

Book reviews

The Sounds of Life: How Digital Technology Is Bringing Us Closer to the Worlds of Animals and Plants by Karen Bakker (2022) 368 pp., Princeton University Press, Princeton, USA. ISBN 978-0-691-20628-8 (hbk), USD 33.00.

Of the different stimuli to our five senses, sound is a particularly important one. Together with visual signals, sound waves—transmitted through the ear drum and the tiny bones of the middle ear, distilled by our inner ears into electric signals and finally interpreted by our brains—make up a large part of how we perceive the world around us. However, in her book *The Sounds of Life*, (the late) Karen Bakker suggests that humans are actually poorer listeners ‘than our cousins on the Tree of Life’ (p. 1). Wedged comfortably between the sonorous infrasound and the shrill ultrasound, our range of hearing precludes us from a plethora of trills, rumbles, squeaks, groans and other sounds that denizens of the natural world produce. In times past, this meant that entire swathes of sound passed us by, unheeded and unnoticed, but now, with rapid advances of technology and its increasing ease of use, scientists are listening in on hitherto unexplored frequencies.

Natural soundscapes have always fascinated me, and I have been privileged to witness some truly spectacular animal vocalizations, such as the distinctive call of the indri *Indri indri* in Madagascar. Príncipe Island, where I currently live and work, brims with understudied species, many of which are threatened. One of the ways in which my team and I work towards conserving these species is by using sound-sensing technology such as AudioMoths to record vocalizations, information that can help us identify priority areas for conservation. In her book, Bakker explores these and other technological tools, from machine-printed spectrographs that helped visualize whale calls in the time of unregulated commercial whaling, to autonomous recording units used to help construct a lexicon of elephant communication.

The book is loosely structured, which works well as the different chapters can be read as standalone conservation stories. Bakker incorporates both marine and terrestrial settings in her book, illustrating the ubiquitous nature of sound. One of my favourite chapters delves into the soundscapes of the plant kingdom, within the larger context of the acoustic niche hypothesis, which states that different species will evolve to occupy different acoustic niches in any given ecosystem. Additionally, co-evolutionary processes fine-tune this acoustic niche, by simultaneously developing mechanisms for producing and detecting sound. For example, Bakker describes how bats that

pollinate certain flowers can recognize these plants by biosonar, or echolocation. Another case study focuses on how bees vibrate at a particular frequency to release pollen from flowering plants whose anthers open through small pores or slits. At one point in the chapter, the author references *The Forest Unseen* by David Haskell (2012, Viking Books, New York, USA), where he rhapsodizes about the richness of plant sounds in forests. Listening to the rain-fall on trees in Ecuador, the melodies leap out: a ‘spatter of metallic sparks’, a ‘low, clean, woody thump’, or a ‘speed-typists’ clatter’. We often take plants and the sounds they make for granted, but as I sit here, writing this on São Tomé and Príncipe’s 48th Independence Day, the susurrations of the wind through the leaves and fronds of the plants around me feels like its own kind of celebratory song.

Bakker’s book is fully referenced, with all factual details meticulously cited and quotations diligently superscripted. For readers like me who like to explore further, this also means that the journey to learn more about sounds in nature does not stop here: the book generously opens the door to a rabbit hole of discovery. I appreciate how intentional Bakker is with referencing, and how she expresses her gratitude for Indigenous and traditional wisdom, highlighting the cultural significance of some of the animals mentioned in her book, as well as explaining the complex interlinkages between culture and conservation.

In summary, the book is a lucid, meandering exploration of sound in the natural world, and a fascinating introduction to the exciting possibilities that technological applications open up towards a better understanding of the non-human world around us. As Bakker puts it, the day may not be far when humans and other species may begin ‘conversing’ with each other in an informed manner. As someone who adored Eliza Thornberry, the young woman in the children’s cartoon programme ‘The Wild Thornberrys’ who could speak with animals, I look forward to that day.

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The Wolf: Culture, Nature, Heritage edited by Ian Convery, Owen Nevin, Erwin van Maanen, Peter Davis and Karen Lloyd (2023) 400 pp., Boydell & Brewer, Martlesham, UK. ISBN 978-1-83765-015-6 (hbk), GBP 75.00.

Wolves have had little say in the structuring of their relationships with humans. Rather,

people have treated wolves as blank slates on which they have written human hopes, dreams and nightmares. The grey wolf’s scientific name, *Canis lupus*, combining simply the Latin words for ‘dog’ and ‘wolf’ is hardly large enough to encompass the story of Little Red Riding Hood, the purported saving of the ecosystem of Yellowstone National Park, hair-raising stories of werewolves and what one author has termed the ‘wolf-shaped hole in Britain’ (p. 378). Yet this book stretches to encompass all of these wolf stories as well as many, many more, as evidenced by the fact that the book is dedicated to a German wolf that was shot inadvertently, and the opening poem is titled ‘Trophic Cascade’.

The editors position the book as exploring the recovery of wolves in all its different dimensions, framing the history of human–wolf relationships with the observation that no other species has polarized human opinion more than the wolf, the largest of extant wild canids. This polarization is documented throughout human history in its varied manifestations: from children’s literature to museums and zoos, from folklore and traditional narratives told by first nations to the gaze of the modern-day eco-tourist. In his foreword, Luigi Boitani, perhaps the dean of European wolf studies, lays out the book’s most helpful framing as to why wolves occupy their unique position in human thought. Firstly, they can adapt easily to live near people, and secondly, both wolves and humans are highly social animals, with all the implications that such a lifestyle entails. Unfortunately, neither Boitani nor other authors examine in any depth the differences between European, South Asian, North Asian and North American wolves with respect to their biology, the history of their interactions with people and the resulting social attitudes. Instead, the book focuses mostly on the European wolf, with rich detailing of history, folklore and the recolonization of landscapes by dispersing wolves.

In this edited volume of 32 contributions by 46 authors, the chapters span a broad range of perspectives, from Thomas Gable, lead for the Voyageurs Wolf Project, and Carol Alexander, a wildlife photographer who documented a lone sea-wolf’s life for 6 years, to Elizabeth Marshall, a writer who specializes in the cultural and historical representation of wolves, and Chris Powici, a poet and essayist. The authors are predominantly European, with many from the UK, but there are a few outliers who cover Australian ‘wolves’ (i.e. dingoes), thylacines, the missing wolves of Japan and coywolves. There are