This Annual Report summarizes the activities of the Commission in 2006. The Report includes all major discussions, which took place at the Enforcement Evaluation and Coordination Meeting (EECM) and Enforcement Symposium in Juneau, Alaska, USA (February 28-March 2, 2006), at the Research Planning and Coordinating Meeting (RPCM) and Second NPAFC International Workshop on "Factors Affecting Production of Juvenile Salmon: Survival on Strategy of Asian and North American Juvenile Salmon in the Ocean" in Sapporo, Hokkaido, Japan (April 24-27, 2006), and at the Fourteenth Annual Meeting of the Commission in Vancouver, British Columbia, Canada (October 23-27, 2006).

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INTRODUCTION

FOUNDATION AND GOALS OF THE NPAFC

The North Pacific Anadromous Fish Commission (NPAFC) was established under the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean, signed at Moscow on February 11, 1992 by Canada, Japan, the Russian Federation and the United States of America (original Parties). The Convention entered into force on February 16, 1993. On May 27, 2003 the Republic of Korea deposited its instrument of accession to the Convention and became the fifth member of the NPAFC.

With development of the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean, the process of establishment of the comprehensive international regime of conservation of salmon resources in the North Pacific Ocean has been completed.

The Convention is based on the recognition that anadromous stocks intermingle extensively during their migrations on the high seas of the North Pacific; that the States of origin have the primary interest in and responsibility for such stocks; that the fisheries for anadromous stocks should be conducted only in waters within the 200-mile zones and that the States of origin make expenditures and forego economic development opportunities to establish favourable conditions to conserve and manage these stocks.

The Convention also recognizes the importance of scientific research and establishment of an effective mechanism of international cooperation for the conservation of anadromous stocks in the North Pacific Ocean based on coordinating efforts.

The goal of conservation is consolidated by prohibition of directed fishing for anadromous fish in the Convention Area. Therefore the Convention represents an important instrument of collective responsibility and cooperative efforts of the Contracting Parties in protection and conservation of the North Pacific salmon resources.

The NPAFC promotes the conservation of salmonids in the North Pacific Ocean and its adjacent seas and serves as a forum for cooperation in and coordination of enforcement activities and scientific research.

The strength of this Commission lies in the shared purpose and active efforts of the Contracting Parties to ensure the conservation and sustainable utilization of North Pacific salmon resources for the benefit of domestic fishermen in their respective waters. As a result, the Commission in its brief history has become a model of positive and successful international cooperation.

NPAFC consists of three committees: Scientific Research and Statistics (CSRS), Enforcement (ENFO), and Finance and Administration (F&A), Science Sub-Committee (SSC), several Working Groups, and Secretariat. The Headquarters of the Commission is located at Vancouver, Canada.
The area to which the Convention applies is the waters of the North Pacific Ocean and its adjacent seas, north of 33° N.Lat. beyond the 200-mile zones of the coastal States. For scientific purposes the activities under the Convention may extend farther southward in the North Pacific Ocean beyond the 200-mile zones.
Anadromous fish is the fish that return to their spawning rivers from the ocean at certain seasons for breeding in fresh water. The following seven anadromous species are listed as species which migrate into the NPAFC Convention Area.

### Oncorhynchus keta

(English Name) Chum salmon  
(Japanese Name) Shirozake  
(Korean Name) Yeoneo  
(Russian Name) Keta

Chum salmon are the second most abundant species of Pacific salmon whose origin is in Asia and North America. The fish spawn in different types of streams and the fries migrate directly to the sea soon after emergence. The immatures distribute themselves widely over the North Pacific Ocean, and the maturing adults return to the home streams in summer or autumn at various ages, usually from two through five years, and in some cases up to seven years. They all die after spawning. Individuals have been reported up to 108.8 cm in length and 20.8 kg in weight.

### Oncorhynchus kisutch

(English Name) Coho salmon  
(Japanese Name) Ginzake  
(Korean Name) Eunyeoneo  
(Russian Name) Kizhutch

Coho salmon originate both in Asia and North America. The majority of coho mature during summer in their third year of life, having spent about four to six months in incubation and up to fifteen months rearing in fresh water followed by a sixteen-month growing period in sea water. They usually arrive at their rivers of origin during late summer and autumn to spawn. The adults die after spawning. The size of adult coho is variable with lengths ranging from 40-88 cm and weights from 1.2-6.8 kg.
**Onchorhynchus gorbuscha**

(English Name) Pink salmon  
(Japanese Name) Karafutomasu  
(Korean Name) Gopsayeoneo  
(Russian Name) Gorbusha

Pink salmon are the most abundant species of Pacific salmon and originate both in Asia and North America. Upon emergence, pink salmon fries migrate quickly to the sea and grow rapidly as they make extensive feeding migrations. After eighteen months in the ocean, the maturing fish return to their river of origin to spawn and die. Maturing adults range from 45-55 cm in length and 1.0-3.3 kg in weight.

**Onchorhynchus nerka**

(English Name) Sockeye salmon  
(Japanese Name) Benizake  
(Korean Name) Hongyeoneo  
(Russian Name) Nerka

Sockeye salmon are the third most abundant species of Pacific salmon and originate both in Asia and North America. They exhibit a greater variety of life history patterns than other Pacific salmon. Typical juvenile anadromous sockeye utilize lake rearing areas for one to three years after emergence from the gravel, but some populations utilize stream areas for rearing and may migrate to sea soon after emergence. They spend 1-4 years in the ocean before returning to fresh water to spawn and die in late summer and autumn. There is substantial size variation among populations. Some of the reported average sizes are 45-60 cm in length with weights of 1.6-3.2 kg.
**Oncorhynchus tchawytcha**

(English Name) Chinook salmon  
(Japanese Name) Masunosuke  
(Korean Name) Wangyeoneo  
(Russian Name) Tchawytcha

Chinook salmon are the largest of the *Oncorhynchus* spp. group and originate both in Asia and North America. Their life history includes broad variations. “Stream-type” chinook are typical of Asian populations, who spend one or more years as fry or parr in fresh water before migrating to sea, perform extensive offshore oceanic migrations, and return to their natal river in the spring or summer several months prior to spawning. “Ocean-type” chinook are typical of populations on the North American coast south of 56°N, who migrate to sea during their first year of life, normally within three months after emergence, spend most of their ocean lives in coastal waters, and return to their natal river in the fall a few days or weeks before spawning. The mean length in the year of migration varies from 58 to 89 cm. The typical weight range of the chinook is 4.5 to 22.5 kg.

**Oncorhynchus masou**

(English Name) Cherry salmon  
(Japanese Name) Sakuramasu  
(Korean Name) Simayeoneo  
(Russian Name) Sima

Cherry salmon are one of the smallest in the *Oncorhynchus* spp. group, and originate only in Asia. Most of them mature at three or four years of age, after spending one or more years in rivers and one winter in the ocean. They return to the natal river in March-May, spend the summer in the river, and move to headwaters for spawning in the fall. The size of spawners varies greatly; 35-70 cm or more in length and 0.3-5.0 kg or more in weight.
Steelhead trout are sea-run types of rainbow trout, and originate in North America. Most of them remain in fresh water for 2-3 years, spend 2-3 years in the ocean, and return to the natal river to spawn. Some return to spawn for a second or third time. The record size is 114 cm in length and 19.5 kg in weight.
The NPAFC provides a forum for cooperation among its member countries to promote the scientific research, to coordinate the collection, exchange and analysis of scientific data, and to exchange statistical information on catch and effort regarding anadromous stocks and ecologically related species.

For those purposes, the Commission established the Committee on Scientific Research and Statistics (CSRS), which holds its meetings during the Annual Meetings of the Commission in autumn. Scientists also meet between the Annual Meetings, at the Research Planning and Coordinating Meeting (RPCM).

At CSRS and RPCM, the Parties submit their scientific research plans for salmon, report the results of their previous scientific researches and statistical data of their catches and fry releases, and discuss the scientific research cooperation among the Parties.

Science Sub-Committee (SSC) and several Working Groups have been established under CSRS in order to facilitate its discussions for cooperation.

SSC discusses the formulation and reviews the implementation of the NPAFC Science Plan, which is a long-term plan for cooperative scientific research and is currently approved for the period up to 2010. SSC also coordinates cooperation with other international organizations, such as North Pacific Marine Science Organization (PICES), North Atlantic Salmon Conservation Organization (NASCO) and others.

There are now four Working Groups including one ad hoc. The Working Group on Stock Assessment meets mainly to summarize and discuss the latest statistical information. The Working Group on Salmon Marking discusses coordination of marks to minimize duplication between countries and the development of a common database of mark releases. The goals of the ad hoc Working Group on Stock Identification are to develop, standardize, and disseminate genetic and other databases among the Parties to encourage the development of new genetic technologies and to facilitate the dissemination of statistical techniques.

BASIS (Bering-Aleutian Salmon International Survey) Working Group is created to facilitate the latest cooperative research activities focused on 1) Bering Sea Salmon Research, 2) Juvenile Salmon Research in Eastern and Western North Pacific Waters, and 3) Winter Salmon Research.

About 10 research vessels are deployed annually for scientific research cruises. In many cases, they are joint cruises with the participation of scientists from the different member countries.

NPAFC publishes the statistical data on salmon catches provided by the member countries in a Statistical Yearbook. The proceedings of the NPAFC symposia and workshops are published in the NPAFC Bulletin series and Technical Report series respectively.
Snapshots from BASIS Research Cruises
Photo by the BASIS Working Group
ENFORCEMENT

The Convention prohibits direct fishing for anadromous fish (chum, coho, pink, sockeye, chinook, and cherry salmon, and steelhead trout) in the Convention Area. The incidental taking of anadromous fish is to be minimized to the maximum extent practicable, and the retention of anadromous fish taken incidentally during fishing activity directed at non-anadromous fish is prohibited, and any such anadromous fish shall be returned immediately to the sea.

The Convention has contributed to the implementation of the UN General Assembly resolution entitled “Large-scale pelagic drift-net fishing and its impact on the living marine resources of the world’s oceans and seas”, by prohibiting direct fishing for anadromous fish in high seas areas of the North Pacific Ocean, where salmon fishing had been mainly conducted by using driftnets.

Since the establishment of the NPAFC, the Parties have cooperated on the exchange of information regarding violation of the provisions of the Convention and on the exchange of enforcement plans and actions.

The agencies of Contracting Parties which are directly responsible for the planning and execution of enforcement activities within the Convention Area are:

- Department of Fisheries and Oceans of Canada and Department of National Defence, Canada;
- Fisheries Agency of Japan and Japan Coast Guard;
- Ministry of Maritime Affairs and Fisheries of the Republic of Korea;
- Fisheries Agency of the Russian Federation and Federal Security Service of Russia
- United States National Marine Fisheries Service and United States Coast Guard

In 1993-2006, the cooperative enforcement efforts of the NPAFC Parties resulted in the detection of 40 vessels conducting directed driftnet fishing operations for salmon in the Convention Area. Of those vessels, 15 were apprehended (see the table).

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In 2006 the development of the Integrated Information System (IIS) was completed. The IIS allows the Parties to keep all electronic information about illegal or suspected vessels in the Convention Area on a closed website.

Despite the decline in illegal fishing operations within the Convention Area in recent years, the threat of illegal high seas fishing activities contrary to the provisions of the Convention continues, requiring the international community to remain vigilant in improving monitoring and enforcement efforts in the North Pacific.
Hakuryu maru (Japan)

Dzerzhinsky (Russia)

Coast Guard Cutter (United States)
The catch of Pacific salmon by all producing countries in 2005 was the second highest in the NPAFC history. Pink salmon amounted for 50% of the catch by weight, followed by chum, sockeye, coho, chinook and cherry (masu) salmon.

<table>
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<tr>
<th>Year</th>
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<th>Japan</th>
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<td>164,736</td>
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<td>209,325</td>
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<td>217,935</td>
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* Data for 2003–2005 are preliminary and do not include commercial catches by foreign fleets in the Russian EEZ.
Fig. 1. Commercial harvests, by species, for Canada, Japan, Korea, Russia, and the United States from 1972 to 2005 (round weight in tonnes).

Salmon Enhancement Production

About 5 billion juvenile salmon were released from the hatcheries by the NPAFC member countries in 2005.

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<tr>
<th>Year</th>
<th>Total</th>
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<th>Japan</th>
<th>Korea</th>
<th>Russia</th>
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* Data for 2003–2005 are preliminary.
II. **ENFORCEMENT EVALUATION AND COORDINATION MEETING**

1. **TIME AND PLACE OF THE MEETING**

The Enforcement Evaluation and Coordination Meeting (EECM) was held on February 28 and March 1, 2006 at the Westmark Baranof Hotel, Juneau, Alaska, USA. Cdr. Mike Cerne, Chairman of the Committee on Enforcement (ENFO) presided at the meeting. Lieutenant-Governor Loren Leaman of the state of Alaska and Rear Admiral James Olson, Commander of the US Coast Guard 17th District, gave welcome addresses to the participants.

2. **PARTICIPANTS**

| **Canada:** | Nicole Gallant | Shelly Joslin |
| | Trevor Juby | Robert Martinolich |
| | Curtis Wright | United States: |
| | Russell Ashenden | Mike Cerne |
| | | Norman Custard |
| | | Eric Giese |
| | | James Gould |
| | | Alan Hansen |
| **Japan:** | Mitsuru Eguchi | Isao Koya |
| | Koji Kumagai | Takaaki Mori |
| | Japan: | United States: |
| | Guy Holt | John Kingeter |
| | Scott Littlefield | Lisa Masterson |
| | Alan McCabe | Neil Nickerson |
| | | Jeff Passer |
| | | Kevin Riddle |
| | | Dan Schaeffer |
| **Korea:** | Byng Kook Ahn | Chiguk Ahn |
| | Ok Jin Jang | Sang Gu Lee |
| | Korea: | United States: |
| | Neil Nickerson | Jeff Passer |
| | | Kevin Riddle |
| | | Dan Schaeffer |
| **Russia:** | Dmitry Ginzburg | Michael Ischuk |
| | Michael Ischuk | Oleg Lukyanov |
| | Oleg Lukyanov | Arkadiy Rybalkin |
| | Arkadiy Rybalkin | Michael Shevchenko |
| | Michael Shevchenko | United States: |
| | Igor Zdorovets | Farit Zufarov |
| | Interpreters: | English-Japanese |
| | English-Korean | English-Russian |
| | English-Russian | English-Russian |
| | | English-Russian |
| | | English-Russian |
| **Secretariat:** | Vladimir Fedorenko | Wakako Morris |
| **Interpreters:** | Taka Crowston | English-Korean |
| | Susan Ritchie | English-Russian |
| | Andrei Falaleyev | English-Russian |
3. **Enforcement Activities**

**Canada**

*Enforcement Activities in 2005:*

Canada flew 180 hours in 2005 with one vessel of interest sighted. Canada has no knowledge of any follow up for this vessel of interest.

*Planned Activities in 2006:*

Canada planned to fly 180 hours patrolling the high threat area. The first patrol was planned from June 1 to 10 to cover the identified area twice. The second patrol was planned in September for one week. The September patrol planned in response to reports received from US fishermen at the Western Central Pacific Fisheries Commission meeting.

**Japan**

*Enforcement Activities in 2005:*

Japan circulated a document with a list of HSDN vessels during their efforts since October 2005. In November 2005, six new driftnet vessels were detected. They were identified to be Chinese fishing vessels. One vessel was ordered to stop by the patrol vessel of Fisheries Agency of Japan. Crew was given a notice paper informing them that they were engaged in an illegal fishing activity. Unfortunately Japan was unable to board to verify fish species nor mesh sizes.

Japanese government using diplomatic route transferred the information to the Government of the People’s Republic of China (PRC). PRC confirmed that some vessels were fishing illegally and the government is investigating the matter. PRC was unable to investigate some vessels, and other vessels were in port with different names. Their suspicion of illegal fishing was not confirmed because of the change in names.

*Planned Activities in 2006:*

Japan noted that the detailed activity plan for patrol vessels was not yet definite. Fisheries Agency of Japan (FAJ) was planning to spend 74 days from September to November using five vessels. Hokkaido prefecture government was planning to use two vessels from April to July for a total of 74 days, and the Japanese Coast Guard (JCG) was planning to use 44 vessels from April until February, 2007 for 344 days total. As for the enforcement activity using aircraft and helicopters, FAJ was planning to fly 32 hours, JCG 118 hours using aircraft and 40 hours using helicopters.

**Korea**

Korea thanked all the Parties for enforcement efforts in 2005. Since joining NPAFC in 2003, Korea has not been undertaking any enforcement activities and does not plan on taking them in 2006. However, some members of the Western Central Pacific Fisheries Commission (WCPFC) responsible for the management of tuna may be undertaking Monitoring Control and Surveillance (MCS) activities in 2007. Korea is looking closely at taking a part in enforcement activities for tuna on the high seas. Because there is overlap between the WCPFC and the NPAFC Convention Areas, Korea could be conducting patrols in the salmon area while patrolling the tuna areas.
Russia

*Enforcement Activities in 2005:*

In 2005 the Border Service of the Federal Security Service of Russia (BSFSS) conducted patrols in the Convention Area and adjacent waters northern part of Pacific Ocean using data provided by aircraft of Russia, US and Canada.

Three patrol ships participated in enforcement activities:

- Patrol ship *OREL* with the helicopter on board – from May 11 till June 27;
- Patrol ship *VOROVSKY* with the helicopter on board – from June 26 till August 1;
- Patrol ship *CHUKOTKA* – from May to June.

A joint enforcement patrolling operation was also conducted by the BSFSS patrol ship *VOROVSKY* and the USCG patrol ship *JARVIS* on July 3-4, 2005. An exchange of the officers was made during this joint operation.

According to the schedule of the BSFSS flights, 5 flights were carried out. At the same time, the situation in the region was controlled under the air surveillance data provided by US and Canadian aircraft and also under the data of the Russian State Monitoring System.

Based on patrol vessel sightings and aircraft patrols there were no illegal driftnet fishing operations detected in the NPAFC Convention Area in 2005. Incidentally there were several arrests of Russian vessels made in their EEZ.

*Planned Activities in 2006:*

The following enforcement activities were planned for the first half of 2006:

1. Patrol ships *DZERZHINSKY* type and *BARS* type of the BSFSS from April 20-September 1, 2006, pending on the data of air surveillance from Russia, USA and Canada.
2. For air patrolling in the Convention Area up to 12 sorties of AN-72/AN26 aircraft were planned.

United States

The United States informed the group that the US Threat Assessment was posted on the IIS. The US Party suggested that the group review the IIS before starting the plans for the year.

The annual threat assessment report for the driftnet fishing shows that the Highsea Driftnet (HSDN) was not necessarily only for salmon, but for all the large scale net fishing contrary to the UN Moratorium. US noted that the trend is shifting south: the majority of the 2004 and 2005 sightings were at the south edge of the threat area. This reflects the trend away from targeting of salmon. The new target seems for tuna and predominantly for squid. The depreciation of cost for salmon and the high cost of fuel seems the reason for the low salmon threats. The US assessed the HSDN fishing is higher in squid, medium for tuna and low for salmon, however, the United States will keep the close watch for the salmon. The sudden change of the ocean temperature trends were also monitored, however because of the little information of sea surface temperature and the yearly change of temperature makes it difficult for assessment.

*Enforcement Activities in 2005:*

The US Coast Guard (USCG) flew C-130 patrols out of Shemya, Alaska and one deployment out of Barbers Point, Hawaii, 32 hours in April, 2 deployments in June for 55 hours, 2 deployments in July for 50 hours. From the end of May through July, the CGC *JARVIS* patrolled in the high threat area. This patrol
included an at sea exercise with Russia for an officer exchange and information exchange. The JARVIS embarked a Korean observer onboard.

The United States deployed National Marine Fisheries Service (NMFS) agents onboard the Canadian flights out of Shemya.

**Planned Activities in 2006:**

The 2006 planned activity was similar to the activities carried out in 2005. This illustrates the deployment schedule for aircraft and patrol assets. United States were planning to conduct five aircraft deployments and one surface asset patrol at the end of June and in July. It intended to have NMFS agents on the Canadian flights to assist.

The United States is reaching out to the US fishing industry that fish in the Convention Area to report any observed illegal activity to the USCG or NMFS. The United States intended to continue its efforts to work with the fishing community to encourage and support high seas sightings and reporting of vessels conducting HSDN operations. The United States encouraged similar actions be taken by the other Parties to utilize their fishing fleets to be on the look out for potential illegal fishing activity on the high seas and to report it to proper authorities.

The United States proposed to plan the use of aircraft and surface assets of all Parties to maximize the enforcement efforts to detect illegal activity. The Parties agreed and worked to develop a joint schedule for aircraft and surface asset patrols (Appendix 1).

Korea opened a discussion on the potential role of the West Central Pacific Fisheries Commission (WCPFC) whose Convention came into effect in 2004. Korea noted that the WCPFC has Technical Compliance Committee (TCC) which is similar to the EECM. The WCPFC is in the process of putting into place an MCS system. At the TCC, a U.S. delegate suggested the EECM and TCC work together and establish a relationship with the NPAFC. Korea supported for such a dialogue between the EECM and TCC, so that the WCPFC can learn much form the NPAFC.

Chairman indicated that at the previous meeting, the suggestion was made to invite a WCPFC observer to the next NPAFC Annual Meeting but a consensus was not reached. He suggested that this item be put forth as an agenda item for the next Annual Meeting.

Canada confirmed that a letter was supposed to come from the WCPFC to the NPAFC Secretariat asking for assistance. The Secretariat noted that this letter has not yet been received. Canada also pointed out that not all the NPAFC Parties are members to the WCPFC and vice versa. Japan agreed with Canada and reiterated that there are non-member states in both Commissions.

Japan held the position, as expressed in last year’s meeting, the WCPFC is now in the stages of determining what species they will be focusing on. Japan believes TCC will be focusing on albacore tuna in the North Pacific which is a different type of focus than NPAFC. Because the WCPFC focus is more complex than salmon species protection of NPAFC, their enforcement method would be taken from a different point of view and that until such a time WCPFC determines what species they will focus on or establish their enforcement system, NPAFC/EECM cannot take any action. If action is taken too soon it may weaken the enforcement efforts towards salmon and potentially affect current salmon protection obligations. Japan noted that as Russian Party indicated earlier that the discussion is digressing toward tuna and squid and away from salmon protection.

The United States concurred that NPAFC should wait to receive the letter from TCC before proceeding further. The United States shared concerns expressed by Japan, that the NPAFC mandate is to protect our salmon species for sustainability and that the WCPFC is concerned with other species. For parties on both Conventions, it is competing for limited resources available for enforcement. Once NPAFC receives letter from TCC they can take up for further action.
Russia concurred with the Japanese position and suggested to follow the current meeting agenda.

The Chairman wrapped up the discussion by saying that the consensus is to await the letter from TCC and take action as needed at the next Annual Meeting.

Canada inquired about the possibility of submitting a letter from the NPAFC President to China expressing concern over the potential illegal activity by Chinese fishing vessels sighted by Japan in 2005.

The Executive Director commented that since it is not clear what the vessels were doing or if they were in violation of any law based on the limited information provided at this meeting by Japan the Executive Director suggested to return to this issue during the next Annual Meeting after receiving more accurate information of these vessels’ activities.

The Executive Director informed to the Parties that in accordance with the decision at the last Annual Meeting a letter was written to the country of Georgia concerning cases of illegal fishing activity under Georgian flag within the Convention Area. The letter was signed by the NPAFC President and sent to the Georgian Government.

The Chairman highlighted that the United States indicated they have a close relationship with fishing vessels operating in the Convention Area that they report potential illegal fishing activity to the USCG. The Chairman asked if any other Parties have similar programs/relationships with their commercial fishermen.

Canada has no formal network but does receive reports from fishermen.

Japan noted that Japanese fishermen operate in the same waters targeting squid and albacore and there are reports that high seas driftnet vessels is an obstacle for these fisheries. When they find the high seas driftnet vessels they report to FAJ. However, such information is not precise: they do not always have the name, location, type of fishery or photographs.

Korea indicated that there is no obligation under Korean law to report the activity of other fishing vessel. In particular in the North Pacific Ocean, driftnet fishing has been banned since January 1993.
4. **REPORT OF THE IIS (INTEGRATED INFORMATION SYSTEM) TECHNICAL GROUP**

Chairman of the group, Capt. O. Lukyanov of Russia reported the following:

Capt. Lukyanov proceeded to give a brief background of IIS and a history of its function. He demonstrated how to use IIS, walking through the functions of the web page and what information can be found on the site. He presented a mock-up of what the catalogue will look like and how it would function if it were used as intended. The demonstration walked through the information that would be available and how to navigate through this part of the web site.

Russia explained the difficulties encountered in developing the vessel catalogue including such details as the unit of measures, fishing vessel classification system used by each country, acronyms. To solve this problem Russia asked each Party to provide their vessel classification system so Russia can make the system user-friendly for each Party. Russia offered to provide copies of the mock-up to the Parties to take and utilize it to become familiar with it and determine what needs to be modified or changed to make it use-friendly. Captain Lukyanov requested each Party contact him with this information including each Party's fishing vessel classification system.

5. **PORT STATE CONTROL MEASURES**

The United States tabled the FAO Model Scheme guidance on port state control which was circulated to the Parties prior to the meeting ([Appendix 2](#)). The United States wished to use guidance as a starting point for discussion to apply this scheme in the NPAFC. The United States asked each Party to describe their port state control measures.

Russia did not have a chance to study the document and had nothing to say at this time.

Canada has looked at their ability to conform to the scheme and stated that it is ready to proceed. Canada requested to know which agencies within each country are responsible for inspecting fishing vessels in their ports.

Although Japan understands the FAO port state control measures, Japan is not ready to get into the details of the regulations.

Korea did not have a chance to have a close look at the model scheme. However, Korea stated that the NPAFC differs from other organizations that deal with fisheries management. Other organizations deal with conservation and management and there is fishing within their convention areas. Because there is a moratorium within the NPAFC Convention Area Korea is not sure what the NPAFC will be checking on.

The United States finds this is a good tool to combat IUU and having these measures in place is another method to help prevent illegal vessels entering into the member country ports if they are suspected of illegal activity prior to entering port.

The United States suggested going through in general terms of the overall provisions of each of the parts of the model and to find out what already exists in each country and what the challenges will be for implementation of the model.

Japan questioned its legitimacy of discussing this item within the EECM. There has been only one incident by non-member countries (Chun Jin No. 1) and whether this type of scheme will be effective at apprehending and prosecuting. Japan also asked what type of measures will be taken by member nations.

Russia noted that while they are not ready to discuss the details of this proposal, this item should not be on the EECM agenda. Russia noted its needs to review its legal means, as there is a new national fisheries agency with new procedures and that the current legislation prevents the BSFSS from having 100% control over fishing vessels or activity within or outside Russian EEZ. Russia stated that Russian vessels do not enter foreign ports. As for those vessels which fish within and outside the Russian EEZ, they will enter foreign ports and unload their
catch. However, the decision is made by ship owners and the authorities do not control owners’ actions. Furthermore, there are four agencies that monitor what fishing vessels are doing. They are: Ministry of Agriculture, Federal Customs Service, Border Service, and the Ministry of Transportation. Russia suggested that the group work within the framework of the Convention signed in 1992.

Korea stated that the NPAFC has the strongest mandate to protect fisheries resources. Other regional management bodies allow fishing within their area. Since NPAFC is already one of the most effective agencies at protecting fish within its Convention Area, it asked if it is necessary for Korea to take additional measures from a cost perspective point of view.

The United States proposed that the issue be discussed at future meetings since many Parties have not had a chance to go in depth to the proposal.

The Chairman clarified that the US proposal is not to engage non-member nations or pass new laws in member Parties, but rather to see if there are already in place in member agencies to prevent the illegal harvest of salmon from the Convention Area that are not being intercepted at sea but are being landed in member ports. The Chairman asked the Executive Director whether there are any Articles to address port state control measures under our Convention.

The Executive Director gave his interpretation of the Convention related to this issue. Although the provisions of the framework are not always clear (in particular it does not specifically mention port state control), there are three parts of the Convention that will form the basis of the discussion for this issue:

1. Article III, Paragraph 3. states:
   “The Parties shall take appropriate measures individually and collectively, in accordance with the international law and their respective domestic laws, to prevent trafficking in anadromous fish taken in violation of the prohibitions provided for in this Convention, and to penalize persons involved in such trafficking.”

2. Article IX, Paragraph 2. states:
   “The Commission shall have the authority to promote the information on any activities contrary to the provision of this Convention, especially with respect to fishing for and trafficking in anadromous fish contrary to the provisions of Article III, as well as on responsive action taken by the Parties and, as appropriate, by any State or entity not party to Convention;”

3. Article IX, Paragraph 13. states:
   “Commission shall have the authority to recommend to the Parties any measures needed to further the attainment of the objectives of this Convention.”

The Executive Director pointed out that the prime task is to prevent any illegal fishing in the Convention Area, and noted that nothing prevents the discussion or proposal of any other measures that may work to conserve anadromous fish.

The United States commented that FAO adopted these measures and encourages all regional bodies to adopt these measures. The United States feels these are good measure and are another tool to combat taking salmon illegally. Once everyone has a chance to review the measures and respective laws, the Parties would be doing most of these things already. The intent is to put this information out there and formalize what we are already doing in our domestic laws. The intent was to be educational on how it can be used. United States suggested that the group further look into it and discuss this issue using IIS and bring the results of discussions and information exchange on IIS to the next Annual Meeting.

Chairman summarized that the United States will start a forum on IIS on Port State Control. All members of the NPAFC with the exception of Russian Party are members of the FAO. The Chairman strongly suspected that all countries have in some form adopted this scheme already. Chairman suggested that each country should ask how this is applied in their domestic fisheries management systems.
6. **ENFORCEMENT SYMPOSIUM (MARCH 2, 2006)**

Following the successful EECM, an enforcement symposium "Patrol tactics, planning and execution of enforcement in the NPAFC Convention Area" (ENFO Symposium) was held at a local oceanfront lodge in Juneau on March 2. The purpose of the symposium was to bring together enforcement professionals from each of the Parties to share lessons learned and best practices from their respective agencies. Enforcement officers, ship captains, and/or air crews from Canada’s Department of Fisheries & Oceans and Department of National Defense, Japan’s Fisheries Agency and Coast Guard, Republic of Korea’s Ministry of Maritime Affairs & Fisheries, Russia’s Federal Security Service, and the United States’ National Marine Fisheries Service and Coast Guard all participated. Each agency made a presentation which was followed by lengthy and spirited discussion. The NPAFC funded two representatives from each of the Parties to attend. It was an extremely productive exchange of ideas and a tremendous opportunity for the actual vessel, aircraft, and enforcement officers to meet and get to know one another before patrolling together in the Convention Area.

![ENFO Symposium Participants](Photo by NPAFC Secretariat)
I. RESEARCH PLANNING AND COORDINATING MEETING

1. TIME AND PLACE OF THE MEETING

The Research Planning and Coordinating Meeting (RPCM) was held on April 24-25, 2006 at the Old Hokkaido Government Office Building, Sapporo, Hokkaido, Japan. Dr. V. Karpenko, Chairman of the Committee on Scientific Research and Statistics (CSRS), presided at the meeting.

2. PARTICIPANTS

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<tr>
<th>Canada:</th>
<th>Richard Beamish</th>
<th>Gerry Kristianson</th>
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<tr>
<td>Japan:</td>
<td>Syuiti Abe</td>
<td>Tomonori Azumaya</td>
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<td>Masatoshi Ban</td>
<td>Masa-aki Fukuwaka</td>
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<td>Shuichi Toda</td>
<td>Shigehiko Urawa</td>
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<td>Syouji Yoshimitsu</td>
<td>Secretariat:</td>
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<td>Vladimir Fedorenko</td>
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<td>Chae Sung Lee</td>
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<td>Jung Youn Park</td>
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<td>Russia:</td>
<td>Vladimir Karpenko</td>
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<td>Victor Nazarov</td>
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<td>Vladimir Radchenko</td>
<td>Kaoru Kawamoto</td>
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3. **2006 National Research Plans and Cruise Activities**

(a) **National Research Plans**

Canada stated that the Canadian National Research Plan remains unchanged from that in the past several years.

The Japanese National Research Plan was submitted at the 13th Annual Meeting (Doc. 924, pages 17–18).

Korea has already submitted this year’s National Research Plan at the last 13th Annual Meeting (Doc. 912). The Korean research activities are limited to near coastal areas.

The Russian National Research Plan was submitted as appended (Appendix 3).

The United States Research Plan remains the same as that of submitted at the 13th Annual Meeting.

(b) **Cruise Plans**

Canada informed that it will submit its cruise plan later when the ship schedule is finalized.

Japan explained research cruise plans for salmon during the 2006/2007 fiscal year (Doc. 892, Rev. 2) and those research cruises that may involve incidental takes of salmon (Doc. 934).

Korea did not have plans for any research cruises in 2006.

Russia described plans for research cruises (Doc. 943).

The United States presented cruise plans for coastal monitoring of juvenile salmon in Southeast Alaska (Doc. 937) and BASIS research in the eastern Bering Sea (Doc. 941).

4. **Exchange of Biological Samples, Data, and Personnel**

Requests for samples can be found in Appendix 4.
5. **Reports from Sub-Committee and Working Groups**

(a) **Science Sub-Committee (SSC)**

The SSC session was attended by all the participants of the RPCG meeting. R. Beamish, the Chairman of the SSC opened the session with a request for agenda items. No items were proposed. R. Beamish asked the United States to try to get the two remaining papers for Bulletin No. 4 handed in as quickly as possible. Both papers are essential for the Bulletin.

The final agenda item related to topics for future symposium. There was a general discussion relating to the need to be able to forecast the impacts of climate change. Forecasting model development and survey methods were suggested as possible subtopics. There was a general acceptance that SSC members would consult with scientists from their country and present ideas at the Annual Meeting.

V. Karpenko raised the possibility of discussing at the upcoming Annual Meeting a 5-year plan for holding future workshops/symposia. He explained that in recent years NPAFC has had a number of workshops and symposia. The burden is not only for the presenters to prepare papers in the short time, but also on the Secretariat for preparation of the meetings, putting proceedings together, etc.

SSC agreed to draft a 5-year plan for the workshops/symposia.

(b) **Working Group on Salmon Marking**

The Chairman, R. Josephson of the United States reported that the group discussed status of thermal mark data and heard two proposals from the Alaska section of the U.S. Party:

The database is largely up to date. The recent addition of the Korean first release of thermal marked chum was noted and an image of their mark was shown to the group. The mark is a clear 3,3nH (1:1,3,2,3n). It was noted that the database still has no images of Washington State releases and that release data from Canada for the years 2004 and 2005 has not been submitted. Russia images are missing for brood years 2003 and forward. Russia commented that they have had problems with the compatibility between their new camera and software programs for image measurements and labeling. Russia will be contacting the U.S. Party (Alaska) by email for technical assistance.

Marking proposals for brood year 2006 have been received from Russia, Japan and the United States (Alaska); Canada and Washington State have not submitted plans for the 2006 brood year (BY); Korea only needs one mark and expressed willingness to follow advice for that mark. Based on the submitted marks for BY 2006, the only conflicts are between the United States (Alaska) and Russia for 4-ring (4H) and 5-ring (5H) marks on chum salmon.

The United States presented a slide show summary of its document on a proposal to simplify the thermal mark code notation ([Doc. 944](#)). There was support expressed for reducing complexity of marks if it reduces duplication of marks.

U.S. Party also presented a second slide show summary of its document on a proposal to designate specific thermal marks for each country by species and brood year ([Doc. 942](#)).

The group accepted the proposal to limit the thermal mark database to releases of salmon that are expected to migrate to the ocean.

(c) **Ad Hoc Working Group on Stock Identification**

The Chairman, J. Seeb of the United States reported the following:

The United States first thanked Korea, Japan, and Russia for sending scientific staff to the Alaska Department of Fish and Game (ADFG) laboratory in Anchorage for sample and data exchange and training in SNP DNA
techniques. ADFG further discussed the needs for international data bases to resolve issues such as the composition of the chum and chinook salmon by-catches in the eastern Bering Sea; these catches include salmon stocks from throughout the species range in Asia and North America.

Japan discussed a plan to report the comparison of allozyme, mtDNA, microsatellite, and SNP analyses in chum salmon. Japan reminded the group that the study plan “Development and evaluation of stock identification techniques for chum salmon: concept proposal” was approved at the last Annual Meeting and is detailed in the NPAFC Doc. 924, Appendix 4. Japan hopes that the present status of baselines for each method will be compiled to identify missing populations for effective samplings in the coming run season.

Korea expressed interest in working mtDNA, microsatellite, and SNP DNA baselines. Korea asked to be included within Japan’s effort (above) in order to improve its interaction with Canada on microsatellite implementation; Japan noted that the study plan has already listed Korean laboratories contributing mtDNA, microsatellite, and SNP baselines.

Russia expressed continued interest in collaborations but explained that the current national policy prohibits the export of biological samples until after they have been analyzed by a Russian laboratory. Russia acknowledged that this policy retards the free flow of samples from Russia but asked for continued patience. Russia requested support from NPAFC Parties in its effort to use scale pattern analyses for stock identification and is forwarding a specific request for scale impressions from pink, chum, chinook, and sockeye salmon.

(d) BASIS Working Group (BASIS WG)

The Chairman, J. Helle of the United States reported the following:

i) Cruises

Japan discussed the 2006 BASIS cruise plan on the Kaiyo maru (Doc. 892, Rev. 2).

Russia discussed Doc. 943 that summarizes the Russian BASIS cruise plan for the 2006 season.

The United States also discussed its BASIS cruises for 2006 described in Doc. 941.

ii) Salmon Tagging Programs

The University of Washington scientists were instrumental in coordinating and summarizing the tagging data among the Parties. The current issue is who will continue to coordinate NPAFC salmon tagging programs now that the University of Washington is no longer available to perform this task. Japan noted that the salmon tagging program is not just a BASIS issue, therefore, the matter should be discussed by CSRS as whole and each Party should prepare comments and bring it up at the Annual Meeting. Chairman suggested that a proposal be developed for discussion at the Annual Meeting.

iii) BASIS Research Plan for 2007 and After

BASIS was originally planned as a five-year research study -- 2002-2006. However, the chairman reminded the participants that there has been a significant climate change in the Bering Sea during the past four seasons and that there is a need to have the plan for 2007 and beyond. Canada asked about the future finances of BASIS. Following the explanation from the United States that it may have budget difficulties for BASIS cruises in 2007, Canada suggested that NPAFC try to get some funds from other sources.

Chairman noted that the U.S., Russian, and Japanese findings all document changes in migrations of pelagic fish in the Bering Sea, and the BASIS research plan was ecosystem based from the
Chairman further noted that future BASIS cruises should be moving northward into the Chukchi Sea and perhaps the Beaufort Sea.

Russia agreed that as much as the future of BASIS is important, analyzing the data obtained so far is just as important. The whole data have not yet been analyzed and when this is done the changes in the Bering Sea will be well-documented. Russia supported that the future of BASIS must move forward to the ecosystem of the whole Bering Sea.

Japan explained the financial state of research is not clear. Japan noted the necessity to set up a forum to determine the future direction of BASIS. The tasks for the Parties include: 1) to assess the past collaborative efforts to monitor the Bering Sea ecosystem; and 2) to scrutinize and review the data and consider future research directions for BASIS funding. The group shared a common view that the Parties need to plan for BASIS activities in 2007 given the importance of recent climate events in the Bering Sea.

All Parties agreed to continue discussion of the BASIS future at the Annual Meeting.
6. **PROJECT PROPOSALS FOR EXTERNAL FUND-RAISING**

Executive Director suggested that the RPCG formulate proposals to external funding groups, e.g. North Pacific Research Board (NPRB), etc.

Canada noted the possibility of receiving funds from the Moore Foundation as the Foundation is interested in salmon and views the NPAFC as an excellent avenue for North Pacific salmon research.

Executive Director noted that the NPAFC should not exclusively seek funds from one particular source, but should work for any possible funding sources in general.

G. Kristianson of Canada offered to prepare a draft proposal and present it to the SSC members. The draft will then be provided to the CSRS at the next Annual Meeting.

7. **BASIS SYMPOSIUM IN 2007**

The United States proposed to reschedule the BASIS symposium from spring 2007 to fall 2008 and hold the symposium at a location (to be determined) in the United States. The United States noted that the delay was necessary to complete sample processing and analyses for samples collected during BASIS 2006. Russia stated its preference to hold the symposium in conjunction with the 2007 Annual Meeting in Russia because: 1) there is a need to finalize the BASIS research in order to begin discussions about the future BASIS plans beyond 2007; 2) no symposium has ever been organized in Russia in the past; 3) most of the BASIS program participants are located in Asia; and 4) to organize the symposium in the fall of 2007 will accelerate collection and analysis of the data.

Japan supported the U.S. proposal and also noted that BASIS program was initiated by the U.S., and thus the BASIS symposium should be held in the U.S.

Korea noted its limited participation in BASIS, therefore has no preference where it would be held. However, Korea agreed that sufficient time must be allowed to analyze BASIS data for good results.

Finally, the consensus was reached to hold the BASIS symposium in conjunction with the 2008 NPAFC Annual Meeting in the United States.
III. THE SECOND NPAFC INTERNATIONAL WORKSHOP ON FACTORS AFFECTING PRODUCTION OF JUVENILE SALMON: SURVIVAL STRATEGY OF ASIAN AND NORTH AMERICAN JUVENILE SALMON IN THE OCEAN

The North Pacific Anadromous Fish Commission (NPAFC) held the second international workshop on juvenile salmon at the Conference Hall, Hokkaido University, Sapporo, Japan on April 26–27, 2006, following the NPAFC Research Planning and Coordination Meeting (RPCM).

In 2000, the NPAFC organized the First Workshop on "Factors Affecting Production of Juvenile Salmon: Comparative Studies on Juvenile Salmon Ecology between the East and West North Pacific Ocean". As a consequence, the NPAFC Science Plan 2001–2005 included "Juvenile salmon research" as one of the three components that were a focus of our research activities. Ocean production of salmon in terms of numbers of fish is closely linked with their early ocean survival. Since 2001, juvenile salmon research has been intensively carried out in various areas such as the coastal waters of the Okhotsk Sea, western and eastern Bering Sea, and the Gulf of Alaska by NPAFC member countries, accumulating new information using new techniques such as DNA stock identification, mass otolith marking, and acoustic tracking system.

The purpose of the workshop was to review the recent juvenile salmon studies in order to increase the understanding of the processes that determine salmon population sizes and the ability to forecast stock sizes. The workshop included 21 oral presentations at five sessions and 28 poster presentations with about 70 participants.

At the Session 1, national overview papers were presented by representative scientists of member countries. In Canada, juvenile salmon studies are focused in the Strait of Georgia and off the west coast to examine the relationship between climate and marine survival trends, bioenergetics, coastal migration, and food web dynamics. Korean study has focused on early mortality of juvenile chum salmon in rivers. Russia has a long-term monitoring program by trawl surveys in the Okhotsk Sea, northwestern Japan Sea and western Bering Sea to examine the distribution, abundance and feeding habit of juvenile salmon, quantitative abundance of diet plankton, and ocean carrying capacity. Juvenile salmon research in the United States occurs in the wide coastal areas of Alaska, Washington, Oregon, and California to understand how the marine environment influences the migration, distribution, growth and survival of juvenile salmon during their early marine experience. Japanese marine research for juvenile salmon has been conducted in the coastal waters and the Okhotsk Sea to examine their distribution and survival by using otolith and genetic marks.

Eight papers were presented for seasonal distribution and migration of juvenile salmon at the Session 2. In the west coast of North America, a permanent continental-scale tracking array has been developed for acoustically tagged juvenile salmon. This new system demonstrates striking differences in marine migration pathways and survival even between different populations of the same fish species, as well as between species. In the Aniva Bay of southern Sakhalin, juvenile pink salmon dwelled in coastal zone until 30 m depth for 0.8–2.5 months, and their off-shore migration occurred simultaneously, possibly related with sea surface temperature (SST) increase up to 14–15°C. A Japanese survey in the coastal water of the Okhotsk Sea also indicated that the distribution of juvenile chum salmon was strongly affected by SST. Juvenile salmon research along the eastern Bering Sea shelf has showed that juvenile coho, chinook and chum salmon are distributed near shore in significantly less saline water than the surrounding habitat. In the Okhotsk Sea and western Bering Sea, in addition to the hydrological impact, the distribution and migration of juvenile chum salmon were influenced by the abundance of large-sized zooplankton, which are the major component of their diet.

The topic of Session 3 was trophic linkages, feeding and growth of juvenile salmon. Consumption demand on prey resources by juvenile pink salmon in the coastal Gulf of Alaska varied spatially across oceanic habitats, and the growth potential metric holds promise in its ability to explain variability in the marine survival of pink salmon. In the Okhotsk Sea coast of Hokkaido, cool ocean conditions might affect the growth and survival of juvenile chum salmon. Russian scientists assessed seasonal amounts of food consumed by juvenile salmon in the western Bering Sea during the fall. Juvenile salmon utilized 112–154 thousand tons of different zooplankton and nektons, while the major fish species have consumed 6.4–8.9 million tons of food animals.

Session 4 dealt with climate changes and ocean ecosystem. Climate variability, fishing, carrying capacity, and nutrients are important forces driving the growth and survival during the early life stages of salmon in the ocean. The stable isotope analysis indicated significant inter-annual variability in diet overlaps and trophic interactions among salmon species, and trophic shifts within each of the species as a function of body size. It would be fundamentally important to develop comparative food web modeling of salmon in Eastern versus Western Bering Sea, because there are major diet differences. In the Okhotsk Sea, the growth of juvenile chum salmon increased in the 1990s, in
association with increase in the SST during summer and fall, and decrease in the sea ice concentration. Thus their survival and growth in the Okhotsk Sea may be affected by the climate change such as the global warming.

The population size and survival estimates of juvenile salmon were discussed at the Session 5. Marine survival of salmon is related to size and growth rate during juvenile and subsequent life stages. Juvenile pink salmon in Prince William Sound and the coastal Gulf of Alaska exhibited a 3-fold difference in marine survival during 2001–2004. High survival was associated with broader spatial distribution, greater feeding rates, faster growth and larger size during the first summer of ocean feeding. Significant size selective mortality occurred after the summer growing season. The opposite phenomenon was observed by Japanese scientists. In the coast of Nemuro Strait, eastern Hokkaido, 2000 brood year chum salmon juveniles had much higher growth rates than other brood years due to high prey production, but their adult return was the least abundant. Winter is generally considered to be a critical period in the early life of fish. Size-selective mortality was apparent for juvenile chinook salmon in southeast Alaska, and may suggest that size-selective mortality may regulate the dynamics of salmon at northern latitudes, but not at southern latitudes. Larger salmon utilized a larger fraction of their energy reserves over winter than smaller salmon.

The following four questions were raised during the final session:

- Why juvenile salmon inhabit in the continental shelf of the Bering Sea and Gulf of Alaska or the open water of the Okhotsk Sea during summer/fall?
- Where, When, and How mortality occurs on juvenile salmon in the oceans?
- What causes the fluctuations in marine survivals of juvenile salmon?
- What is the future of juvenile salmon research?

Workshop participants in front of the Conference Hall
Photo by T. Nomura, Fisheries Research Agency
IV. FOURTEENTH ANNUAL MEETING OF THE COMMISSION

1. TIME AND PLACE OF THE MEETING

The Fourteenth Annual Meeting of the Commission was held at Morris J. Wosk Centre for Dialogue, Vancouver, B.C., Canada on October 23-27, 2006. Plenary sessions were held under the chair of Mr. Guy Beaupré President of the Commission.

The Committee on Scientific Research and Statistics (CSRS) met on October 23-26, with Dr. Vladimir Karpenko of Russia as Chairman.

The Committee on Enforcement (ENFO) met on October 23 and 24, with Capt. Michael Cerne of the United States as Chairman.

The Committee on Finance and Administration (F&A) met on October 25-26 with Mr. Kazuaki Tanaka of Japan as Chairman.

2. PARTICIPANTS

From Left to Right:

1st row: J. Balsiger (United States), G. Smith (United States), G. Beaupré (NPAFC, President, Canada), D. Nagahata (Japan), K. Imamura (Japan)

2nd row: C. Ahn (Korea), T. Uoya (NPAFC Deputy Director), V. Fedorenko (NPAFC Executive Director), K. Tanaka (F&A Chairman, Japan), V. Karpenko (CSRS Chairman, Russia), S. Maksimov (Russia), I. Zhuravlov (Russia)

3rd row: R. Jones (Canada), A. Austerman (United States), P. Steele (Canada), S. Kang (Korea), M. Cerne (ENFO Chairman, United States), G. Kristianson (Canada), M. Glubokovskiy (Russia)
Persons participating in the meeting were as follows:

**Canada**
- **Representatives**
  - Guy Beaupré (President)
  - Russ Jones
  - Gerry Kristianson
- **Advisers and Experts**
  - Paul Steele (Head of Delegation)
  - Richard Beamish
  - Gérard Chaput
  - Nicole Gallant
  - Jim Irvine
  - Shelly Joslin
  - Richard McNicol
  - Brian Riddle
  - Jeff Till
  - Tim Young

**Japan**
- **Representatives**
  - Daishiro Nagahata (Head of Delegation)
  - Koji Imamura
- **Advisers and Experts**
  - Hiroyasu Hasegawa
  - Toru Nagasawa
  - Yoshiko Onozawa
  - Kazuaki Tanaka
  - Tomoaki Tomita
  - Shigehiko Urawa

**Republic of Korea**
- **Representatives**
  - Chiguuk Ahn (Head of Delegation)
  - Sukyung Kang
- **Advisers and Experts**
  - Sung Young Kim
  - Jeongseok Park
  - Jung Youn Park
  - Ki Baik Seong

**United States**
- **Representatives**
  - James Balsiger (Head of Delegation)
  - Alan Austerman
  - Gary Smith
- **Advisers and Experts**
  - Xan Augerot
  - Heather Bartlett
  - Michael Cerne
  - Norman Custard
  - Douglas Eggers
  - Ed Farley
  - Douglas Fricke
  - Eric Giese
  - William Heard
  - Jack Helle
  - William Johnson
  - Ron Josephson
  - Robert Kehoe
  - John Kingeter
  - Scott Littlefield
  - Loh-Lee Low
  - Katherine Myers

**Russia**
- **Representatives**
  - Mikhail Glubokovskiy (Head of Delegation)
  - Sergey Maksimov (Alternate)
- **Advisers and Experts**
  - Elena Akinicheva
  - Oleg Gritsenko
  - Alexander Kaev
  - Vladimir Karpenko
  - Oleg Klebleev
  - Natalia Klovach
  - Oleg Lukyanov
  - Igor Melnikov
  - Svetlana Naydenko
  - Victor Nazarow
  - Vladimir Ostrovskiy
  - Valeria Savchik
  - Vladimir Sviridov
  - Olga Temnykh
  - German Uvarkin
  - Vladimir Volobuev
  - Igor Zhuravlev
  - Frait Zufarov

**Observers**
- Bruce Leaman (International Halibut Commission, IPHC)
- Malcolm Windsor (North Atlantic Salmon Conservation Organization, NASCO)
- Peter Hutchinson (North Atlantic Salmon Conservation Organization, NASCO)
- Alexander Bychkov (North Pacific Marine Science Organization, PICES)
- Don Kowal (Pacific Salmon Commission, PSC)
- David C.S. Chang (Taiwan)
- Moa-Sheng Wang (Taiwan)
- Shinn-Chang Wu (Taiwan)

**Secretariat**
- Vladimir Fedorenko (Executive Director)
- Toshinori Uoya (Deputy Director)
- Wakako Morris (Administrative Officer)
- Marcey Johnson (Secretary)
- Rhonda Hash (Temporary Assistant)

**Interpreters**
- **English/Japanese**
  - Toshiko Adilman
  - Hiromi Chino
  - Taka Crowston
  - Ikumi Graham
  - Mieko Kondo
  - Yoshiko Soeda
- **English/Korean**
  - Yun Hyang Lee
  - Seon Young Lim
  - Jacki Noh
  - Soo Park
  - Susan Ritchie
  - Chunghee Ryu
3. **AGENDA**

(1) **Opening by the President of NPAFC, Mr. Guy Beaupré**

(2) **Opening addresses, introduction and report on delegation memberships**

(3) **Introduction of observers**

(4) **Adoption of Agenda**

(5) **Meeting procedures**
   (a) Attendance at meetings
   (b) Schedule of sessions
   (c) Press policy
   (d) Minutes

(6) **Executive Director’s report**

(7) **Consideration of enforcement**
   (a) Exchange of information on activities contrary to provisions of the Convention (Article IX 2.)
   (b) Review and evaluation of enforcement actions (Article IX 5.)
   (c) Review of the report of 2006 Enforcement Evaluation and Coordination Meeting (EECM)
   (d) Report of the Integrated Information System (IIS) Technical Group
   (e) Port State Control Measures
   (f) Discussion of proposed enforcement meetings and activities for 2007
   (g) Review of Parties’ proposals on joint projects to be financed by the Commission
   (h) Cooperation with relevant international organizations and invitations to state or entity (Article IX 9., 10.)
   (i) Adoption of ENFO Report

(8) **Consideration of scientific research and statistics**
   (a) Review of scientific research activities (Article IX 6.)
   (b) Coordination of scientific research activities (Article IX 6. and 8.)
   (c) Consideration of the 5 years plan for workshops and symposia
   (d) Coordination of salmon tagging program
   (e) Statistical Yearbook (Rules of Procedure 19 (k))
   (f) Other publications (Rules of Procedure 25)
   (g) Cooperation with relevant international organizations (Article IX 9.)
   (h) Review of Parties’ proposals on joint projects to be financed by the Commission from different funds
   (i) Project proposals for external fundraising
   (j) Development of 2007 Workplan
   (k) Invitations to state or entity (Article IX 10.)
   (l) Adoption of CSRS Report

(9) **Administrative and fiscal matters**
   (a) Consideration of Auditors’ Report and selection of an auditor
   (b) Financial situation in current fiscal year
   (c) Budget estimate for fiscal year beginning July 1, 2007
   (d) Budget forecast for fiscal year beginning July 1, 2008
   (e) Administrative report for 2006
   (f) Administrative matters
(g) Review of ENFO and CSRS recommendations on joint projects to be financed by the Commission from different funds
(h) Policy of accepting external funds and a fundraising plan
(i) Report on the status of special and external funds
(j) Amendments to the Rules of Procedure
(k) Schedule of future Annual Meetings
(l) Adoption of F&A Report

(10) Accession of certain other states of origin to the Convention (Article XVIII)
(11) Selection of the new Deputy Director
(12) Other Business
(13) Place and time of the Fifteenth Annual Meeting
(14) Summary minutes of plenary sessions
(15) News Release
(16) Closing remarks
(17) Adjournment
4. **OPENING REMARKS**

There were addresses of welcome and statements by the NPAFC President, representatives of Korea, Japan, Russia, the United States, Canada and observers from International Pacific Halibut Commission (IPHC), North Atlantic Salmon Conservation Organization (NASCO), North Pacific Marine Science Organization (PICES), Pacific Salmon Commission (PSC), and Taiwan.

**Mr. Guy Beaupré, President of NPAFC**, addressed the meeting as follows:

*Distinguished delegates, observers, ladies and gentlemen,*

*As President of the North Pacific Anadromous Fish Commission I would like to open the Fourteenth Annual Meeting of the Commission.*

*I am honoured and very proud to welcome you here in Vancouver for this Fourteenth Annual Meeting of the Commission. We have a very interesting program ahead of us and I am looking forward to working with all of you throughout this week.*

I want to take the opportunity to thank our Executive Director, Mr. Fedorenko and all his team for their efforts throughout the year and particularly in recent weeks to organize this meeting.

*Being right downtown Vancouver you will have opportunities during the week to appreciate this beautiful Canadian city. The city is preparing to host the 2010 Olympic and Paralympic Winter Games. It is the third largest city in Canada and it has Canada's largest and most diversified port. And it is a city of many cultures, spectacular natural scenery, and diverse ethnic cuisine. I hope you will have opportunities to enjoy it this week.*

*As you all know, governments are working together in many regional fisheries management organizations around the world to stop overfishing and illegal, unreported and unregulated fishing activities. Well, in NPAFC we have been doing this successfully for several years already. Our Committee on Enforcement, through coordination, monitoring and surveillance, by using an Integrated Information System, and by focusing its enforcement actions where most needed has been able to reduce salmon poaching to minimal levels. Our Committee is now focusing its efforts on Port State controls and other measures to ensure strong follow-up to infractions to the Convention.*

*We should be proud of this Commission's accomplishments and promote them as examples of what needs to be done to stop illegal fishing.*

*We should also be proud of the work of our scientists, especially their commitment and determination to understanding salmon, its life cycles and behaviours, but also because they are now focusing major efforts on marine ecosystems, the interactions between species, and the impacts of climate change. Again major challenges where I think the NPAFC is a leader.*

*There is a lot of work ahead of us this week and this work is very important for the protection and conservation of Pacific salmon. We have tremendous expertise in our committees and I encourage the Chairpersons of the three committees - Captain Cerne, Dr. Karpenko, and Tanaka-san to ensure thorough discussions and bring to Heads of Delegations any issue they feel may be more easily addressed at that level as early as possible during the week.*

*I wish all of you a good and fruitful week. Thank you.*
Mr. Chiguk Ahn, Head of the Korean delegation, addressed the meeting as follows:

Mr. President, Distinguished Delegates, Ladies and Gentlemen!

Good morning. My name is Chiguk Ahn and I am the Deputy Director of International Cooperation in the Ministry of Maritime Affairs and Fisheries. To begin, I want to thank the Canadian Government for hosting this conference here in the beautiful city of Vancouver.

Also, I want to extend my best wishes and deep gratitude to Mr. Vladimir Fedorenko, Executive Director of NPAFC, and to his staff, for their valuable support in the smooth and efficient operation of the Commission.

As I understand, NPAFC has been effectively achieving its goals in the conservation of salmon resources in the Convention Area through the close cooperation among those involved in enforcement activities and in scientific research. I want to congratulate all those who have contributed to these efforts.

So far, Korea has not been active in enforcement activities, but it is positively considering the possibility of dispatching patrol vessels to the Convention Area in the near future.

Korea has also made efforts to protect and enhance salmon resources in Korean waters, but the results have not measured up to the degree of our efforts. In 2005, Korea caught only about 50 tons of salmon, but we still hope to increase our salmon resources through the expansion of existing salmon related projects such as the release of salmon fingerlings, environmental improvement of salmon streams, and in providing support to North Korea to foster its salmon resources. I expect that the efforts of the Committee on Scientific Research and Statistics will significantly contribute to Korea’s salmon resource enhancement policy.

Meanwhile, some local counties that have salmon rivers have much interest in promoting salmon fishing tourism to bolster their local economies. They would be very interested in hearing about the experience of others in this regard. Any helpful information you may be able to pass along would be much appreciated.

Finally, it is my sincere wish that this conference produce constructive results that will have a lasting, positive impact on promoting and preserving our common fisheries resources.

Thank you very much, Mr. President.
Mr. Daishiro Nagahata, Head of the Japanese delegation, addressed the meeting as follows:

Mr. President, distinguished delegates, observers, ladies and gentlemen,

I am Daishiro Nagahata, the head of the Japanese Delegation. I would like to make an opening address on behalf of our delegation.

I am with the Fisheries Agency of Japan, and was appointed as a Japanese Representative to the NPAFC this month, succeeding Mr. Suenaga, who attended the last Annual Meeting. Although this is my first attendance to the NPAFC Annual Meeting, I had been attending the INPFC Annual Meetings from 1983 to 1990, as a member of the Japanese Delegation or as the Assistant Director of the INPFC Secretariat. Therefore, I am really glad to see many familiar faces.

We, the Japanese Delegation, are very happy to meet all of you here in Vancouver, Canada. First of all, I would like to extend our deepest gratitude to the Canadian Government for hosting this meeting and its warm hospitality, and to the Secretariat for its efficient preparation of the meeting.

Since NPAFC was established, the Parties have been working together cooperatively, in accordance with the purpose of the Convention, the promotion of the conservation of anadromous stocks in the North Pacific Ocean. As you know, we have been ardently continuing our eager activities in both enforcement against illegal operations and scientific research, since the last Annual Meeting.

As for the enforcement, more efficient and effective operations are being realized by the framework for information exchange among the Parties. In Japan, not only the Fisheries Agency, but the Japan Coast Guard is in charge of enforcement operations, and we are willing to share information of our activities with the other Parties.

On the other hand, various fruitful scientific research activities were carried out in accordance with the NPAFC Science Plan. Japan has been working hard to plan and implement meaningful research surveys, and will continue to make every effort to do that.

Particularly, Japan is seriously concerned by the fact that the number of non-Parties’ fishing vessels, which were confirmed to use or be equipped with driftnets in High-Sea areas during our enforcement activities of this year, is increasing more than ever. Our Party considers it important to discuss at this Annual Meeting the Commission’s possible actions to be taken to correct such a situation.

I would like to take this opportunity to express my respect to the President of the NPAFC, Mr. Beaupré, and to the Chairpersons of the three committees, and request them to ensure smooth and efficient proceedings by exercising their excellent leadership at this meeting.

I would also like to note that we count on the usual diligence of the Secretariat. Needless to say, our meaningful and continued activities are attributed to their day-to-day hard work, and we could not make this Annual Meeting successful without their effort.

This will be the last Annual Meeting for Mr. Uoya, as the Deputy Director of the Secretariat. I hope he will continue to work hard for the Commission until the end of November, when his term of office expires. We have been officially notified that Dr. Urawa of Japan will assume the duties as the new Deputy Director from this December, succeeding Mr. Uoya. Being well known to the people in this forum, there is no doubt that Dr. Urawa will make great contributions to the Commission as a staff member of the Secretariat.

Let me introduce the Japanese delegation:

Finally, Mr. Chairman, I wish all the participants the successful and fruitful meeting.
Thank you.
Dr. Mikhail Glubokovskiy, Head of the Russian delegation, addressed the meeting as follows:

Honorable President, Honorable Parties’ representatives, Honorable observers, Ladies and Gentlemen!

On behalf of the Russian delegation let me greet you at the Fourteenth Annual Meeting of NPAFC.

Since its establishment, NPAFC has managed to become recognized as an international organization with distinct features and traditions. We achieved success in all areas of activities: protection of salmon stocks, scientific research and solving financial issues. We broadly utilize international collaboration, cooperation of efforts and coordination of activities. This enables us to reduce the time required to reach certain research objectives. During the last 5 years, our countries cooperated to implement the Bering Sea research program. The results of these studies are hard to exaggerate.

The results of recent BASIS trawl surveys testify to significant changes in the Bering Sea ecosystem and underscore the importance of continuing such type of studies. Russia considers that extension of the BASIS program beyond the preliminary stated, but not rigidly fixed, 5-year plan is extremely important and necessary. Particularly, this is important due to the rapid changes in the ecosystem of the Bering Sea, which were disclosed by recent years of program implementation.

During recent years, reproduction of salmon stocks in Russia was effective and catches were high. The abundance of several stocks reached high or exceeded historical maxima. According to our studies this was due to the high levels of ocean survival. We do understand that high salmon catches is a God’s gift to people. However, we hope that our research also resulted in better state of salmon stocks.

Certainly, the favorable state of salmon reproduction cannot last forever. A period of high abundance will be followed by a period of depression of the stocks. We have to be prepared for this. Also, we should keep in mind that the period of stock depression is accompanied by an increase in pressure from fishermen, community and government. In connection with this, let me underscore the necessity of extension of the cooperative research in the Bering Sea.

I would like to emphasize the fruitfulness of the NPAFC cooperation with other organizations, first of all—with PICES and NASCO. I hope for the extension of this cooperation. It is a part of my official duties to be engaged in Baltic Sea fisheries issues. To be more specific, it is considered that fishing for salmon at sea during the foraging migrations is optimal. I consider that the respective practice in Pacific waters is more progressive. It should be multiplied and advertised. In order to do so it is logical to use NPAFC publications.

To conclude, I would like to thank the Canadian Government for providing the opportunity to have the current session in Canada. I thank the Commission’ Secretariat for the excellent organization of the session itinerary, as well as its activities in an intersession period. I wish you successful participation at this meeting. Now, let me introduce the members of the Russian delegation.

Thank you.
Dr. James Balsiger, Head of the United States delegation, addressed the meeting as follows:

President Beaupré, Fellow Representatives, Distinguished Delegates, Observers, Ladies and Gentlemen.

On behalf of the United States delegation I am pleased to greet our friends and colleagues from NPAFC. We thank the Canadian Party for hosting this event in the beautiful city of Vancouver once again. From a personal perspective it is especially nice to be at this Annual Meeting since I wasn’t able to travel to Jeju Island, Korea, last year. We give a special welcome to the new Representatives: Mr. Nagahata from Japan, Mr. Ahn and Mr. Son from Korea, and Mr. Glubokovskiy from Russia. I will introduce the U.S. delegation later, but will note here that we also have a new Representative, Mr. Gary Smith. In fact, only the Canadian delegation remains intact, so we will look for them to lead us through these meetings with a sense of great stability.

Regarding issues of the Committee on Scientific Research and Statistics, the US Party looks forward to the review of documents and sharing of research results from all of the Parties. We wish to congratulate the scientists for another year of successful research cruises. The Bering-Aleutian Salmon International Survey, the program that is better known as BASIS, has successfully completed its first 5-year plan. We have designed our surveys to study juvenile salmon – their distribution, inter-mixing of the stocks, diet, growth, survival, their interactions with other species, and effects of the ocean environment. It has become apparent that the NPAFC, through BASIS cruises and the surveys of other salmon research vessels of the Parties, has provided the only comprehensive network of sampling stations in the high seas of the North Pacific Ocean to study salmon. In addition, these BASIS cruises have very effectively and efficiently included research efforts on other ecologically related species in the surface layers of the ocean. These auxiliary data collected on these species and the ocean environment are invaluable to ecosystem studies. In this regard, the US Party strongly supports the continuation of BASIS into Phase II, that will build upon the experiences and scientific knowledge gained from Phase I. Our emphasis on salmon research in this NPAFC forum, including those on steelhead from the Pacific Coast States, remains strong.

I would also like to address the topic of steelhead, Oncorhynchus mykiss, as it relates to future work of the Commission. Steelhead are not as numerous as the other salmon species, but in the United States they are highly valued by sports fishermen and Native American Tribes. Of the 15 distinct population segments of steelhead in the states of Washington, Oregon, Idaho, and California, the Federal Government considers 11, or more than 70%, of those population segments to be at risk to one degree or another. In light of these concerns, American taxpayers are spending tens of millions of dollars protecting and restoring spawning and rearing habitat for these fish. Even so, adult returns in a number of areas have recently been lower than expected, and our scientists do not fully understand why. In pursuit of the answers, the United States proposes to work with the other Parties to integrate into the enforcement and research programs the sharing and development of more data on steelhead stocks in the Convention Area. We look forward to discussing this matter in the committees this week.

With regard to the Committee on Enforcement, we are pleased that Port State Control issues are receiving some attention. For several years, the successful results of cooperative enforcement activities among the Parties is one of the true success stories of the Commission. Great progress has been made in tracking illegal, unreported and unregulated (IUU) fishing in the Convention Area.

We would like to thank Mr. Fedorenko and his very competent staff for having completed all of the arrangements for this meeting. It is very helpful to the conduct of meetings to have all of the logistics, paperwork, and hard organizational aspects taken care of so efficiently that it is generally unnoticed.

We look forward to the week’s work. Please let me introduce the United States delegation.

Thank you.
Mr. Paul Steele, Head of the Canadian delegation, addressed the meeting as follows:

Mr. President, distinguished delegates, ladies and gentlemen, on behalf of the Government of Canada and the Minister of Fisheries and Oceans I would like to welcome you to the city of Vancouver for the Fourteenth Annual Meeting of the North Pacific Anadromous Fish Commission.

My name is Paul Steele. I work for the Department of Fisheries and Oceans in Ottawa as the Director General of the Conservation and Protection (fisheries enforcement) Directorate. As a first-time delegate to the NPAFC, I am looking forward to the opportunity to meet the members of the other delegations and to learn first-hand about the important work of the Commission.

I would also like to introduce my fellow Commissioners, although I’m sure that many of you know them quite well from previous meetings.

Mr. Russ Jones is a member of the Haida First Nation and is a representative and spokesperson for First Nations on fisheries and environmental issues.

Dr. Gerry Kristianson is equally well known and is very active in representing the interests of recreational fishermen in British Columbia.

As you explore Vancouver this week you will see many signs of how important Pacific salmon are to the people of Canada’s west coast. Salmon are particularly important to First Nations people as a source of food and also for social and ceremonial purposes. Commercial and recreational salmon fisheries here in British Columbia also depend upon health salmon stocks. Pacific salmon are truly a vital part of the culture on Canada’s west coast.

While Canada is blessed with relatively good salmon habitat, there are many factors that can have impact on the health of salmon stocks. There appears to be a renewed interest in illegal high seas drift net fishing and this week we will hear about the collective surveillance and enforcement efforts of NPAFC members in dealing with this issue.

On the science side, we will hear of issues such as ocean climate and its impact on marine survival. This will also be of interest to our colleagues from the North Atlantic Salmon Conservation Organization (NASCO) who have embarked on strategy to identify related factors in the North Atlantic.

So, in conclusion Mr. President, the Canadian delegation looks forward to a week of interesting and productive discussions. Thank you.
Dr. Bruce Leaman, observer from IPHC, addressed the meeting as follows:

14th Annual Meeting
Vancouver, B.C., 2006
Photo by S. Urawa, Japan

Mr. President, distinguished delegates, ladies and gentlemen. I thank you for the invitation to attend your Fourteenth Annual Meeting and it is a pleasure to be with you here in Vancouver. The meetings of the North Pacific Anadromous Fish Commission are often held at the same time as the Interim Meeting of the International Pacific Halibut Commission and it is rare that I have the welcome opportunity to attend your Annual Meeting. While this meeting venue for me may not be as exotic as those at which you have held other meetings, it nonetheless involves travel between nations and a visit to my homeland.

This meeting is an anniversary for me. As a Canadian technical advisor, I attended my first meeting of your predecessor commission, the International North Pacific Fisheries Commission, some 30 years ago in Tokyo, in 1976. Unfortunately, I see very few of the same faces at this meeting, that I saw at that meeting. This leads me to think that I might have somehow missed my retirement date! However, it is a pleasure to renew at least some old acquaintances and to make new ones.

Our two Commissions have long histories of stewardship for the marine resources in the North Pacific Ocean. The NPAFC has an outstanding record of protection of salmon resources on the high seas and it has played a major role in the coordination of research to further our understanding of the ecology of this area. We share common resource management and research goals. Changes in the marine environment that are wrought by both global and local events, whether natural or human-induced, have created enormous challenges to our continued stewardship of those species under our care. It will only be through continued scientific cooperation that we will be able to meet these challenges.

The extensive range of the Pacific halibut affords the IPHC with an opportunity to conduct research in much of the same environments that are of concern to the NPAFC. Sharing the knowledge of these environments among the nations participating in our Commissions is vital component of success for all of us.

Mr. President, I will keep my remarks brief since you have an ambitious agenda for this week. I thank you once again, and wish you a productive and successful meeting.
Dr. Malcolm Windsor, observer from NASCO, addressed the meeting as follows:

Mr. President, Ladies and Gentlemen: Thank you for this opportunity to attend your Annual Meeting as an observer. It is a great pleasure for my colleague, Dr Peter Hutchinson, and me to be here in the beautiful city of Vancouver. NPAFC and NASCO are natural partners and we feel it valuable to cooperate. It is a real pleasure to congratulate you on being elected President of NPAFC.

If I can just take a moment to bring you our news. Over the last eighteen months, NASCO has undertaken a major review of all its activities. As a consequence we have taken steps to improve transparency to the extent that our 27 accredited NGOs can now contribute to all agenda items in both the Council and Commissions and participate in our various Committees and Working Groups. We have also taken steps to improve implementation of NASCO’s agreements and to ensure review of the measures taken in a challenging environment, also involving our NGOs in this review process. We also aim to improve our public relations to try to raise the profile of wild salmon with the public so as to improve support for our work and the work of our Parties.

Mr President, despite all the measures taken to reduce exploitation, improve habitat and address impacts of aquaculture, the abundance of wild Atlantic salmon stocks has not yet responded. We have, therefore, again restricted the distant water fisheries to subsistence-only harvests and NASCO’s States of Origin continue to introduce controls on exploitation in their homewaters. Our situation is perhaps more desperate than yours!

Exactly one year ago, ICES and NASCO co-sponsored a major international symposium in Bergen, Norway, on the impacts of aquaculture on the wild salmon stocks. Following peer review, the scientific papers were published in the ICES Journal of Marine Science in an issue edited by Peter Hutchinson. A separate report written with my Co-Convener, Lars Petter Hansen of Norway, and published last week provides an overview of the meeting and draws conclusions. Copies of these reports have been made available at the Secretariat office. While progress is being made in managing the interactions, there remain real concerns about the impacts, in particular of sea lice and escapees on the wild salmon stocks. In the case of the North Atlantic, continuing escapes of fertile farmed salmon in huge numbers pose risks to the genetic diversity of the wild stocks.

I refer to this symposium because, as you know, NPAFC and NASCO, have agreed to co-sponsor an international symposium on the causes of marine mortality of Pacific, Atlantic and Baltic salmon, building on the very successful two-day meeting we held in 2002 on the same subject. ICES is also keen to cooperate with us on this initiative and we hope PICES will also be involved. You have already appointed an Organizing Committee with Dr Jim Irvine as the coordinator, and Peter and I look forward to working with Jim and his colleagues in further developing a proposal this week. While the initial idea had been to hold the symposium in 2008 or 2009, we think that it may be wise to hold it a little later. While in the Pacific the BASIS project has been underway for some years, in the Atlantic we are a little behind you and we are only just embarking on our major program of research, the SALSEA program, to better understand the marine migration and distribution of Atlantic salmon and the factors influencing their survival at sea. We are aiming to conduct research cruises in 2008 and 2009 and are hoping to raise the significant resources required through public/private partnerships. If all goes well, we should have much new information to contribute to the symposium in 2009 or, more likely, 2010. However, we want to make it a major landmark international meeting and our experience from the Bergen meeting is that it is not too early to start the planning here this week. In that regard, there will be a need for the co-sponsors to allocate funds and NASCO has already agreed to do so. There may also be a need to find external sponsorship. Our Bergen meeting was 50% funded by external agencies, but I doubt this subject will find a similar level of external support.

Mr President, we look forward to working with NPAFC on this joint symposium to ensure that it is a prestigious event, that is well attended, with the best scientific input, a high-quality report or reports and that it succeeds in raising awareness among the public and politicians of the problems facing salmon at sea. As this is three or four years away, there might also be benefits from a smaller meeting of salmon scientists from the North Pacific and North Atlantic areas in the intervening...
period to promote support for research. You and I have previously discussed this Mr President and no doubt there will be further discussions this week.

In closing, I would like to thank you all for the invitation to join you and to thank Vladimir Fedorenko and his excellent staff with whom we enjoy very good relations. I wish you a very successful meeting. Thank you.
Dr. Alexander Bychkov, observer from PICES, addressed the meeting as follows:

Dear Mr. President, Mr. Executive Director, distinguished representatives of Contracting Parties and guests:

On behalf of the North Pacific Marine Science Organization (PICES), I would like to thank the North Pacific Anadromous Fish Commission (NPAFC) for inviting PICES to be present as an observer at its Fourteenth Annual Meeting. It is an honor for me to be here with you in Vancouver.

NPAFC and PICES are natural strategic partners, and not just because we have a formal Memorandum of Understanding (MOU) and because the NPAFC Secretariat and the PICES Secretariat are located in close proximity in British Columbia, but because scientists of both Organizations are very interested in working together. NPAFC and PICES have already good records of joint activities:

- We organized together several workshops and symposia related to salmon and ecosystem (the latest example is the symposium on “The status of Pacific salmon and their role in North Pacific marine ecosystems” held on October 30-November 1, 2006, in Jeju, Korea) and more are to come;
- NPAFC provided information on salmon for the first North Pacific Ecosystem Status Report published by PICES in 2004, and agreed to continue contributing in our future Ecosystem Status Reports;
- Scientists involved in the NPAFC BASIS Program actively communicate their results at PICES’ Annual Meetings.

The PICES Fifteenth Annual Meeting was just completed in Yokohama, Japan. One of the most important issues at this meeting was the Open Forum discussion on the development of the new PICES integrative scientific program called FUTURE (Forecasting and Understanding of Trends, Uncertainty and Responses of Ecosystems). It is expected that a Science Plan for FUTURE will be completed by the PICES Sixteenth Annual Meeting to be held in October 2007, in Victoria, Canada, and an Implementation Plan will be compiled by the PICES Seventeenth Annual Meeting to be convened in October 2008, in Dalian, China. I do hope that the new scientific program will further facilitate joint activities undertaken by NPAFC and PICES scientists.

NPAFC should be proud by all its accomplishments and achievements. I have no doubt that this Annual Meeting will be a great success, and I wish you all a very fruitful and enjoyable week in Vancouver. Thank you.
Mr. Don Kowal, observer from PSC, addressed the meeting as follows:

Mr. Chairman, distinguished delegates, ladies and gentlemen, it is a pleasure to welcome you to Vancouver. I would like to thank the NPAFC for inviting me on behalf of the Canada/US Pacific Salmon Commission to participate as an observer at your Fourteenth Annual Meeting. The Pacific Salmon Commission, similar to the NPAFC is also headquartered in beautiful Vancouver.

I would like to acknowledge that some of your Representatives also serve as Commissioners to the Pacific Salmon Commission and a good number of your scientific research representatives are also active in our bilateral forum.

The work of both our Commissions is linked through both our needs to better understand and monitor the aquatic ecosystem of the North Pacific. The results of the multi-lateral research and assessments of the NPAFC are of great benefit and importance to the fishing management applications of the PSC.

At the last annual meeting of the PSC scientists from the NPAFC forum were invited to make presentations to members of our Commission and to inform them of the important initiatives being undertaken by the NPAFC.

In recent years, the PSC has been fortunate to be able to activate a Northern and Southern Restoration and Enhancement Fund. Over the past three years we have spent approximately $17M US in support of 250 projects from the Alsek River in Alaska to the Coquille River in southern Oregon. Approximately two thirds of the spending has been directed to fund investigation projects in support of improved information for resource management, approximately twenty percent for rehabilitation and restoration of marine and freshwater habitat and approximately ten percent for enhancement of wild stock production. For 2007 the PSC Fund Committees have identified that $7.4 M US will be available for funding. Following the deadline for submission of proposals the Commission had received $25.4 M US in project proposals. Needless to say some work remains before the final projects are chosen.

Mr. Chairman, I wish you a successful meeting and look forward to cooperation of our Commissions over the coming years.
Mr. Shinn-Charng Wu, observer from Taiwan, addressed the meeting as follows:

Mr. President, distinguished delegates, ladies and gentlemen,

I am Shinn-Charng Wu, the head of the delegation of Taiwan. On behalf of the Taiwanese delegation, I would like to thank the NPAFC for inviting us to attend this Annual Meeting again. I also would like to extend our deepest gratitude to the Canadian Government for hosting this meeting and its warm hospitality, and to the Secretariat for its efficient preparation of the meeting. This is my second attendance to the Annual Meeting of NPAFC, and it is my great pleasure to meet all of you here again.

As an important user of marine living resources, Taiwan has the responsibility of using these marine resources in a sustainable manner. Taiwan, therefore, will cooperate with the members of NPAFC as well as the Secretariat of NPAFC to fulfill the objective of promoting the conservation of anadromous stocks in the North Pacific Ocean. For example, Taiwan has been undertaken measures to prohibit our vessels from engaging in the activities of driftnet fishing in the North Pacific Ocean since 1993, including dispatch patrol vessels to the North Pacific Ocean to monitor the fishing activities of our vessels. Taiwan will continue to implement existing management measures to prevent our vessels from engaging in driftnet fishing activities in the North Pacific Ocean.

Finally, I wish you all a fruitful and productive Annual Meeting. Before I close, I would like to introduce the members of the Taiwanese delegation.

Thank you, Mr. Chairman.
5. **Consideration of Enforcement**

The committee reviewed enforcement activities in 2006 and planning for 2007 on the basis of information provided by Japan, Russia, the United States, and Canada.

(1) **Japan**

**Enforcement Activities in 2006**

Japan reported that a total of 37 patrol vessels were deployed for a total of 361 days between February and October, 2006. Air patrols were operated by aircraft and helicopters for 112 hours. Japan also made a joint operation with the USCG using JCG Gulf V. There were no fishing activities targeting salmon in the Convention Area.

However, Japan reported that it had sighted 50 vessels engaged in driftnet fishing activities or rigged for driftnet (Appendix 5). Many of these vessels were later thought to be Chinese as identified by their vessel types, Chinese characters used for vessel names, and from the fact that many squid jigging vessels flying Chinese flag were sighted nearby. Some of these jigging vessels attempted to obstruct patrol vessels’ course to prevent sighting.

The Government of Japan requested the Government of China through diplomatic channels to provide details of these vessels, and if the vessels are confirmed as Chinese, for the purpose that appropriate measures be taken by China to penalize them in accordance with Chinese domestic laws.

Japan proposed that the NPAFC President write an official letter to request that the Government of China take preventative measures to ensure that Chinese vessels are not involved in driftnet fishing which could adversely affect salmon stocks in the Convention Area. Japan also proposed to express in the letter the Commission’s concerns of the increased number of Chinese vessels equipped with driftnets given that the Chinese government has received a similar report from Japan in recent years.

Chairman suggested that Japan draft the letter describing our patrol activities and that the Commission and the Government of China be partners to combat the illegal fishing activities. The draft letter would then be sent to the Parties through the Secretariat for review and comments before sending it to the Chinese government.

The committee recommended sending a letter to the Chinese authorities on behalf of the NPAFC President expressing the Commission’s concern with the increased number of Chinese vessels equipped with driftnets in the Convention Area and to request to ensure that the Chinese vessels are not involved in driftnet fishing in the Convention Area.

(2) **Russia**

**Enforcement Activities in 2006**

Russia reported that the FSS patrolled during the period of spawning migration of Pacific salmon from May until August. Seven patrol vessels and three aircraft participated in patrolling the Convention Area. Vessels patrolled for 62 days covering 1875 nautical miles. Aircraft patrolled 3340 nautical miles with six sorties. Most of the patrols took place in the northern part of the Convention Area. No contradictions with the Convention were revealed during patrolling the Convention Area.

**Planned Activities in 2007**

Sakhalin Border Service will have a priority for patrolling next year, given that the recent sightings in the vicinity of the Russian EEZ in Convention Area are closer to their patrol assets ports. Russia also
looks forward to possibly planning more internationally combined patrolling with the United States and Canadian assets, both surface and aircraft.

(3) **UNITED STATES**

*Enforcement Activities in 2006*

The United States had a successful high level of cooperation to combat IUU operations. It also had a successful joint exercise using a Japanese G-V flight this year which was a landmark event.

USCG patrols did not detect any vessels actively engaged in fishing contrary to the Convention and no boardings were conducted by USCG cutters.

*Planned Activities in 2007*

USCG will patrol with its HC-130 aircraft at resource levels similar to recent years in order to meet the high seas driftnet fishing threat. USCG high endurance cutters will continue to be scheduled to patrol in areas of the US EEZ and high seas, giving them the capability to respond to any potential violators in the Convention Area. NOAA/NMFS will continue to place officers on Canadian high seas driftnet flights during 2007 deployments and patrols with USCG HC-130 deployments when able. The USCG intends to continue issuing Local Notices to Mariners prior to and during the high threat season and partner with other NPAFC Parties to provide more detailed information on HSDN to mariners on an internet web site.

The United States plans to deploy aircraft from Alaska and Hawaii as well as receiving reports from US fishermen. United States also hopes to cooperate with Western and Central Pacific Fisheries Commission (WCPFC).

(4) **CANADA**

*Enforcement Activities in 2006*

Canada reported the Pre-Season meetings with the USCG, the Canadian Department of Fisheries and Oceans (DFO), and the Department of National Defence (DND) were held in Victoria, B.C. on April 27, 2006. They discussed and developed a detailed operational plan for the Canadian patrols based out of Shemya.

2006 Canadian patrols were conducted in two periods using 14 aerial patrols with total of 168 hours flown. Two operations were conducted by two CP-140 aircraft with NMFS officer aboard, based out of Shemya Island, Alaska. The 2006 patrol area was slightly decreased from 2005. During the first period, two vessels rigged for driftnet netting were sighted without fishing activities observed. During the second period, 27 vessels rigged for driftnet netting were sighted, of which 12 vessels were observed with nets in the water that ranged from less than 2.5km (1.5 miles) up to 7 nautical miles. Most of the vessels bore neither flags nor names.

Detailed suspected driftnet vessels’ photos were presented. Department of Defense is currently enhancing the photo quality for further details and once it is recovered, the information will be posted on the IIS.

*Planned Activities in 2007*

Canada will commit 180 hours of air surveillance time. The timing of its patrol efforts will be informed through the Joint Operations Information Coordination Group.
Taiwan gave 2006 Taiwan enforcement activities (Appendix 6).
The Chairman of the Working Group, Capt. O. Lukyanov presented a detailed report on the status of the IIS.

The first portion of the report showed a template for “Vessel of Interest”. The working group ran into a few complications; how exactly should different classifications of vessels and species be addressed? Each country employs its own way of classifying certain ship types and species names. Chairman requested that each county edit the species document to create a reference guide for salmon names that each group can use within the system. Chairman also requested that each country work to create a standard list of vessel types that can be cross referenced and agreed upon. Russia can make the templates available to each of the member groups so that future work can take place and then changes can be proposed for each country’s classification sources.

The United States presented information regarding species and vessel codes from the UN FAO report that provides a list of standard reference codes that are already employed internationally. They hope to develop a more robust system at the Enforcement Evaluation and Coordination Meeting (EECM) in February of 2007.

The United States proposed that each delegation agree upon a goal for a determined amount of time (possibly 48 hours) for posting all vessels sighted by patrol assets within the Convention Area, or suspected of using high seas driftnets.

The United States also stated that a negative reply indicating no assets were available to respond would be useful information.

ENFO Chairman summarized the major updates to the IIS as follows:

- The new section for “Articles” should be more user friendly for data input,
- The member section is outdated and that before the next meeting each country should update its member lists and reflect any changes, and
- The United States will provide a list of codes that have been adopted by the FAO in order to create a list of accepted vessel types, gear types, country/port, and species.
- Near real time entries are the goal.

The committee reached consensus to adopt Terms of Reference for IIS Vessels of Interest (Appendix 7) with the addition of the below definition of a “Vessel of Interest”.

Revised definition of a “Vessel of Interest” was provided as follows:

A vessel of interest is defined as a vessel that has been sighted in the Convention area and that:

a) Is engaged in fishing, or supporting fishing activity, that could adversely affect the conservation of anadromous stocks within the Convention Area, or
b) Appears to be equipped with driftnet gear, or
c) Is reasonably suspected of having engaged in fishing that could adversely affect the conservation of anadromous stocks within the Convention Area, or
d) Has previous history of fishing activity or supporting fishing activity that is contrary to the Convention.

The Parties recognized the Port State Control Measures are an important tool to combat IUU fishing and they agreed to implement the Port State Control Measures of FAO Model Scheme where consistent with national laws. Parties also agreed to promote such measures of the Model Scheme with other agencies not present, but with authorities for Port State Control. In addition, Parties will look for possible
implementation of specific measures in the future within ENFO that will improve information sharing and cooperative Port State Control Measures.

Japan noted that they will not issue permits for port calls of the vessels that are suspected of illegal fishing with reasonable evidence provided and this would contribute to deterrence of IUU fishing. Japan emphasized that all Parties work toward the overall goal of the NPAFC which is to combat illegal fishing.

(8) Enforcement Meetings and Activities in 2007

The committee agreed that the 2006 EECM was productive and recommended undertaking a similar meeting in 2007.

Korea offered to host the next EECM in Busan, Korea.

The committee recommended to hold the next EECM in Busan, Korea from 27 February to 01 March, 2007.

Chairman reiterated that the Enforcement Symposium in 2006 was very beneficial and successful, and hopes to conduct such a symposium in the future. Chairman proposed that the ENFO requests at the next Annual Meeting to hold such a symposium in conjunction with the 2008 EECM in Canada.

(9) Cooperation with Relevant International Organizations and Invitations to State or Entity

The Executive Director reported that representatives of eleven international organizations and representatives of People's Republic of China, Malaysia, Thailand and Taiwan were invited to attend the 2006 NPAFC 14th Annual Meeting. Observers from the International Pacific Halibut Commission (IPHC), North Atlantic Salmon Conservation Organization (NASCO), North Pacific Marine Science Organization (PICES), Pacific Salmon Commission (PSC) and Taiwan were in attendance at this meeting.

The committee recommended that the following International Organizations, States or Entities be invited to send representatives to act as observers to the 2007 NPAFC 15th Annual Meeting:

<table>
<thead>
<tr>
<th>International Organizations</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>In accordance with the list developed by the CSRS (Doc. 1004, p. 17), and Western and Central Pacific Fisheries Commission (WCPFC)</td>
<td>People's Republic of China</td>
</tr>
<tr>
<td></td>
<td>Malaysia</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td>Taiwan</td>
</tr>
</tbody>
</table>
6. **Consideration of Scientific Research and Statistics**

(1) **Salmon Catches**

Table 1. Preliminary 2005 commercial salmon catches in Canada, Japan, Korea, Russia, and the United States. Commercial catches by foreign fleets in the Russian EEZ are not included. WOC = Washington, Oregon, and California. WOC data may include a small portion of ceremonial and subsistence harvest.

(a) Preliminary 2005 commercial catch in millions of fish.

<table>
<thead>
<tr>
<th></th>
<th>Sockeye</th>
<th>Pink</th>
<th>Chum</th>
<th>Coho</th>
<th>Chinook</th>
<th>Cherry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>0.384</td>
<td>7.026</td>
<td>2.133</td>
<td>0.327</td>
<td>0.289</td>
<td>-</td>
<td>10.159</td>
</tr>
<tr>
<td>Japan</td>
<td>0.003</td>
<td>11.115</td>
<td>64.342</td>
<td>0.028</td>
<td>0.010</td>
<td>NA*</td>
<td>75.504**</td>
</tr>
<tr>
<td>Korea</td>
<td>-</td>
<td>-</td>
<td>0.023</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.023</td>
</tr>
<tr>
<td>Russia</td>
<td>7.070</td>
<td>164.206</td>
<td>10.004</td>
<td>0.254</td>
<td>0.068</td>
<td>0.013</td>
<td>181.614</td>
</tr>
<tr>
<td>USA</td>
<td>43.603</td>
<td>161.631</td>
<td>11.763</td>
<td>5.435</td>
<td>1.656</td>
<td>-</td>
<td>224.089</td>
</tr>
<tr>
<td>Alaska</td>
<td>43.387</td>
<td>161.237</td>
<td>11.760</td>
<td>4.821</td>
<td>0.687</td>
<td>-</td>
<td>221.892</td>
</tr>
<tr>
<td>WOC</td>
<td>0.216</td>
<td>0.394</td>
<td>0.003</td>
<td>0.614</td>
<td>0.969</td>
<td>-</td>
<td>2.197</td>
</tr>
<tr>
<td>Total</td>
<td>51.060</td>
<td>343.978</td>
<td>88.265</td>
<td>6.044</td>
<td>2.024</td>
<td>0.013**</td>
<td>491.389**</td>
</tr>
</tbody>
</table>

* "NA": Not Available
**Not including cherry salmon catches in Japan.

(b) Preliminary 2005 commercial catch in metric tonnes (round weight).

<table>
<thead>
<tr>
<th></th>
<th>Sockeye</th>
<th>Pink</th>
<th>Chum</th>
<th>Coho</th>
<th>Chinook</th>
<th>Cherry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>933</td>
<td>12,588</td>
<td>10,402</td>
<td>1,137</td>
<td>2,008</td>
<td>-</td>
<td>27,068</td>
</tr>
<tr>
<td>Japan</td>
<td>7</td>
<td>15,893</td>
<td>222,243</td>
<td>72</td>
<td>93</td>
<td>938</td>
<td>239,246</td>
</tr>
<tr>
<td>Korea</td>
<td>-</td>
<td>-</td>
<td>222,43</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>Russia</td>
<td>19,503</td>
<td>205,470</td>
<td>32,565</td>
<td>818</td>
<td>572</td>
<td>17</td>
<td>258,945</td>
</tr>
<tr>
<td>USA*</td>
<td>121,548</td>
<td>252,726</td>
<td>43,549</td>
<td>17,109</td>
<td>11,096</td>
<td>-</td>
<td>446,065</td>
</tr>
<tr>
<td>Alaska*</td>
<td>121,058</td>
<td>252,226</td>
<td>43,535</td>
<td>14,370</td>
<td>4,800</td>
<td>-</td>
<td>435,990</td>
</tr>
<tr>
<td>WOC*</td>
<td>490</td>
<td>537</td>
<td>14</td>
<td>2,739</td>
<td>6,296</td>
<td>-</td>
<td>10,075</td>
</tr>
<tr>
<td>Total</td>
<td>141,991</td>
<td>486,714</td>
<td>308,815</td>
<td>19,136</td>
<td>13,769</td>
<td>955</td>
<td>971,380</td>
</tr>
</tbody>
</table>

* USA data were submitted in pounds and converted into tones (1 mt = 2,204.59 lbs.)

1.1 **Canada (Doc. 979)**

In general, preliminary catch estimates for 2005 were lower than most other recent years. The 2005 commercial catch was ~27,068 tonnes, about 41% of the average since 1952. The sockeye catch was ~933 tonnes, and the chum catch was ~10,402 tonnes.
1.2 Japan (Doc. 966)

Japan reported total commercial catches of Pacific salmon by coastal and offshore areas in 2005 by number and weight. Total catches in coastal and offshore areas of Japan include 64.3 million (222.2 thousand tonnes) chum and 11.1 million (15.9 thousand tonnes) pink salmon.

1.3 Korea (Doc. 972)

Total catch of chum salmon was 22,832 fish or 55.2 tonnes in 2005. Among these, 10,705 fish or 25.9 tonnes were caught in coastal areas for commercial purposes and 12,127 fish or 29.3 tonnes in the river for artificial propagation.

1.4 Russia (Doc. 999)

In 2005, coastal catches of Pacific salmon in the Russian Far East totaled 258,945 tonnes, or 181.614 million fish. The main species were pink salmon (205,470 tonnes), followed by chum (32,565 tonnes), sockeye (19,503 tonnes), coho (818 tonnes), and chinook salmon (572 tonnes).

1.5 United States

(i) Alaska (Doc. 991)

Alaska Department of Fish and Game biologists were expecting an all-species commercial catch of 181 million fish for the 2005 season. As it turned out, the all-species catch reached 222 million fish. In 2005, the overall catch of pink salmon was 161 million fish compared to the preseason projection of 114 million fish. The overall chum salmon catch was 11.8 million fish compared to the preseason projection of 17.6 million fish.

(ii) Washington, Oregon, California, and Idaho (Doc. 984)

Preliminary estimates of all species commercial salmon catches in Washington, Oregon, and California were 10,075 tonnes. Idaho does not have a commercial fishery.
### Table 2. Preliminary 2005 hatchery releases of juvenile salmon in Canada, Japan, Korea, Russia and the United States in millions of fish. WOCI = Washington, Oregon, California, and Idaho.

<table>
<thead>
<tr>
<th></th>
<th>Sockeye</th>
<th>Pink</th>
<th>Chum</th>
<th>Coho</th>
<th>Chinook</th>
<th>Cherry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada*</td>
<td>236.59</td>
<td>11.52</td>
<td>131.75</td>
<td>14.39</td>
<td>43.36</td>
<td>-</td>
<td>437.61</td>
</tr>
<tr>
<td>Japan</td>
<td>0.46</td>
<td>145.90</td>
<td>1,844.39</td>
<td>-</td>
<td>-</td>
<td>11.70</td>
<td>2,002.46</td>
</tr>
<tr>
<td>Korea</td>
<td>-</td>
<td>-</td>
<td>10.93</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10.93</td>
</tr>
<tr>
<td>Russia</td>
<td>9.69</td>
<td>278.18</td>
<td>387.33</td>
<td>6.84</td>
<td>0.84</td>
<td>1.24</td>
<td>684.12</td>
</tr>
<tr>
<td>USA</td>
<td>58.13</td>
<td>808.33</td>
<td>596.85</td>
<td>64.23</td>
<td>183.95</td>
<td>-</td>
<td>1,711.49</td>
</tr>
<tr>
<td>Alaska</td>
<td>38.72</td>
<td>808.33</td>
<td>548.99</td>
<td>22.14</td>
<td>9.46</td>
<td>-</td>
<td>1,427.64</td>
</tr>
<tr>
<td>WOCI</td>
<td>19.41</td>
<td>0.00</td>
<td>47.86</td>
<td>42.09</td>
<td>174.49</td>
<td>-</td>
<td>283.85</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>304.87</strong></td>
<td><strong>1,243.94</strong></td>
<td><strong>2,971.25</strong></td>
<td><strong>85.46</strong></td>
<td><strong>228.15</strong></td>
<td><strong>12.94</strong></td>
<td><strong>4,846.60</strong></td>
</tr>
</tbody>
</table>

* Not including releases from facilities which operate outside the direction of Oceans, Habitat and Enhancement Branch.

** Including releases from manned spawning channels as well as hatcheries.

### 2.1 Canada (Doc. 980)

The Salmonid Enhancement Program (SEP) in British Columbia, Canada was undertaken in 1977 to rebuild stocks and increase catch through the expanded use of enhancement technology. The program comprises nearly 300 projects that produce chinook, coho, chum, pink, and sockeye salmon, as well as small numbers of steelhead trout and cutthroat trout. Projects include hatcheries, fishways, spawning and rearing channels, habitat improvements, flow control works, lake fertilization, and small classroom incubators, and range in size from spawning channels releasing nearly 100 million juveniles annually, to schools with classroom incubators that release fewer than one thousand. Data from facilities that operate outside the direction of SEP are not included in this report.

The Ocean, Habitat, and Enhancement Branch (OHEB) released about 438 million juvenile salmon in 2005 from hatcheries and manned channels in British Columbia, Yukon, and Transboundary Area, Canada. The main species produced and reared was sockeye salmon (~237 million fish), followed by chum (~132 million), chinook (~43 million), pink (~12 million), and coho (~14 million) salmon.

### 2.2 Japan (Doc. 967)

Four species of Pacific salmon (chum, pink, cherry, and sockeye salmon) are currently enhanced in Japan. A total of 2,002 million juveniles and smolts were released from Japanese hatcheries in 2005. Approximately 1,844 million chum salmon fry were released in the spring of 2005, almost the same level as in the previous year. Hatcheries also released 146 million pink salmon fry, 11.7 million juveniles and smolts of cherry salmon, and 464 thousand juveniles and smolts of sockeye salmon.

### 2.3 Korea (Doc. 972)

The total number of released chum salmon fry was 10.930 million fish in 2005 (2004 brood) and 7.250 million fish in 2006 (2005 brood). Among these, the number of chum salmon fry released was highest in Namdae-cheon, which composed more than 60% of total Korean chum salmon fry releases.
2.4 Russia (Doc. 999)

Russian hatcheries released 684 million Pacific salmon fry and smolts in 2005, including 278 million pink, 387 million chum, 10 million sockeye, 7 million coho, 1 million cherry, and 1 million chinook salmon.

2.5 United States

(i) Alaska (Doc. 991)

In 2005 there were 29 private nonprofit, 2 federal, and 2 state hatcheries operating in Alaska. Most of these facilities (22) are located in southeast Alaska. The Cook Inlet-Prince William Sound region has 11 hatcheries and the Kodiak region has 2 hatcheries.

Alaskan hatcheries released approximately 1.43 billion fish. Of the fish released 57% were pink salmon and 38% were chum salmon. Hatcheries in Prince William Sound and Cook Inlet contributed 53% and hatcheries in Southeast Alaska contributed 36% of the fish released.

(ii) Washington, Oregon, California, and Idaho (Doc. 984)

In 2005 hatcheries in Washington, Oregon, California, and Idaho released 229.5 million Pacific salmon juveniles and smolts, including 19.4 million sockeye, 47.9 million chum, 42.1 million coho, and 174.5 million chinook salmon.
(3) **Coordination of Scientific Research Activities**

### 3.1 Sample and Data Exchanges

**Canada requested:**
- *From Japan,* samples from four even-year and four odd-year pink salmon populations. Target sample size is 100 fish per population, with samples either tissue or extracted DNA.

**Japan requested:**
- *From Russia,* tissue and otolith samples from juvenile chum salmon caught in the Okhotsk Sea, and catch and biological information of these samples.
- *From Russia,* tissue or extracted DNA samples from Russian representative chum salmon stocks which are missing from the present mtDNA baselines *(Doc 897).*
- *From Russia,* tissue or extracted DNA samples from representative pink salmon stocks (both even and add year) in Russia.
- *From the United States,* tissue or extracted DNA samples of chum salmon stocks which are missing from the present mtDNA baselines *(Doc 897).*
- *From the United States,* tissue or extracted DNA samples from representative pink salmon stocks (both even- and odd-year) in USA.

**Russia requested:**
- *From the United States,* chum salmon scale samples or impressions from rivers Nushagak, Kuskokwim and Yukon from 2005 and 2006 escapements. Preferably, 200 individuals from each river. Accompanying biological data is also needed.
- *From the United States,* fin clips individually preserved in 96% ethanol from up to 50 individuals of sockeye salmon (of any age group) from up to 10 stations (preferably throughout entire survey area) of U.S. high-seas salmon survey in 2007 in the eastern Bering Sea.
- *From Canada,* fin clips individually preserved in 96% ethanol from up to 50 individuals of sockeye salmon (of any age group) from several rivers of British Columbia.

**United States requested:**
- *From Canada,* for BASIS purposes samples of 100 individuals from each of approximately 20 populations of sockeye, chum, and coho salmon (for the State of Alaska) and samples of steelhead (for the State of Washington). Canada may select the actual populations 1) based upon availability of high quality tissues and 2) to provide a data base representative of Canadian diversity to enable identification of Canadian stocks in BASIS cruises as well as western Alaskan and Bering Sea fisheries.
- *From Japan,* samples of Hokkaido chum salmon to investigate possible impacts of the historical stocking of these stocks into Washington drainages.
- *From Russia,* samples from chum and sockeye salmon populations, after they are analyzed in a Russian laboratory, ensuring that appropriate data are represented in USA baselines for Bering Sea studies.
- *From Russia and Japan,* if possible from BASIS cruises in 2007—samples from 60 Chinook, chum, and sockeye salmon as available from each BASIS station.
- *From Russia and Japan,* return heads of all salmon and steelhead lacking the adipose fin that are caught during salmon research cruises in the Convention Area and adjacent waters.
- *From Russia and Japan,* tissue samples from all steelhead captured on research cruises in the Convention and adjacent waters for an investigation of the ocean migrations of United States steelhead populations.
3.2 Report of the Science Sub-Committee

Members of the finalized a five-year plan for workshops and symposia (Appendix 8).

3.3 Report of the Working Group on Stock Assessment

Preliminary 2005 commercial catch estimates were confirmed and incorporated into the NPAFC time series (Figure 1). 2005 catches were the second highest on record. Pink salmon constituted ~50% of the catch by weight, followed by chum, sockeye, coho, Chinook, and cherry (masu) salmon. Largest catches were reported by Alaska (~435,000 tonnes), Russia (~260,000), and Japan (~240,000).

Figure 1. Cumulative commercial salmon catch, by species, for Canada, Japan, Korea, Russia, and the United States from 1972 to 2005 (round weight in tonnes).
3.4 Report of the Working Group on Salmon Marking

a) Database of otolith mark releases

The United States presented a summary report to CSRS of a new website for use by the NPAFC for otolith mark releases. The website is currently housed on a server based at the Mark, Tag, and Age Laboratory, Alaska Department of Fish and Game (ADF&G), Juneau, Alaska and accessed by http://npafc.taglab.org/.

b) Otolith release reports for brood year 2005

Japan (Doc. 968), Korea (Doc. 974), Russia (Doc. 997) and the United States (Doc. 970) submitted documents on otolith mark information for releases in 2006. It was noted that while the United States submitted a report, their report only includes Alaska releases; information from other states is not yet available and will be added to a revision of Doc. 970. Canada reported that they will soon have an updated report detailing otolith marked releases; they did report summary information as shown in Table 3. The number of otolith marked salmon released from Pacific Rim hatcheries was 1.42 billion in 2005 (Table 3) and 1.46 billion in 2006 (Table 4); this indicates releases have stabilized in number.

c) Otolith mark plans for brood year 2006

All countries have submitted their mark plans: Canada (Doc. 947), Japan (Doc. 938 Rev. 1), Korea (Doc. 974), Russia (Doc. 998), and the United States (Doc. 936, Rev. 2). The U.S. document only includes plans for Alaska; other USA states were not able to report their release information prior to marking. Of significance was the absence of mark duplications among countries for all species except coho salmon. The single coho conflict between the United States and Russia was considered to be insignificant.

d) Steps to avoid duplication of otolith marks

The U.S. Party has suggested that the WGSM consider designating specific otolith marks for different countries (Doc. 942). This proposal was accepted by the working group. The United States will submit a draft plan for pink, chum, and sockeye salmon with designated marks for each country. This information will be exchanged prior to the next Research Planning and Coordinating Meeting (RPCM), with the intention of reaching agreement at the RPCM.

e) Discussion of Thermal Mark symbols

The WGSM did not have time to discuss the U.S. proposal to simplify the mark symbols (Doc. 944). However, all Parties were consulted regarding this proposal and all supported it.
### Table 3. Number of otolith-marked salmon released from Pacific Rim hatcheries in 2005.

<table>
<thead>
<tr>
<th></th>
<th>Sockeye</th>
<th>Pink</th>
<th>Chum</th>
<th>Chinook</th>
<th>Coho</th>
<th>Cherry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>2,609,917</td>
<td>0</td>
<td>39,834,145</td>
<td>19,176,154</td>
<td>189,448</td>
<td>0</td>
<td>61,809,664</td>
</tr>
<tr>
<td>Japan</td>
<td>198,000</td>
<td>4,807,000</td>
<td>138,220,000</td>
<td>0</td>
<td>0</td>
<td>3,276,000</td>
<td>146,501,000</td>
</tr>
<tr>
<td>Korea</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Russia</td>
<td>9,653,700</td>
<td>685,600</td>
<td>38,718,000</td>
<td>839,000</td>
<td>6,181,700</td>
<td>0</td>
<td>56,078,000</td>
</tr>
<tr>
<td>USA</td>
<td>36,307,045</td>
<td>644,245,049</td>
<td>466,361,624</td>
<td>5,628,270</td>
<td>5,253,069</td>
<td>0</td>
<td>1,157,795,057</td>
</tr>
<tr>
<td>Alaska</td>
<td>36,307,045</td>
<td>644,245,049</td>
<td>466,361,624</td>
<td>5,628,270</td>
<td>5,253,069</td>
<td>0</td>
<td>1,157,795,057</td>
</tr>
<tr>
<td>WOCI*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>48,768,662</td>
<td>649,737,649</td>
<td>683,133,769</td>
<td>25,643,424</td>
<td>11,624,217</td>
<td>3,276,000</td>
<td>1,422,183,721</td>
</tr>
</tbody>
</table>

*Data not available from Washington, Oregon, California, and Idaho.

### Table 4. Preliminary number of otolith-marked salmon released from Pacific Rim hatcheries in 2006.

<table>
<thead>
<tr>
<th></th>
<th>Sockeye</th>
<th>Pink</th>
<th>Chum</th>
<th>Chinook</th>
<th>Coho</th>
<th>Cherry</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>4,000,000</td>
<td>0</td>
<td>41,800,000</td>
<td>17,500,000</td>
<td>200,000</td>
<td>0</td>
<td>63,500,000</td>
</tr>
<tr>
<td>Japan</td>
<td>24,000</td>
<td>5,984,000</td>
<td>146,396,000</td>
<td>0</td>
<td>0</td>
<td>2,278,000</td>
<td>154,682,000</td>
</tr>
<tr>
<td>Korea</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,200,000</td>
</tr>
<tr>
<td>Russia</td>
<td>5,385,170</td>
<td>3,136,500</td>
<td>12,842,395</td>
<td>7,779,300</td>
<td>2,792,585</td>
<td>49,600</td>
<td>31,985,550</td>
</tr>
<tr>
<td>USA</td>
<td>47,523,778</td>
<td>677,493,501</td>
<td>468,693,875</td>
<td>5,370,806</td>
<td>4,472,461</td>
<td>0</td>
<td>1,203,554,421</td>
</tr>
<tr>
<td>Alaska</td>
<td>47,523,778</td>
<td>677,493,501</td>
<td>468,693,875</td>
<td>5,370,806</td>
<td>4,472,461</td>
<td>0</td>
<td>1,203,554,421</td>
</tr>
<tr>
<td>WOCI*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>56,932,948</td>
<td>686,614,001</td>
<td>671,932,270</td>
<td>30,650,106</td>
<td>7,465,046</td>
<td>2,327,600</td>
<td>1,455,921,971</td>
</tr>
</tbody>
</table>

*Data not available from Washington, Oregon, California, and Idaho.*
3.5 Report of the ad hoc Working Group on Stock Identification

The goals of the WGSI are to: (1) develop, standardize, and disseminate genetic and other databases among the Parties; (2) encourage the development of new genetic technologies; and (3) facilitate the dissemination of statistical techniques.

The WGSI discussed progress on a concept proposal received in 2005 from the Japanese Party entitled “Development and evaluation of stock identification techniques for chum salmon.” The objective of the proposal was to promote and review the development of accurate and repeatable chum salmon baseline that could be shared and added to by the Parties. The Japanese Party requested that the other Parties complete a survey reviewing the specific populations assayed for the various marker types and loci. The Parties agreed to work together to complete the survey.

The WGSI also reviewed baseline development for other species:

**Sockeye:** Microsatellite baselines have been developed by Canada and the United States. A SNP baseline, suitable for use in any laboratory, is under development by the United States. Russia is evaluating both microsatellites and SNP baselines for their use.

**Chinook:** A standardized microsatellite baseline has been developed through the Pacific Salmon Commission for North American populations. With some effort, this baseline could be adapted to other laboratories. A different microsatellite baseline has been developed by Canada. A SNP baseline, suitable for use in any laboratory, is also under development through the Pacific Salmon Commission and by the United States. Russia has collected the samples for future microsatellites and SNP analyses for their use.

**Coho:** Microsatellite baselines have been developed by Canada and the United States. SNPs, suitable for use in any laboratory, have been developed by the United States, but baseline data are very limited.

**Pink:** A microsatellite baseline has been developed by Canada for both brood lines.

The Working Group discussed a concept proposal received from the United States entitled “Proposal to develop a comprehensive genetic baseline for steelhead (Oncorhynchus mykiss).” The purpose of the proposal is to begin the development of a standardized genetic baseline for steelhead, a highly valued species in the United States for sportsmen and Native American Tribes. The approach will begin with the identification of candidate populations for a genetic baseline in consultation with scientists and managers throughout the species’ range. The WGSI supported the concept. The proposal is attached as Appendix 9.
Report of the BASIS Working Group

Major agenda items discussed were: 1) status of the BASIS annual report for 2005, 2) BASIS Symposium in 2008 in conjunction with the Annual Meeting in the United States, 3) budget for the BASIS Symposium in 2008, 4) BASIS Symposium Committee, 5) phase II of the BASIS program (BASIS Phase II), 6) re-writing of original BASIS research plan to accommodate BASIS Phase II, and 7) funding of BASIS Phase II.

It was decided that the United States will draft the 2005 BASIS annual report in the format previously used for the 2002-2004 BASIS annual reports.

As it was decided at the 2006 RPCM in Sapporo, the BASIS Symposium would take place in conjunction with the 2008 Annual Meeting in the United States. A cost estimate suggested by the Secretariat was discussed. Additionally, the subject of hiring a special editor for assistance in production of the Symposium proceedings was discussed.

The Chair suggested that the Chairperson of the BASIS Symposium should be from the host country for efficiency of making arrangements. One person from the BASIS Working Group from each of the Parties was appointed to the BASIS Symposium Committee for planning purposes, including: R. Beamish from Canada; T. Azumaya from Japan; K.B. Seong from Korea; V. Sviridov from Russia; and E. Farley (Chair) from the United States. The committee will correspond by e-mail and bring a draft outline of the Symposium agenda to the RPCM in the United States in April 2007.

The need for planning BASIS Phase II was discussed. High variability in the distribution and abundance of salmon and associated marine species as well as the oceanographic conditions was observed during the five field seasons of research activities. In view of variability the Chair suggested that BASIS Phase II was needed to focus research to understand further the effects of these conditions on survival of salmon. The Russian Party reported that funding and planning for the second phase of BASIS was already under discussion in Russia. The United States reported that the money for the BASIS charter vessel was already funded for the 2007 season. In addition, a second vessel was under consideration for expanded BASIS activities by the United States in 2007 in the Bering Sea.

The Chair suggested that the original BASIS research plan (Doc. 579) be rewritten in the manner of the NPAFC Science Plan 2006-2010 (Doc. 921). The Chair requested that each Party prepare a set of key research questions related to salmon research in the Bering Sea. For example, the United States presented 3 draft questions that utilize results from the previous 5-year study to provide for expanded research opportunities in the Bering Sea.

Draft set of key questions for BASIS Phase II presented by the United States

1. What are the key climatic and oceanographic factors affecting long-term changes in Bering Sea food production and salmon growth rates?
2. Will climate change impact the available salmon habitat in the Bering Sea?
3. Can salmon biological characteristics be used as indices of Bering Sea productivity? (i.e., size, growth rate, energetics, diet, etc.)

The Chair requested that questions developed by the Parties be distributed to members of the BASIS Working Group for discussion. Once a set of key questions have been decided on, then the Parties will prepare draft methodology within the scope of their own research organizations to address these research questions. A draft research plan for BASIS Phase II must be completed by the 2007 RPCM.

Funding opportunities for BASIS Phase II were also discussed. It was suggested that the BASIS Working Group should prepare a short summary paper that documents the achievements of the first five years of BASIS. This paper would be very useful in supporting requests for additional funding and for generating support within our agencies. The Chair suggested that the U.S. Party prepare a draft of such a document before the 2007 RPCM.
(4) Statistical Yearbook


(5) Cooperation with Relevant International Organizations

PICES proposed several issues for cooperation between PICES and NPAFC (Appendix 10).

Regarding the proposed joint symposium with the North Atlantic Salmon Conservation Organization (NASCO) in 2008 or 2009, the NPAFC’s organizing committee met with representatives of NASCO, PICES and the NPAFC Secretariat to consider a proposal from NASCO with initial suggestions *inter alia* as to the objectives, structure, date and venue and financial aspects of the symposium. Because of existing commitments to symposia until 2009 and in order to allow for the results from NASCO’s SALSEA (Salmon at Sea) programme and from the BASIS Phase II initiative to be presented, it was agreed that the symposium should be delayed until spring 2010. However, in order to facilitate an early exchange of information between scientists, and to raise the profile of research on salmon at sea with the media, meetings in conjunction with scheduled NASCO and NPAFC meetings in 2007 and 2008 were proposed.

(6) Project Proposals for External Fundraising

Canada explained that there was a strong possibility of getting some external funds from, for example, the Gordon and Betty Moore Foundation to develop a research plan, and the Parties discussed an external funding proposal prepared by Canada (Appendix 11).

The committee recommended that the Science Sub-Committee work to refine the Canadian proposal for external funding so that it is satisfactory to all Parties. It is intended that an agreed draft of such a proposal be prepared for presentation to the 2007 RPCM.
The committee recommended the following work plan for the CSRS in 2007:

<table>
<thead>
<tr>
<th>Work Plan Item</th>
<th>Interim Term of Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) report on last year's salmon catches, escapement, and wild and artificial production of juvenile salmon;</td>
<td>1</td>
</tr>
<tr>
<td>(B) review results of salmon stock assessment research and the condition of salmon stocks;</td>
<td>1 and 6</td>
</tr>
<tr>
<td>(C) review and summarize results of this year's salmon research beyond the 200-mile limits;</td>
<td>2</td>
</tr>
<tr>
<td>(D) exchange biological samples as necessary;</td>
<td>5</td>
</tr>
<tr>
<td>(E) review and summarize salmon research plans for next year beyond the 200-mile limits;</td>
<td>5</td>
</tr>
<tr>
<td>(F) propose data exchanges;</td>
<td>5</td>
</tr>
<tr>
<td>(G) review any documents submitted to the Commission prior to this year's annual meeting;</td>
<td>6 and 7</td>
</tr>
<tr>
<td>(H) the Parties will review any research proposals submitted in accordance with Article VII paragraph 6;</td>
<td>8</td>
</tr>
<tr>
<td>(I) consider international collaboration with relevant organizations;</td>
<td>6 and 7</td>
</tr>
<tr>
<td>(J) consider a report to the Commission</td>
<td>12</td>
</tr>
</tbody>
</table>

Each Party's specific research and vessel cruise plans in relation to the 2007 Work Plan are outlined below.

### 7.1 Canadian Research Plan

The Canadian research plan will be submitted at the 2007 RPCM. In developing its research plan, Canada will take into account the NPAFC Science Plan 2006-2010.

### 7.2 Japanese Research Plan

#### J-1 Juvenile Salmon Studies

Major mortalities of salmon may occur during the initial coastal life. The previous studies indicate that Asian juvenile salmon are abundantly distributed in the Okhotsk Sea during summer and fall in the first year of ocean life. The early life history studies in the coastal waters and the Okhotsk Sea are important to understand the survival mechanisms of salmon. To clarify mechanisms controlling population dynamics of juvenile salmon, the research will be focused on the following research items:

- Feeding, growth, and survival of juvenile salmon
- Seasonal distribution and migration of juvenile salmon
- Monitoring of ocean environments such as surface water temperature, salinity, primary production, and prey organisms
J-2  Summer Salmon Studies in the Bering Sea and Other Waters

J-2-1  Bering Sea Salmon Ecology Studies

Current studies suggest that changes of salmon growth may occur in the Bering Sea, when many salmon migrate in the waters for their feeding and growth in summer. To clarify relations between the growth and mortality of salmon and the carrying capacity in the Bering Sea, the research will be focused on the following research items:

- Climate change and primary production
- Production of prey organisms
- Population size and distribution of major salmon stocks
- Feeding competition and growth change of salmon
- Homing migration and maturing mechanism

J-2-2  Monitoring of Salmon and Environment in the North Pacific Ocean

To assess the status of salmon population, Japanese salmon research vessels are continuing to monitor salmon and their environment in the North Pacific Ocean, the Bering Sea, and the Gulf of Alaska in summer. Monitoring items are:

- Salmon abundance estimated using research gillnets and trawl nets
- Body sizes and ages of salmon
- Physical and chemical environmental conditions
- Chlorophyll a concentration and zooplankton biomass
- Offshore migration and distribution of salmon
- Stock identification using genetic analyses, otolith marking, and tagging experiments

J-3  Monitoring of Major Salmon Stocks

A monitoring program continues to assess the status of major salmon stocks in Japan for their proper management.

- Annual changes in the number of adult returns
- Annual changes in body size and age at maturity, and fecundity
- Genetic monitoring for stock conservation
- Otolith mark surveys to assess coastal and homing migrations
- Development of stock identification techniques
- Salmon stock assessment and forecast

7.3  Korean Research Plan

The Korean research plan was submitted as Doc. 975.

7.4  Russian Research Plan

The Russian research plan will be submitted at the 2007 RPCM. In developing its research plan, Russia will take into account the NPAFC Science Plan 2006-2010.
7.5 United States Research Plan

U-1 Juvenile Salmon Studies in the Gulf of Alaska and Bering Sea (BASIS)

Research activities take place primarily in the coastal waters of the Gulf of Alaska from the southeast Alaska area to the western Kodiak Island area and in the eastern Bering Sea from Bristol Bay northward through Kotzebue Sound. Activities include: (1) repeated measurements of the habitat, and stock-specific life history characteristics of salmon from their early marine residence period to their later migration through coastal waters; (2) fine-scale field studies that focus on aggregations of salmonids to look for specific processes or factors that influence their distribution, behavior, and growth; (3) studies on diet overlap and prey selectivity among salmon and other fishes; (4) genetic stock-identification studies of juvenile, immature, and maturing salmon; (5) monitoring of thermally marked salmon; (6) studies of growth and size of juvenile and immature salmon; (7) modeling salmon production based on interannual variability in early marine salmon survival and growth; (8) describing the trophic dynamics of juvenile salmon and their predators in coastal waters; (9) bioenergetic models of juvenile salmon growth; and (10) archival tagging of immature and maturing salmonids. Research in the coastal area of the Gulf of Alaska was initiated in 1995. A coastal monitoring activity was initiated in 1997 in southeast Alaska. Particular focus of this research is placed on examining the extent of seasonal (May–October) interactions between hatchery and wild stocks of salmon, and their potential impact on marine carrying capacity, and to examine the use of juvenile catch data and associated biophysical parameters to forecast pink salmon run strength. This research was expanded in 2005 to include stations in southern as well as northern Southeast Alaska. The Bering Sea program in western Alaska began in 1999. Particular focus of the western Alaska research was placed on monitoring effects of climate on growth, migration, and distribution of juvenile Bristol Bay sockeye salmon as they migrate in the coastal waters of the eastern Bering Sea. In 2002 research activities expanded in the Bering Sea to participate in offshore as well as coastal studies within the BASIS operation plans. Research activities under BASIS are designed to address the following issues: (1) seasonal-specific migration patterns of salmon inhabiting the Bering Sea, particularly those stocks exhibiting recent declines in production, and their relation to the Bering Sea ecosystem; (2) key biological, climatic, and oceanographic factors affecting long-term changes in Bering Sea food production and salmon growth rates, (3) similarities (or dissimilarities) in production or survival trends among salmon populations originating in rivers around the Bering Sea Rim, and (4) the limit or carrying capacity of the Bering Sea to produce salmon, and the effect of hatchery salmon on Bering Sea food supplies.

U-2 Retrospective Analyses

Retrospective studies characterize past variability in climate and salmonid population parameters over various time and space scales, and are a key component to understanding effects of climate change on the abundance and life-history of U.S. salmon populations. Current retrospective studies include: (1) analyses of scale growth patterns of Karluk Lake and Bristol Bay sockeye salmon, Yukon River chum salmon, and six pink and chum salmon populations from the northern and eastern Gulf of Alaska; (2) a summary of historical salmon research in the Karluk Lake area; (3) time-series analyses of North American salmon population and climate data; and (4) analyses of scale growth patterns of Auke Creek coho salmon to examine the relationship of marine growth to precise estimates of stock-specific marine survival.

U-3 Stock Identification

This research program is designed to find biological markers capable of identifying stocks of salmon in the North Pacific Ocean. These biological markers include genetic characters displayed in protein electrophoresis and in various forms of DNA. Non-genetic characters being evaluated are derived from scale pattern analysis and thermal marks on otoliths. The first task is to develop standardized methods of genetic analysis among Parties, and to identify important stocks of salmon that should be included in the database. The United States is developing genetic stock identification algorithms that combine different types of genetic characters and non-genetic characters into one analysis. The United States is also continuing international cooperative high-seas tagging studies and recovery of coded-wire tagged
salmonids in ocean fisheries and research vessel operations. These data will assist in identifying the origins of stocks harvested in mixed-stock fisheries and in determining the oceanic distribution of stocks.

**U-4 High-Seas Salmon Research**

Activities under this program include research coordination efforts and international cooperative high seas salmon research (maintenance of historical scale collections, high seas salmon tagging, and salmon research vessel cruises) in support of U.S. commitments to the NPAFC.

**U-5 Southeast Coastal Monitoring Research Plan**

Biophysical data have been collected along a primary marine migration corridor of juvenile Pacific salmon in the northern region of southeast Alaska since 1997. Data are routinely collected at 13 stations at four sampling intervals from May to August. This systematic monitoring is conducted to identify and understand biophysical parameters that influence habitat use, marine growth, predation, stock interactions, year-class strength and carrying capacity of large numbers of juvenile salmon as they pass through a major migration corridor. Sampling stations include three habitat types: (1) inshore, (2) strait, and (3) coastal where fish, zooplankton, surface water samples, and physical profile data are collected using a surface rope trawl, conical bongo nets, and a conductivity-temperature-depth profiler. As part of the NPAFC overall science plan this long-term monitoring of key stocks of juvenile salmon, both on an intra- and interannual basis, will enable researchers to better understand how growth, abundance and ecological interactions affect year-class strength. Data collected on SECM cruises has shown promise for forecasting regional abundance of pink salmon. Beginning in 2005 and continuing in future years, eight additional stations in the southern region of Southeast Alaska during June and July cruises will allow intra-regional comparisons to increase the geographic scope of data for use in forecasting models for pink salmon.
7. **Administrative and Fiscal Matters**

(1) **Policy of Accepting External Funds**

The Committee on Finance and Administration (F&A) discussed and adopted the Policy of Accepting External Funds for Scientific Research (*Appendix 12*).

(2) **Amendments to the Rules of Procedure**

The F&A committee recommended the approval of the proposed Amendments to the Rules of Procedure of the NPAFC related observers (*Appendix 13*) and Application Requirements for any Organization Desiring to Participate as Observer in a Meeting of the NPAFC (*Appendix 14*).

(3) **Schedule of Future Annual Meetings**

Russia extended an invitation to the Commission to hold the Fifteenth Annual Meeting in Vladivostok, Russia on October 8-12, 2007.

The United States invited the Commission to the 2008 Sixteenth Annual Meeting. The preliminary location of the meeting was Seattle, U.S.A.

Japan expressed its intention to invite the Commission to hold the 2009 Seventeenth Annual Meeting in Japan. Japan offered that meeting rooms will be provided by Japan to reduce the meeting expenses.
8. **Heads of Delegations Meeting**

(a) *Invitation to China*

The Heads agreed that the Commission should continue to communicate with the authorities of the People’s Republic of China on the issue of China’s future accession to the Convention, especially since there were many suspected driftnet vessels sighted in the Convention Area which may be Chinese flagged. The President of NPAFC will meet with the Chinese Ambassador to Canada in Ottawa on these issues. The other Parties were encouraged to do the same in their own countries.

(b) *Dates for 2007 Annual Meeting*

It was decided that the 2007 Annual Meeting will be held in Vladivostok, Russia, on October 8-12, 2007.

(c) *Journalists attending NPAFC Annual Meetings*

The Heads of Delegations instructed F&A to draft guidelines on how to deal with journalists attending the Annual Meetings of the Commission.

The following issues were presented:

- The United States raised the issue of steelhead research as the contributions to science are starting to focus and include steelhead studies (Appendix 9).
- Canada reiterated the issue of external funding (Appendix 11).

9. **News Release**

The Commission reviewed and adopted the News Release prepared by the Secretariat and the Press Committee (Appendix 15).
10. **Closing Remarks**

The closing remarks from the President and the Parties' Representatives were made as follows:

**Closing remarks by Mr. Guy Beaupré, President of NPAFC**

*Distinguished Delegates, Observers, Ladies and Gentlemen,*

*We have reached the end of our Annual Meeting and I am very glad that we have been able to achieve all our objectives.*

*I want to thank all of you for your continuous efforts and attention.*

*I want to thank particularly the Chairpersons of the committees for their leadership and their efforts in bringing their reports to this Plenary. It is obvious that the work of the committees was successful.*

*I also want to thank the Executive Director for his support during the week. I also want to mention the very efficient work of the team that has made sure that this meeting runs smoothly throughout the week. Specifically Toshinori Uoya, Wakako Morris and Marcey Johnson from the NPAFC Secretariat, and Rhonda Hash from the Department of Fisheries and Oceans. They deserve to be applauded.*

*Finally I wish you all a very good year and look forward to seeing you in Vladivostock next October.*
Mr. President Guy Beaupré, Representatives, Ladies and Gentlemen.

During the Fourteenth Annual Meeting of the NPAFC, we have discussed on the enforcement activities, science and administrative matters. Though we had different views on some issues, I think overall it is another successful meeting following the Thirteenth Annual Meeting in Jeju, Korea.

Reviewing the enforcement activities during 2005/2006, we did not find any violation of the Convention, which reaffirms that the NPAFC is an exemplary fishery management organization. One area of concern is the report that high seas drift net vessels were significantly increased in the Convention Area in 2006. Though we made some progress during the meeting on fishery monitoring and control measures such as the establishment of the definition on “vessel of interest” and the possible introduction of the port state measures into the national law, we still have lots of rooms that we have to exert our efforts in order to prevent illegal salmon fishing activities. I expect that we will facilitate our works on the enforcement at Busan EECM in February 2007. As for the Korean Government, it will positively consider the possible participation in the patrol activities in the Convention Area in the near future.

I am also pleased with the work in the CSRS meeting that has expanded knowledge and understanding on salmon and its ecosystem in the North Pacific. I would like to express my thanks to the Parties for the great support they have extended in promoting the research capabilities of Korean scientists. I am looking forward to your continued support.

The Committee on Finance and Administration had worked hard for the smooth and stable operation of the Commission.

Mr. President, I would like to express my sincere gratitude to you, Capt. Mike Cerne, the Chair of the ENFO, Dr. Vladimir Karpenko, the Chair of the CSRS, and Mr. Kazuaki Tanaka, the Chair of the F&A for their excellent guidance and leadership.

I also would like to thank the distinguished delegates from member countries, the Executive Director Mr. Vladimir Fedorenko and his staff, and interpreters, who have devoted themselves to organizing and preparing this meeting.

My special thanks go to the Canadian people for their warm hospitality. I have no doubt that all the participants will always and very fondly remember our time at the Museum of Anthropology and in this beautiful city of Vancouver.

Finally, Mr. President, on behalf of the Korean delegation I wish everyone a safe trip home. Thank you.
Closing remarks by Mr. Koji Imamura (Japan)

Mr. President, fellow Representatives and Delegates, distinguished guests, ladies and gentlemen:

At the close of the Fourteenth Annual Meeting of the NPAFC, I would like to say a few words on behalf of the Japanese Delegation.

At this meeting we once again worked together and completed many tasks. Under the excellent chairmanship of the President Mr. Beaupre of Canada, we exchanged a great deal of useful information, and conducted serious discussions on some important matters. This has enabled us to deepen our mutual understanding, to reach agreements on various matters, and further enhance our cooperative relationship.

During this Annual Meeting, the substantive discussions were carried out at the three committees: I would like to express my deep and sincere appreciation for their tireless work, to Dr. Karpenko, Capt. Cerne, and Mr. Tanaka, the Chairpersons of CSRS, ENFO and F&A committees respectively, and their members who have put together their reports we just adopted.

As well, my heartfelt gratitude goes to Mr. Vladimir Fedorenko, the Executive Director who has once again accomplished a smooth and efficient operation of the meeting, and to all of his very able staff. I should also mention that Mr. Uoya is about to complete his last Annual Meeting in his capacity as the Deputy Director. He will go back to Japan in November. I trust he and his family have enjoyed their 3-year stay here in Vancouver.

Mr. President, you have accepted Dr. Urawa, again from Japan, to replace him. After a life dedicated to scientific research work, he will undoubtedly go through some learning phase, both professionally in his new position as Deputy Director of the NPAFC and personally in his new experience living in another country. I ask for the understanding and warm support for him of the Contracting Parties, and for the kind guidance and assistance from Mr. Fedorenko and Wakako-san, just as you all helped Mr. Uoya.

In closing I would like to thank the Canadian Government for their warm hospitality, and at the same time congratulate the interpreters for their excellent and professional work as usual. Let us meet again next year in Vladivostok.
Honorable President, honorable Parties’ Representatives, honorable Observers, ladies and gentlemen!

The Fourteenth Annual Meeting of the NPAFC is ending. We had a tight working schedule. Nevertheless we managed to discuss all the addressed issues and made several useful decisions. I highly value the results of activities along the BASIS program and it is pleasant to see the consent of Parties to go on with it in the future.

Population geneticists achieved significant progress nowadays. The genetic databases were created for North American and Asian stocks of sockeye, chum and chinook salmon, which enables us today to discern between individuals of different origin in mixed catches. The new format of Statistical Yearbook has been developed and discussed. The collaboration in salmon tagging activities will be continued. The state of salmon stocks is elucidated. In addition to agenda items we also informally discussed issues pertaining to pink salmon abundance, which is of importance for all Convention member countries.

Similar to previous practices, in 2006 Russian Federation was engaged in measures preventing Pacific salmon illegal fishing in the Convention Area. The major efforts were focused upon inspection of northwestern part of the Convention Area, providing for functioning and development of Integrated Information System of the Committee on Enforcement.

The Russian Federation supports concern of member countries, related to a possible increase of driftnet fisheries in the Convention Area and suggested to conduct collaborative inspections by Russian vessels and US and Canadian airplanes in the regions of expected driftnet fishing.

At the present moment there are several North Pacific organizations which study Pacific salmon, whereas only one carries out armed protection of salmon stocks. In relation to this I would allow myself to make a following forecast. I think that in the future the role of the Committee on Enforcement of the NPAFC will increase, as compared to the Committee on Scientific Research and Statistics. The issue of Pacific salmon stocks protection will become more important in the future.

In conclusion, I wish to thank Dr. Vladimir Karpenko for excellent guidance of the Committee on Scientific Research and Statistics, Mr. Kazuaki Tanaka for supervision of the Committee on Finance and Administration, and Capt. Mike Cerne for supervision of the Committee on Enforcement. I want to thank the Executive Director, Mr. Vladimir Fedorenko and the entire Secretariat for an excellent management of the meeting as well as for their work during the intersession period. I want to thank the interpreters, who performed their duties at a high professional level, as well as hotel personnel for technical assistance.

The forthcoming Fifteenth Annual Meeting of NPAFC will be held in Russia. I invite all of you to attend it during the second week of October (October 8-12). We will do our best to provide all of the meeting attendants with good conditions for work and accommodation, as well as good warm weather. I wish all of you a comfortable way back home.
Closing remarks by Dr. James Balsiger (United States)

Mr. President, Fellow Representatives, Distinguished Delegates and Observers, Ladies and Gentlemen:

This has been another memorable Annual Meeting for the United States delegation. It is always pleasant to visit Vancouver, and the proximity to the Secretariat offices provided a very convenient venue. Our friends from the Canadian Party have been wonderful hosts and have made our stay truly enjoyable.

We are pleased to be among the distinguished group of fisheries scientists and managers, enforcement professionals, and administrators gathered here this week. With everyone’s cooperation, the Commission has once again successfully completed its work and we have accomplished the goals we set for this meeting.

As to matters before the Committee on Finance and Administration, the United States commends the hard work of all the Parties. It appears that the NPAFC cannot proceed indefinitely without additional financial support from the Contracting Parties. We encourage the Parties to evaluate their options in a timely manner so that we may resolve the budget deficit before it actually impedes the work of the Commission. Finally, we support the recommendations, and commend the work of the committee, in developing changes to the rules of the Commission to make our work as transparent and accessible as possible. It appears that the subject of finding sources of external funds to support NPAFC research, while a good idea, will require more work to fully realize. The United States encourages the Parties to work intersessionally on a more specific plan to identify sources and strategies, as this information may be helpful to the CSRS.

The Committee on Enforcement had another very successful meeting. The Parties shared results of patrol efforts for 2006, highlighting an unprecedented level of cooperative and coordinated efforts. The Parties also agreed to put forth another strong enforcement presence in 2007, the details of which will be developed at the Enforcement Evaluation and Coordination Meeting (EECM) to be hosted by Korea next February. In addition, ENFO agreed in general terms to use Port State Control measures to combat IUU fishing for salmon in the Convention Area, and will look to develop more specific measures at the upcoming EECM. Progress was made on the Committee's enforcement website, IIS, where consensus was reached on Canada's proposal on how to manage the “Vessel of Interest” section. And finally, ENFO recommended the NPAFC invite the Western and Central Pacific Fisheries Commission to our next Annual Meeting, a recommendation the United States fully supports.

Regarding issues of the CSRS, a review of Pacific salmon production showed that total catches were at near record levels in 2005. This reflects generally healthy northern populations of Asian and North American salmon. At the same time, the United States has heightened concern about lower than expected returns of North American steelhead and some southern populations of salmon. Preliminary data from 2006 research vessel surveys indicated major ecological changes in North Pacific marine ecosystems, including poor ocean conditions for juvenile salmon in the eastern North Pacific and Gulf of Alaska in winter. The United States strongly supports the continuation of BASIS research, as well as the expansion of cooperative research to other North Pacific marine ecosystems. Better scientific information on salmon distribution and migration routes is also vital to enforcement activities in the Convention Area. The development and implementation of cooperative and well-coordinated research programs within the NPAFC forum continues to be the most economical, efficient, and effective method for addressing scientific issues of mutual concern. The United States Party thanks the other Parties for their efforts that have contributed greatly to rapid advancement of our scientific understanding of the important role of salmon in marine ecosystems. We look forward to continued international cooperation, as the CSRS plans and implements cooperative research under the 2006-2010 Science Plan.

We acknowledge the exemplary work of the Secretariat—Vladimir Fedorenko, Toshinori Uoya, Wakako Morris, in ensuring the success of this meeting. Their professional approach to the meeting has once again allowed us to complete our work on schedule.

Finally, without our interpreters, we would not be able to reach our conclusions. We owe much of the success of this Commission to their skills.

We wish you all a safe journey home and look forward to seeing you again at the NPAFC Fifteenth Annual Meeting in Vladivostok.
Dear Representatives, Delegates, and Special Guests:

This has been a most interesting and productive week. Once again our continuing cooperation and collective efforts have led to initiatives that will help conserve Pacific salmon.

I would like to suggest that we work to raise the profile of NPAFC to ensure that the public understands what we do and recognize the NPAFC as an effective organization and an authority on understanding and protecting Pacific salmon.

Through the efforts of ENFO on initiatives such as the development of an Integrated Information System we continue to enhance our enforcement efforts to fight illegal fishing of Pacific salmon. This is particularly important given the increase in suspect activity in the western Pacific as uncovered by our long range patrol aircraft this past month.

The CSRS continues its efforts on many fronts to enhance accessibility to research data and information and to further our collective understanding of Pacific salmon. One of the highlights this past year is that for the first time scientists now have some information on what conditions Pacific salmon are experiencing during the winter months.

I commend the important work that the ENFO and CSRS committees have both accomplished at our Annual Meeting. However, we must not forget the work of the Committee on Finance and Administration which provides the structure and financial components for effective operation of the NPAFC.

Mr. President, before closing I would like to acknowledge once more the useful presence of representatives of the various organizations that share our interests. I believe closer links and exchanges with these organizations will benefit our understanding of ecosystems and the challenges salmon, Pacific and Atlantic face in the marine environment.

Finally, I would like to again thank the members of the Secretariat for their hard work, their continued availability and efficiency throughout this week. And I hope you have enjoyed your stay in Vancouver.

I look forward to seeing all of you in Vladivostok, Russia.

Thank you.
PRESIDENTS

 Vyacheslav Zilanov  
 1993-1995

 Koji Imamura  
 1995-1997  
 2003-2005

 David Bevan  
 1997-1999

 Fran Ulmer  
 1999-2001

 Anatoly Makoedov  
 2001-2003

 Guy Beaupré  
 2005-Present
REPRESENTATIVES
(Participated at the Annual Meetings)

Canada 🇨🇦

Victor Rabinovitch 1993-1994
Darlene Weir 1993-1994
Garnet Jones 1993-1999
Gary Williamson 1994-1997

David Bevan 1996-2002
Gerry Kristianson 1997-Present
Russ Jones 1999-Present
Guy Beaupré 2002-Present

Japan 🇯🇵

Masahiro Ishikawa 1993-1994
Koji Imamura 1993-Present
Seiichi Yoshida 1994-1995
Satoshi Watanabe 1995-1997
Shuji Ishida 1997-1999
Ryozo Kaminokado† 1999-2000
Shiro Yuge 2000-2002
Tomofumi Kume 2004-2005
Yoshimi Suenaga 2005-2006
Daishiro Nagahata 2006-Present
†deceased

Republic of Korea

Joon Suk Kang 2003-2004
Bong Se Oh 2003-2004
Dong Yeob Yang 2003-2004
Chong Rak Park 2004-2005

Sukyung Kang 2004-Present
Yang Soo Kim 2004-2006
Yong Kuk Lee 2005-2006
Chiguk Ahn 2006-Present
COMMITTEE CHAIRPERSONS

CSRS Chairpersons

Leo Margolis†
1993-1996

Loh-Lee Low
1996-1997,
2003-2005

Oleg Gritsenko
1997-1999

Yukimasa Ishida
1999-2001

Richard Beamish
2001-2003

Vladimir Karpenko
2005-Present

†deceased

ENFO Chairpersons

Dennis Brock
1993, 1997-1999

Vladimir Izmailov
1994-1996

Satoshi Watanabe
1996-1997

Shuji Ishida
1997
Vincent O’Shea
1999-2001

Igor Rypalov
2001-2003

Takashi Kato
2003-2004

Akihiro Mizukawa
2004-2005

Koji Miyaura
2005

Mike Cerne
2005-Present

**F&A Chairpersons**

Richard Lauber
1993-1996

Vladimir Izmailov
1996-1997

Shuji Ishida
1997-1999
Ryozo Kaminokado†
1999

Aaron Sarna
1999-2000

Gerry Kristianson
2001

James Balsiger
2001-2003

Vladimir Shevlyakov
2003-2005

Koiji Miyaura
2005-2006

Kazuaki Tanaka
2006-Present

†deceased
SECRETARIAT

Executive Directors

Shigeto Hase
1993-1994
(Interim Executive Director)

Irina Shestakova
1994-1999

Vladimir Fedorenko
1999-Present

Deputy Directors

Wakako Morris
1993-1994
(Interim Deputy Director)

Hisashi Endo
1994-1997

Hiroko Omori
1997-2000

Yoshikiyo Kondo
2000-2003

Toshinori Uoya
2003-2006

Shigehiko Urawa
2006-Present
Administrative Officer

Wakako Morris
1994-Present

Secretaries

Heather Nevin
1993-1995

Marijke Nap
1995-1997

Denise McGrann-Pavlovic
1997-Present
 Meetings and Events - 15 Years of History

1992

February 11  Convention was signed in Moscow

1993

February 16  Convention entered into force

February 24  Inaugural Meeting of the Commission in Ottawa, Canada. Secretariat was established.

April 27–29  Meeting of the Sub-Committee of Enforcement in Vancouver, Canada

June 22–24  Inaugural Meeting of the Committee on Scientific Research and Statistics in Vladivostok, Russia

November 1–5  1st Annual Meeting of the Commission in Vancouver, Canada

1994

October 10–15  2nd Annual Meeting of the Commission in Vladivostok Russia
1995
March 6–10  Research Planning and Coordinating Meeting, Seattle, Washington, U.S.A.
November 5–10  3rd Annual Meeting of the Commission in Seattle, Washington, U.S.A.

1996
October 21–25  4th Annual Meeting of the Commission in Tokyo, Japan
October 28–29  International Symposium on Assessment and Status of Pacific Rim Salmon Stocks in Sapporo, Japan

1997
February 11  F&A Working Group Meeting in Vancouver, Canada
March 4–6  Research Planning and Coordinating Meeting (RPCM) in Vancouver, Canada
October 27–31  5th Annual Meeting of the Commission in Victoria, Canada

1998
March 24–25  Research Planning and Coordinating Meeting (RPCM) in Vancouver, Canada
March 26–27  Workshop "Climate change and Salmon Production" in Vancouver, Canada
November 1–6  6th Annual Meeting of the Commission in Moscow, Russia
<table>
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<tr>
<th>Year</th>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>1999</td>
<td>March 16–19</td>
<td>Enforcement Standardization Symposium in Kodiak, Alaska, U.S.A.</td>
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<td>March 24–26</td>
<td>Research Planning and Coordinating Meeting (RPCM) in Vancouver, Canada</td>
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<td>October 24–29</td>
<td>7th Annual Meeting of the Commission in Juneau, Alaska, U.S.A.</td>
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<td>November 1–2</td>
<td>International Symposium &quot;Recent Changes in Ocean Production of Pacific Salmon&quot; in Juneau, Alaska, U.S.A.</td>
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<td>2000</td>
<td>March 1–3</td>
<td>Enforcement Planning and Coordinating Meeting (EPCM) in Tokyo, Japan</td>
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<tr>
<td></td>
<td>March 27–28</td>
<td>Research Planning and Coordinating Meeting (RPCM) in La Jolla, California, U.S.A.</td>
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<td>October 29</td>
<td>International Workshop &quot;Factors Affecting Production of Juvenile Salmon: Comparative Studies on Juvenile Salmon Ecology between the East and West North Pacific Ocean&quot; in Tokyo, Japan</td>
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<td>October 30–November 2</td>
<td>8th Annual Meeting of the Commission in Tokyo, Japan</td>
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<tr>
<td></td>
<td>March 21</td>
<td>International Workshop on Salmonid Otolith Marking in Seattle, Washington, U.S.A.</td>
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<tr>
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<td>May 14–17</td>
<td>Enforcement Evaluation and Coordination Meeting (EECM) in Petropavlovsk-Kamchatsky, Russia</td>
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October 28–November 2  
9th Annual Meeting of the Commission in Victoria, Canada

2002

March 12–13  
Research Planning and Coordinating Meeting (RPCM) in Vancouver, Canada

March 14–15  
Joint Meeting of IBSFC, ICES, NASCO, NPAFC, PICES on "Causes of Marine Mortality of Salmon in the North Pacific and North Atlantic Oceans and in the Baltic Sea" in Vancouver, Canada

May 7–9  
Enforcement Evaluation and Coordination Meeting (EECM) in Kodiak, Alaska, U.S.A.

May 27–29  
Bering-Aleutian Salmon International Survey (BASIS) Working Group Meeting in Vladivostok, Russia

October 6–11  
10th Annual Meeting of the Commission in Vladivostok, Russia

2003

May 21–22  
Enforcement Evaluation and Coordination Meeting (EECM) in Queen Charlotte City, B.C., Canada

May 29–30  
Research Planning and Coordinating Meeting (RPCM) in Seattle, Washington, U.S.A.

May 30  

October 23–31  
11th Annual Meeting of the Commission in Honolulu, Hawaii, U.S.A.

November 1–2  
International Workshop on "Application of Stock Identification in Defining Marine Distribution and Migration of Salmon" in Honolulu, Hawaii, U.S.A.
### 2004

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<td>May 12–13</td>
<td>Research Planning and Coordinating Meeting (RPCM) in Petropavlovsk-Kamchatsky, Russia</td>
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<tr>
<td>May 14</td>
<td>Bering-Aleutian Salmon International Survey (BASIS) Working Group Meeting in Petropavlovsk-Kamchatsky, Russia</td>
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<tr>
<td>May 26–27</td>
<td>Enforcement Evaluation and Coordination Meeting (EECM) in Kushiro City, Hokkaido, Japan</td>
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<td>October 24–29</td>
<td>12th Annual Meeting of the Commission in Sapporo, Hokkaido, Japan</td>
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<td>October 30–31</td>
<td>International Workshop &quot;BASIS-2004: Salmon and Marine Ecosystems in the Bering Sea and Adjacent Waters&quot; in Sapporo, Hokkaido, Japan</td>
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### 2005

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<tr>
<td>April 21–22</td>
<td>Research Planning and Coordinating Meeting (RPCM) in Nanaimo, B.C., Canada</td>
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<tr>
<td>May 18–19</td>
<td>Enforcement Evaluation and Coordination Meeting (EECM) in Vladivostok, Russia</td>
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<td>October 24–28</td>
<td>13th Annual Meeting of the Commission in Seogwipo, Jeju Island, Korea</td>
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<td>October 30–November 1</td>
<td>NPAFC-PICES Joint Symposium &quot;The status of Pacific salmon and their role in North Pacific marine ecosystems&quot; in Seogwipo, Jeju Island, Korea</td>
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### 2006

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<td>February 28–March 1</td>
<td>Enforcement Evaluation and Coordination Meeting (EECM) in Juneau, Alaska, USA</td>
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<td>March 2</td>
<td>Enforcement Symposium in Juneau, Alaska, USA</td>
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<tr>
<td>April 24–25</td>
<td>Research Planning and Coordinating Meeting (RPCM) in Sapporo, Hokkaido, Japan</td>
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October 23–27  14th Annual Meeting of the Commission in Vancouver, B.C., Canada

**Events**

July 1994, H. Endo takes office as Deputy Director.
December 1997, H. Omori takes office as Deputy Director.
November 6, 1998 - NPAFC and PICES sign MOU.
July 1999, V. Fedorenko takes office as Executive Director.
December 2000, Y. Kondo takes office as Deputy Director.
October 2001 - Plan for NPAFC Bering-Aleutian Salmon International Survey (BASIS) in 2002-2006 was presented.
May 27, 2003 - Republic of Korea became the fifth member of the Commission.
December 2003, T. Uoya takes office as Deputy Director.
October 2004, the NPAFC Public Lecture "Pacific Salmon a Gift from the Sea" took place in Sapporo, Hokkaido, Japan
October 2005, New NPAFC Science Plan 2006-2010 was approved
December 2006, S. Urawa takes office as Deputy Director.
## APPENDIX 1

### NPAFC 2006 ENFORCEMENT SCHEDULE

(As at March 1, 2006)

<table>
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<th>2006</th>
<th>March</th>
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- Aircraft
- Cutters
APPENDIX E: Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing

In developing this Model Scheme, Members,
Concerned that illegal, unreported and unregulated (IUU) fishing continues to persist;

Emphasizing that effective action by port States is required to prevent, deter and eliminate IUU fishing;

Noting that the relevant international instruments call for port States to establish measures to promote the effectiveness of subregional, regional and global conservation and management measures;

Recognizing that the Code of Conduct for Responsible Fisheries and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, promote the use of measures for port State control of fishing vessels in order to meet the objectives of the Code and the Plan of Action;

Desiring to achieve co-operation and co-ordination in fisheries-related port State control in accordance with international law;

Emphasizing the need for non-Members and fishing entities to take action consistent with this Model Scheme;

should be guided by the following:

General
1. In this Model Scheme,

1.1 references to ports include offshore terminals and other installations for landing, transshipping, refuelling or re-supplying, and

1.2 references to fishing vessel includes any vessel used or intended for use for the purpose of fishing, including support ships, carrier vessels and any other vessels directly involved in such fishing operations.

2. A Port State should:

2.1 give effect to the provisions of the present Model Scheme and the Annexes thereto, which constitute an integral part of the Model Scheme;

2.2 maintain an effective system of port State control for foreign fishing vessels calling at its port, with a view to promoting the effectiveness of relevant [1] conservation and management measures;

2.3 designate and publicize ports to which foreign fishing vessels may be permitted access and ensure that these ports have the capacity to conduct port State inspections;

2.4 require, prior to allowing port access to a foreign fishing vessel, that the vessel provides a reasonable advance notice prior to entering its port or its EEZ for the purpose of port access, which includes, with due regard to confidentiality requirements, vessel identification, the authorization(s) to fish, information on its fishing trip and vessel monitoring systems, quantities of fish on board and other documentation, as described in Annex A;

2.5 not allow a vessel to use its ports for landing, transshipping or processing fish if the vessel which caught the fish is entitled to fly the flag of a State that is not a contracting or cooperating party of a regional
fisheries management organization or has been sighted as being engaged in, or supporting, IUU fishing activities in the area of that particular regional fisheries management organization or in the waters under the jurisdiction of a relevant coastal State, unless the vessel can establish that the catch was taken in a manner consistent with the relevant conservation and management measures;

2.6 where there are clear grounds for believing that a fishing vessel has engaged in or supported IUU fishing in waters beyond the limits of its fisheries jurisdiction, refuse to allow the vessel to use its port for landing, transshipping, refuelling or re-supplying;

2.7 not allow a vessel to use its ports for landing or transshipment where it has been established that the vessel is identified by a regional fisheries management organization as engaging in, or supporting, fishing activities in contravention with its conservation and management measures;

2.8 ensure that port State inspections take place in accordance with Annex B[2] and obtain, in the course of such inspections, at least the information listed in Annex C; and

2.9 consult, cooperate and exchange information with [other States] in order to facilitate the implementation of this Model Scheme.

**Inspections**

3. In implementing this Model Scheme, each port State should:

3.1 carry out inspections of foreign fishing vessels in its ports for the purpose of monitoring compliance with relevant[3] conservation and management measures;

3.2 ensure that inspections are carried out by properly qualified persons authorized for that purpose, having regard in particular to Annex D;

3.3 ensure that, prior to an inspection, inspectors are required to present to the master of the vessel an appropriate identity document;

3.4 ensure that an inspector can examine any areas of the fishing vessel that is required, the catch (whether processed or not), the nets and any other gear, equipment, and any document which the inspector deems necessary to verify compliance with relevant [4] conservation and management measures;

3.5 ensure that the master of the vessel is required to give the inspector all necessary assistance and information, to present relevant material and documents as may be required, or certified copies thereof;

3.6 subject to appropriate arrangements with the flag State of a vessel, invite the flag State to participate in the inspection;

3.7 make all possible efforts to avoid unduly delaying a vessel and ensure that the vessel suffers the minimum interference and inconvenience and that degradation of the quality of the fish is avoided;

3.8 ensure that an inspector is accompanied, where possible and where needed, by an interpreter of the language of the inspected foreign fishing vessel;

3.9 ensure that inspections are not conducted in a manner that would constitute harassment of any fishing vessel; and

3.10 ensure that the result of a port inspection is presented to the master of the vessel and that the report is completed and signed by the inspector and the master. The master should be given the opportunity to add any comment to the report and to contact the relevant authorities of the flag State, in particular when
(s)he has serious difficulties in understanding the contents of the report.

**Actions**

4. When, following an inspection, an inspector finds that there is reasonable evidence for believing that a foreign fishing vessel has engaged in, or supported, IUU fishing activities which include, but are not limited to, the following:[5]

a) fishing without a valid licence, authorization or permit issued by the flag State or the relevant coastal State;

b) failing to maintain accurate records of catch and catch-related data;

c) fishing in a closed area, fishing during a closed season or without, or after attainment of a quota;

d) directed fishing for a stock which is subject to a moratorium or for which fishing is prohibited;

e) using prohibited fishing gear;

f) falsifying or concealing the markings, identity or registration of the vessel;

g) concealing, tampering with or disposing of evidence relating to an investigation;

h) conducting multiple violations which together constitute a serious disregard of relevant conservation and management measures;

i) failure to comply with Vessel Monitoring Systems (VMS) requirements; and

j) taking or landing undersized fish in contravention with relevant conservation and management measures;

then the port State should promptly notify the flag State of the vessel and, where appropriate, the relevant coastal States and regional fisheries management organizations.[6]

5. The port State should take due note of any reply or any actions proposed or taken by the flag State of the inspected vessel.[7] Unless the port State is satisfied that the flag State has taken or will take adequate action, the vessel should not be allowed to land or transship fish in its ports. The port State may take other actions with the consent of, or upon the request of, the flag State.

**Information**

6. The port State should report on the results of its inspections under this Model Scheme to the flag State of the inspected vessel, and other relevant States, and to relevant regional fisheries management organizations.

7. The port State should establish a communication mechanism that allows for direct, computerized exchange of messages between relevant States, entities and institutions, with due regard to appropriate confidentiality requirements.

8. The port State should handle the information in a standardized form and in accordance with Annex D.

**Others**

9. Nothing in this Model Scheme should prevent any fishing vessel from being allowed port access in accordance with international law for reasons of force majeure or distress or for rendering assistance to persons, ships or aircraft in danger or distress.
10. Nothing in this Model Scheme affects the exercise by States of their sovereignty over ports in their territory in accordance with international law.

11. All measures provided for under this Model Scheme and any additional related measures, should be taken and applied in accordance with international law.

12. All measures provided for under this Model Scheme should be implemented in a fair, transparent and non discriminatory manner.

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Annex A

Information to be provided in advance by foreign fishing vessels

1. **Vessel identification**
   - Name of the vessel;
   - External Identification Number;
   - International Radio Call Sign;
   - Flag State;
   - Vessel owner (name and address of the vessel owner);
   - Type of VMS required by the Flag State; and
   - Previous Names(s) and Flag State(s), if any.

2. **Purpose of access to port**

3. **Fishing authorization (licenses/permits)**
   - The vessel's authorization(s) to fish;
   - State(s) issuing the authorization(s);
   - Areas, scope and duration of the authorization(s);
   - Species and quota authorized; and
   - Fishing gear authorized.

4. **Trip information**
   - Date trip commenced (date when the current trip started);
   - Areas visited (entry and exit from different areas);
   - Ports visited (entry into and exit from different ports); and
   - Date trip ended (date when the current trip ended).

5. **Species Information**
   - Fish species and fishery products onboard, particularly those to be landed;
   - Areas of capture;
   - Presentation (product form);
   - Processed weight; and
Annex B

Port State Inspection Procedures of Foreign Fishing Vessels

1. Vessel identification

The port inspector(s) should:

a) verify that the official documentation onboard is valid, if necessary, through appropriate contacts with the flag State or international records of fishing vessels;

b) be assured that the flag, the external identification number (and IMO ship identification number when available) and the international radio call sign are correct;

c) examine whether the vessel has changed flag and, if so, note the previous name(s) and flag(s);

d) note the port of registration, name and address of the owner (and operator if different from the owner) and the name of the master of the vessel, including the unique ID for company and registered owner if available; and

e) note name(s) and address(es) of previous owner(s), if any.

2. Authorization(s)

The port inspector(s) should verify that the authorization(s) to fish or transport fish and fishery products are compatible with the information obtained under paragraph 1 and examine the duration of the authorization(s) and their application to areas, species and fishing gear.

3. Other documentation

The port inspector(s) should review all relevant documentation which may include various logbooks, in particular the fishing logbook, as well as stowage plans and drawings or descriptions of fish holds if available. Such holds or areas may be inspected in order to verify whether their size and composition correspond to these drawings or descriptions and whether stowage is in accordance with the stowage plans. Where available, this documentation should also include catch documents issued by any regional fisheries management organization, trade documents or, if applicable, CITES documents.

4. Fishing gear

a) The port inspector(s) should verify that the fishing gear on board is in conformity with the conditions of the authorization(s). The gear may also be checked to ensure that the mesh size(s) (and possible devices), length of nets,
hook sizes etc. are in conformity with applicable regulations and that identification marks of the gear correspond to those authorized for the vessel.

b) The port inspector(s) may also search the vessel for any fishing gear stowed out of

5. Fish and fishery products

a) The port inspector(s) should, to the greatest extent possible, examine whether the fish and fishery products on board are harvested in accordance with the conditions set out in the authorization. In doing so, the port inspector(s) should examine the fishing logbook, reports submitted, including those resulting from a vessel monitoring system (VMS), as appropriate.

b) In order to determine the quantities and species which are fresh on ice, frozen by not packed, processed, packed or in bulk, the port inspector(s) may examine the fish in the hold or during the landing. In doing so, the port inspector(s) may open cartons where the fish has been pre-packed and move the fish or cartons to ascertain the integrity of fish holds.

c) If the vessel is unloading, the port inspector(s) may, to the greatest extent possible, verify the species and quantities landed. Such verification may include presentation (product form), live weight (quantities determined from the logbook) and the conversion factor used for calculating processed weight to live weight. The port inspector(s) may also examine any possible quantities retained onboard.

d) If the port inspector(s) has reasonable grounds to believe that a vessel has engaged in, or supported IUU fishing, the port inspector(s) should as soon as possible contact the flag State authorities to verify whether the fish and fishery products have been harvested or collected in the areas as recorded in the relevant documents. To this effect, the port inspector(s) may also review the quantity and composition of all catch onboard, including by sampling.

6. Report

The result of the port State inspection should be presented to the master of the vessel and a report should be completed, signed by the inspector and the master. The master should be permitted the opportunity to add any comments to the report.

Annex C

Results of Port State Inspections

Results of port State inspections shall include at least the following information:

1. Inspection references
   - inspecting authority (name of inspecting authority or the alternate body nominated by the authority);
• name of inspector;
• port of inspection (place where the vessel is inspected); and
• date (date the report is completed).

2. **Vessel identification**

• name of the vessel;
• type of vessel;
• external identification number (side number of the vessel) and IMO-number (if available) or other number as appropriate;
• international Radio Call Sign;
• MMSI-number (Maritime Mobile Service Identity number), if available;
• flag State (State where the vessel is registered);
• previous name(s) and flag(s), if any;
• whether the flag State is party to a particular regional fisheries management organization;
• home port (port of registration of the vessel) and previous home ports;
• vessel owner (name and address of the vessel owner);
• vessel operator responsible for using the vessel if different from the vessel owner;
• name(s) and address(es) of previous owner(s), if any; and
• name and certificate(s) of master.

3. **Fishing authorization (licenses/permits)**

• the vessel's authorization(s) to fish;
• State(s) issuing the authorization(s);
• areas, scope and duration of the authorization(s);
• species and fishing gear authorized; and
• transshipment records and documents (where applicable).

4. **Trip information**

• date trip commenced (date when the current trip started);
• areas visited (entry and exit from different areas);
• areas where fish and fishery products were captured or collected;
• ports visited (entry into and exit from different ports); and
• date trip ended (date when the current trip ended).

5. **Result of the inspection on discharge**

• start and end (date) of discharge;
• fish species;
• presentation (product form);
• live weight (quantities determined from the log book);
• relevant conversion factor;
• processed weight (quantities landed in equivalent live weight, as “product weight multiplied with the conversion factor”); and
• intended destination of fish and fishery products discharged.

6. **Quantities retained on board the vessel**

• fish species;
• presentation (product form);
• relevant conversion factor;
• processed weight; and
• equivalent live weight.

7. Results of gear inspection

• details of gear type inspected and attachments, if any.

8. Conclusions

• conclusions of the inspection including identification of the violations presumably committed and reference to the rules which have been presumably not complied with.

Annex D

Training of Port State Inspectors

Elements of a training programme of port State inspectors should at least include the following:

1) Training in inspection procedures

2) Provision of information on relevant conservation and management measures, as well as relevant laws and regulations and applicable rules of international laws;

3) Information sources, such as log books and other electronic information that may be useful for the validation of information given by the master of the vessel;

4) Fish species identification and measurement calculation;

5) Catch landing monitoring, including determining conversion factors for the various species and products;

6) Vessel boarding/inspection, hold inspections and calculation of vessel hold volumes; gear measurements and inspections;

7) Collection, evaluation and preservation of evidence;

8) Range of measures available following the inspection; and

9) Training in relevant languages, particularly English.
Information System on Port State Inspections

1. Computerized communication between States as well as between States and relevant regional fisheries management organizations would require the following:
   - data characters;
   - structure for data transmission;
   - protocols for the transmission; and
   - formats for transmission including data element with a corresponding field code and a more detailed definition and explanation of the various codes.

2. International agreed codes shall be used for the identification of the following items:
   - states: 3-ISO Country code;
   - fish species: FAO 3-alpha code;
   - fishing vessels: FAO alpha code;
   - gear types: FAO alpha code;
   - devices/attachments: FAO 3-alpha code; and
   - ports: UN LO-code.

3. Data elements shall at least include the following:
   - Inspection references;
   - Vessel identification;
   - Fishing authorization(s) (licenses/permits);
   - Trip information;
   - Result of the inspection on discharge;
   - Quantities staying on board the vessel;
   - Result of gear inspection;
   - Irregularities detected;
   - Actions taken; and
   - Information from the flag State.
APPENDIX 3

RUSSIAN NATIONAL RESEARCH PLAN 2006-2007

1. NPAFC 5-year science plan (2006-2010) research component “Anadromous Stocks in the Bering Sea Ecosystem (BASIS)”. Research sub-theme “Bering Sea Salmon Research”

Offshore life history of juvenile salmon will be studied in the western Bering Sea. Distribution, migration, abundance, and biological data of salmon juveniles were collected by research vessels, and would be analyzed retrospectively from 1981. These data will be used for estimation abundance of pink, chum and sockeye salmon in 2006 brood and latter.

During summer and autumn information on distribution, migration, stock composition, abundance, and biological characteristics of adult and immature salmon will be collected in the Russian EEZ of the Bering Sea. These data are required for fishery management. Also, meteorological and oceanographic data will be collected during the surveys.

Feeding of Pacific salmon will be studied during summer and fall period in the western Bering Sea. Data will be collected during these surveys on the other fishes of the pelagic community. A comparison between salmon and other pelagic fishes of the consumption rates of plankton and micronekton animals will help to estimate the place of salmon in the trophic structure of pelagic ecosystems.

Research on nekton communities' composition and structure in the upper epipelagic layer of the western Bering Sea during the summer-autumn period of 2006 will be conducted. Research on key features of salmon spatial distribution, abundance and biomass estimates for different salmon species and major nekton species from salmon environment will be carried out. Salmon and major nekton species seasonal and interannual feeding behavior will be studied. Investigation on intra- and interspecific food competition of salmon and predation on salmon will be fulfilled. Overall estimates of plankton resources and production will be made. Estimates of consumption of salmon prey organisms by nekton and carnivorous plankton species in the western Bering Sea will be achieved. Traumatization and infestation of the Pacific salmon in the western Bering Sea and adjacent Pacific waters will be analyzed. The spatial distribution of injured and infected individuals will be reviewed in the context of species- and age-specificity. Salmon tagging research activities will be continued. Bioenergetics studies on salmon diets are also expected to be continued. Further improvement of salmon and other nekton species stock assessment and trawling techniques is expected. Also studies on measurements of fishing gear selectivity and catchability of Pacific salmon are anticipated.

A 24-hour trawling stations will be conducted for different water strata in order to clarify daily dynamics Pacific salmon vertical distribution. These stations are planned to be carried out in the waters off Navarin Peninsula.

2. NPAFC 5-year science plan (2006-2010) research component “Juvenile Anadromous Stocks in Ocean Ecosystems”. Research sub-theme “Juvenile Salmon Research in Western North Pacific Waters”

Coastal and offshore life history of juvenile salmon in some selected areas (western Bering Sea, eastern, northern and southern Okhotsk Sea) will be studied. Environmental, feeding, and food competition data will be collected in the main coastal areas off Sakhalin, Kamchatka, and in the northern Sea of Okhotsk during spring-summer-fall season. Seasonal distribution, migration, population characteristics, and survival juvenile salmon will be estimated using various methods. Abundance of migrants in different zones, marking, scale and parasite analyses will be carried out. Stocks abundance, habitat conditions, feeding and trophic interactions of salmon juveniles and others species will be studied. Thermal and “dry” marking programs will be continued at hatcheries in the northern Okhotsk Sea region, Sakhalin and Kamchatka. Return of marked juvenile and maturing fish will be monitored. In Kamchatka region, methods of thermal and “dry” otolith marking will be used for studies on distribution and migration of juvenile and adult sockeye salmon, as well as for reproduction efficiency estimates both for artificial reproduction.

On juvenile salmon abundance distribution throughout the Bering Sea and southern Okhotsk Sea, evaluation of environmental foraging conditions (hydrological and hydrobiological), overall abundance estimates, feeding behavior peculiarities, trophic relationships of juveniles, salmon stock identification during the period of seaward migrations will be studied.
Primary production and salmon food resources in different salmon habitat: rivers, lakes, estuaries, coastal and offshore waters, will be estimated. These investigations will be based on the study of main reproduction basins of Pacific salmon in Far East.

3. NPAFC 5-year science plan (2006-2010) research component “Anadromous Stocks in the Western Subarctic Gyre and Gulf of Alaska Ecosystems”. Research sub-theme “Anadromous Stocks in the Western Subarctic Gyre”

The fulfillment of trawl survey in 2006 on Pacific salmon abundance and ecology in the Bering Sea and adjacent North Pacific waters is planned in accordance with comprehensive ecosystem Russian research plans.

The major purpose of these studies is the detection and interpretation of ion of environmental variation and density-dependence mechanisms that influence salmon carrying capacity in the North Pacific waters and their relevance for conservation and rational exploitation of salmon stocks. In 2006 the studies on salmon distribution, salmon food selectivity, dependence of salmon feeding on biomass and composition of plankton and nekton communities, changes of biological condition of salmon during the anadromous migrations and foraging, salmon spatial differentiation, structure of stocks contributing to the mixture and the influence of abiotic environment upon the salmon quantitative allocation and migrations are planned. The major objectives of these studies include: 1) determination of the current state of Pacific salmon in the pelagic ecosystems of the Pacific waters of Kuril Islands; 2) elucidation of Pacific salmon position and role in the trophic structure of the epipelagic zone; 3) evaluation of pelagic ecosystems status, as well as oceanic and overall ecological conditions in the Pacific waters of Kuril Islands during summer of 2006. The further development and application of ocean trawl survey techniques to successfully forecast salmon catches and returns to spawning streams are anticipated.
APPENDIX 4

REQUESTS FOR SAMPLES

JAPAN:

Japan requests the following samples for genetic stock identifications.

From Canada:
- tissue or extracted DNA samples of chum salmon stocks which are missing from the present mtDNA baselines.
- tissue or extracted DNA samples from representative pink salmon stocks in Canada

From Russia:
- frozen allozyme (liver, heart, and muscle) samples from approximately 500 juvenile chum salmon caught in the Okhotsk Sea in the fall of 2005 with catch and biological information of these samples.
- tissue samples from Russian representative chum salmon stocks which are missing from the present mtDNA baselines.
- tissue samples from representative pink salmon stocks in Russia.

From the United States:
- tissue or extracted DNA samples of chum salmon stocks which are missing from the present mtDNA baselines.
- tissue or extracted DNA samples from representative pink salmon stocks in the United States.

KOREA:

From Russia: Tissue samples and biological information of:
Chum Salmon: 100 fishes from each river, 2005
Amur River
Eastern Sakhalin – 1 river
Western Sakhalin – 1 river
Eastern Kamchatka – 1 river
Western Kamchatka – 1 river

RUSSIA:

From Canada: Scale Prints and Biostatistics of:
Chum Salmon: 100 fishes from each river, 2002-2005
Stikine River
Nass River
Skeena River
Nimpkish River
Fraser River
Queen Charlotte Island – 1 river
West Vancouver Island
East Vancouver Island

**From Japan:** Scale Prints and Biostatistics of:

**Chum salmon:** 200 fishes from each following river, 2002-2005
- Abashiri River
- Chitose River
- Gakko River
- Ishikari River
- Kushiro River
- Miomote River
- Nishibetsu River
- Shari River
- Shibetsu River
- Teshio River
- Tokachi River
- Tokoro River
- Tokushibetsu River
- Tsugaruishi River
- Yurappu River

**From the United States:** Scale Prints and Biostatistics of

**Chum salmon:** 200 fishes from each river, 2002-2005

**West Alaska**
- Yukon River, summer run
- Yukon River, fall run
- Kuskokwim River

**Bristol Bay**
- Togiak River
- Nushagak River
- Egegik River
- Alagnak River
- Meshik River
- Nelson River

**North Alaska Peninsula**
- 2 rivers

**South Alaska Peninsula**
- 2 rivers

**Kodiak Island**
- 2 rivers

**Central Alaska**
- Sustina River

**Prince William Sound**
- 2 rivers

**Southeast Alaska**
- Alsek River
- Taku River
- 2 rivers from Prince of Wales Island

**Washington and Oregon State**
- Puget Sound - 2 rivers

**Sockeye salmon:** 2004-2005

**Port-Moller** – 600-800 fishes

**Rivers of Alaska Peninsula**
- 3-4 rivers – 400-600 fishes from each river

**Kodiak Island**
- 5-6 rivers – 400-600 fishes from each river

**Coho Salmon:** 100-150 fishes, 2003-2005

**Bristol Bay**
- Nushagak River
United States:

All samples requested should simply be fin clips stored in alcohol at room temperature for DNA analysis.

From Canada:
For BASIS purposes State of Alaska requests samples of 100 individuals from each of approximately 20 populations of sockeye, chum, Chinook, and coho salmon. Canada may select the actual populations 1) based upon availability of high quality tissues and 2) to provide a data base representative of Canadian diversity to enable identification of Canadian stocks in BASIS cruises as well as western Alaskan and Bering Sea fisheries.

From Japan:
State of Washington requests samples of Hokkaido chum salmon to investigate possible impacts of the historical stocking of these stocks into Washington drainages.

From Russia:
Samples from chum salmon populations, after they are analyzed in a Russian laboratory, ensuring that appropriate data are represented in USA baselines for Eastern Bering Sea studies.

From Russia and Japan:
- if easily possible from BASIS cruises in 2006—samples from 60 Chinook, chum, and sockeye salmon as available from each BASIS station.
- return heads of all salmon and steelhead lacking the adipose fin that are caught during salmon research cruises in Convention and adjacent waters.
## APPENDIX 5

### LIST OF DRIFTNET VESSELS

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Movement of Vessel | Sailing
Photo | Photo No.7
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Movement of Vessel | Fishing
Photo | Photo No.9
APPENDIX 6

REPORT FROM TAIWAN

Pursuant to the United Nations General Assembly (UNGA) Resolutions on prohibiting driftnet fishing on the high seas, Taiwan has been undertaken measures to prohibit Taiwanese vessels from engaging in the activities of driftnet fishing in North Pacific Ocean since 1993, including dispatch patrol vessels to North Pacific Ocean to monitor fishing activities of Taiwanese vessels.

It is noted that there is no Taiwanese vessels engaging in driftnet fishing activities in North Pacific Ocean after 1993, but Taiwan still has continued to send patrol vessels to North Pacific Ocean to examine whether its nationals have involved in the driftnet fishing activities of the vessels flew the flag of other country.

To further promote the exchange of information on monitoring activities in North Pacific Ocean, early this year, Taiwan has provided the Secretariat of NPAFC with the information on Taiwan monitoring operation plan in 2006 before patrol vessels from Taiwan’s Coast Guard Administration departing for North Pacific Ocean.

Taiwan has sent three patrol vessels for monitoring operation in the area of 35°-45°N, 145°–180°E from June 14 to November 5 of this year. The patrol day will be 242 days shown as table 1.

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<td>10 Aug.~19 Sep.</td>
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</tr>
<tr>
<td></td>
<td>E145°~160°</td>
<td>26 Sep.~5 Nov.*</td>
<td>41</td>
</tr>
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</table>

On August 23 of this year, one of our patrol boat, “Hsun Hu No.2”, sighted a driftnet fishing vessel named “Meriyana” at 42°11’N, 158°27’E in North Pacific Ocean. Vessel “Meriyana” does not fly any flag, neither the registration port nor the radio call sign. On October 16, our another patrol vessel “Hsun Hu No.3” sighted 2 unknown driftnet fishing vessels at 41°26’N, 150°55’E at around 10:30. On that day, “Hsun Hu No.3” also sighted 2 driftnet fishing vessels “東遠漁62602號- Don Yuan Yu No.62602（transliteration）” and “東遠漁66021號- Don Yuan Yu No.66021（transliteration）” at 41°21.5’N, 150°48.1’E at around 11:40. On October 17 the official from Fisheries Agency of Taiwan sent e-mail to members of NPAFC, informing the above two cases.

To prevent our flagged vessels and our nationals from engaging in driftnet fishing activities in North Pacific Ocean, Taiwan will continue to implement existing management measures. Besides, as the high sea driftnet fishing is regarded as an international illegal activity, Taiwan will keep cooperating and exchanging information with all concerned countries.
The driftnet vessel “Meriyana” sighted at 42°11’N, 158°27’E on 23 August 2006.
APPENDIX 7

TERMS OF REFERENCE FOR IIS VESSELS OF INTEREST

Definition:
A vessel of interest is defined as a vessel that has been sighted in the Convention area and that:

- a) Is engaged in fishing, or supporting fishing activity, that could adversely affect the conservation of anadromous stocks within the Convention Area, or
- b) Appears to be equipped with driftnet gear, or
- c) Is reasonably suspected of having engaged in fishing that could adversely affect the conservation of anadromous stocks within the Convention Area, or
- d) Has previous history of fishing activity or supporting fishing activity that is contrary to the Convention.

1. Any NPAFC member country may place a vessel on the “Vessel of Interest” list.
2. NPAFC members will provide as much information as possible when placing a vessel on the “Vessel of Interest” list.
3. Other NPAFC members who may have more information on the “Vessel of Interest” shall add the information to the “Vessel of Interest” entry.
4. When a vessel is listed as a “Vessel of Interest” listing country will provide the reasons why the vessel is of interest.
5. For vessels belonging to NPAFC member countries, once the reasons for the vessel being placed on the list is resolved to the satisfaction of the listing party the member country of registry may request the vessel be removed from the list.
6. If there is no evidence if IUU fishing and the member country of registry has requested that the vessel be removed from the list, the vessel will be removed.
7. Any vessel which has been apprehended for violating the convention, has been tried and convicted or is currently prevented from conducting further fishery operations to prevent further violations of the convention shall remain on the list.
8. Vessels not registered to member countries which have been placed on the “Vessel of Interest” list shall remain on the list until the listing member removes it from the “Vessel of Interest” list.
### 5-Year Plan for Workshops and Symposia

<table>
<thead>
<tr>
<th>Year</th>
<th>Season</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td>No workshops/symposia scheduled</td>
</tr>
<tr>
<td>2008</td>
<td>Autumn</td>
<td>BASIS Symposium (in U.S.A., in conjunction with (before) the Annual Meeting. Proceedings will be published in an NPAFC Bulletin.)</td>
</tr>
<tr>
<td>2009</td>
<td>Spring</td>
<td>One-day workshop on methodological advances in Pacific salmon research and return forecasting (in conjunction with 2009 RPCM).</td>
</tr>
<tr>
<td>2010</td>
<td>Spring</td>
<td>Joint Symposium with NASCO and others (somewhere in Europe)</td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td>No workshops/symposia scheduled.</td>
</tr>
</tbody>
</table>

*This is only for planning purposes. Financial implications and other related matters should be fully considered before making an official decision of holding each event.*
APPENDIX 9

PROPOSAL TO DEVELOP A COMPREHENSIVE GENETIC BASELINE FOR STEELHEAD
(Oncorhynchus mykiss)

submitted to the
Ad hoc Working Group on Stock Identification

at the
NPAFC 14th Annual Meeting
by the U.S. Delegation

The Problem

In the western United States, steelhead (Oncorhynchus mykiss) are highly valued by sportsmen and Native American Tribes. The United States government has identified 15 distinct population segments of steelhead in the states of Washington, Oregon, Idaho, and California. The federal government considers 11 of those population segments to be at risk to one degree or another. In light of these concerns, United States taxpayers are spending tens of millions of dollars protecting and restoring spawning and rearing habitat for these fish. Even so, adult returns in a number of areas have recently been lower than expected, and we do not fully understand why. Our citizens want, and justifiably expect, us to apply the appropriate technical tools to the task of returning endangered and threatened steelhead populations to healthy numbers.

Gaps in our knowledge of steelhead biology impede our steelhead stock recovery efforts. Interactions between, and comparative performance of, naturally produced and hatchery produced steelhead are of particular interest in our area. The primary focus of current recovery efforts for O. mykiss populations attempt to address limiting factors during the freshwater phases of their life cycle; however, anadromous salmonid populations can be exposed to substantial decimating factors during their marine residence. A better understanding of how warming of the North Pacific sea surface affects the marine distribution and survival of specific steelhead stocks might allow us to evaluate or adjust our stock rebuilding and recovery strategies or goals. Although high-seas surveys have revealed the broad distribution of steelhead in the open ocean, the current survey gear may not provide reliable presence/absence assessments in an area for steelhead. Furthermore, individuals from few North American populations are tagged so we are unable to identify the stock-of-origin of most steelhead when they are encountered in the ocean. Consequently, we know very little about the oceanic distributions of specific stocks of concern.

The Concept

We propose to develop genetic stock identification capabilities that will allow us to identify steelhead that originate from populations in our area of interest and distinguish them from those from other populations throughout the species' range. We envision this effort as a multi-laboratory endeavor that can include interested scientists from throughout the species' range. The baseline data set that this effort will generate will allow us to use genetic mixture analysis methods to examine the marine distributions of natural- and hatchery-origin steelhead from Washington, Oregon, Idaho, California, and elsewhere, and to learn more about the ocean migrations of healthy and at risk natural-origin populations and successful and struggling hatchery-origin populations. Existing molecular genetic technology and analytical methods can provide those capabilities.

Fish management agencies from the States of Washington and Idaho, the Columbia River Intertribal Fish Commission, the United States Fish and Wildlife Service, and National Marine Fisheries Service have standardized a set of protocols to collect data for 16 microsatellite DNA loci from steelhead populations within the Columbia River basin. Data collected for any of the 16 loci in any of the five participating laboratories are compatible. Standardization of the suite of loci and protocols has allowed the participating laboratories to contribute to a common database of genetic data that is useful to all involved. The protocols are available to other laboratories that wish to collect data that are compatible with the common database. We propose to use this standardized suite of microsatellite loci as the foundation of a shared, open-standards Pacific Basin-wide steelhead genetic baseline. Additional microsatellite loci or other marker classes including single nucleotide polymorphisms may be included if they likely will provide benefits of increased stock resolution, ease of use, or reduced cost.

The participation of multiple laboratories in constructing large, shared, standardized genetic baselines is beneficial in several ways. It allows the workload of baseline construction to be distributed so that no single laboratory needs to dedicate most of its
resources to the task; it requires communication between laboratories and promotes technology sharing; it allows scientists in separate laboratories and agencies to perform analyses using common reference data, thereby removing a potential source of conflicting results; and it reduces the risk that changing priorities at a single laboratory might render the data set useless to the interested scientific community.

We will assemble allelic ladders or sets of allelic standards to share with other genetics laboratories that want to collect compatible data and contribute to and use the shared database. Periodic genotyping by all contributing laboratories of common sets of extracted genomic DNA will promote the continuing compatibility of the data going into the database.

The resolving power of a genetic baseline depends on the scope of its coverage with respect to its intended use, and on the accuracy and precision of the allele frequency distributions it estimates. We will perform simulations to identify a target baseline sample size, over a generation, that we expect will yield accurate and precise estimates of allele frequencies for the suite of loci and to estimate the resolving power of the baseline data set.

We will develop a list of candidate populations for the steelhead genetic baseline in consultation with scientists and managers throughout the species’ range. Within the State of Washington, state and tribal steelhead managers have identified 137 natural-origin steelhead stocks, so the range-wide number of candidate populations probably will be large. Construction of the baseline data set will require cooperation with scientists from Canada, Alaska and Russia, either as participating laboratories or as sources of tissue samples or extracted genomic DNA.

We will identify a public host for the shared database to insure that the data remain accessible to all Parties to the Convention.
In 2004, NPAFC accepted PICES’ invitation for the Chairman of NPAFC’s Committee on Scientific Research and Statistics (CSRS) to present annual updates on the status of Pacific salmon in the North Pacific to the MONITOR Technical Committee. It was also agreed that every third year, the CSRS Chairman will make a more complete presentation on the status of Pacific salmon in the North Pacific as input to update the North Pacific Ecosystem Status Report (NPESR). There is a plan to have the updated version of the North Pacific Ecosystem Status Report published on web in 2008 and as a hard copy in 2009.

- PICES invites a 30-min presentation by NPAFC on the status of Pacific salmon in the North Pacific at the MONITOR Committee meeting during PICES XVI to be held October 26-November 4, 2007, in Victoria, Canada;
- PICES encourages NPAFC to contribute the chapter on the status of Pacific salmon in the North Pacific to the web version of NPESR by the end of 2007 and to the updated version by the end of 2008.

**Cooperation between NPAFC BASIS WG and PICES MIE-AP**

The PICES Advisory Panel on *Micronekton Inter-calibration Experiment* (MIE-AP) is tasked with comparing the common micronekton gear used presently and determining the best gear types to aid in future sampling efforts. So far, MIE-AP conducted two cruises to examine the abundance, distribution of micronekton and to compare relative catch efficiency of different gears. These cruises have been off Hawaii (in 2004) and off Hokkaido (in 2005), and now MIE-AP is planning on a final cruise in the summer of 2007 in the Bering Sea. Since this is an area of interest to the NPAFC BASIS Program, and the animals MIE-AP is trying to collect (mesopelagic fishes, squids and crustaceans) are important prey of salmon in this region, collaboration between the BASIS Working Group and MIE-AP could be an excellent opportunity for the two our organizations to work together on a project of mutual interest which has not happened much in the past. This collaboration has been already proposed by Dr. Ian Perry on behalf of PICES at the 2005 Research Planning and Coordinating Meeting, and there was general support by the BASIS Working Group (BASIS WG) for this proposal.

- PICES inquires a possibility for several scientists representing MIE-AP to join one of BASIS cruises in 2007.

**International Symposium on “Understanding the causes of marine mortality of salmon”**

PICES would be prepared to consider a proposal to join NPAFC, NASCO and ICES in co-sponsoring a symposium on “Understanding the causes of marine mortality of salmon” to be held in spring 2010.

**HUFO-DAT Vol. 2 CD-ROM (North Pacific/Bering Sea Biological Data)**

The Hokkaido University has been conducting annual oceanographic and fishing surveys in the North Pacific and the Okhotsk Sea and Bering Seas since 1950. In March 2005, the first CD-ROM of the Long-Term Fisheries Oceanography Data Base (HUFO-DAT Vol. 1) was published, that contains vertical CTD profiles, nutrients and chlorophyll data collected during these surveys onboard of two research vessels, T/S Oshoro-maru and T/S Hokusei-maru. There is an intention to publish the second CD-ROM (HUFO-DAT Vol. 2) that contains biological and fishing information, including species composition, body length and weight, sex, etc., gathered during these cruises. The Japan Science Promotion Society (JSPS) provided ~$20,000 US for this project, but this amount allowed digitizing only 30% of data. At the 2006 inter-sessional Science Board/Governing Council meeting, PICES agreed to allocate $10,000 CND to support this initiative.

- PICES brings the project to the attention of the NPAFC CSRS and requests to consider a possibility of providing additional support to recover these important salmon gillnet data.
APPENDIX 11

EXTERNAL FUNDING PROPOSAL

EXPERT WORKSHOPS ON PRODUCTION OF PACIFIC SALMON IN OCEAN ECOSYSTEMS

Canada proposes for CSRS to follow up with an external funding opportunity to develop a strategic research plan to implement the NPAFC Science Plan 2006-2010. The research plan would define work activities, priorities, strategic issues, and logistic needs to implement the Science Plan. The research plan would serve as an important reference source for the Parties, and to foster cooperative research with those external to the NPAFC, to achieve the scientific objectives of the NPAFC.

The objectives of the proposal are as follows:

1. Examine the current state of knowledge with respect to factors governing ocean productivity for salmon at the level of the North Pacific ecosystem;
2. Assess the present ability to predict changes in productivity that might result from changes in climate regimes and similar factors; and
3. Identify possible knowledge gaps related to the understanding ocean productivity which, if filled, could facilitate better management of salmon production and harvest.

Each NPAFC Party will be funded to participate in the project which will involve at least two workshops and preparation of a report (Research Plan). Dates of the workshops will be determined by the Parties. The CSRS will agree to authorship of a report that summarizes the results of the discussions and identifies research priorities. A final report will be approved by the NPAFC.
APPENDIX 12

NPAFC POLICY OF ACCEPTING EXTERNAL FUNDS FOR SCIENTIFIC RESEARCH

1. The North Pacific Anadromous Fish Commission (NPAFC) may apply for and receive grants or funds (hereafter “external funds”) from governments, private parties, foundations and any other sources (hereafter “external foundations”) for scientific research under the NPAFC Science Plan.

2. The purposes for external funds shall be consistent with the policies, aims, and activities of the NPAFC.

3. The applications shall be prepared and recommended by the Committee on Scientific Research and Statistics (CSRS) and approved by the NPAFC.

4. For the application that has satisfied conditions in paragraphs 1 to 3, the NPAFC Secretariat may apply, directly or through the External Funding Working Group (EFWG) members, to external foundations for external funds for scientific research on behalf of the NPAFC.

5. Any interested external foundation, which desires to have its specific scientific study be undertaken by the NPAFC, may approach the NPAFC Secretariat, directly or through the EFWG members with the request.

6. The NPAFC Secretariat would refer any request, mentioned in paragraph 5 above, to the CSRS for its review and, where appropriate, recommendation to the NPAFC.

7. The external funds shall be used in accordance with the provisions of the agreed contracts or MOU between NPAFC and external foundations and existing “Terms of Reference”. Such contract or MOU shall be approved by the NPAFC.

8. Points of Contact:

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E-mail: maksimovsv@fishcom.ru
APPENDIX 13

AMENDMENTS TO THE RULES OF PROCEDURE OF THE NPAFC

A. Replacement of the existing Rule 5:

5. The Commission may invite any intergovernmental or other organizations, as appropriate, to participate as observers at selected meetings of the Commission. It may also invite additional persons to participate as guests or observers at such meetings and such invitation may be initiated by any Party. Decision shall be taken by consensus among all Parties.

B. New Rule 6:

6. Any organization desiring to participate as an observer in a meeting of the Commission on its own initiative, shall notify the Executive Director of its desire to participate at least 120 days in advance of the meeting via an application. The Executive Director shall send such applications to the Parties for their consideration at least 90 days prior to the Annual Meeting. A decision of the Commission on that matter shall be taken by consensus among all Parties at least 60 days prior to the Annual Meeting.
Any organization desiring to participate as an observer in a meeting of the NPAFC shall notify the Executive Director of the Commission of its desire to participate at least 120 days in advance of the meeting.

This application must include:

a) name, address, telephone, fax number and e-mail address of the organization and the person(s) proposed to represent the organization;
b) aims and purposes of the organization;
c) a brief history of the organization and a description of its activities.
NEWS RELEASE

Salmon stocks in the North Pacific Ocean are healthy and well protected, as a result of strong cooperation on monitoring and surveillance and decisions based on strong science.

Representatives of Canada, Japan, Republic of Korea, Russia and the United States, the primary states of origin for salmon stocks in the North Pacific, met in Vancouver, Canada, October 23-27, 2006, for the Fourteenth Annual Meeting of the North Pacific Anadromous Fish Commission (NPAFC). The meeting was chaired by Guy Beaupré, President of the NPAFC.

Every year, Coast Guard and Enforcement representatives of these five countries coordinate their efforts to ensure that drift net fishing for salmon in the far reaches of the North Pacific is prevented. The NPAFC has been most successful in eliminating Illegal, Unreported and Unregulated (IUU) fishing in its Convention Area. Detailed analysis and a coordinated enforcement plan is generated each year, from which the Parties base their at sea air patrol efforts to stop illegal activity. Cooperation and continuous exchanges of information are at the base of an effective force of action.

This past year, Coast Guard vessels from the United States and Russia conducted joint patrols in the Convention Area. Russian patrol vessels responded to sightings in the Western Pacific made from a Canadian long-range patrol aircraft. Japan made a joint operation with the U.S. Coast Guard using the Japanese aircraft. To further assist their efforts, a web based system developed by Russia to share information related to enforcement activity in the Convention Area allows the Parties to coordinate enforcement efforts and share observed illegal activity. This includes sending photos of illegal fishing vessel activity as it is occurring from the patrol aircraft to each of the Parties enforcement contacts.

High seas drift net vessels activity has been very low in recent years, however, in 2006, there was a significant increase in suspect activity in western portions of the Convention Area. In maintaining its efforts to deal with this threat of high seas fishing for salmon, the NPAFC recently drafted boarding guidelines for vessels of non-member countries that are observed targeting salmon in the Convention Area. The Commission is currently examining the possibility of application of the United Nations Food and Agriculture Organization’s Port State Control Measures.

Taiwanese authorities, which are official observers at the NPAFC, reported their efforts to ensure Taiwanese vessels and nationals do not fish salmon in the NPAFC Convention Area.

Due to the continued threat of high seas fishing for salmon in the Convention Area, all Parties reaffirmed their commitment to maintain 2007 enforcement activities at high levels as a deterrent to the threat of potential unauthorized fishing activities. The Republic of Korea invited all the participants to the Enforcement Evaluation and Coordination Meeting to be held next February in Busan.

Lead salmon scientists met to further their understanding on Pacific salmon. The NPAFC provides the only forum in the world for scientists with this opportunity.

Japanese winter research in the Gulf of Alaska indicated that most chum salmon in the northern part of the Gulf were from North America, while salmon from Japan and Russia remained in the southern part. Other research also indicated specific behavior and ecology for southern populations of US Chinook salmon, and the early life history of chum salmon from the Republic of Korea and for salmon in the western Bering and Okhotsk Seas. There is also evidence that the Strait of Georgia ecosystem in southern British Columbia may be shifting to one that is favourable for pink, chum, and sockeye salmon.

The catch of Pacific salmon by all producing countries in 2005 was the second highest in recent history. Previous high levels occurred in 1995 and 2003. Pink salmon accounted for 50% of the catch by weight, followed by chum, sockeye, coho, chinook, and cherry (masu) salmon. Largest catches were reported by the United States (Alaska), Russia, and Japan (see table at the end).

While it is too early to report definitive catches for 2006, it is encouraging that preliminary catch estimates by Russia for 2006 are very similar to catches recorded in 2005. Preliminary catches in 2006 in Alaska showed major fluctuations in abundance. Returns of pink salmon in southeast Alaska were much lower than forecasted while chum salmon returns were very strong. Complicating these fluctuations of abundance are the ongoing consequences of climate change on salmon production. Oceanographic conditions have undergone dramatic changes in the Bering Sea in recent years. These conditions are being monitored by the NPAFC Bering-Aleutian Salmon International Survey (BASIS). Vessels from Japan, Russia, and the USA are involved in the ecosystem study of
salmon and associated marine fishes in the entire Bering Sea. Results from this research will be reported at the NPAFC Symposium on BASIS which will be held in the USA in 2008.

The NPAFC has incorporated into its scope of research new work to develop a comprehensive genetic baseline for steelhead.

Preliminary 2005 Commercial Salmon Catches (thousands of metric tones)

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<tr>
<th></th>
<th>Chinook</th>
<th>Sockeye</th>
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<th>Pink</th>
<th>Chum</th>
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<tr>
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<td>0.9</td>
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<td>0.0</td>
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<td>222.2</td>
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<td>Korea</td>
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<td>0.0</td>
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<td>19.1</td>
<td>486.7</td>
<td>308.8</td>
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For Information

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## APPENDIX 16

### THE COMMISSION'S MEETINGS AND PUBLICATIONS FOR THE PERIOD 1993-2006

**Meetings**

<table>
<thead>
<tr>
<th>Year</th>
<th>Meetings</th>
</tr>
</thead>
</table>
| 1993 | • Inaugural Meeting of the Commission in Ottawa, Ontario, Canada, February 24.  
      • Meeting of Sub-Committee on Enforcement in Vancouver, British Columbia, Canada, April 27-29.  
      • Inaugural Meeting of the Committee on Scientific Research and Statistics in Vladivostok, Russia, June 22-24.  
      • First Annual Meeting of the Commission in Vancouver, British Columbia, Canada, November 1-5. |
| 1994 | • Second Annual Meeting in Vladivostok, Russia, October 10-15. |
| 1996 | • Fourth Annual Meeting of the Commission in Tokyo, Japan, October 21-25.  
      • International Symposium on Assessment and Status of Pacific Rim Salmon Stocks in Sapporo, Japan, October 28-29. |
| 1997 | • Research Planning and Coordinating Meeting in Vancouver, British Columbia, Canada March 4-6.  
      • Fifth Annual Meeting of the Commission in Victoria, British Columbia, Canada October 27-31. |
| 1998 | • Research Planning and Coordinating Meeting in Vancouver, British Columbia, Canada, March 24-25.  
      • Workshop “Climate Change and Salmon Production” in Vancouver, British Columbia, Canada, March 26-27.  
      • Sixth Annual Meeting of the Commission in Moscow, Russia, November 1-6. |
      • Research Planning and Coordinating Meeting in Vancouver, British Columbia, Canada, March 24-26.  
      • Seventh Annual Meeting of the Commission in Juneau, Alaska, U.S.A., October 24-29.  
| 2000 | • Enforcement Planning and Coordinating Meeting in Tokyo, Japan, March 1-3.  
      • Research Planning and Coordinating Meeting in La Jolla, California, U.S.A., March 27-28.  
      • International Workshop “Factors Affecting Production of Juvenile Salmon: Comparative Studies on Juvenile Salmon Ecology between the East and West North Pacific Ocean” in Tokyo, Japan, October 29. |
<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
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</table>
| 2001 | Eighth Annual Meeting of the Commission in Tokyo, Japan, October 30-November 2.  
Enforcement Evaluation and Coordination Meeting in Petropavlovsk-Kamchatsky, Russia, May 14-17.  
Ninth Annual Meeting of the Commission in Victoria, British Columbia, Canada, October 28-November 2. |
Enforcement Evaluation and Coordination Meeting in Kodiak, Alaska, USA, May 7-9.  
Tenth Annual Meeting of the Commission in Vladivostok, Russia, October 6-11. |
| 2003 | Enforcement Evaluation and Coordination Meeting in Queen Charlotte City, British Columbia, Canada, May 21-22.  
Eleventh Annual Meeting of the Commission in Honolulu, Hawaii, USA, October 23-31.  
International Workshop on Application of Stock Identification in Defining Marine Distribution and Migration of Salmon in Honolulu, Hawaii, USA, November 1-2. |
Enforcement Evaluation and Coordination Meeting in Kushiro City, Hokkaido, Japan, May 26-27.  
Twelfth Annual Meeting of the Commission in Sapporo, Hokkaido, Japan, October 24-29.  
| 2005 | Research Planning and Coordinating Meeting in Nanaimo, British Columbia, Canada, April 21-22.  
Enforcement Evaluation and Coordination Meeting in Vladivostok, Russia, May 18-19.  
Thirteenth Annual Meeting of the Commission in Seogwipo, Jeju Island, Korea, October 24-28.  
PAPAFC-PICES Joint Symposium "The Status of Pacific Salmon and their Role in North Pacific Marine Ecosystems" in Seogwipo, Jeju Island, Korea, October 30-November 1. |
Enforcement Symposium in Juneau, Alaska, USA, March 2.  
Research Planning and Coordinating Meeting in Sapporo, Hokkaido, Japan, April 24-25. |
• Fourteenth Annual Meeting of the Commission in Vancouver, B.C., Canada, October 23-27.

Publications

• Annual Reports 1993-2006

• NPAFC Statistical Yearbooks 1993-2002

• NPAFC Scientific Bulletins:
  #1 "Assessment and Status of Pacific Rim Salmonid Stocks", 1998
  #2 "Recent Changes in Ocean Production of Pacific Salmon", 2000

• NPAFC Technical Reports:
  #1 "Workshop on Climate Change and Salmon Production", 1998
  #2 "Workshop on Factors Affecting Production of Juvenile Salmon", 2000
  #3 "Workshop on Salmonid Otolith Marking", 2001
  #4 "Joint Meeting on Causes of Marine Mortality of Salmon in the North Pacific and North Atlantic Oceans and in the Baltic Sea", 2002
  #5 "Workshop on Application of Stock Identification in Defining Marine Distribution and Migration of Salmon"
  #6 "Workshop "BASIS-2004: Salmon and Marine Ecosystems in the Bering Sea and Adjacent Waters"

• NPAFC Handbook (1st and 2nd editions)

• NPAFC 10th Anniversary Commemorative Album

• NPAFC Newsletters Nos. 1-21
# Abbreviations Used in This Report

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADF&amp;G</td>
<td>Alaska Department of Fish and Game</td>
</tr>
<tr>
<td>BASIS</td>
<td>Bering-Aleutian Salmon International Survey</td>
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