

Marine Ecosystems of the  
North Pacific Ocean  
2003-2008

Editors

Stewart M. McKinnell and Michael J. Dagg

PICES Special Publication Number 4

# Marine Ecosystems of the North Pacific Ocean 2003-2008

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### Feedback

Comments on this report are welcome and can be sent  
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# [Foreword]

This book is a scientific product of the North Pacific Marine Science Organization (PICES). The first version entitled “Marine Ecosystems of the North Pacific” was published in 2004 as PICES Special Publication Number 1\*. It was a pilot project to determine whether a comprehensive overview of the status and trends in the North Pacific could be achieved through voluntary efforts, and once created, whether a report of this nature would be of value to PICES Member Countries. In 2007, following recommendations by the PICES Study Group on Ecosystem Status Reporting, Governing Council and Science Board endorsed the development of a second version of the North Pacific Ecosystem Status Report, adding that it should represent an incremental improvement over the first endeavour. Changes and improvements included:

- Providing a better balance of information among chapters,
- Developing a more comprehensive synthesis by facilitating analysis, inter-comparison, and reporting of results,
- Identifying clearly the target audience for the report,
- Providing better recognition to contributing scientists.

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\* [http://www.pices.int/publications/special\\_publications/NPESR/2005/npesr\\_2005.aspx](http://www.pices.int/publications/special_publications/NPESR/2005/npesr_2005.aspx)

## [foreword]

The focus period of this book is 2003-2008. The basic information is organized around eight (originally nine) regional chapters. These summarize ecosystem status and trends in the four marginal seas, the four coastal boundary currents, and the large oceanic region at their centre. The boundary current chapters have a focus on the region from the coastline out to and including the continental slope and the adjacent boundary currents. The oceanic region includes everything beyond the boundary current/continental slope that is not in a marginal sea. The development of each regional chapter was the responsibility of a Lead Author who recruited a team of scientists with expertise in the region to contribute to the chapter. A common framework was provided by the editors to facilitate comparisons among the regions.

The schedule planned for a five month period of analysis/synthesis before a synthesis workshop was convened from December 1-4, 2009 in Honolulu, USA. The workshop was convened:

- to review findings within individual regions,
- to compare status and trends among regions,
- to review and discuss synthesis results from regional teams,
- to understand the cause(s) of variation/trends, with attention to regional, basin-scale, global forces,
- to reach agreement on what to include in the synthesis, and
- to write its first draft before leaving Honolulu.

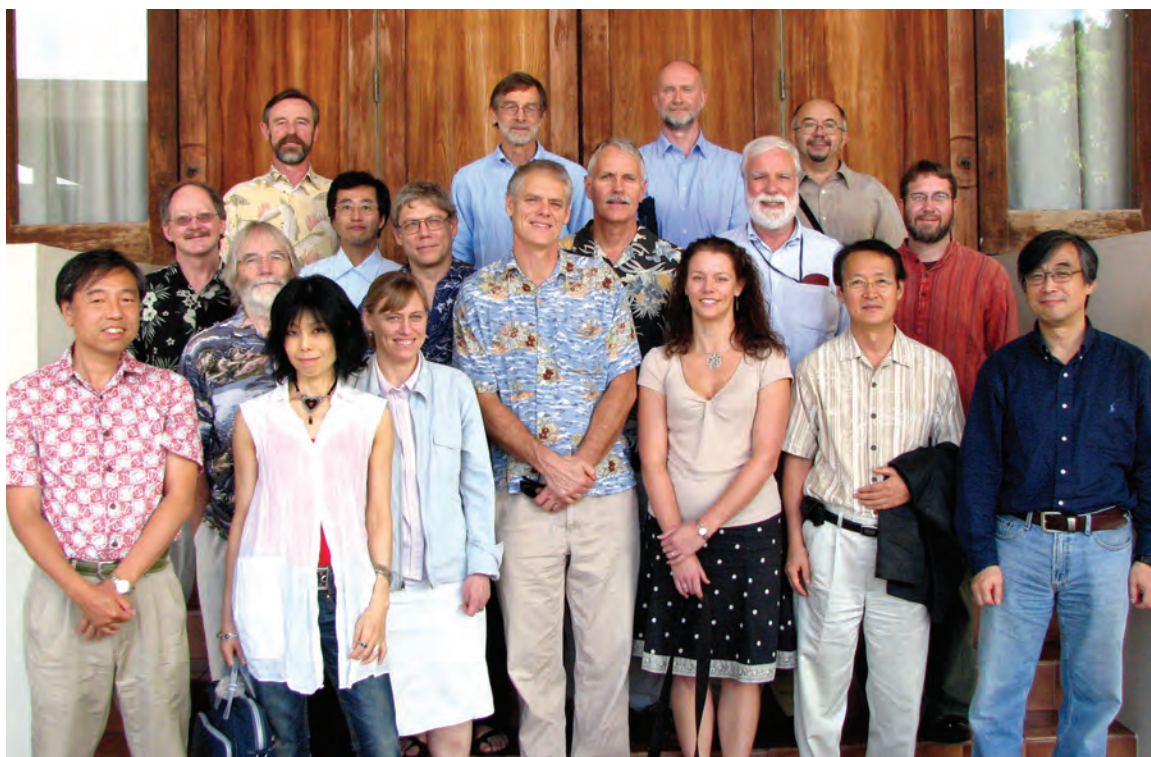
The anticipated products of the project were:

- A PICES Special Publication containing the scientific synthesis and regional chapters.
- A collection of data files with the time series and other data that were used to create the figures in the Special Publication. These files would permit standardized figure formats in each chapter, and provide the data required for analysis and synthesis and the creation of figures for the synthesis.
- A scientific paper written jointly by the Lead Authors and rest of the synthesis team for the primary scientific literature.
- A PICES Brochure containing a summary of important highlights for non-scientific audiences.

The intended audience for this book is primarily scientists involved in the study of climate and marine ecosystems of the North Pacific Ocean, but also includes governments who deal with issues of understanding, use, policy, and management of North Pacific marine systems, and the general public. It is our hope and expectation that as the North Pacific ecosystem status report becomes more complete and more available, each of these groups will find that it stimulates and leads to new connections and new understanding of the North Pacific Ocean.

This book was made possible through the efforts of many volunteer scientists from PICES Member Countries, especially the Lead Authors of the regional chapters who were responsible for amassing such a diversity of information and the synthesis team that was responsible for summarizing the major findings. The Synthesis chapter received the benefit of comments provided by Roger Harris, Paul Harrison, James Overland, Franklin Schwing, and Jake Rice. The regional chapters did not have a formal review but they were subject to the scrutiny of the editors and advisors. Workshops hosted by our Korean colleagues at the Novotel Hotel in Busan in 2009 and by our American colleagues at the NOAA/Auke Bay Laboratories in Juneau, Alaska in 2009 made important contributions to this report. The North Pacific Anadromous Fish Commission (NPAFC) was invited and agreed to lead the development of the Pacific salmon sections of the Oceanic and Synthesis chapters. Their participation in this project is greatly appreciated. The North Pacific Research Board generously offered us access to their photograph collection. Special thanks to Wayne Barnes of Tofino Photography and to Mr. Y. Itayama (Yomiuri Shimbum), who have no affiliation with PICES, for allowing us to use their photographs of a black bear with squid, and giant jellyfish.

Stewart M. McKinnell and Michael J. Dagg



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Participants at the Synthesis workshop, December 1-4, 2009: [Front] Akihiko Yatsu, Sanae Chiba, Jennifer Boldt, Nick Bond, Sonia Batten, Young Jae Ro, Sinjae Yoo; [Middle] Jim Irvine, Frank Whitney, Hiroya Sugisaki, Dave Mackas, Mike Foreman, George Hunt, Steve Bograd; [Back] Skip McKinnell, Mike Dagg, Vyacheslav Lobanov, Oleg Katugin. Missing from the photograph are Phil Mundy, Ian Perry, Vladimir Radchenko, John Stein, Sun Song, and local participants Jeff Polovina, Mike Seki, Phoebe Woodworth.

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