SIXTH MEETING OF THE NORTHERN COMMITTEE
SUMMARY OF OUTCOMES

The sixth meeting of the Western and Central Pacific Fishery Commission (WCPFC) Northern Committee (NC) was held September 7-10, 2010, in Fukuoka, Japan. The NC meeting was preceded by a one-day workshop on biological reference points. Council staff has summarized key results of these meetings below.

Workshop on Biological Reference Points

Canada presented a paper, Developing a fishery management regime for stocks managed by the Northern Committee (WCPFC-NC6-DP-02). The paper presents a management framework similar to what is found in Council fishery management plans, although in more generalized form.

As background to the discussion the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) provided a paper compiling ISC Working Group descriptions of candidate reference points for northern stocks (WCPFC-NC6-WP-09).

Broadly speaking, there was a difference of opinion between the U.S. and Japan on what types of reference points are appropriate. The U.S. position was that reference points should be related to maximum sustainable yield (MSY), at least for fishing mortality (F) based reference points. The U.S. argued that MSY-based reference points are consistent with both the U.N. Fish Stocks Agreement (UNIA) and the WCPF Convention, Article 6. Japan generally favored reference points based on past observed stock conditions, such as minimum observed biomass (Bloss) and the associated fishing mortality rate (Floss). Throughout there also seemed to be some confusion on how limit reference points (LRPs) function, in terms of a management response. The NC Chair asserted that all fishing must cease if an LRP is exceeded while the U.S. argued that a variety of responses are possible and ideally any response is established in advance (i.e., a “control rule”).

For North Pacific albacore tuna, discussion focused on the current interim reference point, the fishing mortality rate that prevents the spawning stock biomass (SSB) from declining below the average of the 10 lowest values for the spawning stock biomass (FSSB-AHTL). The U.S. recommended that this be replaced with a comparable reference point related to spawning stock biomass, e.g., F%SPR as a proxy for FMSY. The U.S. pointed out that such a reference point is more statistically robust, related to MSY, and less dependent on subjective decisions, as is the case with determining the value of the interim reference point (e.g., the length of the projection period). In contrast, Japan argued for a less precautionary interpretation of the interim reference point. The value of FSSB-AHTL is derived from simulation framework using a 25-year projection.

1 Meeting materials are available at http://www.wcpfc.int/meetings/2010/6th-regular-session-northern-committee.
period. Japan argued that the projection period should be reduced to 10 years. Workshop participants agreed that the Canadian management regime proposal should be used for North Pacific albacore, but no specifics needed to operationalize such a framework were discussed.

A similar difference of opinion occurred with respect to Pacific bluefin tuna. Japanese scientists favored reference points such as $F_{\text{med}}$ and $F_{\text{loss}}$, which are relatively insensitive to estimates of natural mortality ($M$). They argued that such insensitivity to estimates of other parameters would result in a framework that avoids management responses disruptive to fisheries. In addition they presented time series data indicating that recruitment was not adversely affected by periods when SSB was low. Here again the U.S. favored MSY related reference points and also did not consider sensitivity to estimates of $M$, which can reflect changing understanding of stock productivity, necessarily a bad thing.

North Pacific swordfish seemed the least problematic candidate for the adoption of reference points, both because the last stock assessment results can be compared to MSY-based reference points and the stock is in good shape (i.e., $B_{2006}/B_{\text{MSY}} \approx 1.3$ and $F_{2006}/F_{\text{MSY}} \approx 0.69$), meaning that a management response would not be triggered in the near future. However, in subsequent discussions during the NC meeting no reference points were adopted for this stock.

**Pacific Bluefin Tuna**

The NC adopted a conservation and management measure (CMM) (attached) to replace CMM 2009-07, which expires at the end of this year. The NC recommendation will be considered by the Plenary in December. Much of the discussion revolved around Japan putting pressure on Korea to accede to a withdrawal of the exemption for fisheries in the Korean EEZ that is in CMM 2009-07. Surprisingly, Korea agreed to remove the exemption, perhaps because their head of delegation is new and relatively inexperienced. After this concession, Korea placed a reservation on the proposed CMM, indicating that further discussion will likely occur on the margins of the December Plenary meeting. Korea also essentially admitted that their coastal purse seine fleet is effectively targeting bluefin, rather than it being bycatch in mackerel sets. This is a departure from their previous position and implies that these bluefin catches could be effectively limited. On the other hand, Japan successfully retained the exemption for their “artisanal” fisheries that catch bluefin. Japan argued that they are implementing measures to allow effective monitoring and management of this fishery, suggesting that the exemption would not carry on beyond the life of the proposed CMM, which is for 2011 and 2012 (the next Pacific bluefin stock assessment is due in 2012). It should be noted that catches in Japan’s artisanal fisheries are probably not insignificant, possibly comparable, for example, with Mexico’s catch.

Per the discussion above on the reference points workshop, no progress was made on adopting reference points for Pacific bluefin. The U.S. was willing to accept $B_{\text{loss}}$ as a biomass-based reference point (comparable to the minimum stock size threshold, MSST, under National Standard 1 Guidelines), but only in combination with an MSY-based fishing mortality based reference point, such as one from the $F_{\%\text{SPR}}$ family of reference points. In the absence of agreed upon reference points the U.S. recommended that future ISC stock assessments include MSY-based results.
North Pacific Albacore Tuna

The NC did not adopt a conservation measure to replace CMM 2005-03, as had been proposed last year (but not adopted at the Plenary). The U.S. argued that it is better to wait until NC7 in 2011 to develop a replacement CMM, because the results of the next North Pacific albacore stock assessment will be available by that time.

Japan proposed F_{SSB-ATHL} with a 10-year projection period as a “precautionary” reference point and B_{loss} as an LRP. The U.S. did not agree to Japan’s proposed change in the interim reference point (shortening the projection period) and so it remains unchanged.

The NC confirmed that it will continue to use “the interim management objective for North Pacific albacore,” agreed upon at NC4 (Attachment J to the NC4 Report), with the following changes to establish a clear time line for management actions:

1. The interim management objective for North Pacific albacore is to maintain spawning stock biomass above the average level of its 10 historically lowest points (“the Level”). The fishing mortality rate that would likely cause SSB to fall below the Level is referred to as the “interim reference point” (IRP).

2. In the event that the ISC finds that the current F exceeds the IRP, the NC shall, at its next meeting, formulate conservation and management recommendations that are designed to reduce F below the IRP within 1 year of the adoption of measures. In formulating such measures the committee shall consider relevant socioeconomic factors and any relevant information from the ISC, including its latest conservation advice.

3. The interim management objective and IRP will be reviewed every 3 years to develop more permanent objectives and reference points that fulfill the provisions of the Convention, in particular Article 6.

4. Achievement of the interim management objective will not preclude the NC from formulating and recommending conservation and management measures that would achieve additional objectives, particularly those stipulated in the Convention or otherwise adopted by the Commission.

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1 Here, “historically” means the time series of annual SSB levels from 1996 through 2005, as estimated in the latest formal stock assessment of the ISC.

2 Here, “likely” means greater than 50 percent probability.

Other Matters

Gerard DiNardo (NMFS Pacific Islands Fisheries Science Center) reported on the activities of the Northern Committee Striped Marlin Working Group (not to be confused with the ISC’s working groups). The U.S. and others have conducted gear-related research on methods to reduce striped marlin bycatch in longline fisheries. However, Dr. DiNardo felt that the Working Group had insufficient financial and technical support; in addition, Dr. DiNardo announced he is resigning as Working Group Chair because he is the incoming Chair of the ISC. For these reasons the NC agreed to abolish the working group but also that the NC should continue to work on striped marlin (although it is not formally a “Northern Stock”). There was discussion of preparing a CMM at NC7, but the U.S. noted that a proposed CMM may emerge from the
upcoming Technical and Compliance Committee (TCC) meeting, for consideration at the Plenary.

Japan submitted a proposed CMM, *Japanese Proposal on Implementation of the ROP [Regional Observer Program] by Vessels Fishing for Fresh Fish in the Area North of 20 Degrees North*. The measure appears principally aimed at Chinese Taipei’s (Taiwan’s) large fleet of small longline vessels. Chinese Taipei argued for exemptions in various forms (crew size, vessel size) from an observer coverage target of at least 5 percent. However, the draft CMM in its final, agreed to form states only that a “CCM may submit [a] request to the NC7 for exemptions from … [at least 5 percent coverage of the effort of each fishery] … with reasons and data collection programs equivalent to the ROP.”

The NC work program includes the idea of some form of independent peer review of the North Pacific albacore stock assessment, and ISC stock assessments generally. It appeared that Japan and other delegations are generally unfamiliar with the cost and requirements for peer review. The U.S. outlined the potential high cost of a Committee of Independent Experts type review and suggested alternatives that might be less costly while preserving the independence of the review.

Notable objectives for next year’s meeting (NC7) include:

- Obtain and review full assessment for North Pacific albacore and consider appropriate management action
- Consider and set up interim management objective and reference points for Pacific bluefin tuna, based on ISC advice
- Obtain and review full assessment for striped marlin and consider appropriate management action
- Encourage voluntary contribution for NC’s list of priority scientific projects (note that an account to hold such voluntary contributions, managed by the Secretariat, was authorized at WCPFC6)
- Review scientific advice from the ISC, if any, and consider management options for blue shark and mako sharks (note that ISC10 abolished the Bycatch Working Group and replaced it with a Shark Working Group, with a preliminary objective of conducting stock assessments for these shark species)

PFMC
09/13/10
The Western and Central Pacific Fisheries Commission (WCPFC),

Recognizing that WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM2009-07);

Recalling that the WCPFC6 requested the Northern Committee to develop a new draft CMM applying to the Korean EEZ for consideration at the WCPFC7;

Taking account of the conservation advice from the 10th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock, which highlighted the importance that the level of F is decreased below the 2002-2004 levels, particularly on juvenile age classes;

Also recognizing that the trend of spawning stock biomass has been influenced substantially by the annual level of recruitment and that collecting of fisheries data in an accurate and timely manner is critically important for the proper management of this stock, and;

Further recalling that paragraph (4), Article 22 of the WCPFC Convention which requires cooperation between the Commission and the IATTC to reach agreement to harmonize CMMs for fish stocks such as Pacific bluefin tuna that occur in the Convention Areas of both organizations;

Adopts, in accordance with Article 10 of the WCPFC Convention that:

1. The interim management objective for Pacific bluefin tuna is to ensure that the current level of fishing mortality rate is not increased in the Convention Area. Initially, control over fishing effort will be used to achieve this objective as follows:

2. The Commission Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) shall take measures necessary to ensure that total fishing effort by their vessels fishing for Pacific bluefin tuna in the area north of the 20 degrees north shall stay below the 2002-2004 levels for 2011 and 2012, except for artisanal fisheries. Such measures shall include those to reduce catches of juveniles (age 0-3) below the 2002-2004 levels.
3. CCMs shall also take measures necessary to strengthen data collecting system for Pacific bluefin tuna fisheries in order to improve the data quality and timeliness of all the data reporting;

4. CCMs shall report to Executive Director by 31 July 2011 and 2012 measures they used to implement paragraphs 2, 3, 6 and 7 of this CMM. The Northern Committee shall annually review reports CCMs submit pursuant to this paragraph;

5. The Northern Committee at its Regular session in 2012 shall review this CMM based on the new ISC stock assessment for Pacific bluefin tuna scheduled in 2012 and take appropriate actions;

6. The WCPFC Executive Director shall communicate this Conservation Management Measure to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna and request them to take equivalent measures in conformity with paragraphs 2 and 3 above;

7. To enhance effectiveness of this measure, CCMs are encouraged to communicate with and, if appropriate, work with the concerned IATTC contracting parties bilaterally.

8. The provisions of paragraph 2 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for northern Pacific bluefin tuna is limited, but that have a real interest in fishing for the species, that may wish to develop their own fisheries for Pacific bluefin tuna in the future.

9. The provisions of paragraph 8 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries.