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Overfishing in a nutshell

Overfishing – What Everyone Needs to Know by Ray Hilborn, with Ulrike Hilborn, Oxford University Press, 2012. US$16.95/£10.99, (pbk) ISBN 978-0-19-979814-8 (pbk)

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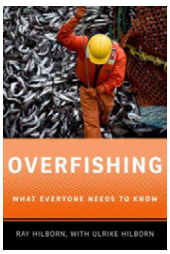

Firstly, I should disclose my own interests: I have worked extensively on the effects of overfishing on ecosystems and have frequently found myself on opposite sides of the debate from the first author of *Overfishing – What Everyone Needs to Know*, well-known fisheries scientist Ray Hilborn from the University of Washington. In fact, he uses the polarized, and sometimes acrimonious debate of the early 2000s as a lead-in to the book, outlining the controversies and how we resolved some of them through a jointly chaired working group [1,2]. Given that bumpy history, and Hilborn's penchant for provocation (e.g., [3]), I was pleasantly surprised by a volume that is quite ecumenical in tone and content, and more often than not illuminates controversial issues from multiple viewpoints.

This approach is exemplified by a statement towards the end of the book, affirming bluntly: 'First, foremost, and always: there is no free lunch'. Meaning: the extraction of food for human consumption will always change the environment, often dramatically, and there are always costs associated with it, both in ecological and economic terms. This is of course true both for food from the oceans and from land. How significant those costs are for capture fisheries, how they are viewed by different stakeholders, and how to minimize them, is a major focus of this book.

Hilborn strikes a good balance between comprehensiveness and attention to necessary detail. The result is a concise and very readable *tour de force* through all major aspects of fisheries research, from the collapse and recovery of single species, to the effects of fishing on ecosystems. Dedicated chapters deal with the management of industrial, artisanal, and recreational fisheries and the challenges associated with those. I particularly liked how the biological perspective is often combined with economic considerations, most prominently in a chapter on economic overfishing (which tends to occur at lower exploitation rates than those associated with yield overfishing). The corollary is a win–win: fishing for maximum profit requires less fishing pressure than traditional management objectives like maximum yield, and hence overlaps with biological conservation objectives.

This dual focus on fisheries biology and economics is quite different from other popular volumes on overfishing. Books like *The End of the Line* [4] or *The Unnatural History of the Sea* [5] are excellent in their own right, but largely emphasize the ecological devastation that overfishing has brought to oceans and seas. By contrast, Hilborn's work focuses upon the underlying human drivers, and how they can be dealt with in order to maximize benefits while minimizing environmental damage. Hilborn's tone can sometimes come across as apologetic for the fishing industry, such as when he is outlining in much detail the human and monetary drivers that encourage overfishing. Still, when taken with a grain of salt, this perspective is valuable as it makes the reader appreciate how seemingly irrational decisions can be made, supported, and maintained over time. I view this book as a good complement to the aforementioned works, but not a replacement. Historical overfishing, for example, is discussed by Hilborn only briefly, and only in the context of whaling. There is, however, a rich and illuminating literature on this topic, for which the reader may turn elsewhere [5,6].

The writing is clear and refreshingly devoid of technical terms – often a challenge in fisheries texts – a debt likely owed to the critical oversight of the first author's wife, Ulrike Hilborn, who co-wrote this book. The format of the text is a little harder to get used to, however. Each chapter is structured around a number of questions that are answered one by one, with a few paragraphs dedicated to each topic. This makes for entertaining reading, but strikes me as unfocused at times, as there is no underlying narrative, and the questions are not always connected in a logical order. Another problem is the strong American bias of the author. Most case studies come from the United States, and much of the remainder from other developed nations. The rest of the world is often only mentioned in passing. Despite these limitations, however, the range of topics is broad enough to leave the reader satisfied in the end with what amounts to a no-nonsense crash course in fisheries science.

References

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http://dx.doi.org/10.1016/j.tree.2012.10.003 Trends in Ecology & Evolution, March 2013, Vol. 28, No. 3

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