

fashion and should be accessible to non-specialists; though the non-philosopher (and even some philosophers) might quickly grow weary of some of the nuanced discussion from within environmental ethics ('infighting' they might think). Norton adeptly employs a narrative style at certain times, traditional philosophical prose at others, and policy-speak when needed. The ultimate effect is a book that keeps you both entertained and on your toes.

Readers not familiar with the detailed ins and outs of environmental ethics should note, however, that Norton has a particular and, I believe, uncommon (I even believe somewhat unsettling) taxonomy of some of the major figures in environmental ethics. The most unusual of these is found in his handling of the philosophy of Aldo Leopold. Norton classifies (or re-classifies) Leopold as a fellow anthropocentrist, and not as someone who forwarded a non-anthropocentric environmental ethic, as most other environmental philosophers and thinkers do. Given Leopold's popularity and persuasiveness, it is understandable why someone would desire to have a Leopoldian imprimatur. And undoubtedly, Leopold forwards many anthropocentric arguments along the way to his non-anthropocentric land ethic. However, while defending a position that directly morally enfranchises non-human nature would most certainly make you a non-anthropocentrist, forwarding and defending the direct moral standing of humans and human interests does not make you an anthropocentrist, even if those are the arguments that you often lead with or if those are the arguments that you believe to ultimately believe those with the greatest likelihood of successfully swaying minds and policies. You are not an anthropocentrist unless you believe that all and *only* humans are worthy of direct moral standing and Leopold's work is riddled with references to a desire for the direct moral inclusion of the more-than-human world. It is simply a mistake to ignore or reclassify those references. In all fairness, however, I would note that it is not at all uncommon to understand or categorize basic environmental ethics categories in a number of ways; Norton's is one, and mine is different.

All in all, however, Bryan Norton has produced yet another piece of important environmental scholarship. Natural resource management, and students thereof, would be greatly served by carefully considering the view of regimes such as adaptive management through the critical lens of philosophical analysis. I can think of few better prompts for critical thought than Norton's treatise.

MICHAEL P. NELSON
Department of Philosophy
 403 Morrill Hall
 University of Idaho
 Moscow, ID 83844-3016, USA
 e-mail: mpnelson@uidaho.edu

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Culture of Ecology. Reconciling Economics and Environment

BY ROBERT BABE

xiv + 230 pp., 23.5 × 16 × 1.5 cm, ISBN 0 8020 3595 7 hardback, US\$ 65.00/GB£ 42.00, Toronto, Canada: University of Toronto Press, 2006

Robert E. Babe addresses the most important issue of our times, the conception of and transition to an economy compatible with ecology.

It is both broadly philosophical and intensely practical about human survival and how the course of nature's evolution depends on a new conception and rapid transition. Robert Babe provides an analysis of the philosophical aspects of this issue in a manner accessible to undergraduates and lay readers.

Professor Babe (University of Western Ontario, Canada) argues for a culture of ecology, for seeing ourselves in an indivisible system of relations. The problem is that we now live within a market system and see ourselves through a neoclassical economic paradigm. This structure and its neoclassical rationale are systemically flawed and leading us to an inevitable destruction unless we change philosophies and restructure. Scholars in the field of ecological economics are bound together by the same general argument, and to a large extent Babe's *Culture of Ecology* provides a review of this heterogeneous field. Like western science, neoclassical economics not only shapes every aspect of our lives, but has also transformed how we picture ourselves in the world. The philosophy of economics has become a secular religion that rationalizes many aspects of our social structure and guides our lives. Transcending this philosophical invasion will require counterattacks from many positions. Many economists will be among its last defenders. Robert Babe's book is a very welcome contribution to the growing realization that moving toward a healthy relation with the natural world requires a new economic paradigm.

Robert Babe portrays economics and ecology as discourses and compares and contrasts neoclassical and ecological economics in historical context. As discourse analysis (Chapter 2), he makes an original contribution, certainly original for those who have not thought of what are conventionally portrayed as scientific disciplines as conversations in the context of the interaction of philosophy and politics over time. Historically, Babe explores the roots of economic and ecological thinking from Aristotle, through the Bible, and into the Middle Ages (Chapter 3), disputing in the process the infamous thesis of Lynn White Jr that our ecological destructiveness is rooted in Judeo-Christian beliefs. Babe argues that the real problems arose in the Enlightenment in the form of individualism and materialism that become incorporated in economics to the exclusion of relational understandings of society and nature (Chapter 4). These are the strong chapters.

In my estimation, the quality of the argument deteriorates hereafter. The arguments presented in his comparison of environmental and ecological economics (Chapter 5) are on target. The bulk of this long chapter, however, is a loose composite of summaries of specific authors' contributions to the two fields. From here, Babe works with concepts of information and entropy in a finite earth (Chapter 6) that also comes across as disjointed, although the concluding chapter is short and strong.

Robert Babe's strongest contributions are suitable for students of communication and of history, but he has not written a whole book for students in either of these disciplines. The historical chapters should be incorporated in courses designed to provide an ecological alternative to conventional economics, but these students will have better access to environmental and ecological economics than Babe provides. And so much of the problem is that it is difficult to write a book of broad significance from a communications theory or historical perspective when our universities see educating students about the modern human dilemma as primarily the responsibility of environmental studies programmes. Clearly, the future of humanity and nature needs to be addressed throughout universities. Of course the larger problem is that we have multiversities instead of universities. I can recommend *Culture of Ecology: Reconciling*

Economics and Environment for classes in environmental studies even though the existence of this category illustrates the problem.

RICHARD B. NORGAARD
Energy and Resources Group
 310 Barrows Hall
 University of California
 Berkeley, CA 94720–3050, USA
 e-mail: norgaard@igc.org

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Applying Nature's Design. Corridors as Strategies for Biodiversity Conservation

BY ANTHONY B ANDERSON AND CLINTON N JEKINS

x + 231 pp., 22.5 × 15.5 × 1.5 cm, ISBN 0 231 13411 8 paperback, GB£ 22.50, New York, USA/Chichester, UK: Columbia University Press, 2006

What conservation biologist has not heard of corridors as a strategy for connecting fragmented habitats and conserving biological diversity? The surprising fact is that, although hundreds of corridor initiatives are underway, the scientific foundations and empirical evidence that support these initiatives are still weak, controversial and still persistently debated in the scientific literature. *Applying Nature's Design* makes this clear, but then goes on with very practical advice on how to design and implement the corridors, the scientific basis of which is still uncertain.

Intended for conservation practitioners and policy makers, *Applying Nature's Design* starts with an overview of the book where an operational definition of corridors is offered: 'spaces in which connectivity between species, ecosystem, and ecological processes is mediated or restored at various scales'. In the second chapter the authors review the conceptual foundations of corridors, and provide a synthetic summary of the theory of island biogeography, metapopulation theory and landscape ecology. This chapter also presents the on-going debate about corridors, regarding the purported functions of corridors, their positive and negative aspects and their cost effectiveness. Are corridors effective in their intent to provide connectivity? After reviewing 32 studies the authors conclude that less than a third of these studies provide convincing evidence that they do.

In spite of all the uncertainties related to corridors, the book turns to the more applied aspects of corridor design and implementation, and in Chapter three examines issues of corridor design. The authors maintain that in highly disturbed landscapes the best approach is linear corridors, while in areas that are still very well preserved a landscape corridor approach is better, and planning should focus on maintaining those areas of connectivity (i.e. protecting them from development of other activities). Chapter 4 examines factors that affect corridor implementation, including their management, obstacles and incentives for implementation and issues of governance. This chapter draws heavily from the eight case studies that are presented in the final chapter. More than half of the book is taken up by an in-depth examination of these eight case studies.

The main contribution of this book is in fact the eight case studies since they illustrate the complexities of conservation in fragmented habitats and examine the interactions between the natural and the social. Anderson and Jenkins state that corridors require conservation

practitioners to look beyond core-protected areas and address a wider range of issues affecting resource-use decisions by people. However rather than thinking of ways in which the agricultural matrix can be managed to enhance connectivity (such as agroforestry or organic agriculture), they think about ways to convert production areas into natural vegetation, or restore narrow strips of land to form corridors. They undermine the importance of the agricultural matrix as a habitat for biodiversity and as a habitat that can provide connectivity between fragments of natural vegetation.

Furthermore, there is a detectable large charismatic megafauna bias in the book (with a fetish for top carnivores). Anderson and Jenkins justify this by arguing that the conservation of focal species (as well as umbrella, flagship and keystone species) presumably results in the conservation of many other species. But few actual data are provided to demonstrate that.

The book is well organized and very clearly written. Each chapter has a clear description of its content and in many cases the authors present information in the form of bullet points, with frequent reference to the case studies for which the concept applies.

Corridors make theoretical sense only when the focus is on the conservation of large vertebrates (such as 'charismatic megafauna' or 'flagship species'). The theoretical foundations break down when considering the millions of small organisms that constitute most of the biodiversity in the world. There is no debate that habitat fragmentation is one of the major drivers of biodiversity loss. Neither is there a debate about the need for connectivity between fragments. What is debatable is whether corridors are effective at all, or in the cases where they are, whether they are the most effective (including cost effective) ways for increasing connectivity. This debate is not entertained in this book. In the end, an excessive focus on corridors may have the unintended consequence of providing cover, or worse, offering permission for destruction of the rest of the landscape.

IVETTE PERFECTO
School of Natural Resources and Environment
 University of Michigan
 Ann Arbor, MI, USA
 e-mail: perfecto@umich.edu

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Biodiversity and Conservation (Second edition)

BY MICHAEL J JEFFRIES

xvi + 236 pp., 54 figs, 27 plates and 24 tables, 24.5 × 17 × 1 cm, ISBN 0 415 34300 3 paperback, GB£ 18.50, ISBN 0 415 34299 6 hardcover, price unknown, Oxford, UK/New York, USA: Routledge 2006

This introductory book brings together the natural sciences and the social sciences that underpin understanding biodiversity, the biodiversity crisis and conservation. It concentrates on ecology but pays sufficient attention to legislation, international treaties and economics to emphasize the point that conservation is not only action-driven, but is also a major societal undertaking supported by governmental policies. From the organization of the text in short sections, the short sentences and the layout, it is clear that the book is aimed at undergraduate level. Routledge has a reputation to maintain concerning the market of introductory texts, and the fact that the present book is a second edition proves that Jeffries has written the right book.