

**Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

**SUMMARY REPORT**

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**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

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| **SUMMARY REPORT** |

**AGENDA ITEM 1 — OPENING OF MEETING**

1. The Tenth Regular Session of the Northern Committee (NC10) took place in Fukuoka, Japan, from 1–4 September 2014. The meeting was attended by Northern Committee (NC) members from Canada, Cook Islands, Japan, Korea, Chinese Taipei, United States of America (USA) and Vanuatu; and Observers from Fiji, Kiribati, Republic of Marshall Islands, Mexico, Nauru, Palau, Papua New Guinea, Tonga, Pacific Islands Forum Fisheries Agency (FFA), International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), American Fishermen’s Research Foundation, Greenpeace, Organization for the Promotion of Responsible Tuna Fisheries (OPRT), The Pew Charitable Trusts, US-Japan Research Institute, and World Wildlife Fund (WWF). The list of meeting participants is included as Attachment A.

**1.1 Welcome**

1. M. Miyahara, Chair of the NC, opened the meeting and welcomed participants to Fukuoka, Japan. Fiji expressed its willingness to be an NC member because its vessels are now operating in the Convention Area north of 20°N.

**1.2 Adoption of agenda**

1. The provisional agenda was amended by adding “Election of officers of the Northern Committee” in Agenda Item 8, and was adopted (Attachment B). Documents supporting the meeting were made available on the Western and Central Pacific Fisheries Commission (WCPFC) website (http://www.wcpfc.int/meetings/10th-regular-session-northern-committee).

**1.3 Meeting arrangements**

1. Japan, as the host for NC10, briefed meeting participants on social arrangements and the meeting schedule. S. Nakatsuka (Japan) served as a rapporteur for this meeting.

**AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES**

* 1. **Report from the Fourteenth Meeting of the International Scientific Committee (ISC14)**

1. G.DiNardo, ISC chair, presented highlights of the 14th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (NC10-IP-01). The results are contained in the ISC14 meeting report, which can be found on ISC’s website at: <http://isc.ac.affrc.go.jp>. His presentation on the ISC14 plenary meeting is summarized below:

ISC14 was held in Taipei, Chinese Taipei, from 16–21 July 2014, and attended by members from Canada, Chinese Taipei, Japan, Korea and the USA, as well as WCPFC and PICES. The plenary reviewed results and conclusions, which were based on new data and updated analyses, of the billfish, albacore, shark, and Pacific bluefin tuna working groups. The plenary endorsed the findings that the North Pacific blue shark, albacore tuna, and swordfish stocks are not overfished nor experiencing overfishing, and reiterated that Pacific bluefin tuna are overfished and experiencing overfishing. It provided projections for managers to consider when crafting management measures for Pacific bluefin tuna, as well as North Pacific albacore tuna, swordfish, and blue shark, and updated the conservation advice from ISC13 based on these projections.

The plenary reviewed the progress of the working groups and endorsed their work plans. The ISC work plan for 2014–2015 includes completing a new stock assessment for North Pacific striped marlin and shortfin mako shark in time for ISC15. A special seminar on impacts of climate change on fisheries was held. Plenary discussed formalizing ISC’s structure and administration and began researching means of doing both. Plenary also noted the strides that working groups had made in incorporating best available scientific information into stock assessment work, enhanced stock assessment reports and the increased transparency in working group efforts. Observers from the Pew Charitable Trust, ISSF and WWF attended. The plenary re-elected C. Sun for a second term as ISC Vice-Chair, as well as J. Brodziak, S. Kohin, and R. Wu for a second term as chair of the BILLWG, SHARKWG and STATWG, respectively. The next plenary will be held in the USA in July 2015.

Collaborations between Pacific regional fishery management organizations (RFMOs), regional fishery organizations (RFOs), and other scientific organizations are essential to advance the science in the region and provide timely scientific advice to decision-makers. The ISC conducted data exchanges with data managers of the WCPFC and IATTC, and presented stock assessments results at the scientific meetings of these RFMOs. The emergence of a new collaboration between PICES and ISC to assess the impact of climate change on pelagic species in the North Pacific Ocean was reported.

1. Canada emphasized the importance of data provision for reliable stock assessments, and expressed concern that an NC member (China) is not up to the requirement. Canada further stated that the NC should encourage China to submit required data through appropriate channels.
2. Mexico pointed out that the ISC report suggests that the current measures of both WCPFC and the Inter-American Tropical Tuna Commission (IATTC) are not sufficient for the recovery of Pacific bluefin tuna (*Thunnus orientalis*). It emphasized that the measures taken by the two organizations are linked to each other, and called for further action by the NC because the impact on the Pacific bluefin stock is far greater in the western Pacific.
3. Z. Suzuki, chair of the Pacific Bluefin Tuna Working Group (PBFWG), presented the results of the Pacific bluefin tuna stock assessment. His presentation is summarized as follows:

The result of an updated stock assessment, projections as requested by the NC9 and management advice was briefly introduced. Current spawning stock biomass (SSB) is close to the historical low level. As for the recruitment trend, a large fluctuation was noted and the recent 5 year recruitment was significantly lower than the average level of recruitment. It was highlighted that taking too many juveniles resulted in a greater impact on the SSB than taking adults. Future projections based on the three different recruitment levels (low, average, and low followed by average) were conducted with the seven harvest scenarios as requested by NC9, and ISC’s conservation advice was based on the projections. Major points of the recommended conservation advice are as follows:

The current CMM if continued in to the future is not expected to increase SSB if recent low recruitment continues. In relation to the projections requested by NC9, only Scenario 6, the strictest one, results in an increase in SSB even if the current low recruitment continues. Given the result of Scenario 6, further substantial reductions in fishing mortality and juvenile catch over the whole range of juvenile ages should be considered to reduce the risk of SSB falling below its historically lowest level.

1. In response to a question, Z. Suzuki commented that at this moment there is no evidence that there is more than one stock of Pacific bluefin tuna. The ISC Chair noted that there is spatial structuring in the population, and indicated that the goal should be to move to a spatially structured population model.
2. Japan questioned why the mortality rate for adult fish decreased recently. The PBFWG chair answered that he is not certain but that it is probably because fishing effort targeting adult fish had decreased.
3. Japan further asked if the change in the definition of juvenile, which currently is less than 30 kg, will affect the result of the stock assessment. The PBFWG chair replied that he would guess that it would not change the result substantially although the PBFWG had not examined this particular question.
4. Japan then asked if the model development that is scheduled for 2016 is expected to change the stock assessment result retrospectively because even a change by several percent could have a significant management implication. The PBFWG chair replied that because the work in 2016 is just a refinement of the current model, and not a development of a new model, he does not expect a substantial change in the result. The ISC chair noted that the structure of the model will depend on input data, which will change, and will need to address comments from the independent review of the 2012 Pacific bluefin tuna stock assessment.
5. With regard to analyzing the harvesting scenarios, the USA asked whether the catch of fish less than 30 kg is assumed to be halved, or whether the catch of fishery predominantly targeting juveniles is assumed to be halved. The PBFWG chair answered that the former will be the case. It was also clarified that the effort table in the IP3 report was based on the reports by Members, Cooperating Non-Members and participating Territories (collectively known as CCMs), and not a result of the analysis.
6. Chinese Taipei stated that the provided Kobe plots are confusing because they seem to indicate that the stock has been in an overfished state throughout the evaluation period. The PBFWG chair stated that he believes that Pacific bluefin tuna has been exploited for more than 100 years, and that the stock in the beginning of the analysis period, the 1950s, was probably already not a “virgin stock”.
7. Mexico cautioned about how to interpret the impact of longline fisheries in future scenarios as the model assumes no recruitment relationship with the spawning stock biomass (SSB) level. Furthermore, Mexico asked for the exact definition of juvenile in the model. The PBFWG chair replied that further research is necessary to have an exact definition of juvenile, but that currently, it is assumed that the maturity rate is 20%, 50% and 100% for ages 3, 4 and 5 respectively. Mexico further stated that it is obvious that the problem lies with the coastal fisheries in the western Pacific, and urged the NC to clearly state that the coastal fisheries and purse-seine fisheries in the western Pacific need to be further regulated.
8. Korea requested the ISC chair to provide to CCMs, as soon as possible, all catch and effort data until 2012 of juvenile and adult Pacific bluefin tuna that all relevant CCMs had transmitted in accordance with CMM 2013-09 to NC members.
9. J. Holmes, the Albacore Working Group (ALBWG) chair, presented the results of the 2014 stock assessment of North Pacific albacore (*Thunnus alalunga*) (SC10-SA-WP-12). His presentation is summarized as follows:

The North Pacific albacore tuna stock was assessed using an age-, length-, and sex-structured Stock Synthesis (SS Version 3.24f) model fitted to time series of standardized CPUE and size composition data over a 1966 to 2012 time frame. All available catch and size composition data from 1966 through 2012 were used in the stock assessment. Standardized catch-per-unit-effort data derived from Japan pole-and-line (PL) and longline (LL) fleets were used to measure trends in relative abundance because these indices were considered to be most representative of trends in juvenile and adult albacore abundance. Sex-specific growth curves were used because there is evidence of sexually dimorphic growth, with adult male albacore attaining a larger size and greater age than female albacore. The assumed value of the steepness parameter in the Beverton-Holt stock-recruitment relationship was *h* = 0.9, based on two independent estimates. Several sensitivity analyses were conducted to evaluate changes in model performance or the range of uncertainty resulting from changes in model parameters. Stochastic stock projections were conducted externally to the base case model to evaluate the impact of various levels of fishing intensity on future female SSB for North Pacific albacore.

Total stock biomass (age-1 and older) show a long term decline from the early 1970s to 1990 followed by a recovery through the 1990s and subsequent fluctuations without trend in the 2000s. Female spawning biomass (SSB) exhibits similar long-term changes, with a decline from the early 1970s to the early 1990s, a recovery in the late 1990s and a levelling off in the late 2000s. Female SSB was estimated to be approximately 110,101 mt in the terminal year of the assessment (2012) and stock depletion was estimated to be 35.8% of unfished SSB. Average historical recruitment is approximately 42.8 x 106 recruits annually, but there are periods of above and below average recruitment at the beginning of the assessment time frame followed by fluctuations around the average since the 1990s.

Biological reference points were computed with the base case model. The point estimate (± SD) of maximum sustainable yield (MSY) is 105,571 ± 14,759 t and the point estimate of spawning biomass to produce MSY (SSBMSY, adult female biomass) is 49,680 ± 6,739 t. The SSB-ATHL threshold (i.e., the average of the ten historically lowest SSB estimates) is estimated to be 117,835 t, which is more than twice the SSBMSY level. The ratio of F2010-2012/FMSY is estimated to be 0.52 and the ratio of F2010-2012/FSSB-ATHL is estimated to be 0.72. F2010-2012 (current F) is below the majority of candidate reference points except FMED and F50% and these ratios are lower than ratios estimated using F2002-2004. Kobe plots, which depict stock status in relation to MSY-based and MSY proxy reference points from the base case model, were presented for illustrative purposes since biological reference points have not been established for the North Pacific albacore stock, with the exception of the FSSB-ATHL interim reference point used by NC. Three issues were noted concerning the FSSB-ATHL interim reference point: (1) the way FSSB-ATHL is calculated may differ from the interpretation of NC, (2) the time frame used to calculate the SSB-ATHL threshold was the model time frame (1966-2012), which because of changes in the spawning biomass trajectory means that there is a low SSB period in the 2000s, resulting in the use of SSBs estimated in 2007 through 2010 in the threshold calculation against which current F (F2010-2012) is evaluated; and (3) FSSB-ATHL is extremely conservative if it is intended to be interpreted as a limit reference point (LRP) for the stock since the estimated SSB-ATHL threshold (117,835 t) is more than twice the estimated biomass level necessary to support MSY (49,680 t), i.e., SSB-ATHL > 2 x SSBMSY.

Based on an evaluation of the estimated current F (F2010-2012) against various F-based reference points, including FSSB-ATHL, the North Pacific albacore stock is not currently experiencing overfishing since the ratios for most candidate reference points, except FMED and F50%, are below 1.0. Although no biomass-based reference points have been developed for this stock, there is little evidence from this assessment that fishing has reduced SSB below reasonable candidate biomass-based reference points, so it was concluded that the stock is likely not in an overfished condition at present.

The current exploitation level (F2010-2012) is estimated to be below that of F2002-2004, which led to the implementation of conservation and management measures (CMMs) for the North Pacific albacore stock in both the eastern Pacific and the western and central Pacific Oceans**.** Future projections assuming average or high historical recruitment and fishing at a constant current F show that median female SSB is expected to remain either relatively stable between the 25th and median historical percentiles or increase and the probabilities that female SSB falls below the SSB-ATHL threshold during a 25-yr projection period are well below 50% (13% and 3%, respectively). The probability of median female SSB declining below the SSB-ATHL threshold is 65% assuming low recruitment. The North Pacific albacore stock is considered healthy and current productivity is believed to be sufficient to sustain recent exploitation, assuming average historical recruitment continues.

The ALBWG prepared updated responses to NC9 requests for advice on biological reference points based on the 2014 assessment results. SSB depletion level probabilities were estimated using SSBF=0 and separate SSBF=0 were estimated for the low, average, and high historical recruitment scenarios. Expected yield increases with recruitment and the aggressiveness of the harvest scenario. Fishing at FMSY and F10% were the most aggressive harvest scenarios and FMED was the least aggressive scenarios. Yield decreases as FSPR% increases across recruitment scenarios and there is little difference in yield at FSSB-ATHL for 10 or 25-yr projection periods. The probability that SSB10% depletion level would be breeched was low for all harvesting scenarios, except FMSY and F10%, which was between 0.4 and 0.5 whereas the probabilities that SSB40% would be breeched was much higher for all harvest scenarios, frequently exceeding 0.5. The FMED and F50% reference points are exceeded when harvesting at Fcurrent (2010-2012). Less productive conditions associated with regime shifts could lead to reduced expected yield and increased risk (probabilities) that SSB will fall below SSB depletion levels.

1. The USA asked how BMSY compares with 20% of unfished SSB; the ALBWG chair answered that they were expected to be roughly at the same level although it is not specifically calculated.
2. Canada asked the ALBWG chair how confident the ALBWG was with the steepness of 0.9. The ALBWG chair noted that the estimation of 0.9 is not based on observed data, rather it is the result of two independent analyses based on life history theory, which estimated the steepness at between 0.95 and 0.84. The ALBWG used the median value.
3. A. Yau, on behalf of the Billfish Working Group (BILLWG) chair, presented an overview of the stock assessment of swordfish (*Xiphias gladius*) in the North Pacific Ocean (WCPFC-SC10-SA-WP-13). Her presentation is summarized as follows:

In 2014, the ISC Billfish Working Group completed the swordfish stock assessment. A Bayesian state-space production model was updated with new years of data to complete assessments for each of two stocks.

Commercial catch data for the WCNPO swordfish stock has fluctuated over the history of the fishery (1951-2012), peaking at 22,000 mt in 1960 and recent catch levels are ~10,000 mt. Japan, Chinese-Taipei, and USA provided standardized CPUE series. Results indicate that compared to BMSY and HMSY, the WCNPO stock of swordfish is not overfished and overfishing is not occurring in 2012. A risk analysis indicated that if current catch levels persist, there will be little to no risk of overfishing or becoming overfished through 2017.

In the EPO stock area, swordfish catches fluctuated over the history of the fishery and peaked in 2012 at 9,910 mt. Japan and Chinese-Taipei provided standardized CPUE series. Results indicate that compared to BMSY and HMSY, the EPO stock of swordfish is not overfished but there is a 55% risk of overfishing in 2012. The recent average catch of ~10,000 mt, or almost two times higher than the estimated MSY, is not likely to be sustainable in the long term. Risk analysis indicated the risk of overfishing will persist into 2017 if current catch levels continue. Retrospective analyses indicated that there was a clear retrospective pattern of underestimating exploitable biomass and overestimating harvest rate.

1. In response to a question from Japan, A. Yau answered that the BILLWG did not explore the impact of a regime shift on swordfish stocks. Also, she commented that there is no agreed on natural mortality rate for North Pacific swordfish though she believed 0.35 could be a conservative estimate.
2. K. Piner, on behalf of the Shark Working Group (SHARKWG) chair, presented the results of the blue shark stock assessment. His presentation is summarized as follows.

The ISC Shark Working Group completed a stock assessment of North Pacific Blue Shark in 2014. Catch, CPUE and size composition data (1971-2012) were used along with life history information to conduct the stock assessment. Uncertainty in data, including the catch, was generally considered greater than for some of the targeted species. To deal with the uncertainty in data, two alternative modeling approaches were used. A Bayesian Surplus Production (BSP) model was used to account for the limited size composition data available. Key model uncertainty included the distributions on process priors and appropriate CPUE to include in the model. In contrast, a complicated length and sex based-age-structured model was used along with regionally defined fleets to evaluate the influence of the spatial patterns in size and sex ratios on stock condition. Key model uncertainty was the shape of the low fecundity spawner-recruit curve. Results of both modelling approaches were in agreement that it is likely that the stock is not overfished (B>BMSY) and overfishing is not occurring (F<FMSY). Current harvest practices are forecasted to be sustainable into the future.

1. In response to a question from Cook Islands, K. Piner stated that the reason for stock improvement is probably due to the reduction of catch.

**2.2 Report of the Tenth Regular Session of the Scientific Committee (SC10)**

1. The WCPFC Secretariat presented the results of the tenth regular session of the Scientific Committee (NC10-IP-02). His presentation is summarized as follows:

SC10 took place in Majuro, Republic of Marshall Islands, from 6–14 August 2014, and L. Kumoru chaired the meeting. The Summary Report is posted at <http://www.wcpfc.int/meetings/10th-regular-session-scientific-committee>, and the following key areas of SC10 were highlighted to NC10:

* overview of tuna fisheries in the western and central Pacific Ocean with the provisional total WCPFC Statistical Area tuna catch estimates of 2,621,511 mt for 2013;
* data gaps, especially related to the provision of operational catch and effort data;
* the outcome of bigeye, yellowfin and skipjack tuna stock assessments and management advice and implications;
* management issues related to identifying the level of acceptable risk which should be applied to breaching a limited reference point for key target species;
* bycatch mitigation in relation to seabird interactions with small longline vessels; and
* administrative matters and the Scientific Committee’s work programme and budget for 2015–2017.

1. Japan asked what the result was regarding the discussion to designate North Pacific blue shark as a northern species. H. Honda explained that a small group meeting was held during SC10 to discuss the matter, and that the group reported the result to the SC10 plenary, suggesting two options to move forward: short-term and medium-term plans. He further reported that the report received no comments in the plenary.
2. In response, Japan pointed out that, in accordance with the Rules of Procedure, the SC has the authority to make recommendations on the designation of the northern species, and further asked what the obstacle to do so was. The Secretariat explained that neither specific information was available for SC’s consideration on the issue, nor were specific criteria established by the Commission for a species to be included in the northern stocks.
3. The USA commented that it is a matter of discussion for the Commission, and what the NC can do is to request the Commission to instruct SC to consider the issue as a matter of priority. The chair suggested that the NC should express its desire and willingness to take the initiative for managing the stock in a healthy way.
4. Japan also pointed out that although SC had evaluated the skipjack stock to be in a healthy state, Japanese coastal fishermen have a different perception about the stock because they have suffered in recent years from poor catches because of the reduced number of skipjack migrating along Japan’s coastal areas. Japan appreciated that the SC emphasized the possibility of range contraction of skipjack but it requested further study on the issue.

**2.3 Conservation and management measure for northern stocks**

**2.3.1 Pacific bluefin tuna**

**Reports by CCMs**

1. Canada reported that there is no fishery targeting Pacific bluefin tuna in Canada, and there is very little import of this species. In response to requests from NC members, Canada stated that it will provide actual trade data at the NC meeting next year.
2. Cook Islands reported that there were minimal catch and trade of Pacific bluefin tuna but it supports an effective management measure for the species.

1. Korea reported that there were 24 large-scale, purse-seine vessels harvesting Pacific bluefin tuna in 2013, which is within the threshold, and that the domestic notification controlling the juvenile catch is now in the process of being amended to be consistent with the conservation and management measure (CMM) for Pacific bluefin tuna, changing the criteria of juvenile from “less than 20 kg” to “less than 30 kg, or three years or younger”, and prohibiting the catch when the catch limit is exceeded. In 2014, a catch limit of 1,220 mt was enforced and the catch has been prohibited since 7 July 2014, when the catch reached 1,192 mt, or 97% of the limit. Fishermen have been instructed to discard juvenile Pacific bluefin tuna catches since 8 July 2014.
2. The USA asked if the definition of juvenile applied to the catch limit for this year was 20 kg or 30 kg, and Korea replied that it is applying the 30 kg definition of juvenile to this year although the current notification defines it at 20 kg.
3. Japan pointed out that the discarded Pacific bluefin tunas are expected to be dead, which means that the catch continues as long as discards continue. In response, Korea stated that it is hard to control bycatch, and that there is no other option at this moment. It was also explained that the sale of Pacific bluefin tuna is prohibited.
4. Japan further stated that it is concerned that the catch still continues, and other NC members shared the concern. Japan also requested Korea to present detailed results of its research programme on the Pacific bluefin tuna fishery from 2010 to 2014. Korea responded that through the programme, biological characteristics were measured, new spawning grounds in Korean waters were searched for, one popup archival tag was attached and catch data were collected. Korea submitted relevant data to ISC as required. Japan requested further detailed data to be provided in order to improve Pacific bluefin tuna management.
5. Mexico stated that the discarded fish should be included in the catch report, and asked Korea if an observer is on board to measure the amount of discards. Korea replied that bycatch and discard data are not currently available although it is planning to collect these starting next year.
6. Japan reported on its Pacific bluefin tuna fishing activities. Various types of fisheries in Japan are catching Pacific bluefin tuna. Purse-seine vessels in western Japan are primarily targeting juveniles and a catch limit of 4,250 mt has been applied since 2011. For purse-seine vessels targeting adult fish larger than 30 kg, there is a voluntary catch limit of up to 2,000 mt. A troll fishery is conducted by very small vessels (one to two crew members), all around the country. A registration system was started in 2011, and in 2014 a licensing system was introduced. Now, more than 20,000 vessels are licensed. Set nets also exist all around the Japanese coast and the number of licenses is fixed at around 1,800. Aquaculture of Pacific bluefin tuna is mainly conducted in western Japan and is controlled by a local government license. There are 147 aquaculture sites. Management of the catch in Japan is challenging because the catch is taken predominantly by a small number of purse-seine vessels, while there is a far greater number of small artisanal fishing vessels fishing for Pacific bluefin tuna. Japan further explained that in response to the ISC’s latest recommendation, the government decided to reduce its juvenile catch by 50% from 2015. The plan is that 2,000 mt is allocated to the purse-seine fishery, and 2,007 mt to other fisheries. The purse-seine catch is allocated to an industry association, and it is a requirement that the catch be landed in designated ports, where monitoring is conducted. A coastal quota will be allocated to six areas and monitored on an area basis. More than 50 local meetings were held to explain the plan, and now there is general support to implement this measure.
7. Japan also reported its import information from Korea and Mexico. It was reported that Japan imported more than 4,000 mt of Pacific bluefin tuna from Mexico and Korea, and exported 20 mt to China and Thailand.
8. Several NC members were concerned with the increase of the number of licensed artisanal vessels from 13,000 to 24,000 this year. Japan replied that the reason for the increase is mainly a bureaucratic one that fishermen applied for a license just to retain future possibility for Pacific bluefin tuna fishing operation but the actual number of active vessels would be around 3,000. Japan also emphasized that it no longer allows further applications and intends to reduce the number of licenses in the future based on actual operation.
9. Mexico also asked whether purse-seine vessels were targeting adult Pacific bluefin tuna outside the three-month fishing season. Japan replied that the three-month season is the only migratory season that the fishery can catch Pacific bluefin tuna, and purse-sein vessels target other pelagic species (e.g. sardines and mackerels) in the remaining nine months.
10. Korea pointed out that the figures of Pacific bluefin tuna total catches from 2002 to 2004 were different: 12,897 mt and 12,676 mt — which came from Table 14.14.2 provided by the ISC’s PBFWG in 2014, and the report on CMM 2013-09 (NC10-DP-01) — and looked for clarification and a correct figure. Also, it asked whether the number of purse-seine vessels fishing for Pacific bluefin tuna had increased from 55 in 2012 to 66 in 2014 as indicated in the Summery Report reviewed by the PBFWG in July 2014, and Attachment A of the Japanese report on CMM 2013-09 (NC10-DP-01).
11. Japan responded to Korea’s question, stating that the number of purse-seine vessels having actually fished for Pacific bluefin tuna has changed annually. Japan also stated that they would provide the data to Korea bilaterally.
12. Chinese Taipei reported that the number of its longline vessels authorized to fish for Pacific bluefin tuna was 485 in 2014. It was explained that all of the catch consisted of adults, and a voluntary catch documentation scheme (CDS) has been implemented since 2010. Size and weight are measured at domestic landing ports and the sampling rate in 2014 was 100%. There was no export of Pacific bluefin tuna, and 4.6 mt were imported in 2013.
13. In response to questions by Japan and the NC chair, Chinese Taipei clarified that the Pacific bluefin tuna catch is landed in three ports, and that experience shows that the tuna are auctioned in those three ports, although landings in other ports is not prohibited.
14. Japan asked about the reason for the increase in catch from last year while the stock is in poor condition, and also asked for clarification about the meaning of the 100% sampling rate. Chinese Taipei replied that the reason for the increase in catch is probably because there were more vessels operating this year, in part because the area of the fishing ground had been expanded. It also clarified that Pacific bluefin tuna can have valid catch documents only when officials physically check the fish. Therefore, every Pacific bluefin tuna landed in domestic ports were well monitored.
15. The NC chair noted that according to his calculation, each vessel catches only about one fish per month and inquired how the fishery could be sustainable, given such a small catch. Chinese Taipei explained that not all of the licensed 485 vessels caught Pacific bluefin tuna, rather they applied for authorization because they needed a CDS tag in case they caught Pacific bluefin tuna. Chinese Taipei is still in the process of finalizing the statistics. Also, it was pointed out that in addition to Pacific bluefin tuna, those vessels catch other tunas such as yellowfin.
16. The USA reported that no vessel targets Pacific bluefin tuna in the WCPFC Convention Area, thus no management measure is necessary. For the occasional catch of adult Pacific bluefin tuna, there is a system to collect data in Hawaii. Trade is being monitored through CDS and 121 mt were imported from Japan and Mexico, and there was no export in 2013.
17. In response to a question, the USA clarified that in the eastern Pacific, there is a commercial purse-seine fishery that occasionally targets Pacific bluefin tuna when the fish is found within the USA’s exclusive economic zone (EEZ), and sports fishing operations are occurring in the EEZs of the USA and Mexico.
18. Mexico commented that it understood that there had been no US commercial fishery targeting Pacific bluefin in the eastern Pacific; the USA responded that there has been a commercial purse-seine operation for a long time but that there was no Pacific bluefin catch for the last couple of years and that the catch is reported in accordance with international agreements.
19. Mexico also asked how the catch of sport fishing is controlled. The USA answered that the sale of Pacific bluefun tuna from sport fishing is prohibited, and a discussion by the domestic fishery management council on further restricting the bag limit is expected in the coming weeks.
20. Vanuatu reported that there are no activities related to Pacific bluefin tuna in its waters.
21. There were no comments on the report from the Philippines.

**Discussion on the new conservation and management measure**

* + - 1. **Pacific bluefin tuna**

1. Japan introduced its draft CMM for Pacific bluefin tuna (NC10-DP-06). Japan recalled that the tasks required of the NC by both the current CMM and the work programme are to: i) review the current CMM, including the substantial reduction of the catch, and ii) agree on a rebuilding programme, including an interim target. ISC advised that, from the seven scenarios evaluated, only the strictest scenario is expected to work in terms of substantial stock recovery with the low recruitment assumption. Japan pointed out that a precautionary approach should be taken in order to ensure stock recovery, especially given that the recent recruitment is near the historical low level. With regard to the interim target, Japan pointed out that Annex II of United Nations Fish Stocks Agreements (UNFSA) recognizes the possibility of using a provisional reference point when information is not sufficient. Because we have firsthand experience of substantial recruitment of Pacific bluefin tuna when the stock is above SSBmed, that level can be used as a preliminary recovery goal to be achieved by 2024 in order to ensure sufficient recruitment. As to specific measures to be taken, Japan proposed, in addition to the current effort, to: i) a 50% reduction of juvenile catches, ii) a deduction of the catch overage from next year’s limit, and iii) endeavor to take measures not to increase catches of adult Pacific bluefin.
2. The USA introduced its Pacific bluefin rebuilding programme proposal (NC10-DP-07). As the rebuilding objective, the USA proposed 20% of unfished SSB to be achieved in 10 years. The USA stated that Pacific bluefin tuna is under a very sophisticated assessment, providing substantial information, and that the UNFSA provides that BMSY can be used as a rebuilding target for overfished stock; 20% of unfished SSB is considered to be a reasonable proxy of BMSY. The USA emphasized that this is not a limited reference point (LRP) but a rebuilding target. The proposal also included a rebuilding strategy that allows dialogue between scientists and managers. The USA queried the fair distribution of conservation burden between east and west of the Pacific, and stated that it is flexible about the ratio between two sides of the ocean but it should be based on the impact on the Pacific bluefin stock.
3. Japan commented that the rebuilding target proposed by the USA, of 20% of unfished SSB, is too optimistic and unrealistic because the ISC projection demonstrated that the stock will not recover to that level if the current low recruitment trend persists. Also, Japan stated that the change in the definition of juvenile would cause a great deal of confusion because the current definition has been used for several years, and ISC analyses and domestic measures are based on the current definition, which is less than 30 kg.
4. The USA commented that the definition of juvenile can be maintained with the understanding that this is a matter requiring further research. With regard to the rebuilding target, the USA stated that the Japanese proposal can be used as an urgent target while the USA’s proposal will be discussed again in the future as a candidate for a longer term target.
5. Chinese Taipei commented that Japan’s draft CMM is consistent with the scientific advice from the ISC, and expressed its general support for the proposal.
6. Mexico emphasized the necessity of a system to prevent further decline of the stock. It pointed out that NC members so far have not achieved the CMM’s aim of reducing the fishing mortality of juvenile Pacific bluefin, and that on the contrary, fishing mortality has increased. Mexico also stressed that the current definition of juvenile, less than 30kg, has no scientific basis and NC should instruct ISC to define juvenile to be included in the measure. Further, Mexico pointed out that “50% reduction” is calculated from the baseline of 2002–2004. If compared with the current catch level, it stands for only 6% reduction. At the same time, it is troubling that Japan has been increasing the number of licensed vessels from 13,000 to 24,000 in recent years.
7. The Chair pointed out that ISC reported the maturity rate to be 20%, 50% and 100% for three–year old, four-year old and five-year old, respectively. Also, he informed the plenary that all of the three-year old Pacific bluefin are matured in the captive environment in his institute, indicating that three-year-old Pacific bluefin can mature in the right environment.
8. In response to Mexico’s comment, Japan stated that the reason for low catches in recent years is the combination of low recruitment and the effect of domestic management measures, and emphasized that the establishment of an upper catch limit is important because it would be effective when there is a larger recruitment.
9. Mexico further remarked that the report should clearly state that the Japanese proposal is only for a 6% reduction from the level of recent years.
10. The chair emphasized that whatever the baseline is, the important thing is that the ISC predicts that the stock will recover at that harvest level. The USA concurred with the view of the chair, stating that a 50% reduction from the 2002–2004 level and a 6% reduction from the current level are equivalent, and ISC projects recovery at that level.
11. An intervention from WWF, the Pew Charitable Trusts, and Greenpeace highlighted the importance of putting action in place in line with Scenario 6 of the 2014 stock assessment. In particular, it noted the need for mandatory catch limits for adult mortality, in addition to the proposed cuts in juvenile mortality, in order to achieve a meaningful increase in SSB in a timely manner. Further, with respect to a rebuilding target, the intervention noted that the 20% of SSB proposed by the USA should be considered the minimum. The rebuilding target proposed by Japan leads to only 8% SSB, which is insufficient given the status of the species. Finally, it was noted that unless both regional fisheries management organizations involved in Pacific bluefin management take the full suite of necessary management measures this year, further action such as a trade ban may be necessary.
12. The Chair convened a small group meeting to discuss the draft CMM on Pacific bluefin based on the proposal by Japan.
13. After several rounds of informal discussion, the Chair presented the revised proposal.
14. Korea stated that the conservation burden should be shared among CCMs in an equivalent manner, taking into account what would be the most beneficial when the stock recovers, and requested that one sentence be inserted to allow flexibility in how to achieve the required reduction when there is a bilateral agreement. Korea expressed a strong opposition to a uniform reduction, indicating that Japan caught 85% and Korea caught 15% of the juvenile Pacific bluefin tuna during the base years, and stated that these rates should be applied for allocating juvenile catch reductions. However, this suggestion was not agreed on due to the unavailability of a catch limit to be transferred from the counterpart. After more discussion, the proposal was further amended by inserting a paragraph to intensify cooperation among members for effective implementation.
15. **The NC adopted the recommendation of a CMM for the management of Pacific bluefin tuna (Attachment C) for submission to the Commission for its adoption.**

**2.3.2 North Pacific albacore**

1. Canada introduced its proposal to establish a harvest control rule of North Pacific albacore (NC10-DP-08). Canada explained that it is based on the information provided by ISC, and that it suggests a management objective, reference points, a decision rule, and future work. The proposed management objective is to maintain biomass that allows a recent exploitation rate. LRP is proposed as BMSY or 20% of unfished SSB, which is consistent with tropical tunas. A target reference point is proposed at F=40%SPR. This is based on the ISC report, which stated that the catch at that level will give a probability of 31% to exceed the LRP (20% of unfished SSB) at least once in 10 years. Canada further explained that its decision rule included is a soft one, requiring the NC to take certain actions when the LRP or target reference point (TRP) is breached. With regard to the USA’s proposal, Canada commented that it is a more intense management strategy evaluation (MSE) process but it can be incorporated in the future work of the Canadian proposal.
2. The USA introduced its proposal to IATTC regarding an MSE of North Pacific albacore (NC10-WP-01). The USA shared Canada’s view that its proposal can be incorporated when the Canadian proposal is discussed.
3. While generally supporting the establishment of a precautionary management framework for North Pacific albacore, Japan stressed that unlike tropical tunas, recruitment level can vary drastically in temperate tunas (e.g. albacore) affected by environmental changes, and stated that it supports depletion-based reference points over maximum sustainable yield (MSY)-based reference points, although whether the 20% level is appropriate or not needs to be evaluated by ISC. With regard to the TRP, Japan called for very careful consideration given the drastic change in the fishing mortality in the past. It also made a presentation to introduce the target shift of its coastal longline vessels. Due to the poor catch of tropical tunas, those vessels had to change their target to albacore.
4. Chinese Taipei expressed its general support on the proposal but highlighted the need to consider the significant effect of environmental factors on recruitment as indicated in the ISC report.
5. The USA stated that the combination of B-based LRP and F-based TRP is appealing, and MSY-based and depletion-based LRPs, including the specific point of 20%SBF=0 level, need to be further discussed. Regarding F-target associated with decision rule, the USA’s idea in the proposal could be merged to conduct MSE and establish an appropriate F-target as soon as reasonable. It suggested that the possible outcome from this meeting would be to defer the adoption of a specific F-target and agree to request ISC to start undertaking an MSE, evaluating different F-targets in association with B-LRPs. They supported the basic concept of decision rule but need to further discuss this.
6. Based on its proposal and taking into account the USA’s proposal, Canada worked with NC members to revise the precautionary management framework for North Pacific albacore and presented a revised proposal.
7. During the course of the discussion, it was highlighted that there is no common understanding about the definition of MSE, which caused some confusion in the discussion. The ISC chair mentioned that ISC is planning to hold a workshop on MSE in April 2015 to which managers, stakeholders and scientists will be invited. The ISC chair further indicated that the ISC ALBWG was tasked at ISC 14 to begin the MSE process on North Pacific albacore tuna, and noted that a progress report will be presented, and input from managers will be requested at NC11. The NC endorsed the initiative of ISC on MSE for this species, and encouraged its members to promote the participation by managers as well as other stakeholders to the workshop.
8. An intervention was made on behalf of WWF, Greenpeace and the Pew Charitable Trusts, which applauded the steps taken to determine reference points for the Northern Albacore stock before it is in danger of being subject to overfishing. It then noted a couple of clear issues for consideration, including the text from the UNFSA, which indicates there should be a “very low” risk of breaching the LRP; that the text of the LRP rule as currently proposed seems to function as a harvest control rule that would generally operate with a TRP; and that a rebuilding timeline should be reduced from 10 years. Finally, it was noted that it is critical to ensure the full suite of measures is in place such that we do not see something happen to this stock such as has happened to Pacific bluefin tuna.
9. **The NC adopted a decision regarding the precautionary management framework for North Pacific albacore (Attachment D).**

**2.3.3 North Pacific swordfish**

1. The Chair drew the attention of the NC to the report by ISC regarding the stock status of North Pacific swordfish, which concluded that the stock is not subject to overfishing nor in an overfished state, and suggested to defer the discussion on the management framework of the species after the framework of North Pacific albacore is established, probably until next year. NC members concurred with the Chair’s suggestion, and it was decided the discussion would be deferred until the management framework for the North Pacific albacore is completed and then endorsed by the Commission.

**2.4 Conservation and management measures for other species**

* + 1. **Bigeye, yellowfin and skipjack tunas (CMM 2013-01)**

1. Japan expressed its concern regarding the continued declining trend of stocks of tropical tunas, especially bigeye, emphasizing that its SSB breached its biomass limit in 2012. Further, Japan pointed out that the bigeye catch in 2013 was a record high, while fish aggregation device (FAD) activity exceeded that of 2010, the level which SC8 recommended. In addition, the purse-seine capacity in the equatorial region continues to expand and the SC raised concern that high catches in the area could cause a range contraction of skipjack tuna. In fact, it was pointed out that Japanese coastal fishery is suffering a very poor catch of skipjack this year (only 18% of average in two prefectures). Based on this backdrop, Japan called for the NC to send a message of strong concern to the Commission that the failure of the management in the tropical area is causing management problems in the northern area, including the management of northern stocks through unavoidable target shifts from tropical tunas to northern species.

1. The USA generally supported the comment made by Japan and drew attention of the spatial component of the management. The USA pointed out that, not only skipjack, the management in the tropical area is affecting the management of bigeye and yellowfin in the northern area.
2. Chinese Taipei expressed its concern on the continued expansion of the purse-seine fleet and the increase of bigeye and yellowfin catches by the fleet, and supported sending this message to the Commission.
3. **The NC once again expressed its strong concern regarding the plight of tropical tuna stocks not only because those species are being caught in the northern area but also the status of those species could impact management of other species through target shifts.**

**2.4.2 North Pacific striped marlin**

1. There were no discussions on this item.

**2.4.3 Sharks**

1. Recalling the discussion in Agenda Item 2.2, the NC expressed its willingness to take the initiative on managing the North Pacific blue shark and **agreed to request the Commission to instruct SC11 to prioritize the work on determination of the designation of North Pacific blue shark as a northern stock, including a prompt establishment of criteria and process for the designation of northern stocks.** In this regard, the NC requests ISC to provide relevant information for the SC’s consideration of this issue at SC11.

**2.4.4 Seabirds**

1. The USA drew NC members’ attention to the fact that, despite the decision at the Commission in 2012, the SC and Technical and Compliance Committee could not evaluate the effect of the exemption of seabird mitigation measure for small-scale vessels because relevant information was not provided by members. **The NC encouraged its members to provide the necessary information as agreed on at the Commission.**

**2.4.5 Sea turtles**

1. There were no discussions on this item.

**AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME**

1. In order to review the implementation of the Regional Observer Programme (ROP) in the NC area, NC members were requested to report its implementation of ROP at the next NC meeting.

**AGENDA ITEM 4 — VESSEL MONITORING SYSTEM**

1. There were no discussions on this item.

**AGENDA ITEM 5 — DATA**

**5.1 Review of the status of data and data gaps for northern stocks**

1. Once again, the importance of required data submission was highlighted and concerns were expressed over the lack of data submission to ISC by one NC member, China. **The NC agreed to urge China to fulfill its responsibility as an NC member through required data submission and participation at the NC meetings.**

**AGENDA ITEM 6 — COOPERATION WITH OTHER ORGANIZATIONS**

**6.1 ISC**

1. The importance of the continued cooperative relationship with ISC was highlighted.

**6.2 IATTC**

1. In order to have effective management framework for the northern stocks, particularly Pacific bluefin tuna, it was recognized that a continued strengthened relationship with IATTC is necessary.

**AGENDA ITEM 7 — FUTURE WORK PROGRAMME**

**7.1 NC work programme for 2015–2017**

1. NC10 revised and adopted its future work programme (Attachment E).

**AGENDA ITEM 8 — OTHER MATTERS**

**8.1 NC administrative arrangements**

**8.1.1 Secretariat functions and costs**

1. There were no discussions on this item.

**8.1.2 Rules of procedure**

1. There were no discussions on this item.

**8.2 Election of officers of the NC**

1. M. Miyahara (Japan) and M. Tosatto were nominated as a candidate Chair and a candidate vice Chair of the NC through NC12, respectively, for the Commission’s approval.

**8.3 Next meeting**

1. The USA offered to host NC11 in Hawaii but Japan requested to host the NC11 to enable various domestic stakeholders to observe the important meeting. The USA kindly withdrew its offer and the NC welcomed the offer by Japan. It was agreed that NC11 will be held early September 2015, with specific dates and place to be determined, taking into account the views of other members.

**8.4 Other matters**

**8.4.1 Membership application**

1. Fiji expressed its willingness to be a member of NC and advised that it had submitted an application with its catch data to the Secretariat. The NC welcomed Fiji’s application. The NC requested the Commission to instruct the SC to review the catch data by SC11. The NC will welcome Fiji as a full member to NC11.
2. The NC noted the possible disclosure of meeting discussions before the conclusion of NC10 by a nongovernmental (NGO) observer to a social network service and agreed to request that NGO to explain the situation. The Chair will report this incident together with the relevant information to the next Commission meeting for its consideration.

**AGENDA ITEM 9 — ADOPTION OF THE SUMMARY REPORT OF THE NINTH REGULAR SESSION OF THE NORTHERN COMMITTEE**

1. NC10 adopted the Summary Report of its Tenth Regular Session.

**AGENDA ITEM 10 — CLOSE OF MEETING**

1. The meeting was closed on 4 September 2014.

**Attachment A**

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

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**Attachment B**

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

Northern Committee

Tenth Regular Session

Fukuoka, Japan

1–4 September 2014

**AGENDA**

**WCPFC-NC10-2014/02**

1. **OPENING OF MEETING**
   1. Welcome
   2. Adoption of agenda
   3. Meeting arrangements
2. **CONSERVATION AND MANAGEMENT MEASURES**
   1. Report from the Fourteenth Meeting of the International Scientific Committee
   2. Report of the Tenth Regular Session of the Scientific Committee
   3. Conservation and management measures for the northern stocks
      1. Pacific bluefin tuna (CMM 2013-09)
      2. North Pacific albacore (CMM 2005-03)
      3. North Pacific swordfish
   4. Conservation and management measures for other stocks
      1. Bigeye, yellowfin and skipjack tunas (CMM 2013-01)
      2. North Pacific striped marlin (CMM 2010-01)
      3. Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04 and CMM 2013-08)
      4. Seabirds (CMM 2012-07)
      5. Sea turtles (CMM 2008-03)
3. **REGIONAL OBSERVER PROGRAMME**
4. **Vessel monitoring system**
5. **DATA**
   1. Review of the status of data and data gaps for northern stocks
6. **COOPERATION WITH OTHER ORGANIZATIONS**
   1. ISC
   2. IATTC
7. **FUTURE WORK PROGRAMME**
   1. Work Programme for 2015–2017
8. **OTHER MATTERS**
   1. Administrative arrangements for the Committee
      1. Secretariat functions and costs
      2. Rules of Procedure
   2. Election of officers of the Northern Committee
   3. Next meeting
   4. Other business

8.4.1 Membership application

1. **Adoption of the Summary Report of the TENTH Regular Session of the Northern Committee and recommendations to the Commission**
2. **CLOSE OF MEETING**

**Attachment C**

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

**[DRAFT] CONSERVATION AND MANAGEMENT MEASURE TO ESTABLISH A MULTI-ANNUAL REBUILDING PLAN FOR PACIFIC BLUEFIN TUNA**

*The Western and Central Pacific Fisheries Commission (WCPFC):*

*Recognizing that* WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM2009-07) and the measure was revised three times since then (CMM2010-04, CMM2012-06 and CMM2013-09) based on the conservation advice from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) on this stock;

*Expressing grave concern* for the latest stock assessment provided by ISC Intercessional Plenary Meeting in March 2014 indicating the following:

* + - * The current (2012) Pacific bluefin tuna biomass level is near historically low levels and experiencing high exploitation rates above all biological reference points except for *Floss*;
      * The average recruitment level for the last five years may have been below the historical average level;
      * The recently adopted WCPFC CMM 2013-09 and IATTC resolution for 2014 (C-13-02), if continued in to the future, are not expected to increase spawning stock biomass (SSB) if recent low recruitment continues;
      * If the low recruitment of recent years continues, the risk of SSB falling below its historically lowest level observed would increase;
      * Further substantial reductions in fishing mortality and juvenile catch over the whole range of juvenile ages should be considered to reduce the risk SSB falling below its historically lowest level; and
      * Monitoring of recruitment should be strengthened to allow the trend of recruitment to be understood in a timely manner,

*Recognizing the importance of* development of reference points for conservation and management of Pacific bluefin tuna in 2014; 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:

**General Provision**

1. The Commission Members, Cooperating Non-Members and participating Territories (hereinafter referred to as CCMs) shall implement a provisional Multi-Annual Rebuilding Plan for Pacific bluefin tuna starting in 2015, with the initial goal of rebuilding the SSB to the historical median (42,592 t) within 10 years with at least 60% probability. Implementation and progress of this plan shall be reviewed based on the results of stock assessments and SSB projections to be conducted by ISC in 2016 and every three years thereafter. For this purpose, the ISC is requested to update the SSB projections for the harvest scenarios previously recommended by the WCPFC, along with any additional scenarios recommended by the Northern Committee. This CMM shall be amended if necessary upon such review.

2. The Northern Committee shall consider and develop reference points and harvest control rules for the long-term management of Pacific bluefin tuna at its meetings in 2015 and 2016. In light of the progress of this work, the provisional Multi-Annual Rebuilding plan provided in paragraph 1.shall be reviewed and, if necessary to rebuild the stock to a level consistent with the long-term management framework for the stock, amended in 2016.

**Management measures**

3. CCMs shall take measures necessary to ensure that:

1. Total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.
2. All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002–2004 annual average levels. Any overage of the catch limit shall be deducted from the catch limit for the following year.

4. CCMs shall take every possible measure not to increase catches of Pacific bluefin tuna 30 kg or larger from the 2002–2004 annual average levels.

5. CCMs shall report their 2002–2004 baseline fishing effort and <30 kg and >=30 kg catch levels for 2013 and 2014, by fishery, as referred to in the preceding two paragraphs, to the Executive Director by 31 July 2015. CCMs shall also report to the Executive Director by 31 July each year their fishing effort and <30 kg and >=30 kg catch levels, by fishery, for the previous year, accounting for all catches, including discards. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.

6. CCMs shall intensify cooperation for effective implementation of this CMM, including juvenile catch reduction.

7. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.

8. Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.

9. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna as a matter of priority.

10. 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;

11. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 3, 4, 5, 7, 8, 10 and 13 of this CMM. CCMs shall also monitor the international trade of the products derived from Pacific bluefin tuna and report the results to Executive Director by 31 July annually. The Northern Committee shall annually review those reports CCMs submit pursuant to this paragraph and if necessary, advise a CCM to take an action for enhancing its compliance with this CMM.

12. 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 this CMM.

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

14. The provisions of paragraphs 3 and 4 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 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.

15. The provisions of paragraph 14 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

**Attachment D**

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

|  |
| --- |
| **PRECAUTIONARY MANAGEMENT FRAMEWORK FOR**  **NORTH PACIFIC ALBACORE** |

**Introduction**

At the Sixth Regular Session of the Northern Committee, and consistent with Article VIof the WCPFC Convention, Canada submitted a paper (WCPFC-NC6-DP02) on the development of a precautionary approach based fishery management regime for the northern stocks. Building on this paper, the Seventh Regular Session of the Northern Committee agreed to a three-year work programme to develop a precautionary approach based management framework for North Pacific albacore.

The Ninth Regular Session of the Northern Committee determined that it was best to delay discussions on the framework until the completion of the 2014 North Pacific albacore stock assessment. In July 2014, the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) concluded that the North Pacific albacore stock is “healthy and that current productivity is sufficient to sustain recent exploitation levels, assuming average historical recruitment in both the short and long term”. The ISC also provided further advice regarding candidate limit and target reference points.

Based on the advice from the ISC, the Northern Committee (NC) recommends the following precautionary management framework for NP albacore.

**1. Management objective**

The management objective for the North Pacific albacore fishery is to maintain the biomass, with reasonable variability, around its current level in order to allow recent exploitation levels to continue and with a low risk of breaching the limit reference point.

**2. Biological reference points**

Based on ISC’s 2014 stock assessment advice and following the hierarchical approach adopted by the Commission, North Pacific albacore is to be treated as a Level 2 stock. The following is based on an average recruitment scenario:

* The limit reference point (LRP) for this stock is established at 20%SSBcurrent F=0.

This LRP is consistent with the Annex II of the UN Fish Stocks Agreement (UNFSA) and recent WCPFC decisions on LRPs for the three tropical tuna species and South Pacific albacore, where 20%SSBcurrent F=0 was adopted. If this point is breached, management actions will be taken to return the stock to a predetermined level as outlined in the subsequent section on Decision Rules. This LRP replaces the current interim limit which was previously established by the NC as FSSB-ATHL.

* The target reference point (TRP) for this stock will be determined following a comprehensive analysis, if appropriate, under a management strategy evaluation (MSE) approach as outlined in section 4 on “Future Work”. Historical fishing activity, anticipated fishing activity, and the source of increased fishing mortality will also be considered when evaluating a suitable TRP. Socioeconomic factors, as per UNFSA Article 6.3.c., will be further considered. The existing conservation and management measure (CMM) for the stock (WCPFC 2005-03) establishes through limits on current effort an overall management regime for the stock.

**3. Decision rules**

NC recommends a management strategy for the stock that ensures that the risk of the biomass decreasing below the LRP is low.

LRP rule: In the event that, based on information from ISC, the spawning stock size decreases below the LRP at any time, NC will, at its next regular session or intersessionally if warranted, adopt a reasonable timeline, but no longer than 10 years, for rebuilding the spawning stock to at least the LRP and recommend a CMM that can be expected to achieve such rebuilding within that timeline. NC will take into account historical fishing activity and the source of increased fishing mortality when developing management strategies to rebuild the stock, including in establishing effort reductions. NC will further consider socioeconomic factors, as per UNFSA Article 6.3.c., as well as which NC members, if any, contributed to exceeding the LRP.

**4. Future work**

This framework shall be reviewed following the 2017 ISC stock assessment of North Pacific albacore. In the interim, NC would support an MSE, if appropriate, for the stock to yield new information that would enhance the robustness of this framework. This framework shall be reviewed following the 2017 ISC stock assessment of North Pacific albacore.

**Attachment E**

**The Commission for the Conservation and Management of**

**Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

**Northern Committee**

**Tenth Regular Session**

**Fukuoka, Japan**

**1–4 September 2014**

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| **WORK PROGRAMME FOR THE NORTHERN COMMITTEE** |

| **Work areas** | **Objectives** | **1-year tasks** | | |
| --- | --- | --- | --- | --- |
| **2015–2017** | **2015** | **2016** | **2017** |
| **1. Northern stocks** |  | Consider other management options  than the existing management  measures, if appropriate. | | |
| a. Monitor status; consider management action | Review status and take action as needed for:[[1]](#footnote-1) |  |  |  |
|  | **North Pacific albacore**  Tasks  (A)Review members’ reports on their implementation of CMM 2005-03.  (1)Estimate the proportion of the total catch of albacore in the North Pacific Ocean (in the Convention Area, and/or across the entire North Pacific Ocean, as appropriate) that is effectively subject to the effort limits mandated in the CMM.  (2) Determine how total effort across those fisheries has changed from 2002 through a review of members’ reports of annual fishing effort by their vessels “fishing for” North Pacific albacore fisheries.  (B)Implement the agreed precautionary approach-based management framework, including: (1)monitor if LRP is breached; (2) establish TRP following MSE; (3) recommend any changes to CMM 2005-03. | Review members’ report as compiled by the Secretariat and identify and rectify shortcomings.  Monitor SSB against LRP. Start consideration of Task (B)(2).  Support ISC MSE Workshop. | Review the compiled members’ reports and identify and rectify shortcomings.  (SAME AS LEFT)  Complete Task (B)(2). | Review the compiled members’ reports and 　identify and rectify shortcomings.  (SAME AS LEFT)  Recommend any necessary changes to CMM 2005-03 (Task(B)(3)). |
|  | **Pacific bluefin tuna**  Establish a precautionary-approach based management framework, including: (1) recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules); (3) recommend any changes to the rebuilding program and CMM. | Review reports from CCMs on their domestic management measures and trade.  Start consideration of Task (1) and (2). | Obtain and review an assessment in accordance with the preliminary rebuilding program and consider emergency measures in case of recruitment drop and, as appropriate, CDS.  Develop the management framework and recommend any changes to the rebuilding program and CMM (Task (1) – (3)). |  |
|  | **Swordfish**  Establish a precautionary-approach based management framework, including: (1) recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules). | Finalize interim management objective and reference points in light of the ISC2014 stock assessment. |  | Obtain and review a full assessment and consider appropriate management action. |
|  | **Striped marlin** (if agreed on by the Scientific Committee and Commission). | Review the ISC stock assessment and implementation of applicable CMM. |  |  |
| b. Data | Achieve timely submission of complete data needed for assessments, formulation of measures, and review of Commission decisions. | CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. | CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. | CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission. |
|  |  | Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin, and swordfish data from all CCMs and make available to ISC. | Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC. | Encourage submission to Commission of Pacific bluefin tuna, North Pacific albacore, North Pacific striped marlin and swordfish data from all CCMs and make available to ISC. |
|  | Consider systems to validate catch data |  |  |  |
| c. Scientific support | Provide support for scientific studies. | Encourage voluntary contribution for NC’s list of priority scientific projects. |  |  |
| **2. Non-target, associated, dependent species** |  |  |  |  |
| a. Seabirds | Consider appropriate implementation of methods to minimize catch and mortality. | Review implementation of CMM-2012-07 in the northern area. | Review implementation of CMM-2012-07 in the northern area. | Review implementation of CMM-2012-07 in the northern area. |
| b. Sea turtles | Consider appropriate implementation of methods to minimize catch and mortality. | Review mitigation research results and consider management action. | Review mitigation research results and consider management action. | Review mitigation research results and consider management action. |
| c. Sharks | Consider appropriate implementation for CMM-2010-07 in the northern area. | Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and mako shark). | Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and mako shark). | Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and mako shark). |
|  |  | Encourage submission of all shark data to ISC. | Encourage submission of all shark data to ISC. | Encourage submission of all shark data to ISC. |
| **3. Review effectiveness of decisions** | Annually review effectiveness of conservation and management measures and resolutions applicable to fisheries for northern stocks. | Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members’ reports on their interpretation and implementation of fishing effort control.  Review effectiveness of Pacific bluefin tuna measure. | Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members’ reports on their interpretation and implementation of fishing effort control.  Review effectiveness of Pacific bluefin tuna measure. | Review effectiveness of North Pacific albacore measure (CMM 2005-03), including members’ reports on their interpretation and implementation of fishing effort control.  Review effectiveness of Pacific bluefin tuna measure. |
| **4. ROP(Paragraph 9, Attachment C of CMM2007-01)** |  | Review implementation of ROP for fishing vessels operating in north of 20°N. | Review implementation of ROP for fishing vessels operating in north of 20°N. | Review implementation of ROP for fishing vessels operating in north of 20°N. |
| **5. VMS** |  | Review implementation of VMS for fishing vessels operating in north of 20°N. | Review implementation of VMS for fishing vessels operating in north of 20°N.  . | Review implementation of VMS for fishing vessels operating in north of 20°N. |
| **6. Cooperation with other organisations** |  |  |  |  |
| a. ISC |  | Consider action to support ISC. | Consider action to support ISC. | Consider action to support ISC. |
| b. IATTC | Following Article 22.4, consult to facilitate consistent management measures throughout the respective ranges of the northern stocks. | Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. | Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. | Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna. |

**Table abbreviations:**

CDS = catch documentation scheme

CMM= conservation and management measure

IATTC = Inter-American Tropical Tuna Commission

ISC = International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

LRP = limited reference point

MSE = management strategy evaluation

NC = Northern Committee

ROP = Regional Observer Programme

TRP = target reference point

VMS = vessel monitoring system

1. In the event that the Commission, in accordance with paragraph 5 of Annex I of the Commission Rules of Procedure, adds additional stocks, such as the northern stock of striped marlin, to the list of stocks understood to be “northern stocks”, this work programme will be revised to include periodic status reviews and consideration of management action for such stocks. [↑](#footnote-ref-1)