

**Commission for the Conservation and Management of**

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

**Northern Committee**

**Fourteenth Regular Session**

**Fukuoka, Japan**

**4 – 7 September 2018**

**SUMMARY REPORT (Revision 1)**

**Note:** The outcomes of the extended meeting of the NC14, held on 10 December 2018, are reflected in Paragraphs 90 and 91, and in Attachment H (Revised CMM 2018-07).

**Acknowledgements**

The financial, logistical and administrative support provided by the Government of Japan and the Western and Central Pacific Fisheries Commission Secretariat are gratefully acknowledged. Mr Masanori Miyahara, who chaired the Fourteenth Regular Session of the Northern Committee, and Dr Shuya Nakatsuka, who served as a rapporteur for the meeting, are acknowledged with appreciation.

**TABLE OF CONTENTS**

[**SUMMARY REPORT**](#_Toc447543291)

[Agenda Item 1 — Opening of Meeting](#_Toc447543292) 4

[Agenda Item 2 — Conservation and Management Measures](#_Toc447543293) 5

[Agenda Item 3 — Regional Observer Programme](#_Toc447543294) 17

[Agenda Item 4 — Data](#_Toc447543296) 17

[Agenda Item 5 — Cooperation With Other Organizations](#_Toc447543297) 17

[Agenda Item 6 — Future Work Programme](#_Toc447543298)………………………………………………………………18

[Agenda Item 8 — Other Matters](#_Toc447543299) 18

[Agenda Item 9 — Adoption of the Summary Report](#_Toc447543300) 18

[Agenda Item 10 — Close of Meeting](#_Toc447543301) 18

[**ATTACHMENTS**](#_Toc447543302)

[Attachment A — List of Participants](#_Toc447543303) 19

[Attachment B — Agenda](#_Toc447543304) 30

[Attachment C — Statement by Republic of Korea](#_Toc447543305) 32

[Attachment D — Statement by Japan on the Sea of Japan](#_Toc447543306) 33

[Attachment E — Outcomes of the 3rd Joint IATTC-WCPFC NC Working Group meeting on the management of Pacific bluefin tuna](#_Toc447543306) 34

[Attachment F — Statement by Japan on the Harvest Strategy for Pacific Bluefin tuna](#_Toc447543307) 40

[Attachment G — Work Programme for the Northern Committee](#_Toc447543307) 41

[Attachment H — Conservation and Management Measure for Pacific Bluefin Tuna](#_Toc447543307) 46

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

**Northern Committee**

**Fourteenth Regular Session**

Fukuoka, Japan

4 – 7 September 2018

|  |
| --- |
| **SUMMARY REPORT** |

**AGENDA ITEM 1 — OPENING OF MEETING**

1. The Fourteenth Regular Session of the Northern Committee (NC14) took place in Fukuoka, Japan, from 4-7 September 2018. The meeting was attended by Northern Committee (NC) members from Canada, Cook Islands, Fiji, Japan, Republic of Korea, Chinese Taipei, United States of America (USA) and Vanuatu; CCM observers from European Union, Federated States of Micronesia, Kiribati, Republic of Marshall Islands, Mexico, Palau, Papua New Guinea, Solomon Islands and Tuvalu; and observers from Birdlife International, Inter-American Tropical Tuna Commission (IATTC), International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), Pacific Islands Forum Fisheries Agency (FFA), MSC, Organization for the Promotion of Responsible Tuna Fisheries (OPRT), Organization for Regional and Inter-regional Studies (ORIS), The Pew Charitable Trusts, Seafood Legacy 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.
2. In the absence of the Commission Chair from NC14, Riley Kim, the Commission Vice Chair was asked to make a statement and she made the following statement: For 14 years, the NC has served as one of the Commission’s important bodies with the responsibility to provide management advice and recommendation to the Commission regarding the northern stocks. In this regard, I would like to congratulate the Members of the NC for their hard work, which is gradually paying off, resulting in the recovery of some of important stocks and making sure that northern stocks are managed properly. This year, the ISC provided advice that shows signs that the recovery plan for Pacific bluefin tuna is on track, projecting more than 90% of probability of achieving the initial target if the current measure continues to apply. We also have 17 future projection scenarios for Pacific bluefin tuna in front of us, which would contribute to guiding the NC in our discussion at this meeting. I believe that whatever management advice we produce here, the NC needs to ensure that the rebuilding plan is given a chance to perform. In this regard, I hold high expectations to the Joint meeting between the NC and the IATTC, which will make up a large part of this year’s NC. The NC will also discuss a discussion paper on a rebuilding plan for the North Pacific striped marlin and a proposal on Harvest Strategy for North Pacific swordfish in accordance with the Harvest Strategy CMM adopted by the Commission. I hope that this year’s NC will bear fruits as it has for the last 13 years so that we can present the Commission right management tools that will help us achieve our common goal of the conservation and rational use of our resources.
   1. **Adoption of agenda**
3. The provisional agenda was adopted without modification (Attachment B).
4. Documents supporting the meeting were made available on WCPFC’s website (https://www.wcpfc.int/meetings/14th-regular-session-northern-committee).

**1.3 Meeting arrangements**

1. Chair clarified his intention on the meeting arrangements of NC14; as was the case of last year, he intends to hold WCPFC NC-IATTC Joint Working Group meeting during NC14 after the presentation of the results of ISC work in the previous year and reports from each CCM regarding their implementation of CMM on Pacific bluefin tuna. D. Lowman (USA) and himself were nominated as co-chairs. The results of the Joint Working Group meeting will be reported to NC14 and IATTC. The NC approved the suggested meeting arrangements.
2. Japan, as the host country of NC14, briefed meeting participants on the arrangements of the meeting.
3. It was agreed that S. Nakatsuka (Japan) would serve as the rapporteur for the meeting.

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

* 1. **Report from the Eighteenth Meeting of the International Scientific Committee (ISC18)**

1. J. Holmes, ISC chair, presented the highlights of the 18th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (NC14-IP-01). Highlights of his presentation on the ISC17 Plenary meeting were summarized below:

The 18th ISC Plenary, held in Yesou, Republic of Korea, 11-16 July 2018 was attended by members from Canada, Chinese Taipei, Japan, Mexico, Republic of Korea, and the United States, as well as the Western and Central Pacific Fisheries Commission Secretariat. The Plenary reviewed results, conclusions, new data, and updated analyses of the Billfish, Albacore, Shark and Pacific Bluefin tuna working groups. The Plenary endorsed the findings that North Pacific shortfin mako shark and WCNPO swordfish are not likely overfished nor likely experiencing overfishing. The Pacific bluefin tuna update assessment continues to show that the stock is overfished and experiencing overfishing. However, the projections, which begin in 2016, showed that the probability of achieving the first and second rebuilding targets (20% SSBF=0) within the specified time frames (2024 and 2034) were 98% and 96% respectively. These results are influenced by the above average recruitment estimate for 2016, the final year in the update assessment and first year of the projections. North Pacific albacore are not overfished nor experiencing overfishing, although it was noted that catch has been decreasing since 2012. In addition, blue shark is not experiencing overfishing nor is it overfished, the Eastern Pacific Ocean swordfish stock is not overfished but likely experiencing overfishing, the Pacific blue marlin stock is not overfished nor experiencing overfishing, and the North Pacific striped marlin is experiencing overfishing and is overfished. The first Pacific Bluefin Management Strategy Evaluation (MSE) Workshop was convened in Yokohama in May 2018 in preparation for undertaking an MSE process beginning in 2019. The workshop was intended to begin discussions on management objectives and performance indicators, finalizing them will require additional input from stakeholders. A third MSE workshop for North Pacific albacore was held in Vancouver, Canada, in October 2018; subsequently, the ISC Plenary agreed and recommended a revised workplan for the ALBWG focusing on testing and providing advice on suitable target reference points, in support of the Harvest Strategy for NP Albacore. The ALBWG is scheduling a 4th workshop, March 5-7, 2019, to discuss initial results with stakeholders and formulate a plan for future MSE activities. The status of the close-kin research project was reviewed and a meeting to discuss the analysis of samples already collected is planned in conjunction with a PBFWG workshop in March 2019 in Busan, Korea. An ad-hoc Working Group meeting on north Pacific tuna tagging will be convened in Honolulu, Hawai’i concurrently with WCPFC15, to explore developing an international North Pacific highly migratory species tagging program under ISC auspices, with an initial focus Pacific bluefin and North Pacific albacore tuna. The ISC Plenary reconfirmed its support of the science objectives for ISC and PICES collaborations and noted that the last business meeting of the joint WG of the ISC and PICES will occur in October 2018. A peer review of the ISC structure and function focusing on the ISC stock assessment process is underway and is expected to conclude in October 2018 with a final report and recommendations to improve stock assessment practices. The ISC Plenary adopted a template to standardize stock status and conservation information as practical, noting that the template was consistent with the strides the WGs have made in incorporating the best available scientific information (BASI) into stock assessment work, enhanced stock assessment reports and the increased transparency in Working Group efforts in recent years. The ISC Plenary agreed to resume discussions on formalizing the ISC structure and administration, with the USA leading this effort. Observers from Pew Charitable Trusts, Monterey Bay Aquarium, World Wide Fund for Nature – Japan, the Western Pacific Fisheries Management Council attended the ISC18 Plenary. The ISC work plan for 2018-19 includes completing a benchmark North Pacific striped marlin assessment, as well as hosting a close-kin workshop and Ad-hoc Tagging Working Group meeting, the 4th MSE Workshop for North Pacific Albacore and the 2nd Pacific Bluefin Tuna MSE Workshop. The next ISC Plenary will be held in Chinese Taipei in July 2019.

1. It was confirmed that the regular PBFWG meeting is scheduled to be held in March 2019 in Korea.
2. S. Nakatsuka, ISC PBFWG vice-chair, presented the results of the 2018 assessment of Pacific bluefin tuna.

As the 2018 assessment was an update, the basic model construction is the same as that used for the 2016 assessment. Population dynamics were estimated using a fully integrated age-structured model (Stock Synthesis) fitted to catch, size-composition and CPUE data from 1952 to 2016 (fishing year). Nineteen fleets were defined for use in the stock assessment model based on country/gear/season/region stratification. Annual estimates of standardized CPUE from the Japanese longline fleets, the Chinese Taipei longline fleets, and the Japanese troll fleets were used as measures of the relative abundance of the population. Based on the diagnostic analyses, the ISC concluded that the model represents the data sufficiently and results were consistent with the 2016 assessment. The 2018 assessment results are considered the best available science information.

The 2018 projection results are more optimistic than the 2016 projections, mainly due to the inclusion of the relatively good recruitment in 2016, which is twice as high as the median of a low recruitment scenario (i.e. that which occurred during1980-1989). Based on the performance analyses of the recruitment estimates using an age-structured production model and the retrospective diagnostics, terminal year recruitment estimates were included in the projections. The projection results showed that the probability of achieving the initial rebuilding target under current measures taken by WCPFC and IATTC was above the level prescribed in the WCPFC Harvest Strategy (75% or above in 2024) to provide relevant information for potential increase in catch. Accordingly, the ISC examined some optional scenarios which have higher catch limit.

**Stock Status and Conservation Information**

The base-case model results show that: (1) SSB fluctuated throughout the assessment period, (2) SSB steadily declined from 1996 to 2010; and (3) the slow increase of the stock continues since 2011 including the most recent two years (2015-2016). Based on the model diagnostics, the estimated biomass trend for the last 30 years is considered robust although SSB prior to the 1980s is uncertain due to data limitations. Using the base-case model, the 2016 SSB (terminal year) was estimated to be around 21,000 t in the 2018 assessment, which is an increase from 19,000 t in 2014.

Historical recruitment estimates have fluctuated since 1952 without an apparent trend. The low recruitment levels estimated in 2010-2014 were a concern in the 2016 assessment. The 2015 recruitment estimate is lower than the historical average while the 2016 recruitment estimate (15.988 million fish) is higher than the historical average (13.402 million fish). The uncertainty of the 2016 recruitment estimate is higher than in previous years because it occurs in the terminal year of the assessment and is mainly informed by one observation from the troll age-0 CPUE index. The troll CPUE series has been shown to be a good predictor of recruitment, with no apparent retrospective error in the recruitment estimates of the terminal year given the current model construction. As the 2016 recruits grow and are observed by other fleets, the magnitude of this year class will be more precisely estimated in the next stock assessment. The above average recruitment estimated in 2016 had a positive impact on the projection results.

Estimated age-specific fishing mortalities (F) on the stock during the periods 2012-2014 and 2015 2016 were compared with 2002-2004 estimates. A substantial decrease in estimated F is observed in ages 0-2 in 2015-2016 from the previous years.

The WCPFC adopted an initial rebuilding biomass target (the median SSB estimated for the period 1952 through 2014) and a second rebuilding biomass target (20%SSBF=0 under average recruitment), without specifying a fishing mortality reference level. The 2018 assessment estimated the initial rebuilding biomass target to be 6.7%SSBF=0 and the corresponding fishing mortality expressed as SPR of F6.7%SPR. SPR is the ratio of the cumulative spawning biomass that an average recruit is expected to produce over its lifetime when the stock is fished at the current intensity to the cumulative spawning biomass that could be produced by an average recruit over its lifetime if the stock was unfished. Because the projections include catch limits, fishing mortality is expected to decline, i.e., Fx%SPR will increase, as biomass increases. The Kobe plot shows that the point estimate of the SSB2016 was 3.3%SSBF=0 and the 2016 fishing mortality corresponds to F6.7%SPR. The evaluation of stock status against some common reference points shows that the Pacific bluefin tuna stock is overfished relative to biomass-based limit reference points adopted for other species in WCPFC (20%SSBF=0) and is subject to overfishing relative to most of the common fishing intensity-based reference points.

Historically, the WPO coastal fisheries group has had the greatest impact on the Pacific bluefin tuna stock, but since about the early 1990s the WPO purse seine fleets, in particular those targeting small fish (ages 0-1), have had a greater impact, and the effect of these fleets in 2016 was greater than any of the other fishery groups. The impact of the EPO fishery was large before the mid-1980s, decreasing significantly thereafter. The WPO longline fleet has had a limited effect on the stock throughout the analysis period, because the impact of a fishery on a stock depends on both the number and size of the fish caught by each fleet; i.e., catching a high number of smaller juvenile fish can have a greater impact on future spawning stock biomass than catching the same weight of larger mature fish.

**Stock Status**

Based on these findings, the following information on the status of the Pacific bluefin tuna stock is provided:

**No biomass-based limit or target reference points have been adopted to evaluate the overfished status for Pacific bluefin tuna. However, the Pacific bluefin tuna stock is overfished relative to the potential biomass-based reference points evaluated (SSBMED and 20%SSBF=0).**

**No fishing intensity-based limit or target reference points have been adopted to evaluate overfishing for Pacific bluefin tuna. However, the Pacific bluefin tuna stock is subject to overfishing relative to most of potential fishing intensity-based reference points evaluated.**

**Conservation Information**

After the steady decline in SSB from 1995 to the historical low level in 2010, the Pacific bluefin tuna stock appears to have started recovering slowly. The 2016 stock biomass is below the two biomass rebuilding targets adopted by the WCPFC while the 2015-16 fishing intensity (spawning potential ratio) is at a level corresponding to the initial rebuilding target.

The 2018 base case assessment results are consistent with the 2016 model results. However, the 2018 projection results are more optimistic than the 2016 projections, mainly due to the inclusion of the relatively good recruitment in 2016, which is above the historical average level (119%) and twice as high as the median of the low recruitment scenario (which occurred 1980-1989).

Based on these results, the following conservation information is provided:

**The projection based on the base-case model mimicking the current management measures by the WCPFC (CMM 2017-08) and IATTC (C-16-08) under the low recruitment scenario resulted in an estimated 98% probability of achieving the initial biomass rebuilding target (6.7%SSBF=0) by 2024. This estimated probability is above the threshold (75% or above in 2024) prescribed by the WCPFC Harvest Strategy. The low recruitment scenario is more precautionary than the recent 10 years recruitment scenario.**

**The Harvest Strategy specifies that recruitment in projection switches from the low recruitment scenario to the average recruitment scenario beginning in the year after achieving the initial rebuilding target. The estimated probability of achieving the second biomass rebuilding target (20%SSBF=0) 10 years after the achievement of the initial rebuilding target or by 2034, whichever is earlier, is 96%. This estimate is above the threshold (60% or above in 2034) prescribed by the WCPFC Harvest Strategy. However, it should be recognized that these projection results are strongly influenced by the inclusion of the relatively high, but uncertain recruitment estimate for 2016.**

The Harvest Strategy adopted by WCPFC (Harvest Strategy 2017-02) guided projections conducted by ISC to provide catch reduction options if the projection results indicate that the initial rebuilding target will not be achieved or to provide relevant information for potential increase in catch if the probability of achieving the initial rebuilding target exceeds 75%. The projection results showed that the probability of achieving the initial rebuilding target was above the level (75% or above in 2024) prescribed in the WCPFC Harvest Strategy. Accordingly, the ISC examined some optional scenarios with higher catch limits, which can be found in Appendix 1 of the Pacific bluefin tuna 2018 stock assessment report (NC14-IP-04).

1. Japan asked how uncertain the 2016 recruitment estimate is and how the projection results should be interpreted. He also asked why the stock is evaluated as being subject to overfishing when the stock is projected to recover. S. Nakatsuka responded that PBFWG as well as ISC Plenary had a lengthy discussion as to if the 2016 recruitments should be included in the projection. Despite relatively higher uncertainty, the ISC felt comfortable including the value based on additional analyses of the reliability of terminal year recruitment estimate. The uncertainty of 2016 recruitment estimate is somewhat reflected in its wider confidence interval, which will be translated in the risk of not achieving the targets. ISC cannot instruct the NC what to do based on the results of projections but NC can take actions based on the probability to achieve the targets against respective risk tolerance. J. Holmes added that the estimates in the terminal year are always most uncertain because of the scarcity of data to inform but that the validity of the 2016 recruitment will be evaluated as more data becomes available in future assessments. With regard to the designation of “over-fishing”, S. Nakatsuka explained that the current fishing intensity is at a level that will bring back the stock only to 6.7% in the long-run, but because of the catch limit, future fishing intensity will decrease as stock increases. In the current practice in fisheries management, such a level of fishing intensity is characterized as “subject to overfishing” even if the stock is projected to increase.
2. Korea asked if the projection results will change in future assessments and if scenarios other than 17 scenarios tested here can be tested. S. Nakatsuka responded that the assessment results and thus projections can change in the benchmark assessment scheduled in 2020 as the entire model assumptions will be reviewed from scratch and changed if necessary. Benchmark assessments are important for continuous improvement of assessment. He also noted that additional scenarios can be tested in the next PBFWG meeting in March 2019 if specific instructions are provided. In this regard, J. Holmes emphasized the importance of the instructions to ISC being as clear as possible.
3. USA clarified the timing of projection starting increase in response to the change of recruitment scenario. S. Nakatsuka clarified that in Scenario 1, the recruitment is switched to average recruitment after achieving the initial rebuilding target in 2021 but it becomes reflected in SSB only after the increased recruits start becoming mature Pacific bluefin tuna after age 3.
4. EU asked if there is a plan for a peer review of the stock assessment of Pacific bluefin tuna. S. Nakatsuka responded that Pacific bluefin tuna assessment is conducted with regular input from IATTC staff and SPC is a member of PBFWG and invited to participate. Also the 2012 assessment underwent CIE review. He further noted that ISC is currently developing an assessment review process and he expects the specific review of Pacific bluefin tuna assessment will be discussed when this process is completed. J. Holmes confirmed that ISC is currently under a structural review and will come back to species assessment review once the structural review is finished.
   1. **Report of the Fourteenth Regular Session of the Scientific Committee (SC14)**
5. The Science Manager S-K. Soh presented the results of the fourteenth regular session of the Scientific Committee (NC14-IP-02) related to NC issues. His presentation is summarized as follows:
   * 1. SC14 was held in Busan, Korea from 8-16 August 2018. Over 220 were participated in the meeting and Mr. Ueta Faasili (Samoa) chaired the meeting.
     2. The provisional total tuna catch for 2017 was estimated at 2,539,950 mt, the lowest catch for the last six years, which is 78% of the total estimated Pacific Ocean catch of 3,239,704 mt and 54% of the provisionally estimated global tuna catch of 4,715,836 mt in 2017.
     3. SC14 reviewed 2018 stock assessments for bigeye tuna and South Pacific albacore. Key stock status and management advice includes:

* Bigeye tuna spawning biomass is above the biomass limit reference point and recent fishing mortality is very likely below FMSY. The stock is not experiencing overfishing (94% probability F<FMSY) and it is not in an overfished condition (0% probability SB/SBF=0<LRP). The stock is not  As a precautionary approach that the fishing mortality on bigeye tuna stock should not be increased from the recent average (2011-2014) level to maintain spawning biomass at or above the 2012-2015 average.
* WCPO albacore tuna spawning biomass is very likely to be above the biomass LRP and recent F is very likely below FMSY. The stock is not experiencing overfishing (100% probability F < FMSY) and is not in an overfished condition (100% probability SBrecent > LRP). SC14 recalled its previous advice from SC11, SC12, and SC13 that longline fishing mortality and longline catch be reduced to avoid decline in the vulnerable biomass so that economically viable catch rates can be maintained, especially for longline catch of adult albacore. SC14 recommends that this advice be taken into consideration when the TRP for South Pacific albacore is discussed at WCPFC15.
  + 1. Regarding the designation of North Pacific blue shark and North Pacific striped marlin, SC14recommended that the Commission clarify and quantify what is meant by “*mostly north of 20 degrees N*”. In addition, SC14 developed a check-list of benchmark scientific information for each species for the Commission’s consideration.
    2. In response to Paragraph 215 of the WCPFC14 Summary Report on the need for a Science-Management Dialogue, SC14 recommended that:
* WCPFC15 take the necessary steps to establish such a Dialogue in 2019; and
* The Commission define the appropriate format for this group to possess authority to enable them to make the appropriate recommendations to the Commission.
  + 1. The Scientific Committee’s work programme and budget for 2019 – 2021 were introduced with a total budget of $2,160,928 for 2019. SC14 agreed that the scientific services provider conduct stock assessments for skipjack and South Pacific striped marlin in 2019.
    2. The 15th Scientific Committee meeting is scheduled to be held in Pohnpei, Federated States of Micronesia during 7-15 August 2019.

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

**2.3.1 Pacific bluefin tuna**

**2.3.1.1 Reports from CCMs and Observers**

1. Canada (NC14-DP-01) reported that there are no fisheries targeting Pacific bluefin tuna to report. In 2017, no catch, including bycatch, was recorded and 154t Pacific bluefin tuna was imported and none exported.
2. China was not present to report its activities related to CMM 2017-08. However, it was noted that, according to its submitted report (NC14-DP-02), there is no fishing for Pacific bluefin tuna in China. The trade is monitored using CDS under ICCAT.
3. USA noted that Japan reports export to China but China reports that all of its import is from Atlantic. The question cannot be answered due to the absence of Chinese delegation.
4. Cook Islands informed the NC that there was no catch of Pacific bluefin tuna to report in 2017.
5. Cook Islands later clarified that 1 Pacific bluefin tuna was caught within the Cook Islands’ EEZ and exported to Japan in 2017. The fish was originally documented as bluefin tuna but later confirmed to be Pacific bluefin tuna. The Cook Islands will look into its reporting system for further improvement.
6. Fiji reported that 250-350kg of juvenile Pacific bluefin tuna are often caught in the northern part of its EEZs as bycatch but no catch was recorded in 2016.
7. Korea reported its management activities of Pacific bluefin tuna fisheries (NC14-DP-06). There are 24 large-scale purse seine vessels catching Pacific bluefin tuna, same as 2017, compared to 30 vessels in 2002-04 average. There are 494 set-nets in total domestically but 63 of those are located in the area where Pacific bluefin tuna do not migrate, which leads to 431 set-nets that can catch Pacific bluefin tuna. Catch of small Pacific bluefin tuna less than 30kg is controlled by the Ministerial Directive to contain the catch at less than 50% of Korean 2002-04 average. The Directive also requires the Pacific bluefin tuna catch be reported to the national institute within 24 hours of the catch since 2005 and the government cross-checks the report. As the result of the overage of 469t of large (equal to or more than 30kg) Pacific bluefin tuna in 2016, 235t equally, or 47t annually, was deducted from the small Pacific bluefin tuna catch limit from 2017 to 2021. In 2018, additional 72t was deducted because of overage in 2017. Pacific bluefin tuna catch was 677t (small: 676t, large:1t), 1028t (small: 559t, large: 469t), 743t (small: 670t, large: 73t), for 2015, 2016 and 2017, respectively. Ministry of Oceans and Fisheries allows fishermen to land Pacific bluefin tuna only in designated ports. Trade of Pacific bluefin tuna is monitored by statistical documents accompanied.
8. Chinese Taipei noted that the catch limit was exceeded by Korea for 2 years in a row and encouraged Korea to continue to work to meet its commitment.
9. Japan reported its activities related to CMM 2017-08 (NC14-DP-05). Japan first described the characteristics of various fisheries catching Pacific bluefin tuna. The licenses for artisanal fisheries catching Pacific bluefin tuna, which includes trolling, jigging and handling, were reduced from over 24 thousand to 22,500. It should be noted that not all of these licensed vessels are targeting Pacific bluefin tuna; the majority is opportunistically catching Pacific bluefin tuna. They operate very close to shoreline. There are about 1800 set-nets all over Japan. They are passive fishing gear, waiting for fish to coming in, thus difficult to control catch. Pacific bluefin tuna catch is only 0.3% of total catch by set-nets. In terms of catch control of small Pacific bluefin tuna, the catch limit was set separately for purse seine and coastal fisheries. Catch limit of purse seine was reduced by 500t, 250t of which was converted to the catch limit of large Pacific bluefin tuna and remaining 250t was retained by JFA as buffer. Because of the overage in 2016, catch limit for small fish in 2017 was set at 3423t. Japan has been struggling to manage coastal fisheries catching small Pacific bluefin tuna; it has modified the management framework every year for the last three years but even in the last year JFA had to request coastal fishermen to refrain from catching small Pacific bluefin tuna due to the sudden extremely large catch by one area (350t in 5 days), much larger than allocated. This resulted in strong dissatisfaction in those fishermen who were unable to utilize their allocated catch limit although Japan barely managed to keep small Pacific bluefin tuna catch within its limit. JFA is afraid that keeping catch limit will be increasingly difficult as stock recovers. In addition, increased population of Pacific bluefin tuna is causing problem in other fisheries, such as snatching catch in squid jigging fishery or being caught and damaging fishing gear in yellowtail longline fishery, and these appears to be worsening as Pacific bluefin tuna stock increases. In particular, situation in set-net fishery is serious because the passive fishery cannot choose fish coming into net. Therefore, JFA is financially supporting projects to develop methods to alleviate the problem of bycatch, such as investigating a new set-net structure that can separate Pacific bluefin tuna from other species. With regard to catch limit of large Pacific bluefin tuna, which is 5132t including transfer from small Pacific bluefin tuna, catch was kept within limit in 2017. For control of aquaculture, sites raising Pacific bluefin tuna need to be registered and JFA instructs not to increase the capacity of Pacific bluefin tuna farms using wild fries. Starting from 2018 additional measures are in place to strengthen the management of Pacific bluefin tuna fisheries; a binding TAC is introduced from 2018 to any fisheries that catch Pacific bluefin tuna. The reporting system was improved to ensure more accurate and timely reporting of Pacific bluefin tuna catch. JFA secured a larger reserve to enable to deal with catch overage in one area. Recruitment monitoring and data collection from aquaculture companies continue.
10. It was confirmed by Japan that domestic TAC is applied to all the fisheries that catch Pacific bluefin tuna.
11. It was noted that the Philippines was not present and that the report from the Philippines indicated that 2 Pacific bluefin tuna were caught in 2017.
12. Chinese Taipei reported that in 2017 559 longline vessels were registered for fishing for Pacific bluefin tuna, which is below 660-vessel baseline. The catch in 2017 is 415t which is also below the baseline. 0.4t and 8.6t of Pacific bluefin tuna were imported and exported, respectively.
13. Japan asked what the cause of decreasing catch is when the number of licensed vessel increases. Chinese Taipei explained that not all registered Pacific bluefin tuna vessels are engaged in fishing for Pacific bluefin tuna during the whole fishing season. It was also noted that standardized CPUE is not decreasing while catch has decreased.
14. USA reported that there is no fishery targeting Pacific bluefin tuna in WCPO. Small bycatch is reported in Hawaii and American Samoa as noted in its national report.
15. Vanuatu reported that 0.99t of Pacific bluefin tuna was caught and no export was authorized.
16. Korea made a statement regarding the geographical name of the sea referred to in the Japan’s national report, which is attached as Attachment C.
17. In response Japan made a rebuttal, which is attached as Attachment D.
18. It was noted that the geographical name used in documents submitted by each member does not reflect the official position of WCPFC or prejudice the views of other members.
    * + 1. **Joint Working Group Meeting between NC and IATTC on Pacific bluefin tuna conservation management**
19. NC14 received the report of Joint Working Group Meeting between NC and IATTC (Attachment E)
20. During the discussion of the Joint WG, Mexico and USA reported its management of Pacific bluefin tuna fisheries in the EPO. Mexico reported that its catch in 2017 was about 400t more than domestically allocated. Because the catch was made in such a short period, the instruction to halt fisheries was issued but several sets were made after the fishing closure. The government ordered the release of Pacific bluefin tuna from those sets (tuna is alive for farming purposes) but the company appealed. The Mexican government is waiting the judge ruling. This overcatch has been deducted from new IATTC resolution but this could change pending the final actions taken by Mexico. USA reported that in 2017 it exceeded its annual catch limit under IATTC Resolution C-16-08 and closed the fishery. In 2018, the U.S. imposed strict trip limits in the commercial fishery to avoid exceeding the biennial catch limit established in the IATTC resolution.
21. It was noted that, during the discussion of the Joint WG, some members considered that the catch limit should not be increased this year due to still low depletion level of the Pacific bluefin tuna stock and uncertainty involved with the terminal year (2016) recruitment estimate as well as concerns about some members exceeding existing catch limits. Some other members, however, considered that some increase of catch limit is possible according to the harvest strategy adopted in 2017 when all the members were aware that the Pacific bluefin tuna stock status was 2.6% of unfished level, which had increased to 3.3% in the latest stock assessment. While all members recognized the need to take a precautionary approach given the uncertainty associated with the 2016 recruitment estimate, the views on how to proceed consistent with the precautionary approach differed among CCMs. Some members also expressed willingness to consider modest changes to the CMM, such as related to underages. There was no consensus to change CMM 2017-08.
22. The Joint WG agreed to recommend the future actions (Attachment E). The NC considered this recommendation and there was no consensus. Japan made a statement on the outcome of Joint Working Group between NC and IATTC (Attachment F) and requested to resume NC during WCPFC15 to address Japan’s concern. Some members raised concern on this request. Chair clarified that in the past NC held a short meeting on the fringe of the Commission meeting just to discuss a reservation put by a member.
23. **NC14 requested the Chair to request the Commission that the NC holds a short meeting on the fringe of WCPFC15 to remove the reservation by Japan on items 1-3 on the outcome of the Joint WG and to adopt the outcome of Joint WG.**
    * 1. **North Pacific albacore**

**2.3.2.1 Reports from CCMs and Observers**

1. Canada reported that there is one fleet, trolling, targeting North Pacific albacore. The catch in 2017 was 33% less than 2015 while fishing effort declined only by a little. Canada noted this decline with concern and is requesting ISC to investigate the situation through the next assessment. Canada also suggested that this matter may be discussed on the margin of the WCPFC15 as in the case of ISC Pacific bluefin tuna tagging working group.
2. China’s absence was again noted by NC. USA noted that while China continuously reports 10 vessels fishing for North Pacific albacore, there is some information indicating shifting of efforts of additional Chinese vessels from south to North Pacific Ocean, which would be in contravention of the effort limitation in the current CMM for North Pacific albacore. The concern was shared by some other CCMs.
3. Fiji reported that there is no fishery targeting North Pacific albacore.
4. Japan reported that there are three fleets targeting North Pacific albacore. Vessel days in 2017 was similar with that of 2016 and below its limit. Catch in 2017 was around 45,000t and Part 1 report needs to be revised.
5. Korea reported that there is no fisheries targeting North Pacific albacore. However, NC noted that substantial catch as well as effort for North Pacific albacore is reported in Korean national report to the Secretariat. Korea explained that North Pacific albacore catch by Korean vessels is by-catch and the report made by research institute to the Secretariat is based on reported operating days by Korean vessels which are not necessarily targeting North Pacific albacore. Korea will investigate the situation to find how many of the reported days actually involve North Pacific albacore catch.
6. It was noted that the Philippines reported that there is no fisheries targeting North Pacific albacore.
7. Chinese Taipei reported its fishing operations catching North Pacific albacore. 25 longline vessels are targeting North Pacific albacore and its annual catch in 2017 is about 4,300t.
8. USA reported that its troll fisheries based in the west coast is targeting North Pacific albacore. Fishing effort in 2017 was about 12,000 days, mostly in EPO within the US EEZ. The reported fishing days within WCPO Convention Area needs to be updated but was well below the limit.
9. With regard to the report from Vanuatu, Japan questioned the reason for the revision of historical effort fishing for North Pacific albacore. Vanuatu responded that it will check the data and report back. USA noted that the provisions of CMM 2005-03 is complex, providing some limitations while recognizing the aspirational rights of SIDSs, thus need to be carefully evaluated.
10. **In relation to the absence of China, NC agreed to ask NC Chair to write a letter to China, urging its participation in NC activities and conveying concern of NC on a possible violation of the effort limits in CMM2005-03.**

**2.3.2.2 Interim harvest strategy for North Pacific albacore fishery (HS 2017-01)**

1. J. Holmes (ISC Chair) informed the NC that ISC is planning to hold another workshop on North Pacific albacore MSE in March 5-7, in Yokohama, Japan. The purpose of the workshop is to provide information on the evaluation of candidate target reference points through MSE.
2. Japan requested that the results of North Pacific albacore MSE workshop be presented to NC15, similarly to Pacific bluefin tuna.

**2.3.2.3 Review of the CMM 2005-03**

1. Canada noted that IATTC Resolution on North Pacific albacore was revised to change the data reporting frequency from every 6 months to 1 year. It intends to submit a revision of CMM 2005-03 to change the obligation in conformity with IATTC in NC15.

**2.3.3 North Pacific swordfish**

**2.3.3.1 Review of 2018 NP swordfish stock assessment**

1. J. Brodziak, ISC Billifsh WG Chair, presented the results of the benchmark stock assessment for the Western and Central North Pacific Ocean swordfish (*Xiphias gladius*) stock conducted in 2018 by the ISC Billfish Working Group. The 2018 assessment consisted of applying a Stock Synthesis model with the best-available catch, abundance index, and length composition data for 1975-2016. The results indicated that population biomass (age 1 and older) for the Western and Central North Pacific Ocean swordfish stock decreased from 97,000 metric tons in 1975 to 51,000 metric tons in 1998, thereafter increasing to around 71,000 metric tons during the last three years of the assessment (2014-2016). Estimated fishing mortality gradually increased from the 1970s to the mid-1990s, peaked at 0.18 yr-1 in 1993, and declined to average 0.09 yr-1 since 2007. Compared to MSY-based reference points, the spawning stock biomass in 2016 was 87% above SSBMSY and the current fishing mortality (average for ages 1 to 10 during 2013-2015) was 45% below FMSY. Overall, the base case model indicated that the WCNPO swordfish stock is not likely overfished and is not likely experiencing overfishing relative to MSY-based or 20% of unfished spawning biomass-based reference points.
   * + 1. **Development of a management framework**
2. USA introduced its proposal of harvest strategy of NP swordfish (NP-DP-14). It includes 6 elements of harvest strategy as stipulated in CMM 2014-06. The proposed objective is to support thriving swordfish fisheries while maintaining the stock size at levels capable of producing MSY. In addition, MSY-based reference points are suggested as it is considered a tier 1 species in the hierarchical approach of WCPFC as its steepness can be reliably estimated.
3. Cook Islands noted that it strongly supports the adoption of harvest strategy for NP swordfish but suggested that LRP based on biomass, namely 20%SSB0, should also be included in addition to F-based LRP as in other WCPFC species. With regard to the risk level, it should be specified in accordance with the conclusion of WCPFC13, that the risk greater than 20% is not consistent with Article 6 of the Convention.
4. Japan also questioned the reason for using F-based reference points rather than biomass-based reference points as done for other fisheries in WCPFC and other RFMOs. It also sought for the view of ISC regarding the reliability of estimated steepness. Further, it asked how low the risk should be to be considered “low”.
5. J. Brodziak replied that the steepness of NP swordfish is the average of values estimated by two different methods and therefore considered reliable.
6. USA responded to Japan that it continues to believe that F is what managers can control as opposed to biomass thus the reference point should be F-based. However, it also noted that the position of USA has not successfully spread among RFMOs. With regard to the specific level of risk, it is considered that in the present form of F-control in the harvest strategy, further definition of “low” is not required at this stage.
7. Japan noted that biomass can fluctuate due to both fishing mortality and environmental effect even when F is controlled. In WCPFC and other RFMOs use biomass-based reference points and Japan is reluctant to change the common practice without analyzing possible effects on management of this and other tuna and tuna-like species.
8. J. Brodziak noted that the difference between SSBMSY and 20%SSB0 is minor in this stock.
9. USA noted that it can be flexible to also include biomass-based reference point. However, no consensus was achieved on a limit reference point on NP swordfish. After further discussion, **NC agreed to adopt the following management objectives for NP swordfish; “The management objective is to support thriving swordfish fisheries in the North Pacific while maintaining the stock size at levels capable of producing maximum sustainable yield. The Northern Committee will develop more refined management objectives.”**
10. **NC also agreed to continue discussion on the harvest strategy based on NC14-DP-14.**
11. No proposal for CMM was presented. In response to Japan’s suggestion to introduce certain effort limits, USA stated that effort or catch control is not necessary for NP swordfish fishery at this stage, based on the results of the new stock assessment.

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

* + 1. **Bigeye, yellowfin and skipjack tunas (CMM 2017-01)**

1. Japan reiterated its concern over the possible impact of purse seine fisheries in the tropical area, in particular for skipjack, as the same stock is migrating to areas around Japan. The catch of skipjack has been poor recently and this is also the case this year. In addition, poor migration of skipjack could cause target shift of those fishermen who usually target skipjack and increase pressure on other species. Therefore, it proposed to maintain the same language expressing the concern of NC over the high level of exploitation of tropical tunas in the equatorial region.
2. Cook Islands noted that last year SC13 reported that catch of skipjack tuna in tropical area does not significantly impact resources around Japan. SC13 did not deny the connectivity but also noted that impact is considered negligible.
3. **NC14 expressed its concern regarding the status of tropical tuna stocks, not only because those species are being caught in the northern area, but also that the status of those species could impact the management of other species through target shift in the northern area.**
4. **NC14 noted the information on stock status provided by SC13, including the progress of Project 67 on the impacts of recent catches of skipjack tuna on fisheries on the margins of the WCPFC Convention Area. NC14 noted that work under Project 67 is on-going and there may be updated advice.**

**2.4.2 North Pacific striped marlin**

1. USA introduced its delegation paper on NP striped marlin (NC14-DP-13). As NP striped marlin is not a northern stock, it is intended to be a discussion paper. It is hoped that NC may agree to give instruction to ISC to evaluate potential rebuilding targets at the stock assessment schedule next year. The suggestion is to ask ISC to evaluate to rebuild the stock to 20%SSB0 within 10 years among other possible reference points.
2. Japan generally supported the approach suggested by the USA. It further noted that it is important to give specific request to ISC and suggested to request ISC to conduct projection for various target levels to achieve, timeline and probability, and possibly provide results in a form of Kobe matrix to enable to look at wider options.
3. **NC14 agreed to request ISC to conduct projections examining rebuilding scenarios for North Pacific striped marlin that cover a range of rebuilding targets (20%SSBF=0, FMSY, and 0% to 50% reductions in increments of 10% from current catch limits), timelines (10, 15 and 20 years) and probabilities of each scenario to reach each target within different timelines. ISC should produce additional scenarios of catch reduction if the probability of reaching the rebuilding target in 10, 15, and 20 years is not at least 60%.**
4. **NC14 expressed concern over the status of NP striped marlin and urged the Commission to develop a rebuilding plan for the stock as a matter of priority. NC members are encouraged to submit a draft CMM, if possible.**

**2.4.3 Sharks**

1. J. Holmes reiterated that the latest stock assessment of NP shortfin mako shark suggested that the stock is neither overfished nor subjected to overfishing.
2. As suggested by USA, NC noted the latest stock assessment of NP shortfin mako shark and also the feedback from SC14 regarding the designation of NP blue shark as a northern stock.
3. S. Ota, the Chair of Shark IWG, briefed NC with the progress to develop comprehensive shark CMM. NC14 noted that the latest draft CMM was uploaded as a working paper for TCC14 for its discussion. USA thanked the Chair for the progress of IWG to date.

**2.4.4 Seabirds**

1. There were no discussions on this item but it was agreed to keep the item for future meetings.
   * 1. **Sea turtles**
2. There were no discussions on this item but it was agreed to keep the item for future meetings.

**AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME**

1. There were no discussions on this item but it was agreed to keep the item for future meetings as CMM 2012-03 is applied specifically to the area north of 20 degree north. NC14 encouraged CCMs to submit information regarding the implementation of the CMM for small fishing vessels.

**AGENDA ITEM 4 — DATA**

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

1. In response to a question from Japan, G. DiNardo, on behalf of ISC, informed NC that ISC is not receiving data from China and thus has to request it from IATTC and WCPFC.
2. **NC14 agreed that this issue should also be raised in the letter from NC Chair to China related to North Pacific albacore.**

**AGENDA ITEM 5 — COOPERATION WITH OTHER ORGANIZATIONS**

**5.1 ISC**

1. NC14 noted that cooperation with ISC is critical for the advance of the tasks of NC. In particular, more close coordination is necessary for development of MSE for North Pacific albacore and Pacific bluefin tuna. NC14 confirmed its commitment to assist ISC in those regards.
   1. **IATTC**
2. NC14 confirmed the usefulness of the Joint Working Group between WCPFC NC and IATTC for the discussion on the management of Pacific bluefin tuna and supported its continuation. Although recognizing the need to hold the Joint Working Group meeting in a reciprocal manner between NC and IATTC, it was noted that the next year’s IATTC schedule conflicts with ISC Plenary and the location is in Europe, far from where stakeholders are.
3. **NC14 recommended to hold the 4th meeting of Joint Working Group between WCPFC NC and IATTC in conjunction with NC15. Current co-chairs (M. Miyahara and D. Lowman) were requested to continue and to construct draft agenda for the next meeting. The Joint WG further agreed to request co-chairs to continue to evaluate feasibility to hold the future Joint WG meeting in conjunction with IATTC annual meeting.**

**AGENDA ITEM 6— FUTURE WORK PROGRAMME**

**6.1 Work programme for 2019-2021**

1. NC14 revised and adopted its future work programme (Attachment G). The NC considered that the requirement under CMM 2014-06 (establishing time table for development of management framework) was duly addressed in its work programme.

**AGENDA ITEM 7 — OTHER MATTERS**

**7.1 Administrative arrangements for the Northern Committee**

**7.1.1 Secretariat functions and costs**

1. There were no discussions on this item but it was agreed to keep the item for future meetings.

**7.1.2 Rules of procedure**

1. There were no discussions on this item but it was agreed to keep the item for future meetings.

**7.2 Next meeting**

1. USA offered to host NC15 in 2019. NC14 welcomed the offer by USA and agreed in principle to hold the meeting in the first week of September for 5 days. The exact timing and venue, which is likely to be in west coast, will be notified to NC members in due course. The arrangement of the Joint WG meeting including one-day CDS technical meeting should be decided through correspondence, although it likely follows the arrangement of NC14. It was agreed that the arrangement of NC15, including that of the 4th meeting of the Joint WG, to be finalized at WCPFC15.

**7.3 Other business (election of chair)**

1. M. Miyahara (Japan) and M. Tosatto (USA) were nominated as a candidate Chair and a candidate vice Chair of the NC through NC14 respectively for the Commission’s approval.

**AGENDA ITEM 8 — ADOPTION OF THE SUMMARY REPORT OF THE FOURTEENTH REGULAR SESSION OF THE NORTHERN COMMITTEE**

1. NC14 adopted the Summary Report of its Fourteenth Regular Session.

**AGENDA ITEM 9— CLOSE OF MEETING**

1. The meeting was closed on 7 September 2018.

90. During WCPFC15, NC resumed its 14th session briefly to discuss the reservation placed by Japan on the outcome of the 3rd Joint IATTC-WCPFC NC Working Group meeting during NC14. Japan informed NC that after extensive explanation and consultation with domestic stakeholders regarding the outcome of the Joint Working Group meeting, Japan is ready to remove its reservation. However, it also stressed that as its catch limits on PBF is divided into many management units domestically, each unit is likely to have a small amount of unused allocation, and the total amount of which could be non-negligible. Therefore, the domestic stakeholders strongly desire to introduce carry-over clause of the unused portion of the catch limit. Japan thus proposed to modify CMM 2018-07 by adding a provision that allows each CCM to carry forward unused catch limit up to 5% of its original catch limit as introduced in the delegation paper WCPFC15-2018-DP25. NC welcomed the removal of the reservation by Japan and **agreed to recommend the revised CMM as proposed by WCPFC15-2018-DP25 to the Commission (Attachment H)**.

91. At this resumed meeting, the US informed that NC15, including the 4th Joint IATTC-WCPFC NC Working Group meeting and CDS technical meeting, will be held in Portland, Oregon, from 2 – 6 September 2019, in accordance with the meeting arrangement agreed at NC14 in September 2018.

**Attachment A**

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

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

**Northern Committee**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

|  |
| --- |
| **List of Participants** |

***Chair***

**Masanori Miyahara**

President,

Fisheries Research Agency

Queen’s Tower B 15F

2-3-3, Minatomirai, Nishi-ku,

Yokohama City, Kanagawa

masamiya@fra.affrc.go.jp

***Canada***

**Robert Day**

Director

International Fisheries Management and Bilateral Relations

Fisheries and Oceans Canada

200 Kent Street, Ottawa, Ontario, K1A 0E6, Canada

(613) 993-7979

Robert.Day@dfo-mpo.gc.ca

**Kirsten Ruecker**

Senior Advisor

International Fisheries Management and Bilateral Relations

Fisheries and Oceans Canada

200 Kent St., Ottawa, Ontario, K1A 0E6, Canada

613-991-0297

kirsten.ruecker@dfo-mpo.gc.ca

**Roger Wysocki**

Senior Science Advisor

Fisheries and Oceans Canada (DFO)

200 Kent Street, Ottawa, Ontario, K1A 0E6, Canada

(613) 990-0704

Roger.Wysocki@dfo-mpo.gc.ca

***COOK ISLANDS***

**Timothy Costelloe**

Director Offshore Division

Ministry of Marine Resources

PO Box 85 Avarua, Rarotonga

+682 28721

t.costelloe@mmr.gov.ck

***Fiji***

**Aisake Tanidrala Batibasaga**

Director of Fisheries

Ministry of Fisheries - Republic of the Fiji Islands

Ministry of Fisheries - Head Quarters  
Takayawa Building - Level 1  
Toorak, Suva,  
Fiji Islands.

679 9229873

abatibasaga@gmail.com

**Reginald Caine**

Senior Fisheries Officer

Technical Services Division

Ministry of Fisheries

Lami Fisheries Office.

679 3361122

reggie.caine@gmail.com

***Japan***

**Shingo OTA**

Councillor, Resources Management Department

Fisheries Agency of Japan

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

shingo\_ota810@maff.go.jp

**Kiyoshi EJIMA**

Member,House of Councillors

Room No 1103 Members' Office building, 2-1-1, Nagatacho, Chiyoda-ku, Tokyo

kiyoshi\_ejima01@sangiin.go.jp

**Hidetada KIYOFUJI**

Tuna and Skipjack Resource Department

National Research Institute of Far Seas Fisheries

Japan Fisheries Research and Education Agency

5-7-1 Orido Shimizu, Shizuoka-shi, Shizuoka

hkiyofuj@affrc.go.jp

**Hiromu FUKUDA**

Bluefin tuna resource group

National Research Institute of Far Seas Fisheries

5-7-1 Orido, Shimizu, Shizuoka-shi, Shizuoka

+81.54.336.6039

fukudahiromu@affrc.go.jp

**Satoshi KITAGAWA**

Assistant Director

Fisheries Cooperative Association of Nagasaki Prefecture

2-27 Goto-machi,Nagasaki-shi, Nagasaki

s-kitagawa@nsgyoren.jf-net.ne.jp

**Kosuke KAWATA**

Director

Fisheries Cooperative Association of Nagasaki Prefecture

2-27 Goto-machi, Nagasaki-shi, Nagasaki

k-kawata@nsgyoren.jf-net.ne.jp

**Hirotaka IJIMA**

Researcher

National Research Institute of Far Seas Fisheries, Japan

5-7-1 Orido, Shimizu-ku, Shizuoka-shi, Shizuoka

+81 054-336-5835

ijima@affrc.go.jp

**Tadanori YAMAGUCHI**

Subsection chief

Saga Prefectural Local Government

1-1-59 Jonai, Saga-shi, Saga

yamaguchi-tadanori@pref.saga.lg.jp

**Masakatsu IREI**

President

Okinawa Tuna Fisheries Association

1-1-18, Minato-Machi, Naha-shi, Okinawa

**Hideki NAKAO**

Miyazaki Tuna Fisheris Association

2-6, Minato, Miyazaki-Shi, Miyazaki

**Shigetsugu TSUJI**

Miyazaki Tuna Fisheris Association

2-6, Minato, Miyazaki-Shi, Miyazaki

**Yoshiharu MIZOGUCHI**

Miyazaki Tuna Fisheris Association

2-6, Minato, Miyazaki-Shi, Miyazaki

**Matsuo SHIMADA**

Miyazaki Tuna Fisheris Association

2-6, Minato, Miyazaki-Shi, Miyazaki

**Koji IWAKIRI**

Miyazaki Tuna Fisheris Association

2-6, Minato, Miyazaki-Shi, Miyazaki

**Masaya SAKANOUE**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Teruo MYOJIN**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Yoshikazu MYOJIN**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Isao MATSUSHITA**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Takao SETO**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Masahito TAKEMURA**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Daisuke NAKAMURA**

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Katsuhide NAKATA**

President

Kochi Offshore Tuna Fisheries Association

1-6-21, Hon-Machi, Kochi-Shi, Kochi

**Sumio KAKOGAWA**

Union president

Fisheries Cooperative Association of Mitsushima-cho

711-10, Kusubo, Mitsushima-cho, Tsushima-shi, Nagasaki

**Akito OGUSU**

Union president

Fisheries Cooperative Association of Hakozaki

171, Setoura, Ashibe-cho, Iki-Shi, Nagasaki

**Hitoshi NAKAYAMA**

Union president

Fisheries Cooperative Association of Gonoura-cho

405-6, Gonoura, Gonoura-cho, Iki-Shi, Nagasaki

**Mitsuyuki YASUNAGA**

Union president

Fisheries Cooperative Association of Ishida-cho

176, Indojiura, Ishida-cho, Iki-shi, Nagasaki

**Kazuo URATA**

Union president

Fisheries Cooperative Association of Ikitobu

1342-14, Motommurafure, Ashibe-cho, Iki-Shi, Nagasaki

**Terutaka OKUBO**

Union president

Fisheries Cooperative Association of Katsumoto-cho

575-61, Katsumotoura, Katumoto-cho, Iki-Shi, Nagasaki

**Isao ISHII**

Executive Managing Director

Central Japan Sea purse seine fishery council

3-1-38 Kitayasue, kanazawa-shi, Ishikawa

**Hidefumi KAWAMOTO**

Executive Director

San-In Purse Seine Fisheries Cooperative

2-23, Showamachi, Sakaiminato-shi, Tottori

**Hiroshi MORIWAKI**

Vice-Union President

San-In Purse Seine Fisheries Cooperative

2-23, Showamachi, Sakaiminato-shi, Tottori

**Yuji IWATA**

Union President

San-In Purse Seine Fisheries Cooperative

2-23, Showamachi, Sakaiminato-shi, Tottori

**Eriko NAGAI**

Interpreter

Fisherires Agency of JAPAN

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

**Tetsuya KUNITO**

Staff

Federation Of North Pacific District Purse Seine Fisheries Co-Operative Associations Of Japan

Sankaido Bldg.2F 9-13,1-Chome, Akasaka, Minato-ku,Tokyo

kunito0804@gmail.com

**Takahide NARUKO**

President

Federation of North Pacific District Purse Seine Fisheries Co-Operative Associations of Japan

Sankaido Bldg.2F 9-13,1-Chome, Akasaka, Minato-ku,Tokyo

hokubu-taiheiyou@kbe.biglobe.ne.jp

**Kota YANO**

Secretariat

National Offshore Tuna Fisheries Association of Japan

Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo

yano-k@kinkatsukyo.or.jp

**Kazushige HAZAMA**

Chief

National Offshore Tuna Fisheries Association of Japan

Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo

hazama@kinkatsukyo.or.jp

**Noriyuki MIKI**

President

National Offshore Tuna Fisheries Association of Japan

Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo

zenkinjp@kinkatsukyo.or.jp

**Yoshihiro NOTOMI**

Managing Director

National Offshore Tuna Fisheries Association of Japan

Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo

+81-3-3295-3721

notomi@kinkatsukyo.or.jp

**Hisao KATOU**

President

Japan Purse Seiner’s Association

3-11-3 Nagahama, Chuo-Ku, Fukuoka

hisao-katou@enmaki.jp

**Makoto HOTAI**

General Manager

Japan Purse Seiner’s Association

3-11-3 Nagahama, Chuo-Ku, Fukuoka

makoto-hotai@enmaki.jp

**Hiroyuki SUETAKE**

Manager

Japan Purse Seiner’s Association

3-11-3 Nagahama, Chuo-Ku, Fukuoka

hiroyuki-suetake@enmaki.jp

**Mariko YAMAMOTO**

Staff

Japan Purse Seiner’s Association

3-11-3 Nagahama, Chuo-Ku, Fukuoka

mariko-yamamoto@enmaki.jp

**Hiroshi HASHIZU**

Director Managing Executide Officer

Kyowa Fisheries Co,Ltd

65 Ei-Machi, Sakaiminato, Tottori

h-hashizu@kyowacom.co.jp

**Yoshihiro KITAZATO**

Assistant Director, International Exchange Promotion Division

Overseas Fishery Cooperation Foundation of Japan (OFCF)

Toranomon 30 Mori Bldg., 2-2, Toranomon 3, Minato-ku, Tokyo

kita@ofcf.or.jp

**Toshihiro OMORI**

Executive Director

National federation of fishries co-operative associations

1-1-12, Uchi-Kanda, Chiyoda-ku, Tokyo

t-omori@zengyoren.jf-net.ne.jp

**Shingo FUJITA**

Assistant to Director

National federation of fishries co-operative associations

1-1-12, Uchi-Kanda, Chiyoda-ku, Tokyo

s-fujita@zengyoren.jf-net.ne.jp

**Satoru SHIMIZU**

Secretariat

National Ocean Tuna Fishery Association

CO-OP BLDG 7F, 1-1-12 Uchikanda, Chiyoda-ku, Tokyo

s-shimizu@zengyoren.jf-net.ne.jp

**Kiyohito ANZAI**

Representative director association chief

Hasama Fisheries cooperative

1012 Hasama, Tateyama City, Chiba

syokuin@hasama-gyokyo.com

**Yoichi HARA**

Assistant Director

Nagasaki Prefecture Government

3-1 Onoue-machi,Nagasaki-Shi, Nagasaki

you-hara@pref.nagasaki.lg.jp

**Nobuo TAKAGI**

Department of length

Nagasaki Prefectural Institute of Fisheries

1551-4, Taira-machi, Nagasaki-Shi, Nagasaki

takagi011141@pref.nagasaki.lg.jp

**Nobuyuki WAKASA**

President

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

n-wakasa@maruha-nichiro.co.jp

**Susumu OIKAWA**

Managing Director

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

s-oikawa@maruha-nichiro.co.jp

**Hidetoshi ITO**

Director

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

hid-itou@maruha-nichiro.co.jp

**Meiko KAWAHARA**

Manager

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

m-kawahara@maruha-nichiro.co.jp

**Kei SONEZAKI**

Staff

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

k-sonezaki@maruha-nichiro.co.jp

**Takafumi NODA**

Deputy Manager

Taiyo A & F Co., Ltd.

4-5 Toyomi-cho, Chuo-ku, Tokyo

t-noda@maruha-nichiro.co.jp

**Masatoshi OYAMA**

General Manager

Shimonoseki Fishery Co.,Ltd.

1-16-1,Yamato-Machi,Shimonoseki-Shi,Yamaguchi

yamaguchimaru@mirror.ocn.ne.jp

**Atsushi ORITA**

General Manager

Toyo Gyogyo Co,Ltd

9-22-6, Daikoku’Cho, Nagasakishi, Nagasaki

Oritaa@kaneko.gr.jp

**Issei ENOKIZONO**

Staff

Toyo Gyogyo Co,Ltd

9-22-6, Daikoku’Cho, Nagasakishi, Nagasaki

Enokizonoi@kaneko.gr.jp

**Keisuke OBA**

Staff

Toyo Gyogyo Co,Ltd

9-22-6, Daikoku’Cho, Nagasakishi, Nagasaki

Obak@kaneko.gr.jp

**Shunji FUJIWARA**

Advisor

Japan NUS Co.Ltd

Nishi-Shinjuku Kimuraya Bldg. 5F

7-5-25, Nishi-Shinjuku, Shinjuku-ku, Tokyo

fjwr-snj@janus.co.jp

**Shun OGAWA**

Deputy Director

Agricultural and Marine Products Office, Trade Control Department

Ministry of Economy, Trade and Industry

1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo

ogawa-shun@meti.go.jp

**Yuichiro KIRIKI**

Assistant Director

Fishery Division, Economic Affairs Bureau

Ministry of Foreign Affairs

2-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

yuichiro.kiriki@mofa.go.jp

**Takahiro HIRAOKA**

Fisheries Coordination Office(Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

takahiro\_hiraoka550@maff.go.jp

**Yoshihiro MATSUMOTO**

Fisheries Coordination Office(Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

yoshihiro\_matsumo790@maff.go.jp

**Noriko MATSUNAGA**

Fisheries Coordination Office (Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

noriko\_matsunaga790@maff.go.jp

**Kiyoyuki SUDA**

Fisheries Coordination Office(Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

kiyoyuki\_suda850@maff.go.jp

**Takuro NAKAKMURA**

Fisheries Coordination Office(Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

takuro\_nakamura380@maff.go.jp

**Kazuhiko KOBAYASHI**

Fisheries Coordination Office(Kyusyu)

Fisherires Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

kazuhiko\_kobayash800@maff.go.jp

**Taku SASAKI**

Fisheries Coordination Office(Kyusyu)

Fisheries Agency of JAPAN

8-1 Okihama-machi, Hakata-ku, Fukuoka-shi, Fukuoka

taku\_sasaki600@maff.go.jp

**Kaoru KAWAMOTO**

Interpreter

Fisherires Agency of JAPAN

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

**Noriyoshi HIJIKATA**

Section Chief, Fisheries Management Division

Fisherires Agency of JAPAN

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

noriyoshi\_hijikat300@maff.go.jp

**Ryo OMORI**

Assistant Director, Fisheries Management Division

Fisherires Agency of JAPAN

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

ryo\_omori330@maff.go.jp

**Wataru TANOUE**

International Affairs Division

Fisheries Agency of Japan

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

wataru\_tanoe630@maff.go.jp

**Takahiro FUJIWARA**

International Affairs Division

Fisheries Agency of Japan

1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo

takahiro\_fujiwara550@maff.go.jp

**Takumi FUKUDA**

Resource Management Department

Fisheries Agency of JAPAN

1-2-1 Kasumigaseki Chiyoda-ku, Tokyo

 takumi\_fukuda720@maff.go.jp

**Shuya NAKATSUKA**

Head, Pacific Bluefin Tuna Resources Group

National Research Institute of Far Seas Fisheries

snakatsuka@affrc.go.jp

**Hideki NAKANO**

Senior adviser

National Research Institute of Fisheries Science

2-12-4, Fukuura, Kanazawa, Yokohama 236-8648, Japan

hnakano@affrc.go.jp

+81 457887615

**Hiroaki OKAMOTO**

Bluefin Tuna Resources Department

National Research Institute of Far Seas Fisheries

5-7-1 Orido, Shimizu-Ku, Shizuoka-Shi, Shizuoka

okamoto@affrc.go.jp

**Akihito FUKUYAMA**

Executive Secretary

Japan Far Seas Purse Seine Fishing Association

14-10, Ginza 1Chome, Chuo-ku, Tokyo

fukuyama@kaimaki.or.jp

**Hiroshi NISHI**

Union president

Fisheries Cooperative Association of Hakozaki

171, Setoura, Ashibe-cho, Iki-Shi, Nagasaki

**Yousuke NAKATA**

Chief fisherman

Hinode-Ooshikiami Corporation

Ukawa 27-25, Noto-Town, Hosu District, Ishikawa

**Toshiro TSUJI**

Chief researcher

Ishikawa Prefecture Fisheries Research Center

Ushitsu-shinkou3-7, Noto-Town, Hosu District, Ishikawa

**Hiroto SHIMADA**

Chief engineer

Ishikawa Prefecture Fisheries Division

Kuratsuki1-1, Kanazawa-City, Ishikawa

**Shinichiro FUKUHIRA**

Councilor

Ishikawa Prefecture Fisheries Division

Kitayasue3-1-38, Kanazawa-City, Ishikawa

***Republic of Korea***

**Dongyeob Yang**

Director General

Ministry of Oceans and Fisheries

dyyang@korea.kr

**Seunglyong Kim**

Deputy Director

Ministry of Oceans and Fisheries

82-44-200-5338

kpoksl5686@korea.kr

**Jung-re Riley Kim**

Policy Officer / Multilateral fisheries negotiator

Ministry of Oceans and Fisheries of Korea

Government Complex Bldg 5, #94, Dasom 2-ro

Sejong Special Governing City, 30110, Korea

riley1126@korea.kr

**Lee Bohyun**

Inspector

National Fishery Products Quality Management Service

8, 30beon-gill, Jungang-daero, Jung-gu, Busan

82-10-9680-7576

bohyun0875@korea.kr

***Chinese Taipei***

**Chi-Chao Liu**

Senior Specialist

Fisheries Agency, Council of Agriculture

6F., No.100, Sec. 2, Heping W. Rd., Zhongzheng Dist., Taipei City 100

chichao@ms1.fa.gov.tw

**Wen-Chi Wang**

Associate Specialist

Fisheries Agency, Council of Agriculture

6F., No.100, Sec. 2, Heping W. Rd., Zhongzheng Dist., Taipei City 100

wenchi@ms1.fa.gov.tw

**Chiee-Young Chen**

Associate Professor

National Kaohsiung University of Science and Technology

No.142, Haizhuan Rd., Nanzi Dist., Kaohsiung City 811, Taiwan (R.O.C.)

chency@mail.nkmu.edu.tw

**Shirley, Shih-Ning Liu**

Secretary

Overseas Fisheries Development Council

shirley@ofdc.org.tw

**Yu-Chih Lin**

Chairman

Taiwan Tuna Association

3F.-2, No.2, Yugang Central 1st Rd., Qianzhen Dist., Kaohsiung City 806

simon@tuna.org.tw

**Kuan Ting Lee**

General Secretary

Taiwan Tuna Association

3F.-2, No.2, Yugang Central 1st Rd., Qianzhen Dist., Kaohsiung City 806

twtuna@tuna.org.tw

**Martin Ho**

Secretary General

Taiwan Tuna Longline Association

2F., No.35, Chaolong Rd., Donggang Township,Pingtung County 928

sefe121@hotmail.com

**Yuan-Lung Tsai**

Chairman

Taiwan SU-AO Fishermen's Association

NO.126.Haibian Rd. Nan-An Village, Su-Ao Township, Yilan County 270

+88639962108#203

lin54069@yahoo.com.tw

***United States of America***

**Michael Tosatto**

Regional Administrator, Pacific Islands Regional Office

NOAA Fisheries

+1 808-725-5001

michael.tosatto@noaa.gov

**Barry A Thom**

Regional Administrator - West Coast

NOAA Fisheries

1201 NE Lloyd Blvd, Suite 1100  
Portland OR 97232

503-231-6266

Barry.Thom@NOAA.Gov

**Gerard DiNardo**

Fisheries Resources Division Director

Southwest Fisheries Science Center

NOAA Fisheries

+1 858 245 5659

gerard.dinardo@noaa.gov

**Dorothy Lowman**

US Commissioner

Lowman and Associates

+1 503-804-4234

6507 SW Barnes Road

Portland OR 97225 USA

[dmlowman01@comcast.net](mailto:dmlowman01@comcast.net)

**Josh Madeira**

Senior Policy Manager

Monterey Bay Aquarium

886 Cannery Row

Monterey, CA 93940 USA

+1 831-648-9826

[jmadeira@mbayaq.org](mailto:jmadeira@mbayaq.org)

**Jon Kenton Tarsus Brodziak**

Senior Stock Assessment Scientist

NOAA Fisheries/Pacific Islands Fisheries Science Center

jon.brodziak@noaa.gov

8087255617

**Christopher Dahl**

Staff Officer - HMS

Pacific Fishery Management Council

7700 NE Ambassador Pl.  
Ste 101  
Portland OR 97218 USA

5038202422

kit.dahl@noaa.gov

**Michelle Sculley**

Stock Assessment Scientist

NOAA

1845 WASP Blvd Building 176  
Honolulu, HI 96818

+1 808-725-5705

michelle.sculley@noaa.gov

**Michael Brakke**

Foreign Affairs Officer

U.S. Department of State

BrakkeMT@state.gov

**Celia Barroso**

Fishery Policy Analyst

NOAA Fisheries

celia.barroso@noaa.gov

5624321850

**Valerie Post**

Fishery Policy Analyst

NOAA Fisheries

+1 808-725-5034

valerie.post@noaa.gov

**Emily Crigler**

Fishery Policy Analyst

NOAA Fisheries

+1 808-725-5036

emily.crigler@noaa.gov

**Peter H. Flournoy**

General Counsel

American Fishermen’s Research Foundation

Western Fishboat Owner’s Association

740 North Harbor Drive

San Diego, CA 92101

+1 619-203-5349

phf@international-law-offices.com

***Vanuatu***

**William Naviti**

Fisheries Department

Vanuatu Government

PMB 9045  
PORT VILA  
VANUATU

wnaviti@gmail.com

**oBSERVERS**

***European Union***

**Josu Santiago**

Head Tuna Research Area

AZTI

Txatxarramendi Ugartea z/g. E-48395 Sukarrieta - BIZKAIA (Spain)

34664303631

jsantiago@azti.es

***Federated States of Micronesia***

**Jamel T James**

Assistant Fisheries Biologist

National Ocean Resource Management Authority

P.O. Box PS-122  
Palikir, FM 96941

+691-320-2700 | 5181 | 3788

jamel.james@norma.fm

***Kiribati***

**Kaon Tiamere**

Senior Fisheries Officer

Ministry of Fisheries & Marine Resource Development

P.O. Box 64  
Bairiki, Tarawa  
Republic of Kiribati

686-73041183

kaont@mfmrd.gov.ki

***Mexico***

**Michel Dreyfus**

Researcher

INAPESCA Ensenada, Baja California

dreyfus@cicese.mx

***Palau***

**Kathleen Sisior**

Fisheries Licensing/Revenue Officer II

Ministry of Natural Resources Environment and Tourism

No.1 Street Peched

utau.sisior@gmail.com

6804884938

***Papua New Guinea***

**Andrew Taunega**

Planner

National Fisheries Authority

11th Floor, Kina Haus, P O Box 2016, PORT MORESBY,  
National Capital District, Papua New Guinea

+675 3090559

ataunega@fisheries.gov.pg

***SOLOMON ISLANDS***

**Ronnelle Panda**

Deputy Director- Policy, Planning & Project Management

Ministry of Fisheries & Marine Resources

PO Box G2, Honiara, Solomon Islands

Phone: +677 39143

Mobile: +677 7979719

Email: [rpanda@fisheries.gov.sb](mailto:rpanda@fisheries.gov.sb)

***Tuvalu***

**Nikolasi Apinelu**

Funafuti, Tuvalu

Ministry of Natural Resources

nvakalasi@gmail.com

***Birdlife International***

**Yasuko Suzuki**

Marine Programme Officer

Birdlife International

Unizo Kakigara-cho Kitajima Bldg. 1F  
1-13-1 Nihonbashi Kakigara-cho  
Chuo-ku, Tokyo 103-0014 Japan

+81 (0)3 6206 2941

yasuko.suzuki@birdlife.org

***Inter-American Tropical Tuna Commission (IATTC)***

**Bradley A Wiley**

Policy Specialist

IATTC

8901 La Jolla Shores Drive  
La Jolla, CA 92037

858 546 7043

bwiley@iattc.org

***International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC)***

**John Holmes**

Chair, ISC

Fisheries and Oceans Canada

Pacific Biological Station  
3190 Hammond Bay Road  
Nanaimo, BC, V9T 6N7  
Canada

john.holmes@dfo-mpo.gc.ca

***Marine Stewardship Council***

**Makoto Suzuki**

Fisheries Manager, Japan

MSC

Kabutocho Sumishin bdg. 3F  
9-15 Nihonbashi Kabutocho  
Chuo-ku  
Tokyo, Japan

8051860177

makoto.suzuki@msc.org

***Organisation for the Promotion of Responsible Tuna Fisheries (OPRT)***

**Daishiro Nagahata**

Managing Director

Organization for the Promotion of Responsible Tuna Fisheries

9F Sankaido Bldg. 9-13, Akasaka 1-chome, Minato-ku, Tokyo, Japan

+81 3 3568 6388

nagahata@oprt.or.jp

***Organization for Regional and Inter-regional Studies (ORIS)***

**Hiroshi Ohta**

Professor

Waseda University

1-6-1 Nishi-Waseda, Shinjuku-ku  
Tokyo, Japan

+81 3 5286 1728

h-ohta@waseda.jp

**Yasuhiro Sanada**

Researcher

Waseda Institute for Global Governance

y-sanada@aoni.waseda.jp

***Pacific Islands Forum Fisheries Agency (FFA)***

**David Power**

Fisheries Management Adviser

Pacific Islands Forum Fisheries Agency

Honiara, Solomon Islands

david.power@ffa.int

**Wetjens Dimmlich**

Fishery Management Advisor

FFA

Honiara, Solomon Islands.

+677 8998 600

wetjens@ffa.int

***Pew Charitable TrustS***

**Jamie Gibbon**

Officer

The Pew Charitable Trusts

901 E St NW  
Washington DC, 20001  
USA

202-540-6447

jgibbon@pewtrusts.org

***Seafood Legacy***

**Isao Sakaguchi**

Professor

Gakushuin University

1-5-1 Mejiro, Toshima-ku, Tokyo 171-8588, Japan

03-5904-9250

isao.sakaguchi@gakushuin.ac.jp

***World Wide Fund for Nature (WWF)***

**Aiko Yamauchi**

Japan-WWF

Mitakokusai BLDG 3F, Mita 1-4-28, Minato-ku, Tokyo

03-3769-1718

ayamauchi@wwf.or.jp

**WCPFC Secretariat**

**Lara Manarangi-Trott**

Compliance Manager

PO Box 2356, Kolonia, Pohnpei 96941   
Federated States of Micronesia

+691 320 1992

Lara.Manarangi-Trott@wcpfc.int

**SungKwon Soh**

Science Manager

PO Box 2356, Kolonia, Pohnpei 96941   
Federated States of Micronesia

+691 320 1992

[sungkwon.soh@wcpfc.int](mailto:sungkwon.soh@wcpfc.int)

**Attachment B**

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

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

**Northern Committee**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

**AGENDA**

1. **OPENING OF MEETING**
   1. **Welcome**
   2. **Adoption of agenda**
   3. **Meeting arrangements**
2. **CONSERVATION AND MANAGEMENT MEASURES**
   1. **Report from the 18th Meeting of the International Scientific Committee**
   2. **Report of the 14th Regular Session of the Scientific Committee**
   3. **Conservation and management measures for the northern stocks**
      1. Pacific bluefin tuna (CMM 2017-08)
         1. Reports from CCMs and Observers
         2. Joint Working Group Meeting between NC and IATTC on Pacific bluefin tuna conservation management
      2. North Pacific albacore (CMM 2005-03)
         1. Reports from CCMs and Observers
         2. Interim harvest strategy for North Pacific albacore fishery (HS 2017-01)
         3. Review of the CMM 2005-03
      3. North Pacific swordfish
         1. Review of 2018 NP swordfish stock assessment
         2. Development of a management framework
   4. **Conservation and management measures for other stocks**
      1. Bigeye, yellowfin and skipjack tunas (CMM 2017-01)
      2. North Pacific striped marlin (CMM 2010-01)
      3. Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 and CMM 2014-05)
      4. Seabirds (CMM 2017-06)
      5. Sea turtles (CMM 2008-03)
3. **REGIONAL OBSERVER PROGRAMME**
4. **DATA**
   1. **Review of the status of data and data gaps for northern stocks**
5. **COOPERATION WITH OTHER ORGANIZATIONS**
   1. **ISC**
   2. **IATTC**
6. **FUTURE WORK PROGRAMME**
   1. **Work Programme for 2019 – 2021**
7. **OTHER MATTERS**
   1. **Administrative arrangements for the Committee**
      1. Secretariat functions and costs
      2. Rules of Procedure
   2. **Next meeting**
   3. **Other business**
8. **Adoption of the Summary Report of the 14th Regular Session of the Northern Committee**
9. **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**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

**Statement by Republic of Korea**

As attested to in numerous historical documents, the name “East Sea“ has been used to refer to the sea area between the Korean Peninsula and the Japanese Archipelago for more than 2,000 years. Even a number of Japanese maps, as late as 1870, described this body of water as the “Sea of Joseon“ rather than the “Sea of Japan.“

Following Korea’s admission to the UN as a full member in 1991, Korea officially brought up the naming issue in the international arena. Beginning with the Sixth UN Conference on the Standardization of Geographical Names (UNCSGN) in 1992, Korea raised the issue of naming the sea area between the Korean Peninsula and the Japanese Archipelago in various international meetings, such as the International Hydrographic Organization(IHO) Conference and UN Group of Experts on Geographical Names(UNGEGN) meetings.

The UNCSGN and the IHO recommend that when countries sharing a given geographical feature fail to agree on a common name, competing names should be concurrently used.

Korea maintains its position that this particular area of sea should be addressed as the East Sea, or at least concurrently as the East Sea and Sea of Japan. The continued and steady increase in the use of both names by many internationally respected cartographers and the media clearly demonstrates that the legitimacy of "East Sea" is gaining wide acceptance.

Having said so, the Korean delegation is also of the view that the NC is not an appropriate forum to discuss this matter and registers that neither Korea’s nor Japan’s position on this matter shall be construed to reflect the WCPFC’s official position, and any part of the official report of the WCPFC endorsed by the Commission shall not include the term used in Japan’s implementation report.

Korea will give this statement to the rapporteur for the inclusion in the meeting report as Korea’s statement. Thank you.

**Attachment D**

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

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

**Northern Committee**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

**Japan’s statement on the Sea of Japan**

Japan points out that the ROK did not make a rebuttal on the name “Sea of Japan” in our national reports until this meeting, although the term has been continuously used in our national reports in previous meetings.

The “Sea of Japan” is the only internationally established name for the sea area concerned.

The United Nations Secretariat has already officially confirmed its policy using the name “Sea of Japan” as the standard geographical term in official UN documents. In addition, governments of a number of countries recognize the name “Sea of Japan” as the official name for the sea area concerned.

The IHO Technical Resolution A.4.2.6 is intended to apply to geographical feature such as “a bay, a strait, channel or archipelago” as articulated in the resolution itself, and the Sea of Japan does not clearly fall under the categories of these features. Regarding the UNCSGN Resolution III/20, it explicitly limits its scope to land features that are “under the sovereignty of more than one country or are divided among two or more countries.” It is therefore clear that the resolution does not apply to this case.

As for the remarks by the ROK about the concurrent use, “Sea of Japan” is the only internationally established and recognized name for the sea area concerned. Serious confusion would occur if we were to start using purely domestic names for specific sea areas simultaneously with the internationally established name, “Sea of Japan”. Hence, the concurrent use is not politically neutral but rather politically too partial to the side of the ROK. Japan hence never accepts the remarks by the ROK.

We request that our remark that the name “East Sea” is not appropriate and “Sea of Japan” should be used be recorded in the summary report.

Also, the WCPFC is the Commission to discuss long-term conservation and sustainable use of highly migratory fish stocks in the Western and Central Pacific Ocean, and we recognize that it is not appropriate to discuss the name “Sea of Japan” at such setting. Therefore, a disclaimer should also be inserted in the summary report as follows: the geological name used in documents submitted by each member does not reflect official position of the WCPFC.

**Attachment E**

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

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

**Northern Committee**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

**Outcomes of the 3rd Joint IATTC-WCPFC NC Working Group meeting on the**

**management of Pacific bluefin tuna**

The Joint IATTC-WCPFC NC Working Group on the Management of Pacific bluefin tuna recommends that the IATTC and WCPFC NC consider incorporating the following actions in their decisions:

Review of current CMMs

1. To request ISC to review the updated abundance indices, including recruitment index, up to 2017 to evaluate the need to change its scientific advice in 2018.
2. To request ISC to conduct projections of harvest scenarios shown below based on 2018 assessment and provide probability of achieving initial and 2nd rebuilding targets in accordance with paragraph 2.1 of HS2017-02.

Scenarios for catch increase

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **West Pacific** | | **East Pacific** |
| **Small fish** | **Large fish** |
| 1 | 0 | 600t | 400t |
| 2 | 5% | 1300t | 700t |
| 3 | 10% | 1300t | 700t |
| 4 | 5% | 1000t | 500t |
| 5 | 0 | 1650t | 660t |
| 6 | 5% | | 5% |
| 7 | 10% | | 10% |
| 8 | 15% | | 15% |

\* 250t transfer of catch limit from small fish to large fish by Japan is assumed to continue until 2020.

\*\* These scenarios will not preempt a decision on allocation of catches between WPO and EPO and the allocation of any increased portion amongst members.

1. To decide in 2019, based upon the above information from ISC, on an increase to the catch limits in accordance with paragraph 5(b) of HS2017-02 and IATTC Resolution on Pacific bluefin tuna adopted at IATTC93.

MSE

1. To request ISC to provide information regarding candidate LRP and TRP.

Catch Documentation Scheme (CDS)

1. To note the CDS WG Chairman’s summary (Annex 1).
2. To schedule another 1-day meeting for CDS in conjunction with the next Joint WG meeting.

Future meeting

1. [deferred to NC]

**Annex 1**

**Chairman’s Summary of the Catch Documentation Scheme (CDS) Technical Meeting**

September 3, 2018

Fukuoka, Japan

**1. Opening of Meeting**

**1.1 Welcome**

* + - 1. Mr. Michael Tosatto, Vice Chair of the Northern Committee (NC), opened the CDS technical meeting at 9:30 am.

**1.2 Selection of CDS Chair and rapporteur and adoption of agenda**

* + - 1. The NC Vice Chair asked for nominations to chair the CDS technical meeting. The United States nominated Mr. Shingo Ota from Japan, and the Cook Islands seconded the nomination. The NC Vice Chair handed the meeting over to the CDS Chair. The provisional agenda was adopted (See Appendix A). The United States also agreed to rapporteur the CDS technical meeting.

**1.3 Meeting arrangements**

**2. Development of a Catch Documentation Scheme for Pacific Bluefin Tuna**

* + - 1. The Chair noted that last year the Joint Inter-American Tropical Tuna Commission (IATTC) - Western and Central Pacific Fisheries Commission (WCPFC) NC Working Group (JWG) agreed on a CDS concept paper, and while the paper laid out a clear objective for a Pacific bluefin tuna (PBF) CDS, there were many issues still to discuss. Japan explained that CDS schemes can be complex, and the purpose of their delegation paper (WCPFC-NC-CDS01-2018/02) was to facilitate discussion on the elements agreed to in last year’s CDS concept paper. Japan hoped that discussions this year could help development of a PBF CDS proposal next year.
      2. Participants generally supported the development of an electronic scheme recognizing that exemptions may be necessary for select cases (i.e., technical problems in the electronic scheme, trade involving non-members, etc.). Paper forms could be used as a backup, and if an electronic form is created, there should be a mechanism to print forms if needed. The Cook Islands noted that internet in Pacific Island countries can be difficult, and, in their experience, electronic systems are not yet completely reliable.
      3. Participants discussed the pros and cons of beginning with an electronic CDS versus transitioning from a paper-based scheme. Some felt that the CDS scheme could begin as a paper-based scheme and transition to electronic, some felt that the scheme should start as an electronic scheme, and some felt that paper-based and electronic options should be developed in tandem. In all cases, participants agreed that the goal is to eventually have an electronic CDS system. Participants noted that flexibility may be necessary in the development and implementation of a CDS, there may be the need for a transition period or phased implementation, and that a PBF CDS could build off of experiences from ICCAT’s implementation of their eBCD system.
      4. Participants noted that the WCPFC has discussed a Commission-wide CDS for a number of years, and it’s possible that whatever CDS is developed for PBF could model a CDS for adoption by a wider WCPFC. As this meeting was under the umbrella of the JWG, there were discussions that any CDS developed by this group could cover IATTC and WCPFC. Whether this is just a WCPFC-focused PBF CDS or a Pacific-wide PBF CDS, it would be important to have IATTC, and in particular Mexico involved in the development of a PBF CDS. Another possibility suggested was to investigate the potential to piggyback onto the existing ICCAT system, and whether the code or system itself could be licensed or expanded for PBF purposes.
      5. Participants generally felt that a PBF CDS should be located with the Secretariat, but that there may be additional personnel needed to help run the system as it will be live 24 hours a day 365 days a year.
      6. Participants noted that the development and maintenance of a CDS could be costly and there was some discussion over who should bear the costs for development and maintenance. If this project is seen as a stepping stone for a Commission-wide CDS, then perhaps the burden should be spread across all CCMs; however, if this is limited to PBF, then perhaps the burden should concentrate on those members who are involved in PBF fisheries and trade. Participants felt it would be useful to have some ballpark cost estimates, and Japan offered to ask the ICCAT Secretariat for information on the money spent for development and maintenance of their eBCD system and to report back with this information to the participants to the CDS technical meeting as soon as possible via e-mail. Participants also requested the Secretariat to provide a cost estimate, and the Secretariat said it was not possible to do so at this stage because more details needed to be decided. Some participants felt that it might be helpful to have a conceptual discussion about funding for a PBF CDS at FAC, but Chair concluded that it would be probably enough to report the result of this WG to the annual meeting through NC.
      7. The Chair noted that the CDS concept paper adopted last year outlined clear objectives, and Japan noted that the ICCAT and Commission for the Conservation of Southern Bluefin Tuna (CCSBT) CDS systems also contain objectives related to supporting the implementation of CMMs for bluefin tuna.
      8. The Cook Islands noted that the concepts of CDS are well described, and the PBF CDS should follow those general standards. Ideally a PBF CDS would cover all transactions of PBF, but it was recognized that tracking domestic flow of PBF was potentially beyond the scope of this CDS. In ICCAT and CCSBT, fish parts other than meat were excluded from their CDS and it was undecided whether it was necessary to include these other fish parts as part of the PBF CDS.
      9. Participants briefly discussed definitions (e.g., the difference between transshipment and transfers and between farming and fattening), whether it might be necessary to include a definition of transshipment or not, and whether the CDS should account for trade from closed cycle aquaculture.
      10. Participants generally agreed that validation authorities should include government and other authorized institutions, and that these list of validation authorities should be registered through the WCPFC website.
      11. Participants generally agreed that it is the responsibility of the flag state to verify that fish are caught in a manner compliant with the rules. In an ideal world, a CDS could help identify and stop product harvested illegally from being traded. However, some participants expressed that the view that the CDS is not a stand-alone measure against IUU fishing. There may be instances where it might be favorable to allow product to be traded (particularly fresh product which has a limited shelf life) while documents are revalidated or investigations of non-compliance are ongoing. CMMs sometimes have mechanisms to address catch overages so a PBF CDS should not necessary block trade since the overage can be addressed in catch limits the following year. At some point, there could be some further discussion that reports that can be developed to identify potential anomalies or products derived from IUU fishing.
      12. There was no consensus on whether artisanal fisheries could receive any special dispensations. In ICCAT, artisanal fisheries have 7 days to validate their catch, and Japan suggested that for some fisheries, validation could occur when the caging occurred rather than when the catching occurred or that validation could occur by fisheries cooperatives authorized to do so. There was also discussion that information from CDS could also be used to validate catch information.
      13. Participants generally agreed that the purpose of the PBF CDS is to track commercial catch and trade, and recreational catch should not be included with the understanding that recreational catches are not sold.
      14. There are no current tagging programs in place for PBF. If tagging programs were developed in the Pacific, they may be more effective for tracking larger bluefin over smaller bluefin, and would need to be reviewed to ensure that there wouldn’t be any loopholes.
      15. Participants agreed that each CCM should provide a point of contact to facilitate communication between exporting and importing countries.

* + - 1. There was general agreement that the Secretariat could play a large role in the development and management of a PBF CDS as well as in evaluating CDS information for potential CMM violations. An electronic PBF CDS system could be built to provide automatic reports to the Secretariat as well as CCMs. There will need to be some thought put into what information would be available for CCMs and the Secretariat and to ensure that any information would not inadvertently disclose any confidential information.
      2. Participants generally agreed that a PBF CDS should allow for some sort of access and use by non-member countries. Participants recognized that there are complex issues around fishing and trade by non-members, and that future discussions on a PBF CDS could benefit by participation by IATTC and Mexico. The participants agreed to request Mexico’s participation in future PBF CDS discussions at the JWG.
      3. Participants agreed that a PBF CDS should be consistent with FAO guidelines and that there should be coordination between the ICCAT eBCD and a PBF CDS (whether Pacific-wide or separate systems for WCPFC and IATTC).
      4. Participants recognized that any future CMM will need to consider impacts to Small Island Developing States (SIDS) and Participating Territories.
      5. Participants agreed that there could be a transition period to identify gaps and allow for domestic implementation of any adopted CMM. The length of the transition period depends on whether the PBF CDS starts as paper-based or electronic-based with the latter probably requiring a longer transition period. Implementation could also be staggered for different product types.
      6. Participants generally agreed that any forms developed for the PBF CDS should be consistent with the forms used in ICCAT and FAO guidelines, and that instructions should be developed/included for each form. The PBF CDS could consider adopting the ICCAT form.
      7. Participants supported the establishment of an intersessional virtual working group, to be led by Japan. It was agreed that objective of the virtual working group will be to progress work on technical issues, including definition of terms, development of forms and instructions, and data to be extracted by the Secretariat, which will contribute to the development of a draft CMM. Japan expects to produce a draft CMM proposal for review by the virtual working group preferably two months in advance of the next meeting of the PBF CDS Technical Meeting next year.

**3 Next Meeting**

* + - 1. The 2nd PBF CDS Technical Meeting will be a one day meeting in conjunction with the 2019 JWG meeting.

**4 Other Business**

* + - 1. No business was discussed under this agenda item.

**5 Report to the Joint WG**

* + - 1. The Chair will provide a general summary of the CDS Technical Meeting to the JWG.

**6 Close of the Meeting**

* + - 1. The meeting was closed at 5 pm.

**Attachment F**

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

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

**Northern Committee**

**Fourteenth Regular Session**

3 – 7 September 1, 2018

Fukuoka, Japan

**Statement by Japan on the Harvest Strategy for Pacific Bluefin tuna**

Mr. Chairman,

Even though Japan did not block adoption of paragraph 1 to 3 at the Joint WG, Japan is not ready to join the consensus on adoption of them at the Northern Committee Meeting. Last year after very difficult negotiations the joint WG adopted the Harvest Strategy for Pacific Bluefin tuna, which includes the Harvest Control Rules and the second rebuilding target. We agreed to this Harvest Strategy as a package. We agreed to the second rebuilding target because the package also included the Harvest Control Rules by which the Commission may increase the catch limit.

As this years’ ISC projections look very bright, the expectation among domestic stakeholders as to possible increase of catch limit became very high. All the people in our delegation came to this meeting, hoping that an increase in catch limits would be agreed in accordance with the Harvest Control Rules.

The discussion this week, however, is totally different. All of us were very surprised to see the response of other Members, saying that it is premature to consider any increase of catch limit this year. Ever since WCPFC adopted the Harvest Strategy last December, we have been telling our fishermen that rules were now established for possible catch limit increase and we must comply with the current catch limit in order to achieve catch limit increase this year. For this purpose, officials from the Fisheries Agency and prefectures as well as fishermen have made tremendous efforts and sacrifices. The coastal fisheries for small fish were closed last January even when 5 months still remained in the fishing season and even when many fishermen still had catch limit for themselves. As I explained repeatedly, there are three types of problems that agonize our fishermen right now. First, they cannot catch Bluefin tuna when they migrate into their ordinary fishing ground or fishermen are forced to release when they are incidentally caught. Second, they must give up catching other fish species in order to avoid bycatch of Bluefin tuna. These caused huge economic losses for not only fishermen but also local fish markets, processing factories, restaurants and other facilities relying on Bluefin tuna. Yet people implemented these actions because these are necessary to contain the total catch of Japan within the catch limit. In addition, the third problem is that Bluefin tuna is interfering with other fisheries such as squid jigging fisheries in which squid are attracted to lights of fishing vessels, but are eaten by Bluefin tuna before fishermen catch them. Please imagine the feeling of fishermen who cannot catch not only Bluefin tuna but also squid because of Bluefin tuna.

It is so regrettable that these efforts and sacrifices are not appreciated and the Harvest Control Rules were ignored this year. The gap between the expectation and the result is so huge that it is not possible for Japanese stakeholders to accept it at this moment. There are many stakeholders all over Japan who are involved in Bluefin tuna fisheries and other related economic activities. It would take us time to explain to them why this has happened and to discuss with them what we should do.

Consequently, Japan proposes that this agenda item is still open until WCPFC15 in December where NC14 will be resumed to conclude this item. Thank you, Mr. Chairman.

**Attachment G**

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

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

**Northern Committee**

**Fourteenth Regular Session**

Fukuoka, Japan

4–7 September 2018

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

| **Work areas** | **Objectives** | **annual tasks** | | |
| --- | --- | --- | --- | --- |
| **2019–2021** | **2019** | **2020** | **2021** |
| **1. Northern stocks** |  |  | | |
| a. Monitor status; consider management action | Review status and take action as needed for: |  |  |  |
|  | **North Pacific albacore**  Tasks  (A)Review members’ reports on their implementation of CMM 2005-03.  (B) Implement the Interim Harvest Strategy, including: (1) monitor if LRP is breached; (2) continue to work to establish TRP and other elements of harvest strategies, if appropriate based on MSE; (3) recommend any changes to CMM 2005-03. | Review the compiled members’ reports and identify and rectify shortcomings.  Continue to support ISC MSE work to complete Task (B)(2).  Recommend any necessary changes to CMM 2005-03. (Task (B) (3)) | Review the compiled members’ reports and identify and rectify shortcomings.  Continue to support ISC MSE work to complete Task (B)(2).  Obtain the new assessment results from ISC and recommend any necessary changes to CMM 2005-03 (Task (B) (3)). | Review the compiled members’ reports and 　identify and rectify shortcomings.  Continue to support ISC MSE work to complete Task (B)(2).  Recommend any necessary changes to CMM 2005-03. (Task (B) (3)). |
|  | **Pacific bluefin tuna**  Tasks  (A) Review members’ reports on their implementation of CMM on PBF.  (B) Implement the Harvest Strategy including: (1) monitor if initial rebuilding target will be achieved; (2) continue to work to establish LRP, TRP and other elements of harvest strategies, if appropriate based on MSE; (3) recommend any changes to CMM; (4) support ISC for MSE development. | Review the compiled members’ reports and identify and rectify shortcomings.  Obtain the results of requested scientific work from ISC and recommend any necessary changes to CMM on PBF (Task B(3)).  Based on information provided from ISC, consider candidate LRPs, TRPs, and HCRs and establish a mechanism to provide funding to ISC for MSE development  Develop CDS based on the inputs from members. | Review the compiled members’ reports and identify and rectify shortcomings.  Obtain the assessment and other work results from ISC and recommend any necessary changes to CMM on PBF (Task B(3)).  Support ISC for MSE development    Complete CDS based on the inputs from members and develop a draft CMM. | Review the compiled members’ reports and identify and rectify shortcomings.  Obtain work results from ISC and recommend any necessary changes to CMM on PBF.  Support ISC for MSE development |
|  | **Swordfish**  Establish a harvest strategy consistent with CMM 2014-06, including: (1) appropriate reference points; (2) actions that will be taken in the event each of the particular limit reference points is breached (decision rules) and other elements of harvest strategies, if appropriate. | Recommend reference points, decision rules, and HCR and develop a draft CMM. |  |  |
|  | **Striped marlin** (if agreed on by the Scientific Committee and Commission). | Review the results ISC stock assessment and consider necessary changes to CMM 2010-01. |  |  |
| 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, including close-kin analysis. |  |  |
| **2. Non-target, associated, dependent species** |  |  |  |  |
| a. Seabirds | Consider appropriate implementation of methods to minimize catch and mortality. | Review implementation of CMM-2017-06 in the northern area. | Review implementation of CMM-2017-06 in the northern area. | Review implementation of CMM-2017-06 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 short fin mako shark). | Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and short fin mako shark). | Review scientific advice from ISC, if any, and consider management options on two shark species (blue shark and short fin 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 CMM 2007-01)** |  | 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. Cooperation with other organizations** |  |  |  |  |
| 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.  Hold a joint working group meeting on PBF management. | Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.  Hold a joint working group meeting on PBF management. | Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.  Hold a joint working group meeting on PBF management. |

**Attachment H**

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

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

**Northern Committee**

**Thirteenth Regular Session**

August 28 – September 1, 2017

Busan, Korea

|  |
| --- |
| **Conservation and Management Measure for Pacific Bluefin Tuna** |

**Conservation and Management Measure 2017-XX**

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

*Recognizing that* WCPFC6 adopted Conservation and Management Measure for Pacific bluefin tuna (CMM 2009-07) and the measure was revised six times since then (CMM 2010- 04, CMM 2012-06, CMM 2013-09, CMM 2014-04, CMM 2015-04 and CMM 2016-04) 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;

*Noting with concern* the latest stock assessment provided by ISC Plenary Meeting in July 2016, indicating the following:

* (1) SSB fluctuated throughout the assessment period (1952–2014), (2) SSB steadily declined from 1996 to 2010, and (3) the decline appears to have ceased since 2010, although the stock remains near the historic low (2.6% of unfished SSB);
* The 2014 estimated recruitment was relatively low, and the average recruitment for the last five years may have been below the historical average;
* The fishery exploitation rate in 2011-2013 exceeded all biological reference points evaluated by the ISC except FMED and FLOSS.
* Since the early 1990s, the WCPO purse seine fisheries, in particular those targeting small fish (age 0-1) have had an increasing impact on the spawning stock biomass, and in 2014 had a greater impact than any other fishery group.
* The projection results indicate that: (1) the probability of SSB recovering to the initial rebuilding target (SSBMED1952-2014) by 2024 is 69% or above the level prescribed in the WCPFC CMM 2015-04 if low recruitment scenario is assumed and WCPFC CMM 2015-04 and IATTC Resolution C-14-06 continue in force and are fully implemented; and (2) a 10% reduction in the catch limit for fish smaller than 30 kg would have a larger effect on recovery than a 10% reduction in the catch limit for fish larger than 30 kg; and
* Catching a high number of smaller juvenile fish can have a greater impact on future spawning stock biomass than catching the same weight of larger fish;

*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. This conservation and management measure has been prepared to implement the Harvest Strategy for Pacific Bluefin Tuna Fisheries, and the Northern Committee shall periodically review and recommend revisions to this measure as needed to implement the Harvest Strategy.

**Management measures**

1. 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 or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit.
2. CCMs shall take measures necessary to ensure that all catches of Pacific Bluefin tuna 30kg or larger shall not be increased from the 2002-2004 annual average levels[[1]](#footnote-1). Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit. However, in 2018, 2019, and 2020 CCMs may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph 2 (2) above to catch Pacific bluefin tuna 30 kg or larger in the same year. In this case, the amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 2020. Based on that review, in 2020 the Northern Committee will determine whether it should be continued past 2020, and if so, recommend changes to the CMM as appropriate.
3. 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 paragraphs 2 and 3, 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 3 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

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

1. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.
2. 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 2 and 3 above. CCMs shall cooperate for this purpose.
3. CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna in accordance with the Attachment of this CMM.
4. CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting;
5. CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 2, 3, 4, 6, 7, 9 and 12 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.
6. The WCPFC Executive Director shall communicate this Conservation Management Measure to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.
7. To enhance effectiveness of this measure, CCMs are encouraged to communicate with and, if appropriate, work with the concerned IATTC contracting parties bilaterally.
8. The provisions of paragraphs 2 and 3 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.
9. The provisions of paragraph 13 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**

**Development of a Catch Document Scheme for Pacific Bluefin Tuna**

**Background**

At the 1st joint working group meeting between NC and IATTC, held in Fukuoka, Japan from August 29 to September 1, 2016, participants supported to advance the work on the Catch Documentation Scheme (CDS) in the next joint working group meeting, in line with the development of overarching CDS framework by WCPFC and taking into account of the existing CDS by other RFMOs.

1. **Objective of the Catch Document Scheme**

The objective of CDS is to combat IUU fishing for Pacific Bluefin Tuna (PBF) by providing a means of preventing PBF and its products identified as caught by or originating from IUU fishing activities from moving through the commodity chain and ultimately entering markets.

1. **Use of electronic scheme**

Whether CDS will be a paper based scheme, an electronic scheme or a gradual transition from a paper based one to an electronic one should be first decided since the requirement of each scheme would be quite different.

1. **Basic elements to be included in the draft conservation and management measure (CMM)**

It is considered that at least the following elements should be considered in drafting CMM.

* 1. Objective
  2. General provision
  3. Definition of terms
  4. Validation authorities and validating process of catch documents and re-export certificates
  5. Verification authorities and verifying process for import and re-import
  6. How to handle PBF caught by artisanal fisheries
  7. How to handle PBF caught by recreational or sport fisheries
  8. Use of tagging as a condition for exemption of validation
  9. Communication between exporting members and importing members
  10. Communication between members and the Secretariat
  11. Role of the Secretariat
  12. Relationship with non-members
  13. Relationship with other CDSs and similar programs
  14. Consideration to developing members
  15. Schedule for introduction
  16. Attachment
      1. Catch document forms
      2. Re-export certificate forms
      3. Instruction sheets for how to fill out forms
      4. List of data to be extracted and compiled by the Secretariat

1. **Work plan**

The following schedule may need to be modified, depending on the progress on the WCPFC CDS for tropical tunas.

|  |  |
| --- | --- |
| 2017 | The joint working group will submit this concept paper to the NC and IATTC for endorsement. NC will send the WCPFC annual meeting the recommendation to endorse the paper. |
| 2018 | The joint working group will hold a technical meeting, preferably around its meeting, to materialize the concept paper into a draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 2019 | The joint working group will hold a second technical meeting to improve the draft CMM. The joint working group will report the progress to the WCPFC via NC and the IATTC, respectively. |
| 2020 | The joint working group will hold a third technical meeting to finalize the draft CMM. Once it is finalized, the joint working group will submit it to the NC and the IATTC for adoption. The NC will send the WCPFC the recommendation to adopt it. |

1. CCMs with a base line catch of 10 t or less may increase its catch as long as it does not exceed 10 t. [↑](#footnote-ref-1)