Samoa:

1. No action (maintain the current 50 mile exclusion zone)
2. Exclusion of purse seine fishing throughout the EEZ.

In discussion, the SSC noted that the objective of purse seine closed areas is to avoid local fishery interaction between industrial purse seiners and the locally-based longline fleet and small-boat troll operations. Historically, only occasional purse seine sets (probably free school sets) have occurred in the EEZ and the catch levels recorded would not pose any concern for the local fleets, particularly the longline fleet, which targets a different species, albacore, to the species caught by purse seine (predominantly skipjack and yellowfin). It was also noted that the current 50 mile exclusion zone is sufficient to avoid direct interaction with the troll fleet, which operates close to shore. The SSC therefore expressed some support for alternative 1 (no action).

**The SSC recommended that alternative 1 (no action) be adopted, with the addition that purse seine FAD sets should be prohibited in the US EEZ around American Samoa.**

### **2. Non-Longline Pelagic Fishery Management Options (Action Item)**

Paul Dalzell outlined alternatives under consideration for non-longline management in Hawaii , noting that control dates have been established for non-longline fisheries on Cross Seamount, non-longline fisheries generally in the Hawaii EEZ and the charter boat fishery in Hawaii.

In discussion of the various alternatives, it was noted that:

- Additional work was required to understand declining trends in charter-boat CPUE (overall and for key species), e.g. have the objectives of charter-boat operators changed towards catching more easily available species?
- There appears to have been changes in the level of State catch reporting in the offshore handline fishery through the catch report and/or dealer systems, possibly linked to more stringent enforcement requirements over the past three years.

**The SSC recommends that federal permitting and reporting be required for these fisheries, noting that this would be required to support limited entry programs should they be introduced as a means of managing ACLs.**

## **C. American Samoa and Hawaii Longline Quarterly Reports**

Russell Ito presented a report on the second quarter operations of the Hawaii longline fleet. There was no report on the American Samoa longline fishery but a summary report was included in SSC briefing materials

## **D. Stock Assessment Review**

## **1. WCPO Yellowfin Tuna**

### **2. Regional stock status indicators**

The stock assessment of yellowfin tuna was presented to the SSC by John Hampton. The current assessment is slightly more optimistic than previous assessments although there is still about a 50% probability that overfishing ( $F_t/F_{msy} > 1.0$ ) is occurring. Hampton also presented on regional stock status indicators which may allow management to focus on sub areas, and which may be more appropriate because of the spatial heterogeneity among these areas.

### **3. NP Striped Marlin**

In the absence of a formal presentation of the North Pacific striped marlin assessment conducted by the ISC, the SSC reviewed the ISC report and the striped marlin power-point. The SSC noted the conclusion that striped marlin appear to be heavily exploited, with long term declines in spawning stock biomass and annual recruitment. It was also noted however, that the declining recruitment trends may be driven by an initial spike in recruitment at the beginning of the data time series. There was also reference to a recent study which looked at striped marlin CPUE by 5 deg square, and which indicated a striped marlin hot-spot off the coast of Baja. This area was the focus of Japanese longline fishing effort which eventually moved for reasons not related to striped marlin stock condition. Because the Japanese fleet moved away from the hot spot, striped marlin catches declined markedly resulting in a region-wide decline in CPUE for the North Pacific. Consequently, future analyses might consider these kind of fishery dynamics. It was also noted that it might be instructive to conduct a spatially disaggregated assessment between eastern and western NP striped marlin using MULTIFAN-CL. Also referenced were an assessment on SW Pacific striped marlin and the stock structure of striped marlin, which suggested separation of north and south Pacific striped marlin in the western Pacific, but that this separation was not as pronounced in the Eastern Pacific.

**The SSC calls the Council's attention to the recent average of about 1 million lbs of striped marlin landed by the Hawaii longline fishery, 67,000 lbs landed by the commercial troll fishery, and an unknown volume by the recreational fishery. In light of the current stock assessment of the billfish working group of the ISC, the MSRA ACL requirements may necessitate a substantial reduction in these landings in the future.**

### **4. Fishing Effort Standardization**

Keith Bigelow presented a summary of work on fishing effort standardization conducted by the Pacific Council's Highly Migratory Species Management Team (HMSMT) and the Advisory Subpanel (HMSAS) in response to North Pacific albacore conservation resolutions of the Western and Central Pacific Fisheries Commission and Inter-American Tropical Tuna Commission. These resolutions require fishing effort for North Pacific albacore not to be increased above recent levels. The Highly Migratory Species Management Team (HMSMT) and the Advisory Subpanel (HMSAS) were tasked to identify appropriate measurements of fishing effort that could be used by the U.S. to comply with the resolutions. It was noted that similar exercises might be conducted for Western Pacific fisheries if conservation resolutions from the Western & Central Pacific Fishery Commission (WCPFC) included fisheries other than longline and purse seines.

## **E. International Fisheries**

### ***IATTC Meeting***

Paul Dalzell noted that the IATTC meeting in June 2006 had not made any tuna conservation recommendations and that these would be the focus of an extraordinary meeting of the Commission in October. Rick Deriso stated that one interesting outcome of the June meeting was the agreement on a proposal to allow a single vessel to conduct experimental fishing with a sorting grid (a plastic panel to allow fish to escape) during the August-September purse seine closure period.

### ***WCPFC Science Committee Meeting***

Keith Bigelow gave a presentation on the 3<sup>rd</sup> WCPFC Scientific Committee meeting held in Honolulu during August 2007. Some highlight points included: (1) skipjack account for ca. 70% of regional catch, (2) purse seine fisheries (mainly skipjack) worth ca. \$US1.6B, (3) YFT assessment estimates ca. 47% overfishing probability but < 6% overfished probability, (4) 2008 priority stock assessments include bigeye, albacore and skipjack.

The SSC thanks Keith Bigelow for his informative summary of the WCPFC/SC3 meeting.

### ***Bellagio II***

Paul Dalzell gave a presentation on the Bellagio II, which was a workshop for Pacific sea turtle conservation initiative held in Kuantan, Malaysia in July 2007. The key focus of that meeting was to develop a framework for a business plan to secure long-term funding for the conservation of sea turtles (specifically leatherbacks) in the western Pacific. Business Plan expected to be completed by November 2007.

The SSC thanks Paul Dalzell for his informative summary of the Bellagio II meeting.