

# BOOK REVIEW

## *Restoration Ecology: The New Frontier, 2<sup>nd</sup> edition*

Jelte van Andel and James Aronson (editors). 2012. Blackwell Publishing, Oxford, U.K., 400 pages, £ 90.00 (Hardcover), £ 45.00 (Paperback). ISBN: 978-1-4443-3636-8 (Pb). Also available as eBook.

When it rains, it pours! On the heels of the publication of not one, but two textbooks for restoration ecology comes this newly revised edition of the classic text by Van Andel and Aronson. How does it differ from *Introduction to Restoration Ecology* by Evelyn Howell et al., and *Ecological Restoration* by Susan M. Galatowitsch? The latter are both designed as (undergraduate) textbooks, organized to systematically cover the field from conceptual bases to restoration in practice. The *New Frontier* is an edited multi-authored volume written with a more advanced audience in mind (graduate students and senior researchers). As such, it is less cohesive than single or few authored texts, but more cutting edge, with exposure to a wider array of ideas and approaches to restoration ecology.

The first edition of this book was already very good, and now it is better. The book is beautifully produced, with crisp type and figures, and a solid binding. There is more attention given to non-European ecosystems and authors in this second edition, and updates all around. The first eight chapters set up the

field and practice of restoration ecology (including a chapter on "Planning and Implementation") and provide a brief conceptual background. The final three look to the emerging issues of invasions, global change, and sustainability. The heart of the book is the middle section, 11 chapters focused on different global biomes. Not simply case histories, these explore patterns across multiple ecosystems and multiple restoration goals and techniques. The biome-specific chapters are less about "how-to" and more "broader issues when considering" restoration. The result is an admirably comprehensive overview.

This volume is an example of the struggle to integrate conceptual aspects of restoration ecology with practical aspects of ecological restoration, both in books like this and the other two texts, and in the field. A legitimate question is: how much is current restoration practice attentive to our conceptual caveats, and how much does it matter when it is not?

No review would be complete without a few quibbles. The European bias still shows through occasionally, as in the brief summary of the history of conservation. There is no mention that other parts of the world also took the global lead in formally setting aside nature for conservation, starting with Yellowstone National Park in 1872, and Banff National Park in Canada in 1885. The Sierra Club (a conservation NGO founded in 1892) predates both of the conservation groups mentioned in the introduction, and the Audubon Society was founded in 1905. And let's not forget Royal National

Park in Australia (1879), Tongariro National Park in New Zealand (1886), and Kruger National Park in South Africa, whose predecessor was founded in 1898.

Some of the chapters are more restricted than their titles suggest. The Grasslands chapter (14) is mostly limited to western European grasslands and heathlands, an odd subset that ignores the vast rangelands of Africa, the Americas, Central Asia, and Australia (some of which are briefly mentioned in Chapter 10). The North American Forests chapter is really about western coniferous forests. On a related note, there is a notable absence of one of the great restorative events of recent human history: the resurgence of the eastern deciduous forest in North America. The current volume shares this shortfall (one of my pet peeves) with both Howell and Galatowitsch: having the pervasive (though hardly universal) power of ecological succession take a back seat to assembly theory.

Such carping from the sidelines is easy, but should not detract from the wonderful job the editors and authors have done. This newly revised and fully updated edition should be on the shelf of every restoration ecologist. Not a "how-to" book, but a fine overview of many of the conceptual and interdisciplinary issues involved, and biome-specific overviews that are still European in emphasis, but now more global in scope.

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