

Opening Remarks

Pacific salmon are one of the most valuable fish resources in the North Pacific Ocean, playing important roles in the ocean and freshwater ecosystems, and also in economics and cultures of the Pacific Rim countries. The North Pacific Anadromous Fish Commission (NPAFC) was established under the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean which entered into force on February 16, 1993. The main objectives of the NPAFC is promotion of the conservation of anadromous fish in the North Pacific Ocean and its adjacent waters, and the NPAFC serves as a forum for cooperation and coordination of scientific research and enforcement activities.

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”, and the proceedings of this workshop were published in the NPAFC Technical Report No. 2. National review papers on marine investigations of juvenile Pacific salmon, presented at the workshop and later published in NPAFC Bulletin No. 3, emphasized the need for new research. 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. 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.

Ocean production of salmon in terms of numbers of fish is closely linked with their early ocean survival. Recent reviews of national research on juvenile salmon show wide diversity of survival rates, growth, predation, etc. The fluctuations of many stocks and intermixing of stocks in the eastern and western North Pacific coastal waters has increased concern and interest in this critical period. Variations in early marine growth and survival are often related to climate-induced changes in distribution and abundance of predator and prey populations.

In order to increase our understanding of the processes that determine salmon population sizes and our ability to forecast stock sizes, I hope the workshop will provide us with a forum to exchange new scientific information, and develop new insights and future research directions about juvenile salmon in the North Pacific ecosystems. I am expecting your contributions to make the workshop valuable for us by providing your experiences and views. I wish you a pleasant stay in Sapporo and a productive meeting.

Shigehiko Urawa
Chair of the Workshop Organizing Committee

