Publications

Human–Wildlife Interactions: Turning Conflict into Coexistence edited by Beatrice Frank, Jenny A. Glikman & Silvio Marchini (2019) 476 pp., Cambridge University Press, Cambridge, UK. ISBN 978-1-108402583 (pbk), GBP 34-99.

Fifteen years ago when Cambridge University Press published People and Wildlife: Conflict or Coexistence? it was one of the first books to bring the term 'coexistence' into conservation parlance, albeit in measured ways. Although the editors of the book examined the idea of coexistence as a new way in conservation, most of the chapters approached the topic from a mitigation and/or damagecontrol perspective. Now, more than a decade later, a sequel (Human-Wildlife Interactions: Turning Conflict into Coexistence) has been published that adds significantly to the previous book and duly justifies the need for another book on the topic. In the years since the first book was published, significant developments have been made in the field of human-wildlife interaction (yes, use of the term human-wildlife conflict is passé now) and the new book is a brilliant testimonial of this progress. The title of the book itself reflects the growing trend in conservation research and practice whereby people and wildlife are no longer posited as adversaries but as co-inhabitants living together through good and bad experiences.

There has been an increasing understanding, particularly in the last decade or so, that human-wildlife conflicts, or negative interactions, are often the outcomes or manifestations of more deep rooted human-human conflict. To decipher these underlying humanhuman conflicts and seek out human drivers of conservation, it has become imperative to study human behaviour, attitudes, motivations, values, institutions and every other human factor that impinges upon people's interaction with wildlife. Conservation researchers have heeded to this call and have employed a range of theories and concepts to understand the interactions between people and wildlife and explore ways of coexistence. In this evolutionary timeline, this book is a timely resource, lending coherence to the human dimension theme and also guiding future directions.

The book contains 20 chapters, with the first five devoted to defining coexistence and laying out the theoretical bricolage that underpins coexistence. The introductory chapter by Frank & Glikman sets out the stage for the book and their 'conflict-to-coexistence continuum' framework gives the book a flow

and consistency that is often difficult to achieve in an edited volume. Chapters 2–5 depict a wide spectrum of social and psychological theories ranging from values, emotions, identity and tolerance to explicate the conflict-to-coexistence framework, and do this thoroughly. Having said this, however, one feels that the linearity of the conflict-to-coexistence continuum is often oversimplified and the precarity of balance between conflict and coexistence is addressed late (in Chapter 20) in the book.

Chapters 6-14 are a mix of case studies featuring different species, although the focus is on terrestrial taxa. The case studies in themselves are interesting and informative, although the theoretical rigour is not the same across the chapters. For instance, whereas in Chapter 7 Skogen et al. firmly set the human-predator interaction within the broader framework of landscape and land-use, Sakurai's description of collaborative coexistence projects in rural Japan in Chapter 9 could have been supported by wider discussions on theories of social capital and cultural ecology. The majority of the case studies deliver on proposing novel approaches to understanding or achieving coexistence, although in some chapters, such as Chapters 10 and 13, one could question whether there is substantial value addition there or whether these read more like a repackaging of older approaches. Additionally, one cannot help but notice the North-American and Eurocentric bias in the selection of case studies, which is disconcerting considering that most biodiversity rich areas are located in the Global South and side-lining this region means missing opportunities to learn about more organically developed coexistence between humans and wildlife.

I consider the final chapters (Chapters 15-19) to be the strongest elements of this publication. From discussing new strategies (Chapter 16) to listing important resources and focus areas to achieve coexistence (Chapter 19), these chapters deliver pragmatic solutions that could benefit conservation science immensely. In fact, I feel that many important concepts and constructs broached in these chapters, such as transboundary conservation (Chapter 18), citizen science and environmental communication (Chapter 19) could have merited individual attention. Furthermore, the book would have had a more well-rounded appeal if newer research methodologies such as multi-species ethnography could have been discussed as a means of configuring the conflict-to-coexistence continuum.

In all, Human–Wildlife Interactions: Turning Conflict into Coexistence is a progressive,

forward looking book that will captivate readers and make them dwell on the positives of human-wildlife interactions rather than the negatives. The book could have covered some other significant aspects of the conflict-to-coexistence continuum such as wildlife trade and wildlife tourism, but nevertheless it is a good attempt at bringing together some contemporary ideas and approaches, which will remain relevant and even gain greater prominence in conservation in the future. I think this book, like its predecessor, will be an indispensable addition to the libraries of all conservation researchers and would recommend it highly to everyone who is interested in this field.

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The Wake of Crows: Living and Dying in Shared Worlds by Thom van Dooren (2019) 288 pp., Columbia University Press, New York, USA. ISBN: 978-0-231182829 (hbk), GBP 30.00/USD 35.00.

Crows are among our most familiar and charismatic animals and as such there is a wealth of literature dedicated to them with which few other wildlife species compare. Although each contributor takes a distinct perspective and harnesses different stories or features of their biology, there is perhaps nothing as unique in the body of work dedicated to crows as The Wake of Crows: Living and Dying in Shared Worlds. It is neither a classic natural history book, nor a memoir of being connected to the natural world through crows. Instead, van Dooren has used crows as a loom on which to weave science and humanities together, producing a thesis of what it means to exist in our contemporary world. Central to this thesis is the question of 'What else is possible?' For the traditional science and natural history reader his exploration of this seemingly familiar question will be anything but familiar. Although by now, for example, we may be used to being asked to reconsider the image of the crow as pest or bad omen, here we are asked to reconsider them systemically, and in ways that ultimately inform the reader's ethic.

The book is organized into five chapters, each of which reflects on a unique theme and takes place in a different part of the world. At the end of each chapter is a complementary vignette that enhances the reader's connection to crows. Among the chapters,

the five themes include community, inheritance, hospitality, recognition and hope. In exploring community, we are taken to Brisbane, Australia where van Dooren reflects on the people that are either making space for urban crows or removing it. He talks with civilians and scientists to provide a holistic picture of what it means to influence—and be influenced by—the presence of crows in our urban and suburban spaces. In addition, he explores what it means, and who gets to define, living in 'balance' with nature.

In Chapter 2 we travel to the Big Island of Hawaii, where we explore the restoration efforts of the endemic 'Alalā, or Hawaiian crow. Like many Western conservation efforts, the reintroduction of the extinct 'Alalā coincides with an inheritance of colonialism. Van Dooren's interviews with conservationists, both white and Indigenous, offer insight into our cultural and ecological inheritance, and what it means to attempt to restore something for which there is no template of wholeness.

Next we travel to Rotten, Netherlands, where a small band of introduced house crows experience the wrath of being othered. Juxtaposed against the backdrop of one of the most influential centres of globalization in the world, the city's effort to eradicate these introduced victors feels insulting, though van Dooren is careful not to say so explicitly. For many ecologists like myself, who fear biological homogenization and embrace the necessity to eliminate invasive species, this chapter may invite the most difficult questions of introspection.

Chapter 4 centres around the expansion of common ravens in the Mojave Desert, and their subsequent impacts on the increasingly rare desert tortoise. We explore what it means to consider the ravens' intelligence not as an obstacle to managing them, but as a gift for non-lethal collaboration. Instead of killing ravens, perhaps we can train them out of consuming the food source that has sustained their growing population. As with all of his queries, however, van Dooren does not leave us here to sit contentedly with a clever solution to a difficult problem. The is far more to unpack in this story, and mostly there is no easy answer.

By Chapter 5, which explores the restoration of the Aga, or Mariana crow, on the island of Rota in the Commonwealth of the Northern Mariana Islands, the echoes of each previous chapter can be heard. Far from becoming repetitive, the tapestry van Dooren has been weaving comes together in hope, the chapter's theme, but not without a deep exploration of nuance.

What is most unique about this volume is that van Dooren's exploration of each topic goes far beyond simple reporting, and instead reaches deep into the humanities to provide a sharp academic backdrop of complexity. Ideas many ecologists might take as fact are questioned, deconstructed, and left for the reader to reassemble anew. It is a unique and powerful look at what it means to live in a shared world, and asks that we reconsider our ethics in doing so. It is far from a light read, but it is one that grants the experience of expansion that curious people crave.

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Shepherding Nature: The Challenge of Conservation Reliance by J. Michael Scott, John A. Wiens, Beatrice Van Horne & Dale D. Goble (2020) 396 pp., Cambridge University Press, Cambridge, UK. ISBN 978-1-108434331 (pbk), GBP 29.99.

The lesser kestrel Falco naumanni and the European roller Coracias garrulus are both avian species that require cavities to be able to nest. In their Portuguese stronghold they nest mostly in cavities in abandoned rural buildings and artificial nest sites. The buildings in which they nest are slowly collapsing, making artificial nest sites an increasing requirement. Both species are on their way to becoming conservation reliant (Gameiro et al., 2020).

In a series of influential papers the authors of *Shepherding Nature* laid out the concept of conservation reliance. In *Shepherding Nature* they expand their argument and provide the following definition of conservation reliance: 'A species is conservation reliant if it is vulnerable to threats that persist and requires continued management intervention to prevent a decline toward extinction or to maintain a population' (p. 3). The term is not binary but rather dynamic, changing with threats, conservation actions and the biology of the species. The concept has its roots in the 1994 version of IUCN's Red List but was dropped in 2001.

For too long the conservation community has operated under a little-examined assumption that somehow when a previously threatened species was fully conserved it would not require further conservation actions. And how wrong we have been. In the USA, for example, some four-fifths of the species listed as Threatened or Endangered under the Endangered Species Act are conservation reliant. Similar figures for other countries have not been calculated.

Shepherding Nature is a book with 11 chapters that details the circumstances,

stories and strategies of conservation reliance. Its chapters cover existing threats, emerging threats, policy and law, and species conservation tools. Throughout the book are scattered some 11 'essays': short case studies written by outside experts, some of which strongly carry the narrative forward and others less so. The well-known stories of the California condor, Hawaii's native forest birds and Kirtland's warbler provide both the basis and the powerful illustration of how and why conservation reliance comes about. The book finishes with a prioritization framework for action to conserve species. The book is mostly about the USA, the country where all authors reside; where it does cross national boundaries, it is largely to other English-speaking countries, particularly Australia and New Zealand.

In many ways the book is more about general species conservation than just conservation reliant species. Although this may have been necessary, it dilutes the power of the concept as it reviews a good deal of basic conservation biology that will be well known to many readers. Shepherding Nature is situated in the core of traditional species conservation and conservation biology. It pays only slight attention to the larger forces that suggest to many of us that traditional conservation and its traditional tools may not be enough to address the future of nature in a human-dominated world. A recent study by Ceballos and colleagues (2020) shows that c. 94% of the populations of 77 mammal and bird species on the brink have been lost in the last century. Conservation reliance is here to stay. And in the end the challenge for humanity is to realize that we, ourselves, are a conservation reliant species.

References

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