

and forestry sectors. Each step in the process is detailed, from scoping the costs and benefits of a project to verifying and registering offsets. Economic concepts such as levelized costs and discount rates are covered, as well as technical information on carbon inventory methods for forest and agricultural systems. The intended readership is wide and includes landowners, project developers, aggregators and verifiers, indeed any individual who might be interested in developing or marketing land-based carbon offsets. The language is clear and very readable, and should be accessible to audiences of varying backgrounds.

Willey and Chameides have done an excellent job of covering the core concepts related to carbon offsets, such as baselines, verification, validation, greenhouse warming potential, upstream/downstream emissions and risk assessment; the discussion of leakage is particularly thorough. Since carbon offsets are still evolving in the USA and there is no formal system or standard, what this volume provides is a recommended approach for interested parties to follow, one that should work with the many existing registry systems and provide the rigour required by the marketplace. While many of the suggested methods and approaches are commonly practised, the idea of proportional baselines is not widely employed and could be burdensome to implement. Some of the forest inventory recommendations, such as seedling and shrub inventories, are not generally practised and would likely add considerable time and expense for little return. However, most practitioners should find the roadmap presented for creating offsets to be workable and easily adapted to fit their particular situation.

Overall, this volume should be quite useful to anyone who needs to understand the emerging market for carbon offsets. A large number of examples and appendices are included; nearly half of the pages comprise appendices that provide additional detail on a variety of topics from quantifying inadvertent emissions to developing new biomass equations. Readers with a natural resources background will find the discussion of the policy and economic aspects of carbon offset projects instructive, and those with a business or policy background will gain a good understanding of the technical aspects of quantifying the various carbon pools. For policymakers, this book is an excellent overview of a complex and growing topic. *Harnessing Farms and Forests in the Low-Carbon Economy: How to Create, Measure, and Verify Greenhouse Gas Offsets* is a thorough well-written treatment of an important topic, and is a useful reference for those in agriculture, business, forestry and policy.

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Old Fields. Dynamics and Restoration of Abandoned Farmland

EDITED BY VIKI A. CRAMER AND RICHARD J. HOBBS

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paperback, GB£ 26.50, London, UK: Island Press, 2007

The sub-title of this volume (number 12 in the series *The Science and Practice of Ecological Restoration*), *Dynamics and Restoration of Abandoned Farmland* brings to mind the proverbial glass of water; half empty or half full? Is land abandonment a threat, resulting in

loss of important semi-natural habitat and biodiversity? Or is it an opportunity for the re-establishment of old (or new) patterns of biodiversity and/or positive options for controlling soil erosion or generating carbon sinks? The answer lies in the eyes of the beholder (restoration ecologist, geographer, conservationist, economist or rural anthropologist), the geographical location of the abandoned land and the origin and nature of the abandonment process itself. As this volume details, land abandonment is a multi-faceted concept. Indeed one of the main strengths of this volume is the diversity of case studies encompassing, of course, the home of old field ecology, the USA; with chapters from New Jersey and Michigan, but including a wide range of case studies and reviews from Puerto Rico, Brazilian Amazonia, the Neotropics, Australia, South Africa, Central Europe, Southern France, Southeastern Spain and Greece. Although the editors' intention was not to provide exhaustive coverage, and I can cope without a contribution from the UK where the abundant literature on old fields ('set aside') is readily available (for example Firbank *et al.* 2003), I did miss contributions from India, Africa (other than South Africa), the Russian Federation and China amongst others, where land abandonment is a critical element of environmental and socioeconomic change (see Jiao *et al.* 2007).

In my own recent project on land abandonment in mountain areas of Europe (Mitchley *et al.* 2006), we focused on trajectories of change following land abandonment, scenarios of what might happen to abandoned land in ecological terms (opportunities and threats) but also what different stakeholders might seek from abandoned land, for example whether this might be back to traditional forms of conservation management or forward to new forms of wilderness on previously tamed agricultural land? I was keen to learn about the restoration objectives for abandoned land in the different case study regions. The editor's stated rationale is to 'make the book relevant to both scientists and restoration practitioners' and 'each chapter therefore addresses not only the dynamics of community development in old fields but also how this knowledge can better help practitioners in the active restoration of old fields'. However, this laudable aim is patchily met. Some chapters are very good at this and show clearly how the discussion of ecological dynamics within the case study can lead to development of practical restoration objectives. In others, the applied practical element is less obvious and this uneven treatment of practical restoration goals will make the volume less valuable to practitioners.

The case studies provide the focus (and main interest) of the book, but the editors provide three early chapters on the rationale for the book and relevant ecological concepts (succession of course, but also assembly rules and complex systems analysis). Case studies are an obvious way to deal with this complex topic and each chapter relates a story of land abandonment causes and consequences always with a valuable introduction to the associated literature. Common themes emerge; the roles of facilitation and competition, the important role of plant-animal interactions (pollination but also dispersal and herbivory) and the importance of proximity of abandoned land to intact habitat and passive restoration for optimizing biodiversity gain. But eventually some formal synthesis is called for, and here the Editors take charge in the concluding chapter aiming to draw some general conclusions on the environmental, biological and human factors affecting old fields. And herein lies a missed opportunity. Because not all the authors responded to the editors' instructions and thought about restoration outcomes for abandoned land, the synthesis lacks the strong practical message it might otherwise have had. Practical restoration scenarios for abandoned land are diverse, the restoration cup may be half full or half empty, but it is a cup

worthy of more integrated analysis than we get here in this otherwise absorbing volume.

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Europe's Living Landscapes: Essays Exploring our Identity in the Countryside

EDITED BY BAS PEDROLI, ANNE VAN DOORN, GEERT DE BLUST, MARIA LUISA PARACCHINI, DIRK WASCHER AND FRED A BUNCE

423 pp., 27.5 × 23.5 × 2.5 cm, ISBN 978 90 5011 258 1, GB£ 49.50, Zeist, the Netherlands: KNNV Publishing, 2007

This excellent book provides a digest of contemporary thinking in relation to the changes facing European landscapes. It is a very 'European' book, being grounded on the principles embedded within the European Landscape Convention. It has a strong landscape ecological outlook where nature and culture are the fundamental and interdependent components. The book espouses a message that an interdisciplinary approach is needed for assessment, planning, design and management to provide multifunctional landscapes. It tells a story of identity, character and culture, or 'ecology, community and delight', where the functioning of the landscape and its communities are inextricably linked, and where 'inevitably we are all onlookers and actors at the same time' (Introduction, p.12). This book cherry picks its way around Europe, but in the 25 chapters (including an introduction and conclusion) it manages to cover a range of landscapes that will interest any professional and academic with a concern for this subject. For those who know little about the landscapes of Europe and European landscape ecological thinking, it could provide enlightenment as to the amount and variety of work that is being done, particularly in relation to the characterization of the territory.

Much of the analysis provides a useful picture of the driving forces, landscape values and valuation that is driving landscape change. There is much about how locals have connected with past and present landscapes and how visitors now see and experience those landscapes. The book provides a mix of historical cultural information, biophysical characteristics and contemporary issues where the problems and challenges raised seem to be much greater

than the solutions given. However there are encouraging stories of adaptation and co-evolution between socioeconomic demands and ecological function, and even the development of sustainable systems based on diversification and efficiency, as reported for example in the Spanish dehesa (Chapter 22).

The format encourages browsing; the content demands reflection. All aspects of landscape and identity are covered here. This book also has much to say about representation of landscape and uses many different ways of doing this: maps, photos, poems, prose, sketches, graphs and plans. Each chapter has a similar basic structure: a description of the particular landscape and its context; an analysis of main problems and opportunities; a discussion of landscape change; and finally some conclusions or a summary relating to future potential, likely problems and recommendations. Bas Pedrolí's short lyrical vignettes based on his own experiences of travelling through European landscapes and meeting the people who live there provide a reflective tone that is picked up by others in their contributions. The writing conveys a deep sadness for the loss of traditional landscape management, the vanishing landscapes that such management produced and the disappearance of ecology and cultures that developed from this human-nature symbiosis. The picture is predominantly one of fragmentation and decline of habitats, the disappearance of landscape features, such as in the Lombardy landscape (Chapter 6) and the loss of lifestyles that provide that strong connection with the land.

The coverage of Europe is pretty good, ranging from the community-based schemes of Ireland through the new polders of Flevoland and the forgotten landscape of Východné Karpaty of Slovakia, to small farms of central Portugal and the terraced landscapes of Malta. The book is well edited and readable. Additional information is provided in open 'boxes' so as not to disturb the narrative of the main text. The book is well illustrated and the images enliven the text, providing a good idea of the context and scale of the landscapes under discussion, as well as the changes that are occurring. The only criticism I would have is that the text is generally rather small. This is particularly a problem with regard to many of the illustration captions and to some of the poetry boxes, which are almost impossible to read.

This book feels like a magnum opus: valuable, interesting and thought-provoking. Students of landscape will find it provides a good grounding in European landscape issues, particularly the policy frameworks and contexts which will satisfy planners. It gives enough hard facts to satisfy the quantitatively minded and enough cultural insight for those primarily interested in the cultural expression of landscape. It also gives plenty of useful references to up-to-date methods of survey and analysis and information on the tools being presently used to record and manipulate data. It does not provide solutions to the problems, but it does suggest ways of working to help communities to find new ways of 'living the landscape'. The names of many of the contributors to this edited text will be familiar to those working in the field; many of them have been strong advocates for the European Landscape Convention over the years. An enormous amount of work goes into putting together a book such as this. It is a considerable achievement to provide such a coherent message and I would gladly recommend it on this basis alone.

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