



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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

SUMMARY REPORT

© Western and Central Pacific Fisheries Commission 2015

The Western and Central Pacific Fisheries Commission authorizes the reproduction of this material, in whole or in part, provided that appropriate acknowledgement is given.

USP Library Cataloguing-in-Publication Data

Commission for the Conservation and Management of Highly Migratory
Fish Stocks in the Western and Central Pacific Ocean. Northern Committee.
Regular Session (11th : 2015 : Sapporo, Japan).
Eleventh regular session, Sapporo, Japan, 31 August-3 September 2015 : summary report.
-- Kolonia, Pohnpei : Western and Central Pacific Fisheries Commission, 2015.

XX p. ; 28 cm.

ISBN ~~978-982-9103-30-7~~

1. Fishery management, International--Oceania--Congresses.
2. Fishes--Conservation--Oceania--Congresses. 3. Fish stock assessment--Oceania--Congresses. 4. Tuna fisheries--Oceania--Congresses.
5. Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean--Congresses.
- I. Western and Central Pacific Fisheries Commission.

~~SH214.9.C78 2014~~

~~333.95609648--dc23~~

TABLE OF CONTENTS

SUMMARY REPORT	Error! Bookmark not defined.
Agenda Item 1 — Opening of Meeting	Error! Bookmark not defined.
Agenda Item 2 — Conservation and Management Measures	Error! Bookmark not defined.
Agenda Item 3 — Regional Observer Programme	Error! Bookmark not defined.
Agenda Item 4 — Vessel Monitoring System.....	Error! Bookmark not defined.
Agenda Item 5 — Data	Error! Bookmark not defined.
Agenda Item 6 — Cooperation With Other Organizations	Error! Bookmark not defined.
Agenda Item 7 — Future Work Programme	Error! Bookmark not defined.
Agenda Item 8 — Other Matters	Error! Bookmark not defined.
Agenda Item 9 — Adoption of the Summary Report	Error! Bookmark not defined.
Agenda Item 10 — Close of Meeting.....	Error! Bookmark not defined.
ATTACHMENTS	†
Attachment A — List of Participants	†
Attachment B — Agenda.....	Error! Bookmark not defined.
Attachment C — Statement by PEW	Error! Bookmark not defined.
Attachment D — Draft Conservation and Management Measure to Establish a Multi-annual Rebuilding Plan for Pacific Bluefin Tuna.....	Error! Bookmark not defined.
defined.	
Attachment E — Northern Committee Work Programme for 2016–2018.....	†



**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August – 3 September 2015**

SUMMARY REPORT

AGENDA ITEM 1 — OPENING OF MEETING

1. The Eleventh Regular Session of the Northern Committee (NC11) took place in Sapporo, Japan, from 31 August – 3 September 2015. The meeting was attended by Northern Committee (NC) members from Canada, Fiji, Japan, Republic of Korea, Chinese Taipei and United States of America (USA); and Observers from European Union, Federated States of Micronesia, Kiribati, Mexico, Samoa, Tonga, Tuvalu, Pacific Islands Forum Fisheries Agency (FFA), International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), American Fishermen's Research Foundation, Greenpeace, International Seafood Sustainability Foundation (ISSF), Organization for the Promotion of Responsible Tuna Fisheries (OPRT), The Pew Charitable Trusts, US-Japan Research Institute, and World Wildlife Fund (WWF). The list of meeting participants is included as Attachment A.

2. Unfortunately, it was noted that the quorum (8 members according to the Rules of Procedure of the Commission) was not achieved. Therefore, the participating members agreed to hold a short meeting of the NC in the margin of the WCPFC 12 in Bali so that the NC would formally adopt the results and the report of the NC11. NC11 regretted the situation and emphasized that the participation is the responsibility of the members and once again urged the participation of all NC members. It further noted that the Commission fund is available for SIDS members.

1.1 Welcome

3. M. Miyahara, Chair of the NC, opened the meeting and welcomed participants to Sapporo, Japan. Fiji was welcomed as a new member of the NC and Fiji expressed its willingness to cooperate with the work of the NC. R. Moss-Christian, the chair of the Commission, and F. Teo, the Executive Director of the Commission, were introduced.

4. R. Moss-Christian conveyed the NC with her expectation on the progress of NC11 as well as the upcoming Commission. She viewed that the last Commission meeting in Apia unfortunately did not accomplish much and expressed her wish to advance the work of the Commission further this year. In NC11, she showed her interest in the work towards the development of CDS of PBF and the review of the implementation of ROP and shark measures in the northern area. In the Commission, she noted that the

Commission needs to move forward in relation to the conservation of tropical tunas and SPALB and sought for the contribution of all Commission members in that regard.

5. F. Teo introduced himself to the NC and presented his vision as the newly appointed Executive Director of the Commission. He supported the need to strengthen the tropical tuna CMM as he expressed the view that the status quo is not acceptable to protect the tuna stocks. He noted, however, the inherent complexity of the management issues confronted by the WCPFC because of the multi-national, multi-stocks, multi-gear characteristics of the fisheries and the huge disparity in the economic and developmental aspirations of the CCMs. He advocated a more strategic and smarter way of doing business for the Commission. One such way, he suggested is to initiate informal dialogue on difficult management issues well in advance of the WCPFC meetings so that CCMs turn up at the meeting fully appraised of the issues and ready to take decision. With that in mind, he informed NC that he and the Commission Chair have embarked on a process to dialogue with CCMs so they can better strategize and prepare for meaningful outcomes at WCPFC-12. He also introduced his new initiative to lift the image and profile of the Commission and its Secretariat by the adoption of a new communication plan for the Secretariat. The plan he explained will make the Secretariat more connected with CCMs and other stakeholders and allow for enhanced dissemination of information on the work of the Commission. He mentioned the recent launch of the new Secretariat quarterly e-newsletter. He cautioned, however, that the Secretariat remains entirely impartial and any information disseminated is consistent with the agreed positions of the WCPFC.

1.2 Adoption of agenda

6. It was agreed that a proposal by Australia on Harvest Strategy of Key Tuna Species (WCPFC-SC11-2015/ MI-WP-01) will be discussed under agenda item 7.1 (Work Programme). The provisional agenda was adopted as proposed (Attachment B).

7. Documents supporting the meeting were made available on WCPFC's website (<https://www.wcpfc.int/meetings/11th-regular-session-northern-committee>).

1.3 Meeting arrangements

8. Japan, as the host for NC11, briefed meeting participants on social arrangements and the meeting schedule. S. Nakatsuka (Japan) served as the lead rapporteur and the USA provided support rapporteurs for this meeting.

1.4 Membership

9. Fiji was recognized as the new member of the NC.

AGENDA ITEM 2 — CONSERVATION AND MANAGEMENT MEASURES

2.1 Report from the Fifteenth Meeting of the International Scientific Committee (ISC15)

10. G. DiNardo, ISC chair, presented the highlights of the 15th meeting of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (NC11-IP-01). The results are contained in the ISC15 meeting report, which can be found on ISC's website at <http://isc.ac.affrc.go.jp>. Highlights of his presentation on the ISC15 Plenary meeting were summarized below:

The 15th ISC Plenary, held in Kona, Hawaii, U.S.A from 15-20 July 2014 was attended by members from Canada, Chinese Taipei, Japan, Korea, Mexico and the United States as well as the Western and Central Pacific Fisheries Management Commission and the North Pacific Marine Science Organization. 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 the Western and Central North Pacific striped marlin is experiencing overfishing and is overfished. It reviewed indicator analyses of North Pacific shortfin mako shark and concluded that better data are needed to determine the status of this stock. It re-iterated that the North Pacific albacore tuna, North Pacific blue shark, and Western Central North Pacific Ocean swordfish stocks are not overfished nor experiencing overfishing, the Pacific bluefin tuna stock is overfished and experiencing overfishing, the Pacific blue marlin stock is not overfished nor experiencing overfishing and that the Eastern Pacific Ocean swordfish stock is not overfished but likely experiencing overfishing. A special seminar on using close-kin mark recapture methods to estimate spawning stock biomass of Pacific Bluefin tuna was held and Plenary agreed to develop a sampling protocol for the method. Plenary endorsed the science objectives for ISC and PICES collaborations and discussed formalizing the ISC structure and administration and agreed to continue researching means of doing both. Over the past year, ISC further conducted a workshop on Management Strategy Evaluation (MSE), developed an MSE framework for NPALB. Plenary also noted the strides WGs had made in incorporating best available scientific information (BASI) into stock assessment work, enhanced stock assessment reports and the increased transparency in Working Group efforts. Observers from Pew Charitable Trusts, International Seafood Sustainability Foundation, World Wildlife Fund for Nature - Japan and Duke University attended. The ISC work plan for 2015-16 includes completing Pacific Bluefin tuna and blue marlin assessments, improving catch and CPUE time series and advancing biological information for shark species, conducting a workshop for managers on fishery objectives and harvest control rules for MSE, and enhancing database and website management. The Plenary revised its operating procedures and endorsed an additional one-year term for the standing Albacore Working Group Chair, John Holmes. The next Plenary will be held in the Japan in July 2016.

11. Japan inquired how to estimate unfished SSB used to assess the depletion ratio of PBF, which is estimated as less than 6% in the ISC report. The ISC chair responded that it is a common standard used in tuna RFMOs to evaluate the status of stocks and detailed explanation could be provided to Japan outside the meeting.

12. Y. Chang (USA) presented the results of the north Pacific striped marlin stock assessment on behalf of the ISC BILLWG (NC11-IP-02). His presentation was summarized as follows:

We present an update of the stock assessment of the Western and Central North Pacific Ocean (WCNPO) striped marlin (*Kajikia audax*) stock conducted in 2011 by the ISC Billfish Working Group (BILLWG). The assessment update consisted of refitting a Stock Synthesis model with newly available catch, abundance index, and size composition data for 1975–2013. Estimates of population biomass of the WCNPO striped marlin stock exhibit a long-term decline. Population biomass (age-1 and older) averaged roughly 20,513 t, or 46% of unfished biomass during 1975-1979, the first 5 years of the assessment time frame, and declined to 6,819 t, or 15% of unfished biomass in 2013. Fishing mortality on the stock (average F on ages 3 and older) is currently high and averaged roughly $F = 0.94$ during 2010-2012. When the status of striped marlin is evaluated relative to MSY-based reference points, the 2013 spawning stock biomass is 61% below SSB_{MSY} (2,819 t) and the 2010-2012 fishing mortality exceeds F_{MSY} by 49%. Therefore, overfishing is occurring relative to MSY-based reference points and the WCNPO striped marlin stock is overfished. The stock has been in an overfished condition since 1977, with the exception of 1982 and 1983, and fishing appears to be impeding rebuilding especially if recent (2007-2011) low

recruitment levels persist. Projection results show that fishing at F_{MSY} could lead to median spawning biomass increases of 25%, 55%, and 95% from 2015 to 2020 under the recent recruitment, medium-term recruitment, and stock recruitment-curve scenarios. In comparison, fishing at the 2010-2012 fishing mortality rate, which is 49% above F_{MSY} , could lead to changes in spawning stock biomass of -18% to +18% by 2020. Fishing at a constant catch of 2,850 t could lead to potential increases in spawning biomass of 19% to over 191% by 2020, depending upon the recruitment scenario.

13. Japan pointed out that the ISC report noted that changes in recent size composition data resulted in changes in selectivity and affected recruitment estimates, which resulted in a more pessimistic assessment than previous one. Y. Chang concurred with Japan that the application of recent size composition data to the historical catch changed the assessment result but he viewed that the results of the latest assessment and previous one was consistent as they showed similar trends and the correlation of recruitment as well as fishing mortality between the two assessments were high.

14. Japan further asked several questions; Is the model used for striped marlin assessment one sex model or two sex model? What is the possible explanation for the apparent opposite trend in the CPUE series of Japan and the other? Stock is not recovering while the fishing effort of Japanese vessels has been low. Is there a possibility of large unreported catch? How should we interpret the future projection results when it offers a wide range such as “fishing at a constant catch of 2,850t could lead to potential increase in spawning biomass of 19% to 191% by 2020”?

15. Y. Chang made the following responses: Currently no sex specific information is available to enable the construction of two sex model for north Pacific striped marlin. If more data is available in the future, the WG would try to develop such a model. The WG evaluated the correlation of 18 abundance indices. While there were some differences in trend, overall the trends are consistent among indices. He was unaware of any information indicating a large unreported catch. The wide range of the projection was due to the three different recruitment scenarios; high recruitment, low recruitment and stock-recruit relationship. If we obtain further information on recruitment trend, the uncertainty could be reduced.

16. Japan further asked what kind of information would be necessary to understand the recruitment. Y. Chang replied that currently the recruitment is estimated through the model and it might be a little difficult as it is a by-catch species but a recruitment index could be developed through appropriately designed sampling.

17. The USA inquired if ISC has any advice to the NC in relation to the fact that the recruitment in 2007-2011 was relatively low. Y. Chang responded that the model indicated that the recruitment in 2011 and 2012 were good but the information was not included due to the uncertainty associated with the recent recruitment. He further pointed out that striped marlin is a very productive species and it would rebound quickly even in a low recruitment period once the fishing mortality is reduced.

18. J. Holmes, the ALBWG chair, presented a progress to date on MSE development by ALBWG of ISC (NP11-WP-01). His presentation is summarized as follows:

J. Holmes (ISC-ALBWG Chair) made a brief presentation on the management strategy evaluation (MSE) process under development by the Albacore Working Group. He noted that MSE provides a structured collaborative approach to designing fishery management systems that are likely to meet stakeholder and manager objectives. The process involves the identification of objectives for the stock, harvest control rules, and hypotheses for population dynamics which are used in a simulation environment to explore the implications and trade-offs of alternative objectives or alternative management actions on achievement of objectives. Unlike the current,

best assessment approach, an MSE attempts to account for both scientific and management-related uncertainties. Holmes emphasized that the development of objectives is critical to a successful MSE process and noted that objectives relate to things that matter to all stakeholders (ecological, socio-economic, cultural values). He briefly reviewed the management objective in the NPALB management framework and used these policy statements to identify three potential quantitative objectives related to ecological and socio-economic values that could be used in an MSE. The next stock assessment in April 2017 is the primary focus of ISC-ALBWG scientists, so an MSE analyst is needed to make sustained progress under the guidance of the ALBWG. The expected timeline for delivering initial results to NC is 3-5 years. Lastly, A Management Strategy Evaluation Workshop for Managers/Stakeholders was proposed for April 2016 to develop inputs (objectives, harvest control rules, acceptable risk, performance indicators/criteria) that scientists will need to fully develop the MSE for NPALB.

19. Noting that the MSE process is difficult for many managers and stakeholders to understand, Japan asked a basic question regarding the terminology used in the process such as MP, HCR, performance indicators, reference points and OM. In response, J Holmes clarified the following: MP (management procedure) is how managers manage a fishery using the assessment output. Reference points are control points where you require specific measures in a HCR (harvest control rule). For example, a HCR may require to stop fishing when exceeding a LRP. Performance indicator is an output you can use to look how well the system is working. OM (operating model) is a simulation model to encompass everything that influence the stock including fishing and environment.

2.2 Report of the Eleventh Regular Session of the Scientific Committee (SC11)

20. S. Soh presented the results of the eleventh regular session of the Scientific Committee (NC11-IP-07). His presentation is summarized as follows:

- a) SC11 was held in Pohnpei, Federated States of Micronesia from 5-13 August 2014. Ludwig Kumoru (PNG) chaired the meeting.
- b) The provisional total tuna catch for 2013 was estimated at 2,860,648 mt, 83% of the total estimated Pacific Ocean catch of 3,486,124 mt, and 60% of the provisionally estimated global tuna catch of 4,783,629 mt in 2014.
- c) SC11 recommended that WCPFC12 notes that a number of CCMs did not achieve the 5% observer coverage of their longline fleets, which impacts on the SC's ability to address a number of scientific issues.
- d) SC11 recommended that Fiji be admitted as a member of the Northern Committee.
- e) SC11 noted that no statistical evidence was demonstrated for skipjack range contraction, and recommended that further work be conducted.
- f) SC11 also noted that it is important for ISC, in collaboration with SPC, to continue to work to provide information regarding the stock distribution north and south of 20°N in order to enable the SC to provide a recommendation to the Commission about whether this should be considered a northern stock.
- g) SC11 reviewed evaluation of CMM-2013-01 (WCPFC11-2014-15) presented at WCPFC11, and requested the scientific services provider provide evaluation of the potential impact of CMM 2014-01 to WCPFC12.
- h) SC11 adopted the Shark Research Plan 2016-2020.
- i) SC11 adopted its work programme budget of USD 1,732,200 for Commission's endorsement.
- j) A. Batibasaga (Fiji) was nominated and accepted by SC11 as the SC Vice-Chair and Indonesia confirmed to host SC12 in Bali, Indonesia, scheduled to take place from 3-11 August 2016.

21. Japan called for the NC to request the Commission to implement the capacity control of tropical purse seine vessels, noting that the SKJ catch is made by the purse seine vessels. It also pointed out that, although the SKJ stock assessment results indicated that the stock is in a healthy condition, it does not reflect the reality of the coastal communities of Japan. It noted that SC advised that high catch in equatorial region may have caused range contraction and Japan therefore sought for further research on the issue so that the result will be utilized for necessary restriction on the fisheries for the stock. Japan also drew the attention of the NC that SC11 requested a continued work by ISC, in collaboration with SPC, to provide information regarding the stock distribution north and south of 20°N regarding the issue of designation of north Pacific blue shark as a northern stock. It proposed that the NC should request ISC to continue to work on this matter.

22. The USA also supported the work on range contraction of skipjack to continue. It noted that the impact of range contraction is being observed even though it might not be statistically significant as SC11 reported. With regard to the designation of north Pacific blue shark as a northern stock, the USA questioned whose responsibility it is to make the next step to analyze the information, now that bibliography of information on blue shark was presented by ISC SHARKWG to SC11.

23. In response to the US question, the Secretariat clarified that ISC had provided the information regarding the distribution in case of north Pacific striped marlin and suggested that it might be useful for the Secretariat if a collaboration can be arranged between ISC and SPC.

24. G. DiNardo commented that in the case north Pacific striped marlin, the ISC provided a clear scientific information to support that the species should be designated as a northern stock but the SC declined the proposal. He noted that that was a very discouraging experience for ISC to put similar effort on blue shark. The list of available information was already provided to the SC, so he considered SPC can analyze them. If SPC requires specific information, ISC can provide it at the next SC.

25. Chinese Taipei also supported the work by the SC towards the designation of north Pacific blue shark as a northern stock to continue.

26. Japan commented that the term “range contraction” may mislead to indicate that it is only a matter for range states while many members are suffering from a poor migration and suggested to use a term “local depletion” instead.

27. The Secretariat clarified that the term “range contraction” is not usually used in the SC and that the research project is titled “impacts of high catch in equatorial region on the margins of the Convention Area”.

2.3 Conservation and management measure for northern stocks

2.3.1 Pacific bluefin tuna

2.3.1.1 Review of CCM reports

28. Japan reported its fishing activities harvesting PBF. Various type of fisheries in Japan are catching PBF. Purse seine in western Japan is primarily targeting juvenile and a catch limit of 4,250mt is applied since 2011. For purse seine vessels targeting fish larger than 30kg, there is a unilateral catch limit up to 2,000 mt. Artisanal fishery, which is conducted by very small vessels (1-2 crew), exists all around the country. A registration system started in 2011 and in 2014 licensing system was introduced for that fishery. Now more than 24,000 vessels are licensed. Almost all small vessels around Japan has a possibility of catching PBF and that is why such large number of vessels have been licensed. Set nets also

exist all around the Japanese coast and their license number is fixed at around 1,800. Aquaculture of PBF is mainly conducted in western Japan and controlled by local government license. The number of sites is 147, mainly in remote areas, where it is an important industry for local communities.

29. The management of PBF catch in Japan is challenging since, while the catch is made predominantly by purse seine, the number of vessels is dominant in artisanal fishery. Japan further explained that in response to the CMM2014-04 Japan reduced 50% small fish less than 30kg catch from 2002-2004 average level without exemption. Among the catch limit of small fish (4,007 mt), 2,000 mt was allocated to purse seine fishery and 2,007 mt was to coastal fisheries and others. More than 50 local meetings were held for the explanation of the plan to the large number of stakeholders and now there is a general support to implement this measure. Purse seine catch limit was allocated to industry association and it is required to land the catch in designated ports where monitoring is conducted. Catch limit for coastal fisheries and others were allocated to 6 areas based on the past catch records and are being monitored on an area basis. Japan also established data collection scheme to monitor the implementation of the catch limit and warning system to be activated when the catch is approaching the limit. Due to operation of troll fishery whose main fishing season is winter (October to February), it is difficult to split the fishing year in the calendar year. Japan therefore established a fishing year starting in July and ending in June of the following year. For the year 2015, one and half year allocation was made since it is the beginning of the process. Japan also introduced an early recruitment monitoring survey. Lastly, Import and export information was provided.

30. Canada asked the reduction of juvenile catch compared with the recent catch. Japan responded that the juvenile catch in 2014 was around 6,000 mt, which was consistent with then 15% reduction requirement. For the year 2015, the catch up to the end of August was around 1,400 mt, which is well below the established limit of 4,007 mt.

31. The USA questioned why the catch limit for purse seine vessels targeting fish larger than 30 kg was described as “voluntary”. While it mentioned its responsibility not to increase the catch of fish larger than 30 kg from the baseline which is 4,882 mt, Japan replied that the catch limit is unilateral because it was set from both a domestic allocation and biological issue.

32. The USA further asked about the measure to be implemented when the limit is reached, i.e. is the fishing for small PBF closed or entire fishing operation in the area is closed to avoid bycatch and discards of small fish. Japan clarified that the closure for the catch of small fish will be in place on an area basis when the limit is reached and it also agreed that the bycatch is possible even after the closure but any overage will be deducted from the catch limit of the following year.

33. The USA also pointed out that Japan had not provided information regarding the effort in recent years and the catch of 2002-2004 baseline as required by the paragraph 5 of the CMM and Japan replied that there was a misinterpretation of the requirement and it assured that it will report the missing information.

34. Chinese Taipei asked how the monitoring of the catch for aquaculture is conducted and also the size of the adult fish caught by purse sine vessels. Japan explained that the aquaculture fry is mainly caught by troll fishery where fish are treated and measured individually. In addition to those information from fishing vessels, reports from aquaculture industry is collected thus cross check is being conducted. It also noted that the adult fish caught by purse seine is about 30 – 70 kg.

35. Korea questioned how individual measurements of aquaculture fly are calculated into weight. Japan explained that the expected weight corresponding to the size is used for the calculation. Korea also

asked how to monitor amount of landing of artisanal fishery and Japan explained that their catch would be marketed at their home port, from where sales slips can be obtained.

36. Mexico asked about the timing gaps between catch and its report so as to avoid the overshoot of allocation. Japan explained that the alarm system is an area based system and reporting frequency will be increased when approaching the limit. It also noted that any excess catch will be deducted from the catch limit of the following year.

37. Canada reported that there is no fishery targeting PBF in Canada but there were small amount of juvenile PBF (4.9 - 9 kg) bycatch by troll vessels in IATTC area. It also reported that import of PBF in 2014 was 196 mt.

38. Korea reported its fishing and management on PBF. The number of purse seine vessels catching PBF in 2015 is 24 against the 2002-2004 average of 30. Korean PBF catch is done mainly by large scale purse seine vessels, which are usually targeting mackerel. The catch of 2014 was 1,198 mt. The ministerial directive on PBF was amended so as to require fishermen to report the PBF catch to the authority within the 24 hours of the catch. Also, the catch limit is set at 90% of the allowed level to have 10% buffer. NFRDI collects daily catches and biological information to monitor recruitment. The government has the authority to prohibit the sales of PBF once the catch has reached around 80% of the limit. The landing is allowed only at designated ports and CDS is required for export.

39. Japan asked the current catch for this year and also the definition of the catch limit is “almost reached”. In response, Korea stated that this year’s catch to date is 611 mt and the definition of “almost” reached is around 80%.

40. Chinese Taipei questioned how to decide the number of purse seine vessels catching PBF. Korea clarified that only 24 offshore large scale purse seine vessels are licensed to catch PBF and they all could occasionally catch PBF as bycatch.

41. Japan asked if Busan is the only designated port for the landing of PBF and Korea responded affirmatively.

42. Chinese Taipei reported its management of PBF fisheries. Longline vessels need to get prior approval for fishing for PBF. Number of longline vessels licensed for PBF was 513 and 485 in 2013 and 2014 respectively. They are prohibited retain PBF less than 30kg. The catch in 2014 was 480 mt and below 2002-2004 average level. In 2015, the preliminary catch to date is 540 mt. For data collection, CDS was introduced throughout the island since 2010. Tags need to be issued and reporting to radio station must be made before landing. Also port sampling is conducted since 2010 and most fish are checked by government staffs.

43. Japan asked the coverage rate of sampling and if there is any plan for research on spawning. In response Chinese Taipei stated that the monitoring is conducted at three main ports and coverage rate should be very high, more than 95%. With regard to the research on spawning, Chinese Taipei stated it will consult with the relevant institution. It was also clarified that, although the landing was not required to be made at those three ports, almost all landings are being made there.

44. The USA reported that no vessel targets for PBF in WCPFC area, thus no baseline is established for the USA in accordance with the CMM 2014-04. In 2014, 161 mt of PBF was exported mainly from eastern Pacific and 238 mt was imported.

45. In response the Japan's question regarding the US measures in the EPO, the USA clarified that the current commercial catch limit is 600 mt for 2015 and 2016 and 425 mt for 2015 and bag limit for sports fishermen was strengthened from 10 fish per day to 2 fish per day. It also explained that Mexico closed USA sports fishery in its EEZ.

46. Mexico introduced that its purse seine vessels targeting PBF have 100% observer coverage and report their catch weekly to IATTC and domestic authority. When the quota is approached, the reporting frequency is increased to daily. There has been a quota system in EPO since 2011 and fishing operation have been closed every year. In 2015, the fishermen are reporting bigger fish than usual and this could be the result of closures in the EPO. Mexico is concerned that EPO measures may be meaningless if the measures in the WPO are not strong enough to protect PBF above 30 kg, when those fish migrate to that region

47. Japan question about the fishing situation in the USA and the USA clarified the fishermen in USA also reported big fish but also they are not active in biting.

48. Korea asked if Canada has implemented CDS system for the imported PBF. Canada responded that it does not implement CDS for PBF but CDS is in place for Atlantic Bluefin under ICCAT. In addition, Canada is in process of ratifying the FAO port state measure agreement, which is expected to strengthen its control over import.

49. No discussion was held on reports from absent members (China, Cook Islands, the Philippines and Vanuatu).

Discussion on the new conservation and management measure

2.3.1 Pacific Bluefin Tuna

Precautionary Management Framework of PBF

50. The USA introduced its two proposals related to the management framework of PBF (NC11-DP03 and DP02). They are related each other in the sense that one (DP03) is to amend the current CMM to incorporate the ultimate rebuilding target and the second (DP02) proposes a precautionary management framework in accordance with CMM2014-06 for future management of PBF after the rebuilding target is reached. DP03 is intended to propose a long term rebuilding target and tools for ISC which enable the performance evaluation of various management frameworks. The proposed ultimate rebuilding target is set at 20% of $B_{current\ f=0}$ as a proxy of B_{msy} , with a time frame to be reached by 2030. It also provides a secondary management objective, which was to balance the conservation burden between east and west Pacific. The proposal is intended to provide ISC a framework to evaluate management options under variety of recruitment scenarios.

51. The second US proposal (DP02) was to propose a harvest control rule for long term management of PBF ahead of it reaches the rebuilding target. The long term management framework should expect infrequent breach of LRP and 15% of $SSB_{current\ f=0}$ was proposed in the document. TRP was not proposed but at least it should be set to ensure the risk to breach the LRP is low. The document proposes the 6 elements specified in CMM2014-06, which are management objective, LRP, acceptable risk which is to be very low, monitoring strategy, and decision rule. This is to provide a long term framework and should be paired with the rebuilding target.

52. Japan questioned the reason for the exclusion of sport fisheries from the proposed scenarios although USA sportfishing vessels caught larger amount of PBF than its purse seine vessels. It also noted

that the new concept of impact balancing between east and west Pacific could potentially introduce an additional layer of difficulty of allocation when the both Commission is trying to rebuild the stock.

53. The USA responded that there is no good reason for excluding non-PBF directed fishery from the scenarios except that the scenarios requested to ISC in the past were generally silent about recreational fishery and it is open to rephrase to address the concern. It further stated that the concept of burden sharing was introduced last year and that the reason was the USA considers that it is essential to have an objective way to measure equitable contribution between two RFMOs which have very different characteristics in terms of history and management approaches. Before discussing the appropriate ratio, the USA hoped to firstly discuss if the general concept is acceptable to the members and emphasized the proposal is a strawman for further discussion.

54. Japan then asked if the USA will support the inclusion of sport fisheries in the suspension of fisheries if so the Commission agrees. The USA responded that it will certainly comply with the language of measures if they are adopted by the both RFMOs.

55. With regard to the impact balancing, Japan pointed out that the same level of catch on small fish could have very different impact year by year due to the large fluctuation of recruitment and that would create a new challenge for introduction of new management measures. It further noted that, with regard to the proposed 75-25 (west-east) impact ratio, impact of EPO fisheries has never reached 25% since 1985 and current impact is only 18%. It stated that the proposal requires WCPO fisheries to pay more conservation burden for the recovery.

56. Chinese Taipei pointed out that the ISC PBFWG noted that the current level of recruitment cannot be explained under a small steepness and both US and Japanese scientists have concluded that steepness of PBF is likely very high. Therefore, the high value of steepness that was currently used in PBF stock assessment may not be 'highly uncertain' as the US proposal DP-03 stated. Regarding the rebuilding target, the Kobe plot produced from last stock assessment using 20%SSB as reference point indicated that the stock has been in overfished state even since the 1950's when few fisheries were operating and the stock assessment models could not provide plausible explanation for the phenomenon. With that in mind, Chinese Taipei preferred a rebuilding target of Bmed which is based on empirical information. It also considered that the long term target should be considered after the next stock assessment. It further sought for clarification of the intention of scenario 6 and 7.

57. The USA responded that although it notes the uncertainty associated with the stock size and that the stock has been heavily utilized throughout the modern history, the USA considers that maintaining the rebuilding target as Bmed is setting aside the best available science and the Commission should not fail to take action based on them. It was pleased that, with the current CMM, the members are gaining control over the species but they need to move towards the final plan. With regard to the questions regarding scenarios 6 and 7, it clarified that they present schemes that can re-set the control rules in response to the assessment results either of biomass or recruitment. They are "dynamic" management regime.

58. Japan commented that it does not disagree that the management should be based on the best available science but it also cautioned that the science is not perfect and there are many assumptions in the model. It emphasized that long term management objective of the stock should be set based on considerations of uncertainty in the model in order to prevent unnecessary negative impacts on associated fisheries.

59. Japan then presented its basic view in considering reference points for PBF (NC11-IP09). Japan emphasized that the management should be based on the fact and that the PBF SSB has been below the current level in 11 times in the past 60 year. It also pointed out that the past SSB fluctuated even with the

absence of any management measures and the recruitment also fluctuates independently with the level of SSB although it was pointed out that it is below average in the past 5 years. However it was pointed out that it had been further low in the past. As the catch history demonstrated, Japan is the dominant player of PBF fisheries and it has the primal responsibility for its management. However, Japan has a very large number of stakeholders and needs to get understanding and cooperation from them for effective management. It needs more time to introduce any measures than other members who have small fisheries.

60. With regard to how PBF should be managed, the Convention stipulates that the stock should be restored to MSY level and also requires a safe biological limit to be set. However, a question is whether PBF can be managed using standard LRPs. Japan noted that no major tuna stocks have adopted MSY based LRP but adopted 20%B₀ as proxy. The question then is whether same is appropriate for PBF. For species like PBF with quite long history of exploitation and large fluctuation, Japan had doubts about the applicability of B₀ based approach. If the trends of different tuna species are compared, initial stock can be estimated for tropical tunas and SBT which show one way declining trend. However, temperate tunas show different trend to repeat going up and down. It was particularly true for PBF even without management measures in place and this should not be overlooked. Further, if you compare the dynamic SSB₀ and estimated SSB, it is revealed that SSB has never reached the 20% of dynamic SSB₀ over the last 60 years. Moreover, the assessment results indicate that the stock has been overfished even before 1950 when the fishery should have been suspended for 5-6 years during and after WWII.

61. Japan further noted that estimated B₀ fluctuated from 470,000 mt to 970,000 mt, more than 100% increase in the past and so would its 20% and concluded that it is not a very reliable figure, which has never been achieved. Japan also pointed out that the stock sustained in the past. Therefore, Japan advocated use of absolute SSB amount as reference points rather than B₀ based figures, which are very misleading. While pointing out the inappropriateness of comparing the current SSB with estimated B₀ which was never achieved in the long history of exploitation, Japan also stated that the current SSB is 20% of the highest observed SSB. Japan then demonstrated that the B₀ based reference points are highly sensitive to the model assumptions such as natural mortality and empirical ones are more robust. It was pointed out that IATTC raised the same point and supported relative biomass instead.

62. Japan finally commented what it believed to be a realistic framework. It noted that an LRP should be a threshold to avoid recruitment collapse and that the recruitment is robust when SSB is over SSB_{med}. It proposed to set LRP and TRP empirically by use of absolute SSB amounts so that SSB grows gradually to identify and eventually reach B_{msy}, and simultaneously adopt emergency rule to cope with unexpected recruitment collapse. It also emphasized that, although some might say that the current rebuilding target is not ambitious enough, the ISC simulation indicated that the stock will recover to the 2nd highest historically observed level even by 2024 under very pessimistic recruitment scenario, which has never been observed. Japan concluded its presentation by requesting to consider the reality and the effectiveness of existing measures.

63. The USA noted that there seems to be difference of view on what is scientific basis, in terms of what it means and what we should do based on it. ISC states that the PBF stock has been depleted and the USA considered that leaving the stock at depleted level would be too risky. It also pointed out that the ISC projection indicated that the stock would recover to B_{med} ahead of schedule. The reason the stock did not reach high level in the past was probably the fishing mortality was simply too high and, unlike Japan's comment, ISC results indicate that the stock can recover to 20% SSB_{current} f=0, if the fishing is properly controlled.

64. Japan agreed with the USA that the stock is depleted. However, it reiterated its view on development of the long term management of PBF that the reference points should be set empirically.

Noting that the current measure will recover the stock to around 68,000 mt by 2024 even under the low recruitment scenario, Japan showed its willingness to continue discussion on this matter next year.

65. After further informal discussion, the USA reported that it believes what needs to be achieved in NC 11 was to provide ISC with a set of harvest scenario to conduct updated SSB projection. For this purpose, it suggested to separate the harvest scenarios from the other components of the proposal to be used by ISC. The overall framework of long term management will be discussed at the next meeting taking into accounts the comments received intersessionally

66. Japan appreciated US suggestion but questioned the rationale to conduct so many additional scenarios while the interim rebuilding target was already agreed under the existing measure.

67. In response, the USA noted that the current measure is included in the proposed scenarios, which is scenario 1, but also it is interested in the effect of more stringent control of adult fish, which could be beneficial for recruitment. Also, some scenarios are intended to balance the measures between IATTC and WCPFC. Those scenarios will be particularly useful, if the next assessment finds the current measure is not achieving the objective. Conducting scenarios with more stringent measures does not mean they will be implemented but if ISC does not conduct the projection of more stringent measure, we may need to wait another year to introduce appropriate measures.

68. Japan pointed out that the current measure provides that the ISC is requested to update the SSB projections for the harvest scenarios previously recommended by the WCPFC, along with any additional scenarios recommended by the Northern Committee for the purpose of assessing achievement of initial rebuilding goal. It proposed to delete some projection scenarios in the US proposal which may be outside such a scope.

69. Mexico shared the concern of Japan over deciding long term rebuilding target based on B0 given that natural mortality of PBF is imported from the knowledge of other species. If new information is obtained through a different approach such as close-kin, very different parameters could be proposed in near future. However, with regard to the harvest scenarios, the NC should not restrict the work of the science. Scenario 6 was the best among 7 tested scenarios in the last assessment but that does not mean there is not a better scenario. Mexico emphasized also the requirement of target and limit reference points of PBF as well as the whole rebuilding plan need to be discussed in both IATTC and WCPFC before the adoption by both Commissions.

70. The ISC Chair noted that ISC report clearly stipulates that ISC can conduct projection on any scenarios other than requested by the NC when deemed necessary.

71. Japan emphasized that any scenario should be based on same reduction ratio in both WCPFC and IATTC. In response, Mexico mentioned that it had made significant efforts for PBF conservation but measures implemented in other countries are not strict enough but expected equitable measures to be implemented.

72. Chinese Taipei also shared the concern of how to share the impact and stated that, according to ISC analyses, the impact from adult fish fisheries on the stock is relatively clear but the impact from juvenile fisheries of EPO and WPO may change substantially by year due to the highly fluctuated trend of recruitment. Chinese Taipei therefore suggested that it is difficult to decide what kind of impact share is equitable and the most important thing at this moment is to review if the newly adopted CMM has been fully implemented as per ISC conservation advice to achieve the goal of recovering the stock.

73. Korea asked what happened to the ultimate rebuilding target of 20%SSB0 which has been removed from the US proposal. Korea suggested that the SSB projection period for performance measure needs to be consistent with the current rebuilding target year and thus a 10-year period needs to be included in the proposed performance criteria which has been set at 15 year. Also for a longer term perspective Korea also suggested a 20-year period to be added to the list.

74. Further discussion was held among members. Based on the proposal made by Japan and the USA, NC11 agreed to request ISC to evaluate the expected performance of the following candidate harvest scenarios with respect to the performance measure below.

Candidate harvest scenarios:

- a. The current management regime, considered to be: fishing effort at 2002-2004 level in PBF-directed WCPO fisheries and maximum catch of 4,725 mt/yr of fish <30kg in WCPO fisheries; maximum catch of 6,591 mt/yr of fish \geq 30kg in WCPO fisheries; maximum catch of 3,300 mt/yr in EPO commercial fisheries; and catch in EPO sport fisheries as currently managed.
- b. Scenario (a), 10% less in catches in all fisheries.

Performance measure:

- a. Expected SSB over the course of 10, 15 and 20-year projection periods.

75. Mexico stated that, in addition to the proposed scenarios, another scenario of the 50% reduction of all of immature fish, not only less than 30kg, should be conducted. It emphasized that even though ISC recommended the all the immature fish catch should be reduced, WCPFC does not comply with this advice and at least the NC should know the impact of not following the ISC advice. It further requested the NC instruct ISC to conduct projection with different value of steepness. It noted that it will request those scenarios at ISC anyway but noted it is important that the NC make those requests.

76. Japan commented that the proposed scenarios are based on the principle of same level of contribution from both RFMOs, given that both organizations adopted measures last year based on the ISC advice, while pointing out that the issue of steepness should be left to scientists to decide.

77. The ISC Chair confirmed that ISC will conduct any additional scenarios they deem necessary as part of the 2016 PBF stock assessment.

78. Canada expressed its disappointment with the lack of progress on the management of PBF given the current low level of the stock. It considered that the Commission is not fulfilling its obligations under the Convention nor are the members living up to the commitments under UNFSA. Furthermore, Canada is concerned about the impacts to the Commission's credibility and its members' reputations as fishery managers.

79. The USA noted that, of the two proposals it had submitted, it seems that only half of one of them was materialized. With regard to the ultimate rebuilding target, the USA looked forward to further discussion at the next NC meeting, including consideration of the new stock assessment and other new work by ISC on PBF. On the precautionary management framework, the USA urged the interested members to provide input well in advance of the next NC so that its discussion will be fruitful next year. It further noted that for the advancement of the discussion on CDS, the members can take advantage of the CDS workshop scheduled right before the TCC meeting in September. Lastly, the USA requested to receive any proposals on emergency measures as early as possible so that it can have enough time to reflect on.

80. Fiji noted that FFA members support the NC to move to take action on PBF management rather than wait another year.

81. PEW made a statement (Attachment C).

Draft Conservation and Management Measure

82. Japan introduced a draft CMM for PBF (NC11-DP05). It is intended to revise the current CMM2014-04 to incorporate a new paragraph which stipulates an emergency rule to be developed in 2016 which are specific rules all CCMs shall comply with when drastic drops of recruitment are detected. Noting recruitment level in 2014 will be lower than that in 2012, it appealed the necessity to develop rule to cope with possible recruitment collapse. Japan also requested Members to prepare to accept strong rules to prevent recruitment collapse. Noting stakeholders' understanding and cooperation is essential to develop the rules, Japan suggested a rule such as to suspend all the fishery for 2-3 years when the recruitment is below 5 million fish for 2-3 years. It also indicated that limited scale of fishery may need to be permitted to monitor the recruitment.

83. The USA supported the idea of the Japanese proposal to reinstate the emergency rule which was included in the past CMMs up to the latest one. It was looking forward to discussing further but pointed out that exact measure could be fishery or age specific measure rather than blanket suspension, depending on the situation. The USA looked forward to seeing a specific proposal in advance of the next year's meeting.

84. Korea also supported the idea and noted that such a measure should be applied to relevant members without exception.

85. Chinese Taipei also supported the general concept but noted that the definition of "recruitment collapse" such as less than 5 million fish needs further discussion in the future.

86. **The NC adopted a recommendation of a CMM for the management of PBF (Attachment D) and submits it to the Commission for its adoption.**

87. EU commented that EU considers the management of PBF is the most important and urgent matter for the NC, although EU is not involved in its fishery. ISC reports the stock is depleted against all common biological reference points and EU had serious concern over the current situation. It also concerned the substantial increase of catch in 2014 over 2013 (50% increase), while preliminary recruitment index indicated very low year class in 2014. EU believed that current measures adopted by IATTC as well as WCPFC were not commensurate to the current status of the stock and more stringent measure is necessary. EU further recalled that ICCAT, whose management of eastern Atlantic Bluefin tuna was described in the past as an "international disgrace", succeeded in the recovery of this stock with effective management measures. And most of the members of the Northern Committee are also members of ICCAT and therefore contributed actively to this success. It should be noted that important sacrifices were made by members, that is 90% catch reduction in juvenile and 65% for adults. At the latest IATTC meeting, EU advocated more ambitious management framework than the one that was proposed, but unfortunately that seemed to be too ambitious for some members. EU has a common policy to rebuild stocks to levels capable of producing MSY and called for Bmsy or an appropriate proxy to be used as the ultimate rebuilding target for PBF. Lastly, it emphasized the importance of having coordinated approach between WCPFC and IATTC.

88. In response to EU's concern, Japan noted that it complied with CMM2013-9, which requires CCMs to reduce their catch of PBF less than 30kg at least 15% from the baseline in 2014. Japan further noted that, in response to Mexican comment previously made, its purse seine fisheries targeting adult PBF was closed in 2014 and 2015 before the unilateral catch limit was reached.

89. The NC noted that Japan and Mexico, the biggest importer and the biggest exporter of PBF, will work bilaterally towards the next NC meeting to come up with a proposal regarding the CDS framework for PBF.

90. The USA made the following statement: U.S. considers the progress made here to be only the barest minimum needed and believes that we missed an opportunity to have a meaningful discussion about the long term management of Pacific bluefin tuna. NC members have a responsibility to recover PBF, and then manage the stock throughout the Pacific Ocean using the best available science. The United States offered two proposals this week- one to rebuild the stock and one to guide future management- and both were based on the best available science and modern principles of science-based management, including the use of biologically based limits. We recognize that the current interim rebuilding target is based on the historic biomass level and we must explore a more appropriate target based on the best available science. We cannot delay this work and shirk this responsibility. The United States hopes that all NC members will provide feedback on our proposals so that at next year's meeting proposals to recover and appropriately manage PBF, including biologically-based reference points for the management framework and the long-term rebuilding objectives

91. Mexico announced that it has taken voluntary measures for 2016, reducing its potential catch from the quota already established in IATTC to 2,750 tons, urging other fishing nations to take further steps for the conservation of PBF.

92. Japan expressed its disagreement with the opinion expressed by some CCMs that little progress has been achieved on long-term management on PBF. Japan referred to the ISC's latest assessment which indicates that PBF resource will recover to the interim rebuilding target under the new measures commenced this year even incorporating a low recruitment observed in 2014. Japan emphasized that this was a clear sign of progress observed by the introduction of WCPFC measure. Japan also referred to its emergency rule proposal which may obligate all CCMs temporary suspension of all PBF catches for in case of very low recruitment detected. Japan also reiterated its effort made during the NC meeting such as explanation of the existing problems in setting reference points but no similar effort was shown by other CCMs. It also noted that Japan has introduced voluntary restriction on adult catch by purse seine fishery since 2011. Japan requested other CCMs to consider its presentation made this week and make positive and active participation in the discussion on PBF long-term management next year.

2.3.2 North Pacific albacore

Review of CCM Reports

93. Summary of CCMs' reports on NPALB fisheries in accordance CMM2005-03 (NC11-DP02) was presented.

Precautionary management framework of NPALB

94. The USA introduced its North Pacific albacore Evaluation of Candidate Harvest Control Rules proposal (NC11-DP-01). As the follow-on to the adoption of the precautionary management framework for NP albacore and in preparation for the ISC to perform the management strategy evaluation, the USA proposed a series of candidate harvest control rules and reference points to be evaluated. These

candidates only serve as a basis for discussion. The candidate harvest control rules include a set based on total allowable catch and a set based on total allowable effort. The reference points proposed for evaluation include combinations of B limits and F targets. The USA acknowledged that the ISC's proposed framework for the NP albacore (NC11-WP-01) was not available when they developed their proposal but hoped for discussion to bring these two proposals more congruent.

95. Canada thanked the USA, noting its priority to move to MSE for NPALB. However, the priority should be given to developing operational objectives which will require further internal consultation. It noted that the proposed MSE workshop would be an appropriate place for further discussion as proposed by ISC.

96. Japan expressed its confusion regarding the relationship between the US proposal and the management framework adopted last year. For example, the Commission adopted an LPR of 20% $SSB_{current} F=0$ while the US proposal suggests additional LRP candidates.

97. The USA responded that it considered that it is the time and place to make a progress about the management framework of the NPALB. It noted that it is prudent to consider other management options through MSE process even though the Commission adopted a management framework. It stated that the NC should be provided information to consider management choices to decide whether or not if we are achieving our objectives. It emphasized that it does not want to lose the momentum and should use the opportunity to close the gap among members.

98. After substantial discussion the NC agreed to advance the work on MSE based on the document provided by ISC (NC11-WP01) particularly the expected input from managers as contained as table 1, taking also into account the US proposal (NC11-DP01). In addition, J. Holmes agreed to prepare an explanatory note to help managers to prepare answers and this will be distributed to members through the Secretariat. The members are then requested to submit answers to the questions to the Secretariat by November 19. ISC will then organize the answers for redistribution to members. In the margin of the Commission meeting in Bali, NC members will review the document provided by the ISC with the aim of producing the initial consensus input to the ALB MSE Workshop scheduled in April 2016.

2.3.3 North Pacific swordfish

99. The USA introduced its proposal on precautionary management framework of north Pacific swordfish (NC11-DP04). It is in accordance with the CMM2014-06 and similar structure to the PBF proposal. Only significant difference is that it proposes F_{msy} for LRP since the USA considered the species would be categorized as tier 1 species in the Commission hierarchical approach based on the fact that its assessment is conducted using surplus production model.

100. Japan commented that it considers the US proposal too strict as it requires immediate reduction of fishing mortality once it exceeds F_{msy} even though the biomass is above B_{msy} . Japan also showed its concerns that efforts immediately reduced under the framework will be transferred to other stock and may cause deterioration of the stock. Based on the backdrop Japan preferred framework based on biomass rather than fishing mortality. Finally it considered this matter should be discussed based on the result of the next stock assessment.

101. The USA responded that according to the Convention, fishing mortality should be reduced once it exceeds the F_{msy} . Fishing mortality can be controlled through management measure and the result is immediate. Therefore, the USA believed the proposal is not overly ambitious.

102. The Chair commented that he understands that the US proposal is to agree an interim framework and can be discussed further when more information is available if ISC conduct next stock assessment.

103. The USA commented that its intention was to agree on a permanent framework but if the members are not comfortable, it is fine to adopt the framework as interim.

104. After further discussion among members, the USA reported that it received comments requiring fundamental shift of the proposal, which requires the LRP based on biomass rather than fishing mortality as originally proposed. The USA noted that it needs to consider the implication of this change and is not in the position to discuss further in NC11 and would hope to continue the discussion at the future meetings.

105. Japan clarified that its comments to the USA. (i) The LRP should be based on biomass rather than fishing mortality as the stock of north Pacific swordfish is healthy. (ii) It proposed an LRP of 40% of Bmsy taking the example of ICCAT. (iii) It proposed a new paragraph requiring the review of the framework after the next stock assessment scheduled in 2017.

2.4 Conservation and management measures for other species

2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2013-01)

106. Japan once again expressed its concern regarding the continued declining trend of stocks of tropical tunas especially bigeye, emphasizing that its SSB breached its biomass limit in 2012. Further, Japan pointed out that FADs activity level in 2014 exceeds that of 2010, the level which SC8 recommended. It emphasized that the situation need to be rectified as Japanese coastal fisherman continue to suffer poor migration and called for SC to continue to work on range contraction. Based on the backdrop Japan called for the NC to send a message of strong concern to the Commission that the failure of the management in the tropical area is causing management problem in the northern area, including the management of northern stocks through unavoidable target shift from tropical tunas to northern species.

107. The NC once again expressed its strong concern regarding the plight of tropical tuna stocks not only because those species are being caught in the northern area but also the status of those species could impact management of other species through target shift.

2.4.2 North Pacific striped marlin

108. There were no discussions on this item.

2.4.3 Sharks

109. Japan noted that blue shark is very important target species and the work to decide whether the species should be categorized as a northern stock or not should continue.

110. The USA pointed out that the Rules of Procedure clearly states that it is the responsibility of the SC to periodically review the list of the northern stocks. Therefore, the SC must respond to the Commission's request made last year and the NC should emphasize this point.

111. Noting that the review of the list of northern stocks is the responsibility of the SC, the NC once again requests the Commission to instruct the SC to undertake the work on determination of the designation of north pacific blue shark as a northern stock based on the information provided

by ISC to SC11. In this regard, the Commission should instruct the Scientific Services Provider to analyze the available information and coordinate with ISC if further information is necessary.

2.4.4 Seabirds

112. There were no discussions on this item.

2.4.5 Sea turtles

113. There were no discussions on this item.

AGENDA ITEM 3 — REGIONAL OBSERVER PROGRAMME

114. There were no discussions on this item.

AGENDA ITEM 4 — VESSEL MONITORING SYSTEM

115. There were no discussions on this item.

AGENDA ITEM 5 — DATA

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

116. There were no discussions on this item.

AGENDA ITEM 6 — COOPERATION WITH OTHER ORGANIZATIONS

6.1 ISC

117. G. DiNardo made a presentation regarding the progress to date on close-kin analysis by ISC. Close-kin is an approach using genetic information. It would detect POPs (parent-offspring pairs) from the samples and use the information to estimate the absolute biomass, as is similar with conventional mark recapture analysis. It is considered as a potential fishery independent assessment and ISC decided to take the lead in the project. Following several workshops, ISC 15 decided that it will establish a small advisory group to design sample collection scheme. It will not, however, engage in the genetic analysis itself and expects ISC members to conduct the analysis. For example, Japan had already made a substantial progress in developing genetic marker. The results of members' analysis will be discussed at PBFWG. It is a new method thus need a validation, probably through simulation modeling and it would take 3-5 years to judge its validity and usefulness. It is considered by ISC members that probably Bluefin Future Symposium in January 2016 would be a good opportunity to take the stock by then and the information can also be presented to the symposium if so requested.

118. The NC welcomed the initiative by ISC on close-kin and expressed its willingness to support it as much as possible. The importance of the continued cooperative relationship with ISC was highlighted.

6.2 IATTC

119. In order to have effective management framework for the northern stocks, particularly PBF, it was recognized that further strengthened relationship with IATTC is necessary.

AGENDA ITEM 7 — FUTURE WORK PROGRAMME

7.1 Work programme for 2016–2018

120. NC11 revised and adopted its future work programme (Attachment E). The NC considered that the requirement under CMM2014-06 (establishing time table for development of management framework) was duly addressed in its work programme.

AGENDA ITEM 8 — OTHER MATTERS

8.1 Administrative arrangements for the Northern Committee

8.1.1 Secretariat functions and costs

121. There were no discussions on this item.

8.1.2 Rules of procedure

122. There were no discussions on this item.

8.2 Next meeting

123. Chair proposed that the NC hold 5-day meeting next year, instead of usual 4-day meeting, in order to deal with expected heavy agenda on PBF and ALB. In addition, he reported that Japan requested to host the next NC due to the large number of stakeholders involved. He also proposed to hold a joint meeting with IATTC at the next NC meeting to discuss the overall framework of PBF conservation. The results naturally need to go back to each RFMO for final approval. If that is supported by the NC, he offered to contact IATTC on behalf of the NC.

124. Japan confirmed the comment of Chair by offering to host the next NC meeting to involve as many stakeholders as possible for decision making. Japan also supported a joint meeting with IATTC and noted that IATTC also proposed to have a joint meeting with WCPFC on PBF at the previous meeting.

125. The USA generally supported the arrangement proposed although it reiterated its willingness and preparedness to host a NC meeting any time in future. It also supported to hold a joint meeting with IATTC and would consider the most effective use of opportunities taking into account the timing of meetings of both RFMOs.

126. With further supports from other members, **the NC agreed to request Chair to contact IATTC Secretariat to arrange a joint meeting on PBF management in conjunction with the next NC meeting.**

8.3 Other matters

127. There were no discussions on this item.

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

128. NC11 adopted the Summary Report of its Eleventh Regular Session, pending the formal approval at the time of the Commission.

AGENDA ITEM 10 — CLOSE OF MEETING

129. The meeting was closed on 3 September 2015.

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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

LIST OF PARTICIPANTS

NC CHAIR

Masanori Miyahara

Northern Committee Chair
+81-3-3502-8459
masanori_miyahara@nm.maff.go.jp

Level 3, Takayawa Tower, Toorak Road. P.O
Box 2218, Government Building, Suva.
+679 3301 011
abatibasaga@gmail.com

CANADA

Derek Mahoney

Senior Policy Analyst
Fisheries and Oceans Canada
200 Kent St, Ottawa, ON
613-990-0188
derek.mahoney@dfo-mpo.gc.ca

Suresh Chandra

Principal Fisheries Officer
Fisheries Department, Ministry of Fisheries &
Forests
P . O Box 2218, Government Buildings, Suva,
Republic of Fiji
(679) 3361122 , Mobile : (679) 9906913
suresh.fjf@gmail.com

John Holmes

Scientist
Fisheries and Oceans Canada
Pacific Biological Station, 3190 Hammond Bay
Road, Nanaimo, BC, V9T 6N7
1-250-756-7303
john.holmes@dfo-mpo.gc.ca

JAPAN

Hisashi Endo

Councillor (Head of Delegation)
Fisheries Agency Government of JAPAN
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
hisashi_endo@nm.maff.go.jp

Kate Johnson

Analyst, International Fisheries Management
Fisheries and Oceans Canada
200 Kent St, Ottawa, ON
613-993-2877
Kate.Johnson@dfo-mpo.gc.ca

Takashi Koya

Counsellor
Fisheries Agency Government of JAPAN
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
takashi_koya@nm.maff.go.jp

FIJI

Aisake Batibasaga

Director- Fisheries Department, Fiji
Ministry of Fisheries and Forest, Fiji.

Yujiro Akatsuka

Assistant Director
Fisheries Agency Government of JAPAN

1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
yuujirou_akatsuka@nm.maff.go.jp

Yousuke Nakayama
Fisheries Agency Government of JAPAN
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
yousuke_nakayama@nm.maff.go.jp

Mako Iioka
Fisheries Agency Government of JAPAN
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
mako_iioka@nm.maff.go.jp

Toshihiro Yokoo
Fisheries Agency Government of JAPAN
1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3502-8459
toshihiro_yokoo@nm.maff.go.jp

Masaki Sawaoka
Director
Agriculture and Marine Products Offices,
Ministry of Economy, Trade and Industry
1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3501-0532
sawaoka-masaki@meti.go.jp

Shingi Koto
Assistant Director
Agriculture and Marine Products Offices,
Ministry of Economy, Trade and Industry
1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo,
JAPAN
+81-3-3501-0532
koto-shingi@meti.go.jp

Hideki Nakano
Deputy Director-General
National Research Institute of Far Seas Fisheries
5-7-1, Orido, Shimizu, SHIZUOKA, JAPAN
+81-54-336-6035
hnakano@affrc.go.jp

Hiroyuki Shimada
Director, Pacific Bluefin Division
National Research Institute of Far Seas Fisheries
5-7-1, Orido, Shimizu, SHIZUOKA, JAPAN
+81-54-336-6035
shimada@affrc.go.jp

Shuya Nakatsuka
Research Coordinator
National Research Institute of Far Seas Fisheries
5-7-1, Orido, Shimizu, SHIZUOKA, JAPAN
+81-54-336-6035
snakatsuka@affrc.go.jp

Hidetada Kiyofuji
Scientist
National Research Institute of Far Seas Fisheries
5-7-1 Orido, Shimizu-ku, Shizuoka, Japan
+81-54-336-6000
hkiyofuj@fra.affrc.go.jp

Hiromu Fukuda
Scientist
National Research Institute of Far Seas Fisheries
5-7-1 Orido, Shimizu-ku, Shizuoka, JAPAN
+81-54-336-6035
fukudahiromu@affrc.go.jp

Ziro Suzuki
Guest Researcher
National Research Institute of Far Seas Fisheries
5-7-1, Orido, Shimizu, SHIZUOKA, JAPAN
+81-54-336-6035
zsuzuki@affrc.go.jp

Shinji Nakaya
General Manager
Nippon Suisan Kaisha,Ltd.
Nishi-Shimbashi Square,1-3-1 Nishi-Shimbashi,
Minato-ku, Tokyo, JAPAN
+81-3-6206-7586
s-nakaya@nissui.co.jp

Chihiro Kino
Councilor
Japan Far Seas Purse Seine Fishing Association
14-10 Ginza 1 Chome Chuo-Ku Tokyo,
JAPAN
+81-3-3564-2315
japan@kaimaki.or.jp

Eihachiro Matsuzawa

President
Kochi Offshore Tuna Fisheries Association
1-6-21, Hon-Machi, Kochi-Shi, Kochi-Ken
JAPAN
+81-88-823-1365

Goto Asako

Chief
Hokkaido Government
Kita 3-jo, Nishi 6-chome, Chuo-ku, Sapporo,
JAPAN
+81-11-204-5477
goto.asako@pref.hokkaido.lg.jp

Hide Nakayama

Assistant Manager
Federation Of North Pacific District
Purse Seine Fisheries Cooperative associations
of Japan
1-9-13, Akasaka, Minato-ku,
Tokyo, JAPAN
+81-3-3585-7941
hokubu-taiheiyou@kbe.biglobe.ne.jp

Hidefumi Kawamoto

Associate Director
San-In Purse Seine Fisheries Cooperative
2-23, Showamachi, Sakaiminato-city, Tottori,
JAPAN
+81-859-42-6381
kawamoto@sanmaki.jp

Hiroshi Moriwaki

Vice Union President
San-In Purse Seine Fisheries Cooperative
2-23, Showamachi, Sakaiminato-city, Tottori,
Japan
+81-859-42-6381
wakaba-hm@lily.ocn.ne.jp

Isao Ishii

Executive director
Central Japan Sea purse seine fishery council
3-1-38, Kitayasue, Kanazawa, Ishikawa, JAPAN
+81-76-234-8829
cyuubumakiami@po4.nsk.ne.jp

Jun Machiba

Fishery Police Dept.

National Federation Of Fisheries Cooperative
Associations
1-1-12 Uchikanda, Chiyoda-Ku, Tokyo, JAPAN
+81-70-6646-9801
j-machiba@zengyoren.jf-net.ne.jp

Kazushige Hazama

Chief
National Offshore Tuna Fisheries Association of
Japan
Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-
Ku, Tokyo, JAPAN
+81-3-3295-3721

Kunikazu Shimamoto

Assistant Director, International Exchange
Promotion Division
Overseas Fishery Cooperation Foundation of
Japan
Toranomom 30 Mori Bldg. 2-2, Toranomom 3,
Minato-Ku, Tokyo, JAPAN
+81-3-6895-5383
shimamoto@ofcf.or.jp

Kunio Shirasu

Union president
San-In Purse Seine Fisheries Cooperative
2-23, Showamachi, Sakaiminato-city, Tottori-
JAPAN
+81-859-42-6381
k-shirasu@kyowacom.co.jp

Makoto Hotai

General Manager
Japan Purse Seiner's Association
3-11-3 Nagahama Chuo-Ku Fukuoka JAPAN
+81-92-711-6261
makoto-hotai@enmaki.jp

Masakatsu Irei

President
Okinawa Tuna Fisheries Association
1-1-18, Minato-Machi, Naha-Shi, Okinawa,
JAPAN
+81-98-951-3546

Meiko Kawahara

Manager
Taiyo A&F Co., Ltd.
4-5 Toyomi-cho, Chuo-ku, Tokyo, JAPAN
+81-3-6220-1263

m-kawahara@maruha-nichiro.co.jp

Noriyuki Miki

President

National Offshore Tuna Fisheries Association of Japan

Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo, JAPAN
+81-3-3295-3721

Seiji Ankyu

Director, Business Support and Information Services Division

Overseas Fishery Cooperation Foundation of Japan

Toranomon 30 Mori Bldg. 2-2, Toranomon 3, Minato-Ku, Tokyo, JAPAN
+81-3-6895-5383
anky@ofcf.or.jp

Shigetsugu Tsuji

Director

Miyazaki Tuna Fisheries Association
2-6, Minato, Miyazaki-Shi, Miyazaki-Ken, Japan

+81-985-28-6111

Shoko Tsukao

Miyazaki Tuna Fisheries Association
2-6, Minato, Miyazaki-Shi, Miyazaki, JAPAN
+81-985-28-6111

Takahashi Kenji

Chief

Hokkaido Government
Kita 3-jo, Nishi 6-chome, Chuo-ku, Sapporo, JAPAN

+81-11-204-5477

takahashi.kenji2@pref.hokkaido.lg.jp

Takaya Nanba Ph.D.

Associate Counselor

Taiyo A&F Co., Ltd.
4-5 Toyomi-cho, Chuo-ku, Tokyo, JAPAN
+81-3-6220-1260

t-nanba@maruha-nichiro.co.jp

Tandai.Sumeragi

Chief

Hokkaido Government

Kita 3-jo, Nishi 6-chome, Chuo-ku, Sapporo, JAPAN

+81-11-204-5477

tandai.sumeragi@pref.hokkaido.lg.jp

Yasuhiro Horinouchi

Director, International Exchange Promotion Division

Overseas Fishery Cooperation Foundation of Japan

Toranomon 30 Mori Bldg. 2-2, Toranomon 3, Minato-Ku, Tokyo, JAPAN

+813-6895-5383

horinouchi@ofcf.or.jp

Yoshiharu Mizoguchi

Vice President

Miyazaki Tuna Fisheries Association
2-6, Minato, Miyazaki-Shi, Miyazaki, JAPAN

+81-985-28-6111

Yoshihiro Notomo

Managing Director

National Offshore Tuna Fisheries Association of Japan
Tohan No.3 Bldg. 1-3-1, Uchikanda, Chiyoda-Ku, Tokyo, JAPAN

+81-3-3295-3721

Teruo Myojin

Myojin Suisan Cooperation

763 Saga, Kuroshio-cho, Hatata-gun, Kochi, JAPAN

+81-880-55-3808

Tomokazu Tominaga

Katsumoto-cho Fisheries Cooperative

61 STS Katsumotoura, Katsumoto-cho, Iki-shi, Nagasaki, JAPAN

+81-920-42-1180

REPUBLIC OF KOREA

hiro9900@korea.kr

lyricgirl@korea.kr

mof_2014@korea.kr

kwonuj@korea.kr

CHINESE TAIPEI

Chi-Chao Liu

Section Chief

Fisheries Agency, Council of Agriculture
8F, No. 100, Sec.2, Heping W. Rd.,
Taipei City 10070, Taiwan
chichao@ms1.f.a.gov.tw

Joseph Chia-Chi Fu
Secretary
Overseas Fisheries Development Council
3F, No. 14, Wenzhou Street,
Taipei, Taiwan
joseph@ofdc.org.tw

Shui-Kai Chang
Professor
National Sun Yat-sen University
70, Lien-hai Road,
Kaohsiung, Taiwan
+886-7-5250050
skchang@faculty.nsysu.edu.tw

Weng Shu-Ting
Third Secretary
Sapporo Branch, Taipei Economic and Cultural
Representative Office in Japan
stweng@mofa.gov.tw

Yu Chen
Associate Specialist
Fisheries Agency, Council of Agriculture
8F, No. 100, Sec.2, Heping W. Rd.,
Taipei City 10070, Taiwan
chenyu@ms1.f.a.gov.tw

UNITED STATES OF AMERICA

Michael D. Tosatto
Regional Administrator
NMFS - Pacific Islands Regional Office
1845 Wasp Blvd., Bldg 176, Honolulu, HI
96818
(808) 725-5001
michael.tosatto@noaa.gov

Barry A. Thom
U.S. Commissioner to the IATTC
Deputy Regional Administrator
NMFS - West Coast Region
1201 NE Lloyd Blvd - Suite 1100
Portland, OR 97232
503-231-6266
barry.thom@noaa.gov

Christopher Dahl
Staff Officer
Pacific Fishery Management Council
7700 NE Ambassador Pl., Ste 101
503-820-2422
kit.dahl@noaa.gov

Michael Brakke
Foreign Affairs Officer
U.S. Department of State
2201 C Street NW, Washington, DC 20520
202-647-3941
BrakkeMT@state.gov

Thomas R. Graham
Program Analyst
National Marine Fisheries Service
1845 Wasp Blvd., Bldg 176,
Honolulu, HI 96818
(808) 725-5032
tom.graham@noaa.gov

Kevin Piner
Research Biologist
NOAA Fisheries
8901 La Jolla Shores Dr
La Jolla, CA 92037
858 546 5613
kevin.piner@noaa.gov

Yi-Jay Chang
Fisheries Scientist
NOAA PIFSC
NOAA Daniel K. Inouye Regional Center
(808)7255705
yi-jay.chang@noaa.gov

Peter H. Flournoy
General Counsel
American Fishermen's Research
Foundation/American Albacore Fishing
Association
International Law Offices of San Diego
740 North Harbor Drive
San Diego, CA 92101
619-232-0954
phf@international-law-offices.com

Svein Fougner
Advisor

Hawaii Longline Association
32506 Seahill Drive, Rancho Palos Verdes, CA,
USA
310 377 2661
fougneranalytics@gmail.com

Dorothy Lowman
US Commissioner
Lowman and Associates
6507 SW Barnes Road Portland OR
503-804-4234
dmlowman01@comcast.net

Josh Madeira
Federal Policy Manager
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA 93940
831-648-9826
jmadeira@mbayaq.org

Margaret Spring
VP of Conservation & Science and Chief
Conservation Officer
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA 93940
mspring@mbayaq.org

OBSERVERS

EUROPEAN UNION

Josu Santiago
Head of Tuna Research Area
AZTI
Txatxarramendi ugarte, 48395 Sukarrieta,
Spain
+34 664303631
jsantiago@azti.es

FEDERATED STATES OF MICRONESIA

Limanman Helgenberger
Chief
Management & Development Division
National Oceanic Resource Management
Authority
POB PS 122, Pohnpei 96941
(691)320-5181/2700
liman.h@norma.fm

KIRIBATI

Mbwenea Teioki
Senior Fisheries Officer
Ministry of Fisheries and Marine Resources
Development
Bairiki Tarawa
686 21099
mbweneat@mfmrd.gov.ki
mbweneat@gmail.com

Maruia Kamatie
Fisheries Advisor
Ministry of Fisheries and Marine Resources
Development, Bairiki, Tarawa, Kiribati
+686 28099
maruiak@fisheries.gov.ki

MEXICO

Michel Dreyfus
Researcher
Instituto Nacional de la Pesca
Carretera Tijuana-Ensenada km 97.5
El Sauzal de Rodriguez, CP 22760
Ensenada, Baja California
Mexico
michel.dreyfus@inapesca.gob.mx
dreyfus@cicese.mx

SAMOA

Sharon Georgina Potoi-Aiafi
Assistant Chief Executive Officer
Ministry of Foreign Affairs and Trade
Apia, Samoa
Ph: (0685) 21171 / 20698
Fax: (0685) 21504
Email: sharon@mfat.gov.ws

TONGA

Mele 'Atuekaho
Senior Fisheries Officer
Fisheries Department
MAFFF
Tofoa, Tongatapu
876 7145
meletoauekaho@gmail.com

TUVALU**Fulitua Siaoisi Tealei**

Deputy Director
Fisheries Department
Ministry of Natural Resources
Vaiaku, Funafuti, Tuvalu
(688) 20549, 20836
fulituas@gmail.com
fulituat@tuvalufisheries.tv

**PACIFIC ISLANDS FORUM FISHERIES
AGENCY (FFA)****Ian Freeman**

Fisheries Management Adviser
FFA
1 FFA Rd Honiara Solomon Islands
+677 7525259
ian.freeman@ffa.int

GREENPEACE**Kazue Komatsubara**

Oceans Campaigner
NF Bldg 2F, 8-13-11 Nishi-Shinjuku, Shinjuku-ku,
Tokyo 160-0023 Japan
+81 3 5338 9800
kazue.komatsubara@greenpeace.org

**INTERNATIONAL SCIENTIFIC
COMMITTEE FOR TUNA AND TUNA
LIKE SPECIES IN THE NORTH PACIFIC
OCEAN (ISC)****Gerard DiNardo**

Chairman
ISC
8901 La Jolla Shores Drive, La Jolla, CA USA
92037
+1-858-245-7106
gerard.dinardo@noaa.gov

**INTERNATIONAL SEAFOOD
SUSTAINABILITY FOUNDATION (ISSF)****Gerald P Scott**

Advisor
International Seafood Sustainability Foundation
11699 SW 50th Ct, Cooper City, FL USA
+19544655589

gpscott_fish@hotmail.com

**ORGANIZATION 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 107-0062 JAPAN
+81-3-3568-6388
nagahata@opr.or.jp

THE PEW CHARITABLE TRUST**James Gibbon**

Senior Associate
The Pew Charitable Trusts
901 E St. NW
Washington, DC 20004
202-540-6447
jgibbon@pewtrusts.org

U.S.-JAPAN RESEARCH INSTITUTE(USJI)**Hiroshi Ohta**

Professor
Waseda University
1-6-1 Nishi-Waseda, Shinjuk-ku
Tokyo
81-3-5286-1728
h-ohta@y.waseda.jp

Atsushi Ishii

Center for Northeast Asian Studies
Tohoku University
41 Kawauchi, Aoba-ku, Sendai, Miyagi, 980-
8576
+81 22 795 6076
ishii@cneas.tohoku.ac.jp

Isao Sakaguchi

Faculty of Law
Gakushuin University
1-5-1 Mejiro, Tsohima-ku, Tokyo 171-8588,
Japan
+81-(0)3-3986-0221 ex.4820
isao.sakaguchi@gakushuin.ac.jp

Mari Koyano

Professor
USJI/Faculty of Law, Hokkaido University
Nishi-7, Kita-9, Kita-ku, Sapporo, Hokkaido
+81-11-706-3948
koyano@juris.hokudai.ac.jp

Takeo Horiguchi

Professor
U.S.-Japan Research Institute
Sophia University
7-1 Kioi-Cho, Chiyoda-ku
Tokyo
thoriguchi@sophia.ac.jp

Yasuhiro Sanada

Researcher
US-Japan Research Institute
Waseda University
1-6-1 Nishi-Waseda, Shinjuk-ku,
Tokyo
y-sanada@aoni.waseda.jp

**WORLD WIDE FUND FOR NATURE
(WWF)****Aiko Yamauchi**

Fishery Project Leader
WWF Japan
Shiba 3-1-14 Minato-ku, Tokyo Japan
+81337691713
ayamauchi@wwf.or.jp

Shunji Murakami

Japan Program Coordinator
Ocean Outcomes
#202 Life Court Sakura
5-17-22 Sekimachi Kita, Nerima-ku
Tokyo 1770051
shunji@oceanoutcomes.org

Yoshida Makoto

Assistant Fishery Officer
WWF-Japan
Nihonseimei Akabanebashi Bldg. 6Fl. 3-1-14
Shiba Minato-ku, Tokyo 105-0014 Japan
+81-3-3769-1714
myoshida@wwf.or.jp

WCPFC CHAIR**Rhea Moss-Christian**

WCPFC Chair
Western and Central Pacific Fisheries
Commission
Kaselehlle Street, PO Box 2356 Kolonia
Pohnpei FM 96941
691-320-1992/1993
rhea.christian@wcpfc.int

WCPFC SECRETARIAT**Feleti P. Teo**

Executive director
WCPFC Secretariat
PO Box 2356 Kolonia Pohnpei 96941
Federated States of Micronesia
691-320-1992/1993
feleti.teo@wcpfc.int

Sungkwon Soh

Science Manger
WCPFC Secretariat
PO Box 2356 Kolonia Pohnpei 96941
Federated States of Micronesia
691-320-1992/1993
sungkwon.soh@wcpfc.int

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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

AGENDA

AGENDA ITEM 1 OPENING OF MEETING

- 1.1 Welcome**
- 1.2 Adoption of agenda**
- 1.3 Meeting arrangements**
- 1.4 Membership**

AGENDA ITEM 2 CONSERVATION AND MANAGEMENT MEASURES

- 2.1 Report from the Fifteenth Meeting of the International Scientific Committee**
- 2.2 Report of the Eleventh Regular Session of the Scientific Committee**
- 2.3 Conservation and management measures for the northern stocks**
 - 2.3.1 Pacific bluefin tuna (CMM 2014-04)**
 - 2.3.1.1 Review of CCM report
 - 2.3.1.2 Precautionary management framework and multi-annual rebuilding plan
 - 2.3.1.3 Catch documentation scheme
 - 2.3.2 North Pacific albacore (CMM 2005-03)**
 - 2.3.2.1 Review of CCM report
 - 2.3.2.2 Precautionary management framework
 - 2.3.3 North Pacific swordfish**
- 2.4 Conservation and management measures for other stocks**
 - 2.4.1 Bigeye, yellowfin and skipjack tunas (CMM 2014-01)**
 - 2.4.2 North Pacific striped marlin (CMM 2010-01)**
 - 2.4.3 Sharks (CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 and CMM 2014-05)**
 - 2.4.4 Seabirds (CMM 2012-07)**
 - 2.4.5 Sea turtles (CMM 2008-03)**

AGENDA ITEM 3 REGIONAL OBSERVER PROGRAMME

AGENDA ITEM 4 VESSEL MONITORING SYSTEM

AGENDA ITEM 5 DATA

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

AGENDA ITEM 6 COOPERATION WITH OTHER ORGANIZATIONS

- 6.1 ISC**
- 6.2 IATTC**

AGENDA ITEM 7 FUTURE WORK PROGRAMME

- 7.1 Work Programme for 2016-2018**

AGENDA ITEM 8 OTHER MATTERS

- 8.1 Administrative arrangements for the Committee**
 - 8.1.1 Secretariat functions and costs**
 - 8.1.2 Rules of Procedure**
- 8.2 Next meeting**
- 8.3 Other business**

**AGENDA ITEM 9 ADOPTION OF THE SUMMARY REPORT OF THE ELEVENTH
REGULAR SESSION OF THE NORTHERN COMMITTEE AND
RECOMMENDATIONS TO THE COMMISSION**

AGENDA ITEM 10 CLOSE OF MEETING

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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

STATEMENT BY PEW

On behalf of the Pew Charitable Trusts, we'd like to express our concern and disappointment on the lack of progress made at this meeting towards agreement on short-term measures to reverse the recent recruitment declines or towards longer-term rebuilding of the species. In fact, most of the discussion this week was focused on what couldn't be done, instead of what should be done. We even heard reasons why robust scientific analysis should not be carried out.

The inaction this year means that many vital decisions have been left until next year, the final deadline for agreement on management objectives, reference points, and harvest control rules. As evidenced by the proceedings of this meeting, those won't be easy conversations. But those discussions cannot be avoided. The Northern Committee, as part of the WCPFC, has an obligation to return Pacific bluefin to a healthy level. And in our view, and a reading of the text of the Convention shows that historic median is not a healthy level – especially when it calculated using a limited set of years and ignores the half century of fishery history that occurred prior to the assessment period.

We urge all parties involved, including all members, the Chair, and ISC, to not wait for next September to begin discussing a path forward. Discussions should begin as soon as possible to find a road to agreement. Recruitment must be improved, and the population must be rebuilt, and those will require consensus to be reached at next year's Northern Committee meeting.

In the current situation, no one wins – the stock remains highly depleted, fishermen catch much fewer fish than they could if the population was healthy, and the inaction and failure of Northern Committee and WCPFC is highlighted for all to see. Members have a choice to make – they can choose to continue to block progress, or they can begin to work together to fix the situation. We sincerely hope that it's the latter.

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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

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

Conservation and Management Measure 2015-01

The Western and Central Pacific Fisheries Commission (WCPFC):

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

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

The current (2012) Pacific bluefin tuna biomass level is near historically low levels and experiencing high exploitation rates above all biological reference points except for F_{loss} ;

The average recruitment level for the last five years may have been below the historical average level;

The recently adopted WCPFC CMM 2013-09 and IATTC resolution for 2014 (C-13-02), if continued in to the future, are not expected to increase spawning stock biomass (SSB) if recent low recruitment continues;

If the low recruitment of recent years continues, the risk of SSB falling below its historically lowest level observed would increase;

Further substantial reductions in fishing mortality and juvenile catch over the whole range of juvenile ages should be considered to reduce the risk SSB falling below its historically lowest level; and

Monitoring of recruitment should be strengthened to allow the trend of recruitment to be understood in a timely manner,

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

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

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

General Provision

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

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

Management measures

3. CCMs shall take measures necessary to ensure that:

(1) Total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

(2) All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002–2004 annual average levels. Any overage of the catch limit shall be deducted from the catch limit for the following year.

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

5. An emergency rule shall be developed in 2016 which stipulates specific rules all CCMs shall comply with when drastic drops of recruitment are detected.

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

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

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

- | [98](#). Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.
- | [109](#). CCMs shall cooperate to establish a catch documentation scheme (CDS) to be applied to Pacific bluefin tuna as a matter of priority.
- | [1140](#). CCMs shall also take measures necessary to strengthen data collecting system for Pacific bluefin tuna fisheries in order to improve the data quality and timeliness of all the data reporting;
- | [1244](#). CCMs shall report to Executive Director by 31 July annually measures they used to implement paragraphs 3, 4, [65](#), [87](#), [98](#), [1140](#) and [1413](#) 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.
- | [1342](#). The WCPFC Executive Director shall communicate this Conservation Management Measure to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna and request them to take equivalent measures in conformity with this CMM.
- | [1413](#). To enhance effectiveness of this measure, CCMs are encouraged to communicate with and, if appropriate, work with the concerned IATTC contracting parties bilaterally.
- | [1514](#). The provisions of paragraphs 3 and 4 shall not prejudice the legitimate rights and obligations under international law of those small island developing State Members and participating territories in the Convention Area whose current fishing activity for Pacific bluefin tuna is limited, but that have a real interest in fishing for the species, that may wish to develop their own fisheries for Pacific bluefin tuna in the future.
- | [1615](#). The provisions of paragraph 14 shall not provide a basis for an increase in fishing effort by fishing vessels owned or operated by interests outside such developing coastal State, particularly Small Island Developing State Members or participating territories, unless such fishing is conducted in support of efforts by such Members and territories to develop their own domestic fisheries

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

**Northern Committee
Eleventh Regular Session**

**Sapporo, Japan
31 August–3 September 2015**

WORK PROGRAMME FOR THE NORTHERN COMMITTEE

Work areas	Objectives	1-year tasks		
	2016–2018	2016	2017	2018
<p>1. Northern stocks a. Monitor status; consider management action</p>	<p>Review status and take action as needed for: <u>North Pacific albacore</u> Tasks (A) Review members' reports on their implementation of CMM 2005-03. (B) Implement the agreed precautionary approach-based management framework, including: (1) monitor if LRP is breached; (2) continue to work to establish TRP based on MSE; (3) recommend any changes to CMM 2005-03.</p>	<p>Review members' report as compiled by the Secretariat and identify and rectify shortcomings. Monitor SSB against LRP. Conduct Task (B)(2). In doing so, support and then consider the results of ISC MSE Workshop.</p>	<p>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 CMM2005-03.</p>	<p>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)).</p>

Work areas	Objectives	1-year tasks		
	2016–2018	2016	2017	2018
	<p><u>Pacific bluefin tuna</u> Tasks (A) Review members’ reports on their implementation of CMM 2014-04.</p> <p>(B) Establish a precautionary-approach based management framework, including: (1) recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules); (3) recommend any changes to the rebuilding program and CMM.</p>	<p>Review reports from CCMs on their domestic management measures and trade.</p> <p>Obtain the new assessment and other work results from ISC and recommend any necessary changes to CMM2014-04, including specific emergency measures in case of recruitment collapse.</p> <p>Develop CDS based on the inputs from members.</p> <p>Develop the management framework and recommend any changes to the rebuilding program and CMM (Task (1) – (3)).</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings.</p>
	<p><u>Swordfish</u> Establish a precautionary-approach based management framework, including: (1)</p>	<p>Finalize interim management objective and reference points</p>	<p>Obtain and review a full assessment and consider appropriate management</p>	

Work areas	Objectives	1-year tasks		
	2016–2018	2016	2017	2018
b. Data	<p>recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules).</p> <p>Striped marlin (if agreed on by the Scientific Committee and Commission).</p>		action.	
	<p>Achieve timely submission of complete data needed for assessments, formulation of measures, and review of Commission decisions.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>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.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>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.</p>	<p>CCMs participating in the NC submit complete data on fisheries for northern stocks to the Commission.</p> <p>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.</p>
c. Scientific support	<p>Consider systems to validate catch data</p> <p>Provide support for scientific studies.</p>	<p>Encourage voluntary contribution for NC’s list of priority scientific projects, including close-kin analysis.</p>		

Work areas	Objectives	1-year tasks		
	2016–2018	2016	2017	2018
2. Non-target, associated, dependent species a. Seabirds	Consider appropriate implementation of methods to minimize catch and mortality.	Review implementation of CMM-2012-07 in the northern area.	Review implementation of CMM-2012-07 in the northern area.	Review implementation of CMM-2012-07 in the northern area.
	b. Sea turtles	Consider appropriate implementation of methods to minimize catch and mortality.	Review mitigation research results and consider management action.	Review mitigation research results and consider management action.
	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). Encourage submission of all shark data to ISC.	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.
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 North Pacific albacore measure (CMM 2005-03), including members' reports on their interpretation and implementation of fishing effort control.	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 Pacific bluefin tuna measure.	Review effectiveness of Pacific bluefin tuna measure.
4. ROP(Paragraph 9, Attachment C of CMM2007-01)		Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.	Review implementation of ROP for fishing vessels operating in north of 20°N.

Work areas	Objectives	1-year tasks		
	2016–2018	2016	2017	2018
5. VMS		Review implementation of VMS for fishing vessels operating in north of 20°N.	Review implementation of VMS for fishing vessels operating in north of 20°N.	Review implementation of VMS for fishing vessels operating in north of 20°N.
6. Cooperation with other 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 meeting on PBF management.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.	Have consultation to maintain consistent measures for North Pacific albacore and Pacific bluefin tuna.

