



**NPAFC**

# **The Role of the NPAFC in Conservation and Protection of Pacific Salmon**

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and

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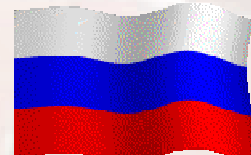
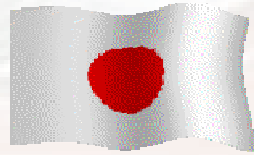
Vancouver, Canada

[www.npafc.org](http://www.npafc.org)

The logo for the North Pacific Anadromous Fish Commission (NPAFC) features the acronym 'NPAFC' in a bold, blue, italicized font. To the left of the text is a stylized graphic of a fish's tail and scales, rendered in shades of blue and green.

# Foundation and Goals

**The North Pacific Anadromous Fish Commission (NPAFC) was established under the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean in 1993.**

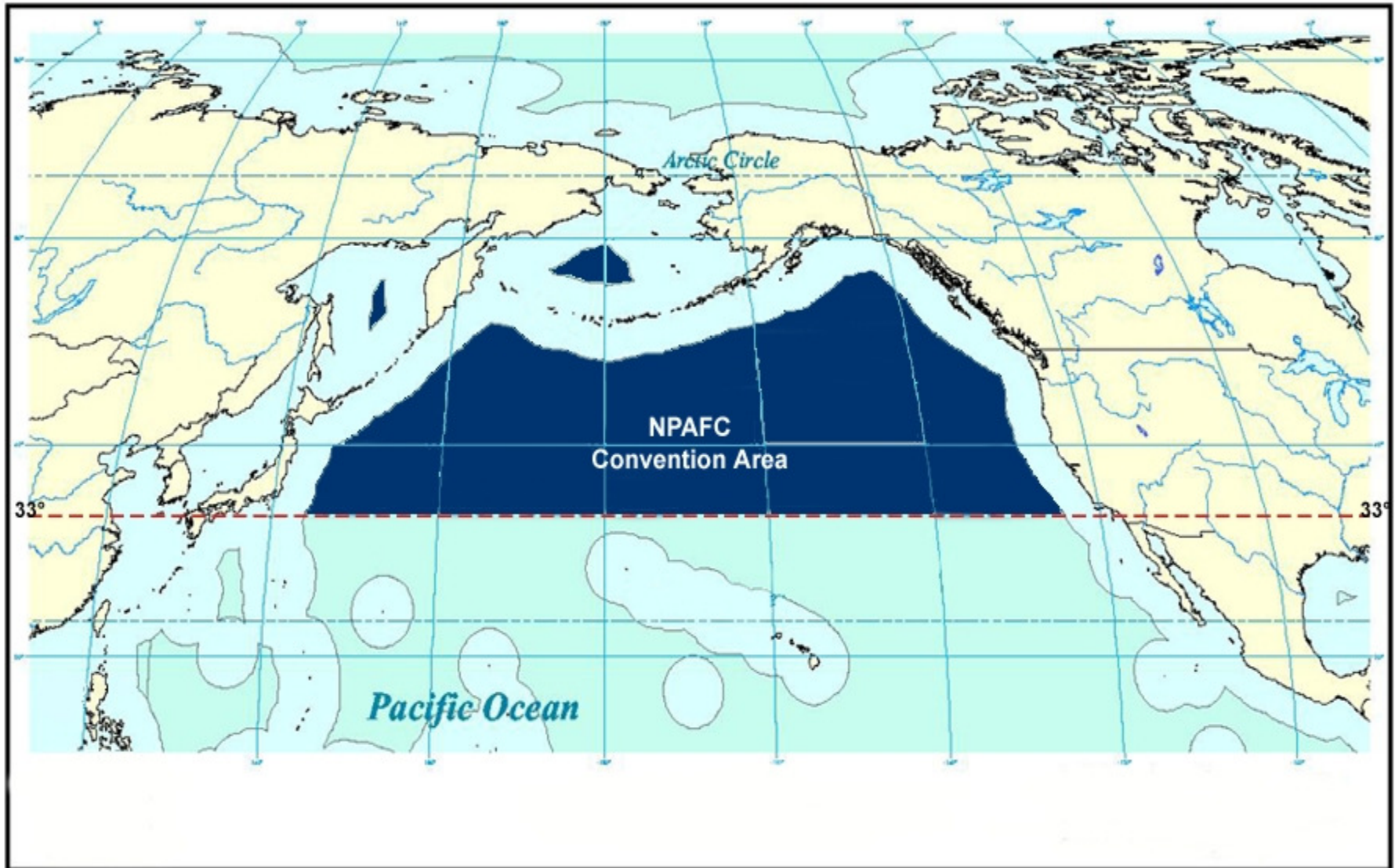


**The Convention is based on the recognition that:**

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

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# Convention Area





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# Species



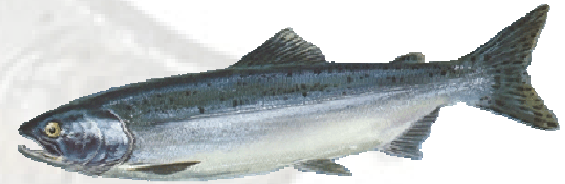
**Chum salmon**

*Oncorhynchus keta*



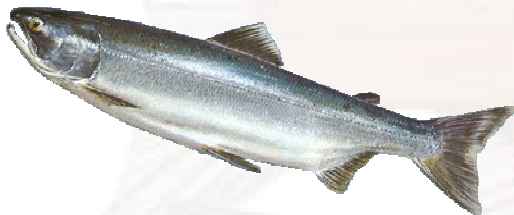
**Coho salmon**

*Oncorhynchus kisutch*



**Pink salmon**

*Oncorhynchus gorbuscha*



**Sockeye salmon**

*Oncorhynchus nerka*



**Chinook salmon**

*Oncorhynchus tshawytscha*



**Cherry salmon**

*Oncorhynchus masou*



**Steelhead Trout**

*Oncorhynchus mykiss*



The logo for the North Pacific Fishery Commission (NPAFC) features the acronym 'NPAFC' in a bold, italicized, sans-serif font. The letters are white with a black outline and are set against a background of green, wavy, brush-stroke-like patterns that suggest water or fish scales.

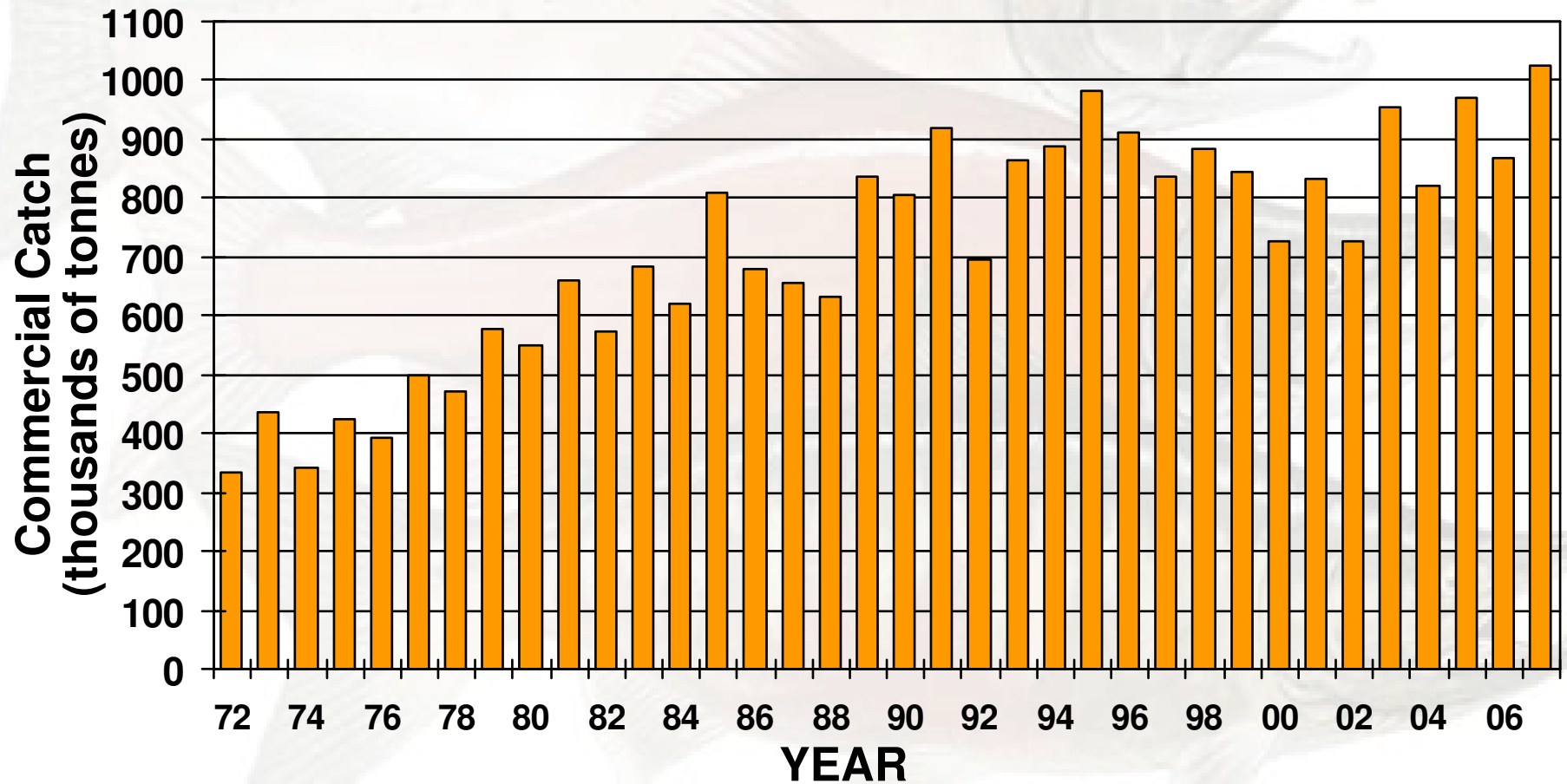
# Scientific Research

**Pacific salmon are very important to the economies, cultural activities, and heritage of the people of the North Pacific Rim. At present, the total North Pacific Rim catch of salmon is almost 1 million metric tons at gross value of more than \$1 billion annually.**

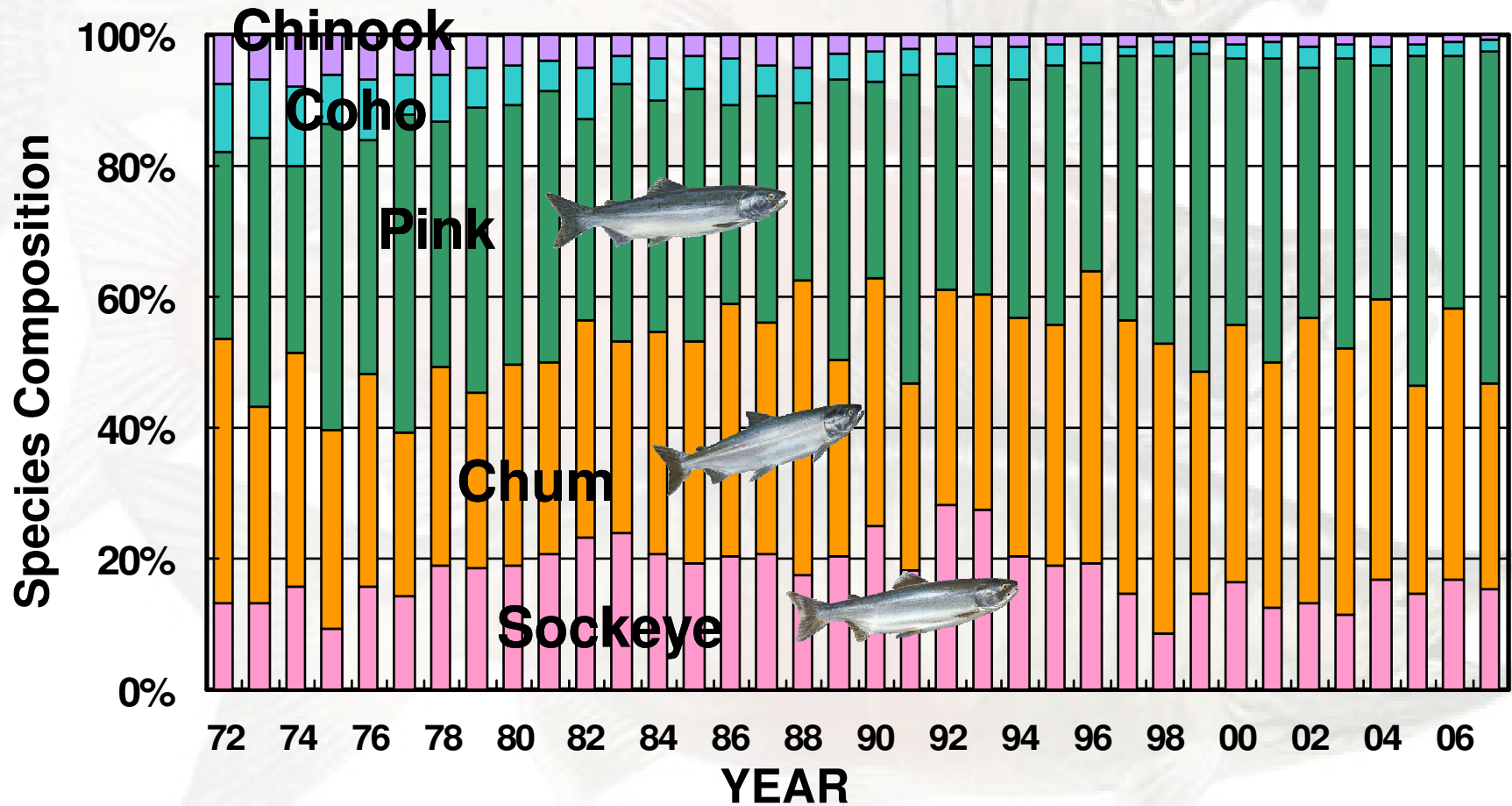


**Approximately 5 billion hatchery salmon per year are released into Convention waters and adjacent seas to augment natural salmon runs.**

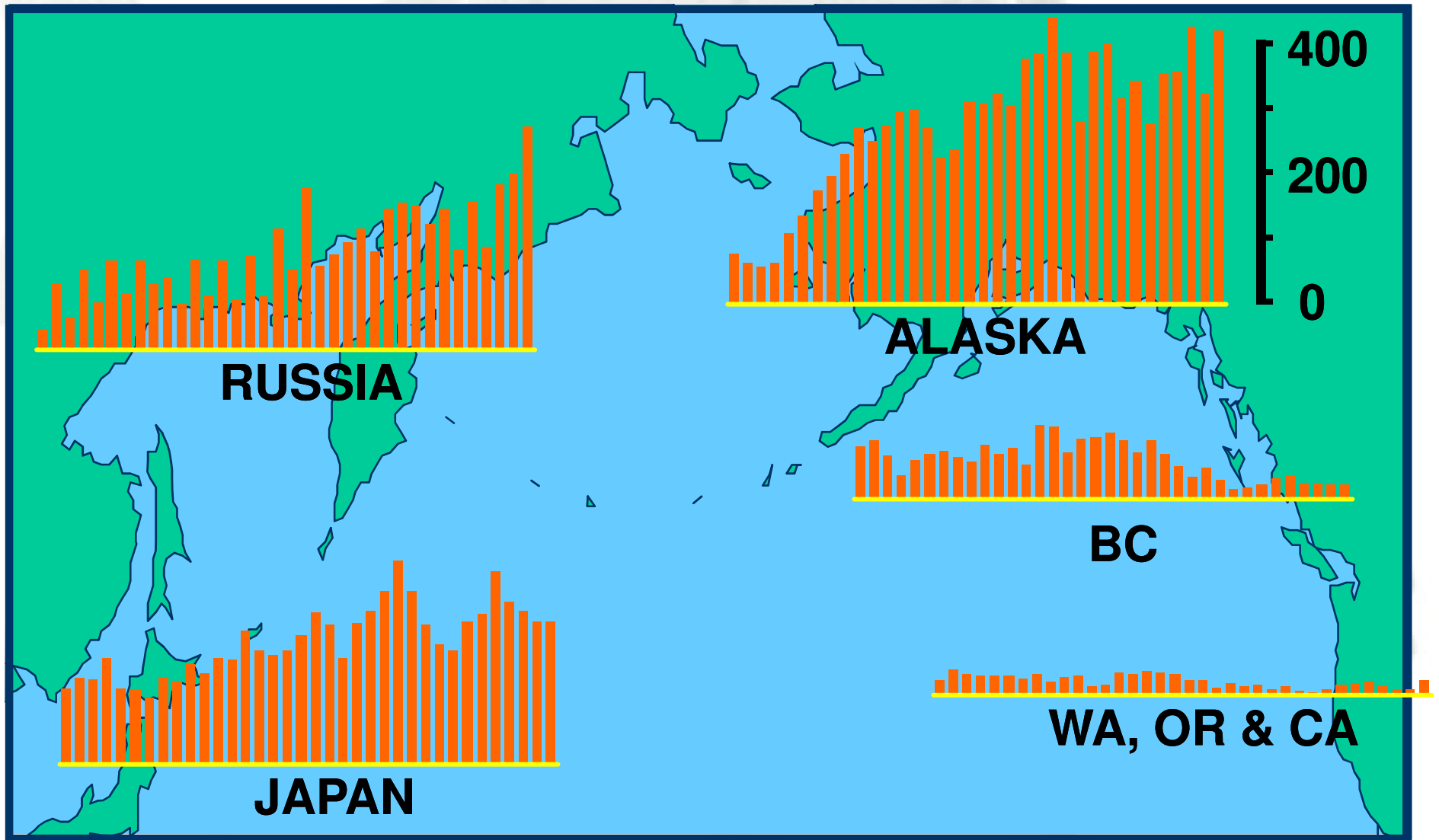
# Annual total commercial catch of Pacific salmon in tonnes, 1972-2007



# Annual changes in the species composition of commercial Pacific salmon catch (in whole weight), 1972-2007



# Annual commercial catch of Pacific salmon (in thousand tonnes) by regions, 1972-2007





# Committee on Scientific Research and Statistics (CSRS)

## The Working Groups

### Stock Assessment

- ✦ Started in 1995
- ✦ To coordinate the development of catch and escapement database for salmon
- ✦ To produce accurate and timely estimates of hatchery production;
- ✦ To study ways of developing methods for measuring the abundance of wild salmon

### Salmon Marking

- ✦ Started in 1998
- ✦ Coordination of marks to minimize duplication between countries
- ✦ Development of a common database for mark releases

### Stock Identification (Ad Hoc)

- ✦ Started in 2000
- ✦ Develop, standardize and disseminate genetic and other databases among the parties;
- ✦ Encourage the development of new genetic technologies;
- ✦ Facilitate the dissemination of statistical techniques

### BASIS

- ✦ Started in 2001
- ✦ Coordinate plans and to present reports on research on Bering-Aleutian Salmon International Survey (BASIS)

### Salmon Tagging

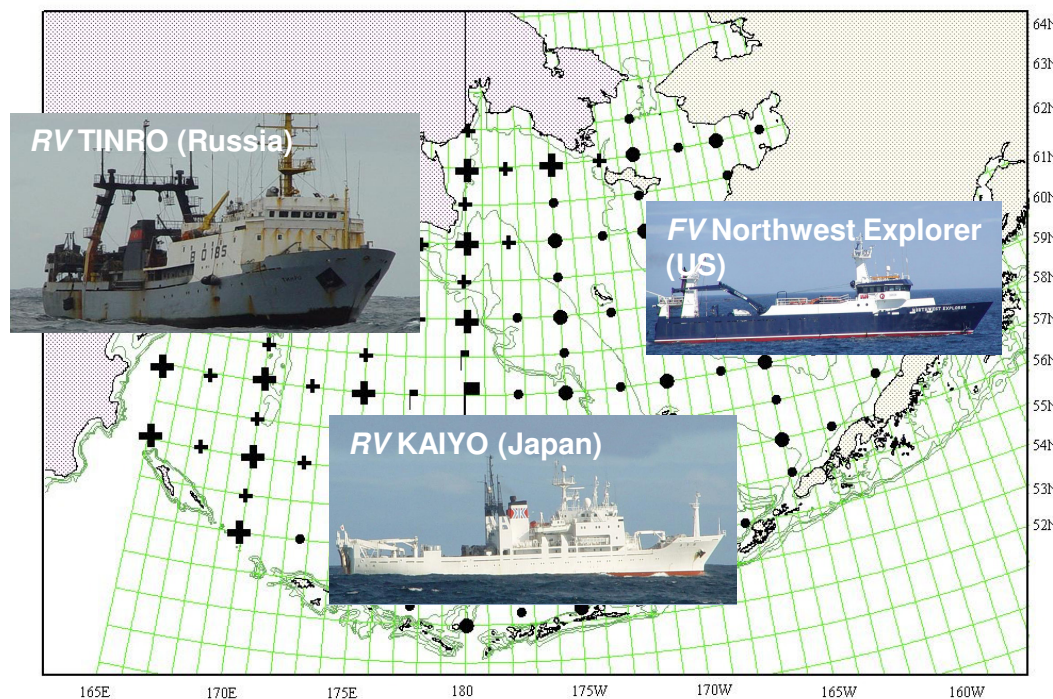
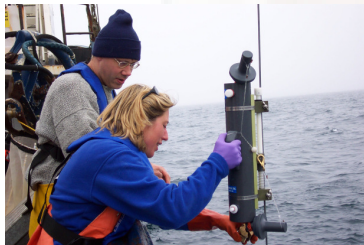
- ✦ Started in 2007
- ✦ Management of the high-seas tagging database
- ✦ Coordination of the high-seas tagging experiments
- ✦ Collection of release and recovery information



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# The BASIS Program

**BASIS** is our new coordinated program of cooperative research on Pacific salmon in the Bering Sea that started in 2002 and was designed to clarify the mechanisms of biological response by salmon to the conditions caused by climate changes.





# **BASIS 2002-2006 (Phase I) Results**

- ⊕ **The Bering Sea ecosystem is influenced by atmospheric processes that affect primary and secondary productivity.**
- ⊕ **During warm years, abundance of salmon is higher in all regions of the Bering Sea, migration pathways shift, and salmon are distributed further north.**
- ⊕ **The Bering Sea does not appear to be at or near the carrying capacity, despite high abundance of salmon during BASIS Phase I (2002-2006).**

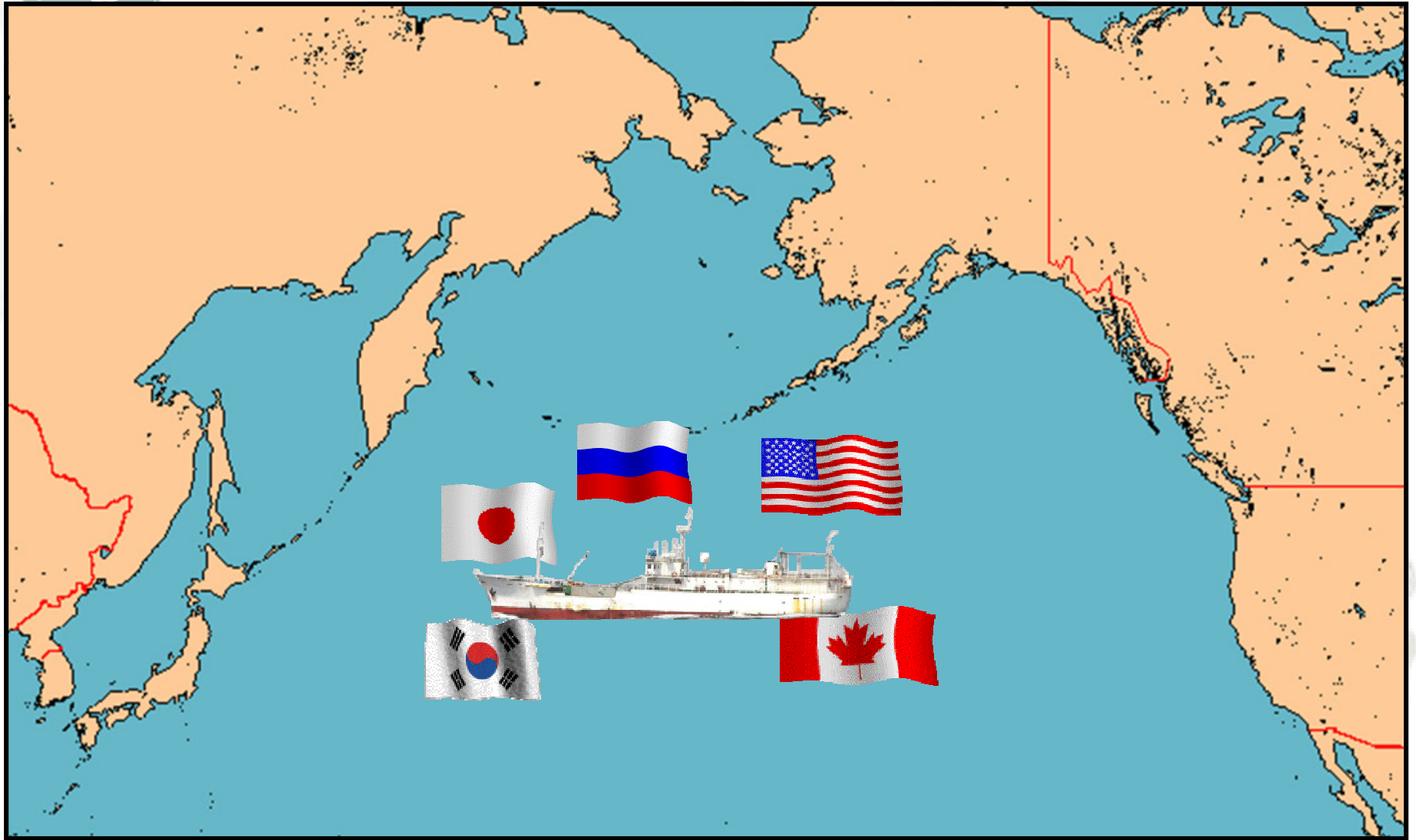


# Future International Researches

- ⊕ **The NPAFC Long-term Research and Monitoring Project Team is developing an international strategic research plan to better understand climate and marine ecosystem mechanisms that determine salmon production (funded by Moore Foundation).**
- ⊕ **BASIS Phase II will be resumed for further monitoring in the Bering Sea.**
- ⊕ **Future international research will also focus on the critical periods of ocean salmon life history such as the early ocean life and winter period in the North Pacific Ocean.**

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# Enforcement





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# Enforcement

- ✦ Fisheries and Oceans Canada and DND Canada
- ✦ Fisheries Agency of Japan and Japanese Coast Guard
- ✦ Ministry of Food, Agriculture, Forestry and Fisheries of the Republic of Korea
- ✦ Fisheries Agency of the Russian Federation and Russian Federal Security Service
- ✦ United States National Marine Fisheries Service and United States Coast Guard



In 1993-2008, the cooperative enforcement efforts of the NPAFC Parties resulted in the detection of 41 vessels conducting direct driftnet fishing operations for salmon in the Convention area. Of those vessels, 16 were apprehended.



# Conclusion

**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 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 salmon 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.**



*Thank You*