

BOOK REVIEW

Stock Assessment for Tropical Small-Scale Fisheries

Stock assessment for tropical small-scale fisheries: Proceedings of an international workshop held September 19-21, 1979 at the University of Rhode Island, Kingston, R.I. S.B. Saila and P.M. Roedel (eds.), International Center for Marine Resource Management, University of Rhode Island. 198 p. No date or price.

The book presents the proceedings of a workshop organized by the University of Rhode Island and funded by the U.S. Agency for International Development. The main purpose of this workshop was "to encourage dialogue between LDC fishery administrators, who must make the most of whatever information is available to them, and theoreticians, who can more effectively propose new approaches to assessment if they are more aware of the practical problems which inhibit data collection and analysis in the less developed countries (LDCs)."

Most papers addressed the overall objective and will prove extremely helpful to people working on tropical stocks, e.g., the paper by *Gulland*, which elaborates on what might be called the basic commandments of fishery biology: first, determine catch; next, determine effort—and only then talk about the status of the fishery; by *Munro*, which briefly reviews the valuable work he has conducted in Jamaica (assessing a coral reef fishery) and the original concepts and methods developed; and by *Brothers*, which gives an extremely lucid, up-to-date review of growth and ageing of tropical fish. Brothers rightly emphasizes the potential of reading the daily otolith markings as the standard method for ageing in the tropics.

Other contributions, such as that of *Stevenson* on the use of length-frequency data and of *Parrish* on an integrated study of the biology of Hawaiian reef fish, are also useful.

Several papers addressed the principal objective of the workshop only obliquely, such as that of *Thorne* on the application of hydroacoustics to tropical stock assessment. Thorne states in his abstract that "hydroacoustic techniques have *potential* (emphasis mine, D.P.) application to stock assessment for tropical and small-scale fisheries;" thus, he sets the stage for a brief review of the physical principles involved in hydroacoustics and of the advantages and disadvantages of the method... as if hydroacoustics had not been used during the last two decades on a very large scale in many fisheries development projects throughout the tropics. There is, for example, a huge amount of literature available on the subject from FAO.

From *Wilimovsky's* contribution on "minimal data requirements," two sentences are cited—obviously out of context—from which the reader will see what is meant by "obliquely." "The literature of the optical industry implies and suggests the existence of a helicopter-borne high-power laser developed for the military which is

capable of penetrating the sea to a considerable depth. Let us assume that a helicopter equipped with such a laser is available to the fishery manager . . ."

Only one paper missed the meeting's main objective—that of *Pollnac and Sutinen* on the economic, social and cultural aspects of stock assessment for tropical small-scale fisheries—containing mostly platitudes, e.g., "additionally, and less obviously, if pictures form an important part of the communications event, target group familiarity with the interpretation of two-dimensional pictorial material should be taken into account."

In summary, it can be stated that the book is very useful: it contains a number of worthwhile contributions, while the others are still fun to read.

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