Transactions of the American Fisheries Society 147:415–416, 2018

ISSN: 0002-8487 print / 1548-8659 online
DOI: 10.1002/tafs.10049

BOOK REVIEW

Foundations of Fisheries Science. *Edited by Greg G. Sass and Micheal S. Allen. American Fisheries Society, Bethesda, Maryland. 2014. 801 pages. $89.00 (hardcover).*

Greg G. Sass and Micheal S. Allen, along with an impressive team of highly qualified coeditors, have done the profession a fine service in compiling this volume. They took as their model Real and Brown's *Foundations of Ecology: Classic Papers with Commentaries* (1991). I briefly cohabitated a department with Real when that volume was being put together and recall the enthusiasm with which it was met by students and faculty alike. That was in the now-forgotten days when compiling a collection of classic references meant prowling the library stacks with a pocket full of nickels for the Xerox machine. Even then, some foundational works were published in such obscure outlets that one needed access to a good interlibrary loan department. Amassing in one handy volume what amounted to a library of classic papers was a gift to students and instructors alike.

The fisheries profession now has access to a volume of equal value thanks to the efforts of Sass, Allen, and their colleagues. It should be noted that the emphasis of this book is on fisheries, and by extension management, and so does not aim to cover the field of fish ecology. It is divided into five sections representing the main components of fisheries systems: Managing Fish Stocks, Managing People, Managing Fish Habitat, Managing Fish Communities and Ecosystems, and Managing Fisheries Enhancements. Each section includes full reprints of 8–10 articles as well as abstracts from "honorable mention" papers that did not make the cut for inclusion as full articles. Given the long history and complexity of fisheries research, selecting the papers to include in a single foundational volume must have been a monumental task, and one ripe for criticism by those who would have done it differently—if only they had been willing to do it in the first place. The editors' approach is hard to fault, however. They first recruited section editors who are among the leading researchers in their fields and abundantly qualified to identify the foundational work in each subdiscipline because they participated in it. Second, the editors solicited nominations for the most influential papers in the field from members of fisheries societies around the world, including the American Fisheries Society. It might have been interesting to add an appendix at the end of the volume that included citations for all of the nominated papers, but the length of that may have been prohibitive. The editors were allowed to use their own judgment in the case of papers that received tie votes and to make sure that the selections adequately covered the breadth of their disciplines.

The papers in each section are given context by introductions written by the section editors. While all of the introductions provide good context for the selected papers and highlight why they have been influential in how fisheries are understood and managed today, the approaches taken by the individual editors are a little uneven. In some cases, a broad historical context is provided to help readers understand the development of today's science and how the selected papers fit into that history. In other cases, the significance of the selected papers is elucidated with less attention to historical context. This is a minor quibble, however, as the strength of the volume lies in the reprinted papers themselves, and in all cases the introductions will help readers appreciate the context in which they were written and why they are fundamental to the development of the field.

I suspect that every reader who has spent enough time in the field to have a mental catalog of the papers that shaped their thinking will feel something has been left out of this book. Personally, I was surprised to see no papers by Johan Hjort or Henry Regier, but these may be personal icons and certainly not every paper for which readers have fond memories could be included. One could argue that the editors took on too large a task trying to boil down the number of foundational papers in fisheries so that they would fit into a single volume. Real and Brown's *Foundations of Ecology* spawned a series of other, similarly organized volumes, including books devoted to animal behavior, macroecology, and biogeography. Fisheries management is a sufficiently complex enterprise that its foundational literature could easily fill multiple, more-focused volumes. But it is not an appropriate response to the efforts of the editors to complain that they did not take on an even larger task.

A challenge in developing a volume of this type is to balance potentially competing objectives. Is the book primarily aimed at illustrating the historical development of the field by featuring papers critical to its advancement (the approach that I think describes Real and Brown 1991), or is it intended to focus on papers that were key contributors to the themes that define modern approaches to the field? The difference may be subtle, as there is much overlap, but the first approach could be viewed as emphasizing historical foundations while the second aims to provide a book that can serve as a primary text for students learning important concepts today. Clearly, the content of the current volume is the product of the voters who

nominated the papers, and I think it winds up straddling the fence between being a collection of golden oldies and being a modern text built around significant primary literature. I don't think that there is anything wrong with that, however. Readers seeking a compendium of all the hard-to-find classics from the early days of fisheries research will find some (but not all) of what they are looking for, and readers looking for critical papers that touch on all the themes of modern fisheries practice and research will have a similar experience.

Overall, I found that the book more than lived up to its stated objectives. The editors are to be commended on their efforts and success. Every reader should be able to easily find many papers that will add depth to their appreciation of the field, and for those who work within one or two of the section areas with little knowledge of the others, this is a great starting point from which to broaden their horizons. I suspect that the book will find a particularly comfortable home in graduate seminar courses as well as finding its way onto the nightstands of graduate students preparing for their comprehensive exams. But everyone in the field should find something of value here, and in an age when folders of pdf files seem to be replacing books, perhaps this is one book that you should consider reading the old-fashioned way.

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REFERENCE

Real, L. A., and J. H. Brown, editors. 1991. Foundations of ecology: classic papers with commentaries. University of Chicago Press, Chicago.