

HIGHLY MIGRATORY SPECIES ADVISORY SUBPANEL REPORT
REGULATORY ACTIVITIES AND INTERNATIONAL UPDATE

Bluefin Commercial and Recreational Fishery Comments

Eastern Tropical Pacific – Inter-American Tropical Tuna Commission (IATTC)

The HMSAS agrees with the NMFS on the retention of the 500 metric ton (m/t) limit for US commercial harvest.

The HMSAS believes that there should be no other prohibition of all catch (commercial or recreational) of Pacific Bluefin, or the imposition of Pacific Bluefin size limits. These measures will not solve the problem.

Western Pacific – Western Central Pacific Fishery Commission (WCPFC)

The HMSAS supports that part of the WCPFC Conservation Measure 2013-09, namely that the CCMS take further actions to substantially reduce the take of juvenile Bluefin particularly ages 0-2 year.

During the June 5, 2014 meeting of the General Advisory Committee (GAC) to the US Commissioners of the IATTC, the NMFS advised that the Japan's Fisheries Agency has publicly announced a plan to cut the catch of juvenile PBF by half of the annual average harvest in the years 2002-2004, starting in 2015. HMSAS advises the Council to carefully examine the Pacific Bluefin catch statistics of the Japanese Bluefin fishery for the period 2002-2004. Based on Appendix II: Pacific Bluefin Catches, a document provided to the GAC by the NMFS, the Japanese purse seine juvenile Bluefin catch for 2002, 2003, and 2004 was as follows: 8,903 m/t, 5,768 m/t and 8,257 m/t respectively. A 50% reduction of this one of six segments of their harvest is a significant number of removals in trying to rebuild a stock.

A Note on Potential Domestic Action

Any domestic restrictions on recreational Bluefin catch would be premature in the absence of international agreements aimed at managing the stock. The US recreational catch is substantially less than 1% of the total Pacific-wide catch of northern Bluefin tuna. The history of international action on tuna has exempted such catches as inconsequential and unnecessary to the management of these fish. We advise that the Council recommend that this approach be continued.

North Pacific Albacore Precautionary Management Framework

There appears to be considerable confusion on what issues are before the Council concerning how to go forward with North Pacific albacore precautionary management advice. We reference three documents:

1. The US Precautionary Management Concept to the Northern Committee (see Agenda Item K.3.a, Attachment 3, March 2014, also attached)

2. The NMFS proposal to the IATTC (Agenda item E.1.b, Supplemental REVISED NMFS Report 4, June 2014)
3. The comparison of Council's previous advice to the US delegation to the Northern Committee) and the NMFS proposal to the IATTC on albacore precautionary management (Agenda item E.1.a, Supplemental Attachment 1, June 2014).

The HMSAS advises that The US Precautionary Management Concept Paper (item 1 above) replace the previous Council advice to the US delegation to the Northern Committee in 2013 in this comparison because it has been vetted and replaces the Council's advice.

The HMSAS wants the Council to keep documents 1 and 2 (above) in mind as we go through our report.

From the perspective of the harvesters as expressed by the HMSAS, there are two major concerns with how the precautionary management program is progressing in the ETP under the IATTC and in the western north Pacific under the WCPFC-NC as guided by the ISC and its Albacore Working Group.

1. Need For Closer Consultation between the IATTC and the WCPFC-NC

There seems to be an unexplained disconnect between the IATTC and the WCPFC-NC approach to the precautionary management of north Pacific albacore. This could lead to the disastrous situation with two different management regimes in the Pacific on the same stock.

2. Chinese Albacore Fleet Expansion

One of the most serious problems facing the U.S. albacore fleets, whether troll, pole and line, or longline, is the huge expansion of effort (estimated to be over 400 vessels) of the Chinese fleet of longline vessels that fish for albacore. Industry publications, and even the general press, have been reporting how disruptive this highly subsidized Chinese fleet has been to the resource, the economic return, and the market for albacore. The Western Pacific Fisheries Management Council is meeting this week and having a conference on what can be done to avert the disruption of the American Samoan, Cook Islands, and Fijian longline albacore fleets south of the equator. As this problem may exist or spread to the north Pacific, we request that the Council send a letter to the Secretary of Commerce and Secretary of State about this problem, which needs their immediate attention. The Secretaries should instruct the U.S. Sections to the international tuna RFMOs of which the U.S. is a member to find a solution for the potential Chinese illicit expansion, which will defy at least the IATTC and WCPFC albacore resolutions on effort control. Equally important is for the U.S. Sections to call on the Asian fisheries for all tunas in the Pacific to fully and accurately report their catches and effort in a timely manner.

Lack of Timely and Accurate Effort and Catch Data from Asian Countries

Another area of concern which should be called to the Secretaries' attention by the Council is the greatly increased catch and effort. Specific concerns include:

1. EU (Spanish) fleets that target swordfish in the IATTC Convention area, and may be taking a large bycatch of albacore, which is thought to go unreported.

2. Unknown tuna harvests of the Japanese artisanal coastal fisheries.
3. Catch and bycatch of the Chinese high seas and domestic fleets of tunas, particularly albacore.
4. As mentioned above, the launching of an estimated 400 longline albacore vessels by China.
5. Lack of information on albacore bycatch of other Asian fleets in the Pacific.

Biological Reference Points (BRPs), Target Reference Points (TRPs), Limit Reference Points (LRPs), and Harvest Control Rules (HCRs)

The HMSAS commends and supports the paper by the albacore troll and pole and line harvesters' science consultant, Dr. Vidar Weststad. Dr. Weststad is a member of the ISC Albacore Working Group and a former member of the Council's SSC. He is intimately familiar with albacore assessments, BRPs and HCRs. His paper (attached) should be read to help explain these complicated concepts in the context of the albacore fisheries. The HMSAS agrees that the current best scientific information is that which has been accumulated by the ISC-AWG, as reported to the WCPFC-NC over the last several years. However, *the most important and critical goal of the Council should be to ensure that the WCPFC and the IATTC eventually agree on the same BRPs, TRPs, LRPs, and HCRs.* To this end the HMSAS supports the purpose of the NMFS West Coast Region's draft resolution, which is to encourage the IATTC scientific staff, the ISC, and the WCPFC-NC to work together in their research, evaluation, and recommendations of these management tools. The draft contains many technical scientific terms which may need to be clarified (for example the chart at the end of paragraph 1 on page 2, suggests a review of Limit Reference Points where $h = 0.75$, and yet the ISC Albacore Working Group apparently has utilized $h = 0.90$). An example of clarification might be the inclusion in the review process of an operating model as suggested by the SSC. The HMS-AS does not believe it is qualified to make such scientific refinements and would suggest the Council obtain the advice of the HMS assessment biologists on the SSC.

Council Focus Should Be On NMFS Proposal and Attachment G to WCPFC-NC 9 Report

The HMSAS sees no rationale for returning to the staff paper resulting from the June 2013 Council instructions and comparing it to the NMFS draft resolution. That paper was more than 10 pages long. It was condensed into a 2 page document after many discussions between PFMC representatives, PIRO representatives, the U.S. Section, and harvester representative on the U.S. Delegation to the WCPFC-NC in September 2013. This document was attached to the official report of the WCPFC-NC entitled "Precautionary Management Framework for North Pacific Albacore (USA Concept Paper)" as attachment G. The report of the Ninth meeting of the NC, including attachment G, was approved by the WCPFC in December 2013 and was available to both the ISC and the IATTC-SC. After a review by the HMS-AS of Attachment G and the draft resolution submitted by the West Coast Region of NMFS the two documents do not appear to be in conflict. Important harvest data from other countries as described above is unknown. The US Concept Paper to NC 9 proposed a Harvest Control Rule (HCR). The HCR states that any F-limit that is exceeded for one year or any spawning stock size that decreases below the B-limit at any time will be dealt with at the next NC meeting or intersessionally, if warranted, with

conservation and management measures that will correct the situation. The HMSAS believes the RFMOs are progressing appropriately with regard to albacore conservation and management.

Conclusion

It is the understanding of the HMS-AS that the ISC-AWG preliminary 2014 assessment indicates the albacore stock is healthy and is not currently subject to overfishing. Our advice to the Council is to recommend to the U.S. Sections to the IATTC and the WCPFC that they should:

1. Work to obtain better catch and effort information;
2. Concentrate on their scientists and scientific advisers working more cooperatively with the goal of establishing a seamless precautionary management across the north Pacific;
3. Stop the rampant increase in effort by non-US vessels which ignores existing WCPFC and IATTC resolutions which have been in place for almost 9 years.

North Pacific Albacore Management – Faith or Science Based? – By Dr. Vidar Weststad

There is a growing debate as to how to best manage albacore in the North Pacific Ocean. The question basically relates to the need for control of fisheries and to what extent and how to institute. For background a U.S. fisherman must understand he is foremost subject to the control of the U.S. government. Secondly, he falls under the control of two regional fishery management organizations (RFMOs): in the eastern Pacific the Inter American Tropical Tuna Commission and to the west of 150 W the Western and Central Fisheries Commission (WCPFC) and its subunit the Northern Committee. All of these organizations have proposals in place designed to control fisheries within their jurisdiction. The basic items under discussions are biological reference points (BRPs) and Harvest Control Rules (HCRs). A BRP establishes the level of fishing that can occur without impairing the reproductive capacity of a stock, essentially not reducing future amount of fish available for harvest. A HCR establishes the rules that will be followed to not exceed the BRP; this can be either through effort controls such as limiting the length of days at sea, or via catch control – trip limits or quotas. Both BRPs and HCRs are valid and valuable management controls when properly applied. The problem with multiple proposals is which one is the properly applied one. That is a difficult question and one that WFOA members should pay attention too as it is a major controlling factor relative to your future operations.

The situation is that the stock assessment and evaluation of harvest levels has primarily taken place within the Albacore Working Group (AWG) of the International Scientific Committee, which provides stock abundance, and harvest level advice to the two RFMOs (IATTC and WCPFC). The AWG produces a stock abundance assessment every three years, the latest to be released in July, and provides analysis of proposed harvest levels for management. Until recently most of the interaction has taken place with the NC of the WCPFC. After several years of refining information to the NC there are several options for them to select for target harvest level of albacore in the North Pacific. Within the past year the IATTC has come forward with another proposal for a harvest level. It is at the lowest level of those examined by the AWG and when presented to the AWG there were several questions raised on the model used and parameters utilized.

In addition to the RFMOs the Pacific Fisheries Management Council is formulating their own set of measures to control harvest in the U.S. 200 mile zone should it be determined that international management is ineffective. It's not clear who makes the determination, U.S. Government, Environmental organizations, or the courts. So, it's shaping up that there could be three competing sets of rules put in place that one would have to comply with while fishing.

With regard to potential harvest levels, the best available science is the BRPs produced by the AWG and other proposals have not undergone the same level of rigorous scientific review. I think it would be best for fishermen to realize that with most things in life the best result lies in the middle of the range of potential choices and provides the best long-term alternative.

From my experience there has been great progress in the determination of stock abundance and harvest level and a good understanding of the key parameters governing abundance of albacore, and I'm certain that we will make further refinements to better estimate biological data and stock abundance. At the current time all indications are that stocks are near the MSY level and overfishing is not occurring. That was three years ago, things haven't changed. In a month the assessment document will be released and everyone can examine the information.

The other issue under discussion is Harvest Control Rules (HCR), primarily a socio-economic political choice dependent on societal values. The proposals now being put forward by IATTC and PFMC would produce control rules that would only effect U.S. vessels and could be effected as pointed out above through limiting fishing time or landings.

My argument against unilateral establishment of BRPs and HCRs solely for the eastern Pacific is that they will largely be biologically ineffective. The majority of catch is in the western Pacific Ocean and the majority of spawning fish are there too. The idea of reference points and harvest control rules is to control fishing to insure maximum stable reproductive output. I'm not sure controlling only 15% of the total catch and not having any controls on harvest of spawning population is going to be of much value.

There are lots of questions on catch and effort and governments should be closely monitoring significant changes in effort throughout the Pacific. The U.S. And Canada are pretty bit players in terms of overall catch and effort and people concerned with excess and growing effort should look more to the western Pacific. My concern on the present rush to establish untested proposals is that it will just lead to rushed regulations that will provide more opportunity for lawsuits against NMFS than effective management of a resource largely outside the control of the U.S. And who will bear the brunt of suits to close the fishery for exceeding harvest limits?

I do believe there is adequate time to take all of the information available and do a full and rational assessment of all management options without a rush to judgment as it seems is happening now. I would hope members pay close attention to this issue and actively participate in the political and management process to insure an outcome beneficial for your continuance in the fishery.

**The Commission for the Conservation and Management of
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee
Ninth Regular Session**

**Fukuoka, Japan
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**PRECAUTIONARY MANAGEMENT FRAMEWORK FOR NORTH PACIFIC ALBACORE
(USA Concept paper)**

Introduction

At the Sixth Regular Session of the Northern Committee (NC), Canada submitted a paper (WCPFC-NC6-DP02) on the development of a precautionary fishery management regime for the northern stocks. Building on this paper, NC7 agreed to a three-year work programme to develop a precautionary management framework for North Pacific (NP) albacore.

Important elements of a precautionary management framework including management objectives, limit and target reference points for stock size and fishing mortality, and associated decision rules (e.g. pre-agreed actions that will be taken in the event that a limit reference point is breached). Under the NC's work programme, NC9 is tasked with agreeing on appropriate reference points and decision rules.

In accordance with Convention Article 6, and as set out in the Northern Committee work programme, NC will further develop a precautionary management framework for North Pacific albacore as follows:

1. Management objectives

To build upon the fundamental management objectives for highly migratory fish stocks as set out in the Convention, NC will work to establish specific management objectives for NP albacore fisheries. In doing so, NC will contribute to, and consider the outcomes of, the Commission's "Management Objectives Workshop" initiative.

2. Biological reference points

Following the hierarchical approach adopted by the Commission:

Level	Condition	LRPs
Level 1	A reliable estimate of steepness is available.	F_{MSY} and B_{MSY}
Level 2	Steepness is not known well, if at all, but the key	$F_{X\%SPRo}$ and either

	2 biological (natural mortality, maturity) and fishery (selectivity) variables are reasonably well estimated.	$X\%SB_0$ or $X\%SB_{current,F=0}$
Level	3 The key biological and fishery variables are not well estimated or understood.	$X\%SB_0$ or $X\%SB_{current,F=0}$

- NP albacore is to be treated as a Level 2 stock.¹
- The limit reference point for the fishing mortality rate, or F-limit, is $F_{l} \text{ }]\%SPR$.²
- The limit reference point for the stock size, or B-limit, is $[\text{ }]\%SB_{current,F=0}$.^{3,4}

NC will work to establish a control rule in which the F-limit decreases with decreasing B, of the type illustrated in Canada's 2010 paper (WCPFC-NC6-DP02).

Once specific fishery management objectives have been adopted, NC will work to establish target reference points for F and/or B, the purpose of which will be to guide the formulation of management strategies such that the fishery management objectives are achieved.

3. Decision rules

NC will develop and recommend management strategies for the stock that ensure that the risk of F exceeding F-limit and of B decreasing below B-limit is very low. With respect to the B-limit, NC will use a risk level of $[\text{ }]$ percent. With respect to the F-limit, until target reference points are established, NC will account for risk by designing management strategies such that F is unlikely to exceed $[\text{ }]$ percent of the F-limit. NC will periodically request the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) to evaluate the performance of a suitable range of alternative management strategies with respect to these limits and risk levels.

In the event that, based on information from ISC, the fishing mortality rate exceeds the F-limit for at least one year, NC will, at its next regular session, or intersessionally if warranted, recommend a conservation and management measure that can be expected to reduce F to less than the F-limit within one year of its adoption.

¹ This determination is based on the information provided by ISC (see NC9-IP-03).

² This F-limit replaces the interim F-limit, $F_{SB-ATHL}$.

³ Based on the information provided by ISC (see NC9-IP-03), B-limit should be $X\%SB_{current,F=0}$ (unfished SB) rather than $X\%SB_0$ (initial SB) because the estimate of the latter is highly uncertain.

⁴ The F-limit and B-limit are specified such that the B-limit serves as a second line of defense behind the F-limit, as follows: If the stock were fished at the F-limit, SB would be expected to average about a particular level associated with that level of F, but would vary above and below that level due to variation in recruitment, natural mortality, and other environmental factors. To accommodate such expected natural variation, it is appropriate that SB be allowed to decrease some amount below the level associated with the F-limit before taking the serious corrective action that would be triggered by breaching the B-limit. The greater the stock's expected natural variation, the greater that allowance should be (to a certain point). A stock's natural mortality rate, M, is a crude indicator of the degree of natural variation in SB that would be expected under a constant fishing mortality rate. Therefore, it is appropriate to set the B-limit at (1-M) times the proportion of unfished SB that would be expected, on average, when fishing at the F-limit. For NP albacore, M is estimated to be 0.25, so the B-limit is set at $[\text{ }]\%$ of unfished SB.

In the event that, based on information from ISC, the spawning stock size decreases below the B-limit at any time, NC will, at its next regular session, or intersessionally if warranted, adopt a reasonable timeline for rebuilding the spawning stock to at least the B-limit and recommend a conservation and management measure that can be expected to achieve such rebuilding within that timeline. Furthermore, NC will develop management strategies that are consistent with pre-agreed on levels of F specified in any adopted control rule.

NC will work to establish specific pre-agreed on management measures that would be automatically triggered upon breaching a limit and/or warning reference point.