

Preface

Dramatic fluctuations in the ocean growth and survival of many Asian and North American salmon populations over the past decade have been attributed to changes in the Bering Sea and other marine ecosystems. The absence of scientific observations for salmon, ecologically related species, and environmental conditions in the North Pacific Ocean has limited our understanding of these changes and how they affect salmon populations and economies around the Pacific Rim. International research efforts to address these issues were developed by the NPAFC, as part of its Science Plan. The research plan, called BASIS (the Bering-Aleutian Salmon International Survey), began in 2002 as a coordinated program of cooperative research on Pacific salmon in the Bering Sea. The goal of BASIS research was to clarify the mechanisms of biological response by salmon to the conditions caused by climate change in the Bering Sea.

The International Symposium on Bering-Aleutian Salmon International Surveys (BASIS): Climate Change, Production Trends, and Carrying Capacity of Pacific Salmon in the Bering Sea and Adjacent Waters was held in the Sheraton Seattle Hotel, Seattle, WA, USA on November 23-25, 2008. The Symposium was hosted by the North Pacific Anadromous Fish Commission (NPAFC) and organized by the Symposium Steering Committee (T. Azumaya, R. Beamish, E. Farley, Jr. (chairperson), K.B. Seong, V. Sviridov, and S.

Urawa) in cooperation with the NPAFC Secretariat. Local arrangements were made by the Local Organizing Committee (H. Bartlett, J. Helle, K. Myers, and J. Seeb) formed by the host country, the United States.

The purpose of the symposium was to summarize BASIS research conducted during 2002 to 2006 and increase our understanding about how climate change will affect salmon growth and survival in the North Pacific Ocean. The symposium topics were:

1. Overviews of Climate Change, Bering Sea Ecosystems, and Salmon Production
2. Biological Responses by Salmon to Climate and Ecosystem Dynamics
 - 2.1. Migration and Distribution of Salmon
 - 2.2. Food Production and Salmon Growth
 - 2.3. Feeding Habits and Trophic Interactions
 - 2.4. Production Trends and Carrying Capacity of Salmon

There were 34 oral, and 30 poster presentations followed by a session of discussion and summary on BASIS 2002-2006 (Where do we go from here?). This bulletin includes 33 papers which were peer reviewed and edited. Reviewers are listed at the end of the bulletin.