

Book Review

Fifty Years of Invasion Ecology: The Legacy of Charles Elton

David M. Richardson (ed.). Wiley-Blackwell, West Sussex, 2011. xix + 432 pp. Price A\$190.00 (hardback). ISBN 978-1-4443-3585-9 (also available in paperback and e-book).

Several years ago, my friend and colleague Chris Dickman lent me a book. That book was *Elton's Ecologists* by Peter Crowcroft. Reading about Charles Elton in that wonderful book, his influence on ecology in general and on his research group in particular, was simply inspiring. It made sense that Chris would offer up that book as a good read, given his similarly profound influence on ecology. Now, having just finished *Fifty Years of Invasion Ecology: The Legacy of Charles Elton*, I continue to be inspired by Charles Elton's legacy. *Fifty Years of Invasion Ecology* (David Richardson, Editor) sets out to provide an overview of the field of invasion ecology with special reference to the influence of Elton's 1958 monograph *The Ecology of Invasions by Plants and Animals*. And Richardson's book does this admirably.

Richardson has assembled a remarkable group of invasion ecologists to contribute to his book, and with few exceptions these contributors discuss their topics in the context of Elton's landmark book. From the authors' contributions can be gleaned keen insight into the history of the study of biological invasions (Kitching's Chapter 1, Carlton's Chapter 3, MacIsaac *et al.* in Chapter 5); some of the key research questions and approaches in the field (Fridley's Chapter 10, Callaway & Rout's Chapter 11, Ricciardi *et al.* in Chapter 17); and the current and future playing fields (Pyšek & Hulme's Chapter 7, Blackburn *et al.* in Chapter 13, Vitousek *et al.* in Chapter 21, Dukes' Chapter 26). There is so much to take in in this book, I'm sure I'll be regularly revisiting various chapters over the next few years.

An important feature of the success of this book is its honesty. Chapter 2 (Simberloff) argues that Elton was

not so much a founder of invasion biology, but a prophet, and that his role in spruiking the importance of managing invasive species as a conservation issue was critical in the development of present-day invasion ecology (and, arguably, restoration ecology, Hobbs & Richardson's Chapter 6). This idea is echoed in other chapters. Davis' short-and-sweet Chapter 20 provides a sanguine and worth-a-read reality check about both the reliance on a niche-based approach and the problem of overstating claims in the field of invasion biology.

An assortment of chapters that I would consider especially essential reading for anyone starting out in the field of invasion ecology include: a compendium of essential concepts and terminology (Richardson *et al.* in Chapter 30); the incredibly engaging essay on biosecurity, undoubtedly an expanding research area in the future (Hulme's Chapter 23); a clear description of the economics of biological invasions (Perrings' Chapter 24); and (for plant ecologists) Barrett's essay (Chapter 15) on reproductive systems.

This is an important book for ecology in general – I'll be using it in my undergraduate teaching and recommending it as key source material to my post-graduate students working on alien invasions. There are little gems scattered throughout the book too, and perhaps one of the best comes from Kitching's opening chapter which gave me a good laugh and which I think sums up the current 'native vs. exotic' debate quite nicely: '. . . to suggest that a preoccupation with biotic invasions and clear contradistinctions between "native" and "exotic" biotas reflected both an inbuilt militarism and, even, an incipient xenophobia is, to my mind, overegging the pudding'. Overegging indeed.

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