

Book Reviews

FISHERIES ASSESSMENT AND MANAGEMENT IN DATA-LIMITED SITUATIONS. Edited by G. H. Kruse, V. F. Gallucci, D. E. Hay, R. I. Perry, R. M. Peterman, T. C. Shirley, P. D. Spencer, B. Wilson, and D. Woodby. Fairbanks, Alaska: Alaska Sea Grant College Program, University of Alaska Fairbanks, 2005. 958 pp. \$50 (cloth). ISBN 156612-093-4.

This large edited volume is the proceedings of the symposium Assessment and Management of New and Developed Fisheries in Data-limited Situations, held on 22–25 October 2003 in Anchorage, Alaska, U.S.A. The symposium brought together fishery managers, policy makers, and scientists to share their research and experiences regarding the assessment and management of developed and small-scale fisheries in data-limited situations.

Forty-six peer-reviewed papers are presented. Among these, a decided majority are case studies from various fisheries around the world. And while there is excellent global coverage, the volume is especially robust in case studies pertaining to Canadian and United States fisheries in the northeastern Pacific and Bering Sea regions. Moreover, only a few of the papers take a more general view, such as by presenting overviews or addressing broader theoretical concerns.

Of course, to some degree virtually all fisheries assessment and management takes place in “data-limited situations.” But in this volume it is mainly newly developing and/or smaller-scale fisheries that are considered, where data concerning fishery assessment and management efforts is more often especially limited.

The book is decidedly for the specialist and for readers who are already quite familiar with fisheries assessment, management, and policy science. To fully comprehend all of its papers, a reader will have to have competence in the use and interpretation of the most formal (i.e., mathematical) biological, economic, and bio-economic modeling approaches utilized in fisheries science today.

The book is divided into seven major parts, which are titled (1) Case Studies of Fishery Failures and Successes, (2) Indicators of Stock Health and Productivity from Limited Sampling Programs, (3) Involvement of Fishermen and Use of Local Knowledge, (4) Multispecies and Ecosystem Indicators and Models, (5) Precautionary Management Approaches, (6) Stock Assessment Models, and (7) Stock Assessment Surveys and Applications.

The book’s greatest strength is the collective experience and scientific findings that are comprised in its diversity of case studies. Collectively these should provide a reader with a comprehensive understanding of the possibilities that may arise from assessing

and managing newly developing and small-scale fisheries in various ways. Getting down to the cases and their specifics, and then internalizing these as both experiential and theoretical possibilities, is what a reader will have to do to get the maximum benefit from close study of this volume.

The book's weakest aspect is its deficit of summaries, overviews, or general conclusions stemming from the whole of the experiences that are presented in it. It does begin with a paper titled, "Overview of World Status of Data-limited Fisheries," but after that the volume is mainly a succession of case studies regarding specific fisheries in specific regions. A summarizing overview or conclusion at the end would have been a welcome and valuable addition to the volume.

Nevertheless, many of the contributions stand out as leading-edge advances in fisheries science and policy, providing readers with new applications of production models, new approaches to

assessment in data-limited situations, and innovative and even futuristic proposals regarding fisheries assessment and management.

Inasmuch as most of the world's major fisheries have been fully exploited for some time, with many of these now over-fished or even depleted, it has become especially important to develop new approaches for assessing and managing fisheries—especially newly developing and small-scale ones. And in that regard, the collected case studies in this book constitute a significant step in that general direction.

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