

**10th ANNUAL CONFERENCE OF THE PARTIES TO THE CONVENTION ON THE
CONSERVATION AND MANAGEMENT OF POLLOCK RESOURCES IN THE
CENTRAL BERING SEA**

**REPORT OF THE MEETING OF THE
SCIENTIFIC AND TECHNICAL COMMITTEE**

6-8 September 2005 – Busan, Korea

Final: 08 September 2005

Delegations from Japan, People's Republic of China, Poland, the Republic of Korea (Korea), the Russian Federation (Russia), and the United States (US) participated in a meeting of the Scientific and Technical (S&T) Committee in conjunction with the 10th Annual Conference of the Parties to the Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea in Busan, Korea.

1. Opening remarks

Patricia Livingston (US), Chair of the Scientific and Technical Committee, opened the meeting at 13:30, 6 September 2005. A list of the participants is provided (attachment 1).

2. Appointment of Rapporteur

Mr. Steven Barbeaux (US) was appointed as lead rapporteur. Each delegation agreed to select rapporteurs to aide Mr. Barbeaux with this function.

3. Adoption of Agenda

3.1 The Korean delegations proposed a new agenda item to discuss the future research plans for the US research vessel R/V Oscar Dyson.

3.2. The Russian delegation proposed a new agenda item to discuss proposal of a joint Bering Sea pollock research program, preliminarily named BAPIS. This should be agenda item 6.2.

3.3 Japan proposed a new agenda item to discuss recommendations for ABC and AHL. Agenda item 5.7.

3.4 The new agenda for the meeting was adopted (attachment 2).

4. Report of the June 6-9, 2005 Pollock Workshop In Seattle

4.1 Dr. Loh Lee-Low (US) provided a synopsis of the workshop held in Seattle. Documents are available at http://www.afsc.noaa.gov/refm/cbs/convention_workshop.htm. The S&T made the recommendation that a group led by Dr. Nishimura (Japan) and consisting of members from each

delegation (Korea: Dr. Soon-Song Kim, Russia: Dr. Alexander Glubokov, Poland: Dr. Jerezy Janusz, US: Dr. Mike Canino, China: Mr. Liu, Xiaobing) should be organized to discuss the planning of a workshop on pollock genetics similar to that convened in Yokohama, Japan. This workshop should use the recommendations from the Seattle workshop as a basis for their agenda. The genetics workshop plan will be discussed and decided upon by the S&T delegates at the next annual meeting.

5. Discussion of Science Issues

5.1. Update catch and effort statistics

5.1.1. Dr. Loh Lee-Low (US) provided the latest catch statistics for the North Pacific Pollock fisheries in a handout (attachment 3: Table 1 and Table 2).

5.1.2. Dr. Stepanenko (Russia) presented a review of the pollock fisheries in the Western Bering Sea (attachment 4). The Russian delegation reported that in 2004 the 1999-2001 year classes predominated in pollock catch in the Navarin area. The CPUE in 2004 increased roughly by 19% compared with 2003, reflecting an increasing abundance of pollock in the Northwestern Bering Sea. The Russian delegation also reported that the Navarin catch for 2005 provided by Dr. Low in attachment 3 Table 2 should be updated to 246,800 t for catch through August 31, 2005.

5.1.3. The Japanese delegation expressed deep concern about the volume of 1 and 2 year-old pollock in the Russian commercial catch (attachment 4 Table 5) and recommended that the Russian fisheries attempt to limit these catches. The Russian delegation replied that the level was dependent on recruitment and oceanic conditions (warm years tend to have more juveniles on the shelf), and unavoidably high concentration of young fish in the summer fisheries.

5.2. Review results of trial fishing

There was no trial fishing reported by the member nations for 2005.

5.3. Review results of research cruises

5.3.1. Ms. Taina Honkalehto (US) provided a review of the 2005 Bogoslof survey, described plans for the 2006 Bogoslof survey, provided preliminary plans for other 2006 surveys, and reported results of research cruise in 2004 (attachment 5).

5.3.2. The US presented a review of the results of the 5-13 March 2005 echo-integration-trawl survey of pollock in the southeastern Aleutian Basin near Bogoslof Island by the R/V MILLER FREEMAN. The cruise was able to complete acoustic data collection and completed 19 trawl hauls. The pollock biomass estimate for the Bogoslof Island area was 253,000 t.

5.3.3. The next survey is planned for 4-12 March 2006, with similar tracklines as 2005 (attachment 5.3.3). R/V OSCAR DYSON will shadow R/V MILLER FREEMAN. The US extended an invitation to all convention parties to participate in the planned 2006 research

survey. The US requested as much notice as possible (minimum of two months) to include visiting scientists on planned research cruises. Korea indicated that it would like to have one scientist participate in the Bogoslof survey on board the R/V Oscar Dyson.

5.3.4. United States provided results of R/V MILLER FREEMAN 2004 Eastern Bering Sea survey from Bristol Bay to Cape Navarin, including Russian waters. 154 hauls were completed, including some experimental hauls with an opening-closing mid-water trawl net. Four Russian scientists participated. Approximately 90 percent of pollock were in the US zone and 10 percent were in the Russian zone.

5.3.5. The Russian delegation stated that they would like to have two scientists participate in the 2006 summer EIT shelf survey, both on the R/V Oscar Dyson.

5.3.6. Dr. Stepenenko (Russia) provided a detailed report on research in the Western Bering Sea in 2005 and presented the preliminary data of EIT Midwater Survey conducted by TINRO in July 2005. Pollock biomass was estimated at about 499,000 t, an increase from 80,000 t from previous survey. The 2001-2002 year classes predominated in the Navarin area in the summer of 2005. Abundance of the 2003 year class was estimated to be relatively low.

5.4. Review the status of Aleutian Basin pollock stocks

5.4.1. Dr. Loh Lee-Low (US) presented the stock assessment for the Eastern Bering Sea pollock stock (attachment 6). The latest Eastern Bering Sea stock assessment can be found at <http://www.afsc.noaa.gov/refm/stocks/assessments.htm>.

5.4.2. Mr. Steven Barbeaux (US) presented on the 2004 Aleutian Islands pollock stock assessment (attachment 7). The latest Aleutian Island pollock stock assessment can be found at <http://www.afsc.noaa.gov/refm/stocks/assessments.htm>.

5.4.3. There is no comprehensive survey at this time that could be used to determine the status of Aleutian Basin pollock stock.

5.4.4. Ms. Taina Honkelehto (US) presented on survey effort and biomass estimates in the Bogoslof Island and basin areas (attachment 8) from 1983-2005.

5.4.5. Mr. Steve Barbeaux (US) delegation provided a table on the effort and catch in the Convention area trial fisheries from 1993-2003 (attachment 9).

5.5. Factors affecting recovery of the stocks

5.5.1. The Korean delegation expressed concerns about the impact of marine mammal populations on the recovery of the convention area pollock stock. The US delegation reported on status of the marine mammal population in the Bogoslof Area. The Steller sea lion and northern fur seal populations remain at low levels in the Eastern Bering Sea. The US stated that they thought it was doubtful that the marine mammals are significantly affecting the recruitment of

pollock to the Donut hole.

5.5.2. The Japanese delegation wanted to stress the importance of conserving juvenile pollock. The US delegation stated that there are no specific rules for protecting juvenile fish, but that there is significant economic incentives for the industry to avoid small fish which are not marketable. The other aspect they wished the S&T to consider is that the US has 100 % observer coverage and that their management is based on the size of fish caught. If the industry catches too many young fish, the quota is effectively reduced in the following years. The US delegation stated that they have two observers on every boat. Observers measure the size composition of the catch. The US conservation goals are on female spawning biomass, they have very strict quota regulations, when the quota is reached the fishery is closed. Pollock caught in other fisheries are also counted against this quota and can be restrictive.

5.5.3. The Korean delegation inquired as to the location of spawning aggregations in the Bering sea and how these are protected. The US delegation stated that there is no directed pollock fishery in the Bogoslof region (which was closed by the North Pacific Fishery Management Council's (NPFMC) in 1993). Furthermore, the Eastern Bering Sea shelf region has seasonal restrictions such that only 40% of the annual quota can be taken during the spawning season.

5.5.4. A map of spawning aggregation sites (attachment 10) was presented and Dr. Stepanenko of the Russian delegation was asked to provide a synopsis of his research in producing this map. He reviewed the previous years' research data on pollock reproduction in the shelf and deep water areas throughout the Bering Sea. Since 2000, the magnitude of the pre-spawning pollock migration from the shelf into the adjacent deep waters has apparently increased. The Russian delegation believes that may improve recruitment to the Aleutian basin pollock.

5.5.5. The Russian delegation proposed that it is necessary to unite research efforts of all convention nations and increase the study of Bering Sea pollock reproduction and subpopulation structure for a better understanding of factors affecting the recovery of the Aleutian basin stocks.

5.5.6. Mr. Kanto (Japan) discussed the history of the 60%-40% split of the Aleutian Basin pollock stock between US origin and Russian origin, concluding that it was a political compromise between the parties. Poland provided some additional background stating that the alternative was a range from 60%-80% in the Bogoslof region.

5.5.7. The Korean delegation pointed out that pollock resources in the Central Bering Sea have declined even though fishing has been suspended in the Central Bering Sea and Bogoslof Island area and they suggested that pollock migration routes might have changed in recent years, and this may also be a factor in the poor recovery of the Aleutian basin stock. The US stated that there is insufficient data at this time to assess this and supported further research on this issue.

5.5.8. The meeting concluded that numerous factors influence basin pollock stock recovery. The factors discussed included climate change, predation, and possible changes in migration route. No one factor was identified as being solely responsible for the lack of biomass recovery.

The parties agreed that continued research is required.

5.6. The effects of the moratorium and its continuation

5.6.1. The Korean and Japanese delegations voiced their concerns that after 12 years of moratorium the stock has not appeared to recover and that perhaps the parties should consider other management options. The Korean delegation stated that they were finding it increasingly difficult to communicate the reasoning behind the moratorium to their fishermen as there have been no positive results to date.

5.6.2. The Chinese delegation stated that according to the scientific data the resource status is very low in the convention area and that the twelve year moratorium has had little effect. They stated that there probably was no other choice but to continue the moratorium. They would like to stress that their fishermen have already paid a lot to comply with the moratorium. The Chinese government is very concerned about the pollock stock status and they hope all the delegations can do more research and obtain more information concerning this issue.

5.7. Methodologies to determine Allowable Biological Catch (ABC) and Allowable Harvest Level (AHL)

5.7.1. The US stated that the NPFMC has not yet met to determine ABC for Bogoslof area pollock for 2006. Dr. Low illustrated the Council's SSC process and a typical calculation was provided. The US delegation stated that they could not predict what the NPFMC would do but that it was most likely that the ABC for the Bogoslof region will be set using the most conservative measure of the three methods outlined in the 2005 Seattle workshop. This would result in an ABC for the Bogoslof area of 5501 t.

5.7.2. Japan delegation proposed that the S&T use this figure, 5501 t, as a basis for setting ABC in the Convention area.

5.7.3. Taking the method defined in the Convention, whereby the winter survey estimate from the Bogoslof region represents 60% of the Aleutian Basin, the meeting noted that an ABC for the convention area would be 9168 t. All parties agreed to this methodology and ABC level.

5.7.4. For determining AHL, the discussion turned to how ABC and AHL should be related. The Japanese delegation proposed that AHL should be equal to ABC. The Korean delegation agreed with the Japanese proposal. The US delegation proposed that AHL be equal to or less than ABC.

5.7.5. The US delegation believes that the ABC estimation should concern scientific issues related to the biology of the stock and that the AHL could take other factors into consideration. The US wishes to maintain a separation between ABC and AHL and prefers to defer the discussion of AHL to the annual meeting.

5.7.6. There was significant discussion on the subject of how to derive AHL. In summary the

Chinese delegation stated that they would prefer that AHL be equal to ABC but in order to reach consensus would agree to an AHL being less than ABC. The Polish delegation prefer that the AHL be equal to ABC, but to easily reach agreement Poland proposed that the AHL be set equal to 33% of the ABC. The Russian delegation proposed that due to scientific uncertainty the AHL be set to 0.

5.7.7. Japan requested the Russian delegation to clarify the scientific base for AHL being set at the zero level. Russia provided additional information concerning scientific uncertainty for the estimation of AHL more than 0. Japan declared that the ABC was determined at a very conservative level, moreover present estimation of Bogoslof Island biomass shows a figure for larger than minimum stock level ($B_{\text{ban}}=120,000$ t). Under such circumstances AHL can be set. Japan stated that they saw no rationale obstacles for setting AHL.

5.7.8. Consensus was not reached on how to determine AHL .

5.8. Recommendation on AHL

5.8.1. Discussions were covered in section 5.7.

5.8.2. As consensus on how to determine AHL was not reached, the proposals submitted by the delegations would be reported to the Annual conference.

6. Discussion of Enforcement and Management Issues

6.1. Trial fishing terms and conditions for 2005

6.1.1. The US Coast Guard reported that there was no trial fishing in 2005 and therefore no enforcement action this year.

6.1.2. Korean party presented on a proposed change to the trial fishing terms and conditions that would allow countries to donate the allocation of trial fishing vessels to another convention nation (attachment 11).

6.1.3. The Japanese supported this proposal, but wished to limit it to a single year as a provisional measure. The Chinese supported this proposal as long as the total number of fishing vessels was limited to current restrictions. Poland supported the Korean position with the Japanese suggestion that it be limited to one year. The US delegation wished further elaboration on the trial fishery plans proposed by the Korean party. The Korean delegation accepted the comments of the other parties. A meeting was convened outside the regular S&T meeting to discuss specific details on trial fishing involving Korea, US, Japan, and China. In this meeting all parties agreed to report the Korean proposal on trial fishing to the 10th Annual Conference. A separate report detailing this agreement is attached (attachment 12).

6.2. Discussion of BAPIS

6.2.1. Dr. Glubokov (Russia) presented a Russian proposal for a comprehensive research plan to create the Bering-Aleutian pollock International Survey Program. For their part the Russians would be willing to conduct an annual bottom and mid-water trawl survey in conjunction with ichthyoplankton collections and a hydroacoustic survey of pollock stocks in their EEZ. The meeting requested more details of their proposal (in English). This is provided in attachment 13.

6.2.2. All parties agreed that they support the idea of such a program, but would like to review a written proposal. The Russians will provide a copy of the proposal in English to the S&T for consideration.

6.3. Components and Recommendations

6.3.1. No further components or recommendations were discussed.

7. Other Matters and Recommendations

7.1. No other matters or recommendations were discussed.

8. Report to the Annual Conference

8.1. The Chair of the S&T gave the S&T report to the Annual Conference.

9. Closing Remarks

9.1. The Chair thanked all the participants of the S&T for their thoughtful discussions, and thanked the rapporteurs for compiling the written report. With that, the Chair closed the S&T meeting at approximately 6 pm on Wednesday, September 7, 2005.

List of Attachments:

1. S&T Committee Participants for 2005
2. S&T Agenda for 2005

The following attachments will be made available on the Convention website:

3. Information Submitted to the Scientific and Technical Committee by the United States for the 10th Annual Conference of the Parties to the Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea, with amended tables
4. Russian report on western Bering Sea pollock catch and Fishery Data
5. Results of Research Cruises – USA
6. 2004 Eastern Bering Sea pollock stock assessment summary
7. 2004 Aleutian Islands pollock stock assessment summary
8. Compilation of the survey effort and biomass estimates in the Bogoslof Island and basin areas

9. Summary of the effort, catch, and track lines in the Convention area trial fisheries from 1993-2003
10. A map of spawning aggregation sites compiled by Dr. Stepenenko
11. Korean party proposal to change the trial fishing terms and conditions
12. Agreement among parties on Korean proposal to change in trial fishing terms and conditions
13. Russian party BAPIS research plan proposal