Publications

Effective Conservation Science: Data Not Dogma edited by Peter Kareiva, Michelle Marvier and Brian Silliman (2017), 208 pp., Oxford University Press, Oxford, UK. ISBN 9780198808978 (hbk), GBP 70.00; ISBN 9780198808985 (ppk), GBP 34.99.

The editors of this volume are concerned that a stifling conservation orthodoxy is limiting the ability of practitioners to learn from evidence. The purpose of their book is to 'expose the confirmation bias and weak evidence for some of conservation's most treasured tenets'. As such, this volume falls in line with the growing emphasis on generating and using evidence in many disciplines. It also can be considered part of the line of argument laid out in Bjorn Lomborg's more ambitious 2001 book The Skeptical Environmentalist: Measuring the Real State of the World.

Effective Conservation Science has three main sections: Challenges to foundational premises in conservation (eight chapters), Iconic conservation tales: sorting truth from fiction (eight chapters), and Questioning accepted strategies and interventions (nine chapters). Chapters cover a wide gamut of topics, from ecosystem services and introduced species to global agricultural expansion, fishing and the role of corporations. All authors lay out what they consider to be a misunderstood aspect of conservation, with some more successful than others in outlining how this misunderstanding came about and what the reader is supposed to think after completing the chapter.

There is no uniformity in the way chapters are written, with some presenting original research (fishing webs), others rehashing previously published work (GM crops), some reviewing debates in the literature (fisheries data), some provocative think pieces (sustainable fishing) and yet others deconstructing media coverage of issues (Yellowstone wolves). The chapters are short, so it is possible to learn about a large number of topics without the usual turgid quality of book chapters.

The challenge promised by the editors of critically examining our 'most treasured tenets' is only partially met because there is no clear mechanism laid out for identifying those tenets and then systematically addressing them. There is a lack of coherence to the topics chosen, with overlap in a number (e.g. fisheries data) and others absent (e.g. social value of protected areas, disease–biodiversity relationships, the role of evidence in policy development). The promise of the approach advocated by the editors is apparent through one excellent chapter, by Lenore Fahrig, on

habitat fragmentation vs loss. If a systematic process had identified the right set of issues and each one had been addressed, as Fahrig did, this would have been a more impactful book.

Instead, the book is an idiosyncratic set of topics written largely by people within the apparent circles of the editors: 96% from North America and Australia and 83% from just North America. Twenty-four of the 47 authors are from the University of California, Duke, University of Washington or The Nature Conservancy, the last of which is represented by 10 authors. Europe, Africa, and Asia are not represented either by authors, or, with a couple of exceptions, by major tenets that should have been identified and challenged in chapters.

With these criticisms in mind this book does perform a valuable service in reminding us to always be on guard to the fact that we in conservation science live inside echo chambers just as much as our fellow citizens. We must question data, conclusions and, above all, accepted wisdom. For many of us who have been in the field for decades this will mean making active room for younger professionals with new ideas, penetrating suggestions, and uncomfortable critiques, to ensure a future for biodiversity.

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Exploiting the Wilderness: An Analysis of Wildlife Crime by Greg L. Warchol (2017), xvi + 188 pp., Temple University Press, Philadelphia, USA. ISBN 9781439913673 (pbk), USD 28.95; ISBN 9781439913666 (hbk), USD 92.50.

This slim volume on wildlife crime is written not by a biologist or activist but, more unusually, by a criminologist. Easy to read, the book is based on the author's and others' field research over 14 years, mainly in southern and eastern Africa. Designed as an introduction to the illegal wildlife trade, it primarily focuses on wildlife crime in the regions of Africa with which the author is most familiar, occasionally touching on aspects of wildlife crimes in Asia, Europe and the USA.

Chapter 1 describes the illegal wildlife trade, some of the key species traded, and the structure of the markets. Although illuminating, here, and at other points in the

book, the author conflates subsistence hunting with criminally-organized international wild-life trafficking. Even though the former might be illegal in many cases, it is very different in almost all ways to the latter, including ethical ones and how it should be addressed.

Chapter 2 looks at national and international efforts to tackle the trade, including national laws, international treaties, and the role of NGOs. Chapter 3 examines who the offenders are, covering poachers, traffickers and consumers. The picture it paints is laudably broad but in doing so, it glosses over some of the complexities, maybe inevitable in a short volume, but does make for a somewhat simplistic impression. Again, the chapter conflates issues, in this case trophy hunting with commercial trade. Very appropriately, it focuses significant attention on the role of corruption, although it would have been helpful to recognize that the picture is not uniform across Africa, with Botswana being the obvious outlier. Chapter 4 explores the reasons that wildlife crime occurs, including applying criminological theory and its relatively new field of green criminology. It describes the history of colonial and post-colonial governments restricting local communities' access to lands, and recognizes the positive and essential nature of more recent communitybased efforts. Chapter 5 focuses on the consumers of illegally traded wildlife, and Chapter 6 on the government agencies in Africa and the USA charged with protecting wildlife. Given that the USA is not, compared with many countries, a major source of trafficked wildlife, it is unclear why so much emphasis is given to describing their wildlife protection systems, unless perhaps as an example of what is working relatively effectively?

Finally, Chapter 7 looks at a range of current efforts to protect wildlife in Africa, including community-based conservation programmes and the application of modern techniques and technologies. Notable absences from the discussion are Namibia, which is arguably the best example in Africa of community-based conservation involving trophy hunting, and also the wildlife enforcement tool SMART (http://smartconservationtools.org/) which has now been adopted by more than 380 sites in 46 countries globally, including across much of eastern and southern Africa.

The book covers much ground, but suffers throughout from a lack of accuracy on details (e.g. CITES enforcement mechanisms, species taxonomies) and, more importantly, from relying extensively on grey literature, much of it more than 15 years old, when the whole picture is changing so rapidly, rather than on