

information contained within natural history museums and botanic gardens, plant conservation action can be effectively undertaken.

The value that natural history collections have in the assessment of plant diversity is explored in detail, including the identification of priority habitats for conservation and the assessment of the conservation status of species at genetic, taxon and community levels. The collections serve as an encyclopedia of the earth's flora that must be available for people to read and use for conservation purposes. The management strategies described include *ex situ* plant conservation, which may unfortunately become increasingly necessary as an insurance mechanism given the scale of biodiversity loss, sustainable ecosystem management, implementation of the Convention on Biological Diversity, and grassroots conservation action.

The sustainable ecosystem chapters provide management models for coral reefs and sea grass communities. The chapters propose the use of indicator plants to predict the health and management requirements of marine and coastal ecosystems. Although interesting, I found these chapters sat somewhat oddly within the general context of the book. Natural history museums and botanic gardens contain vast amounts of information on the uses of plant species. This needs to be tapped to contribute to the sustainability of ecosystem use but is one topic scarcely explored within the book. As Kerry ten Kate and John Kress point out 'A goal in many national biodiversity strategies is to help alleviate poverty, to support sustainable livelihoods and to raise living standards'. Natural history collections are an important source of information to support such goals.

The role that individuals can play in plant conservation through membership of voluntary societies, contributing both their natural history expertise and personal commitment, is powerfully described by Stanwyn Shetler. The development of the native plant societies in the USA over the past century is described with the increasing need to 'transform the traditional, popular interest in wildflowers into an ardent concern for the whole native flora in the wild'. Grassroots action at a local level combined with effective education and lifestyle changes are needed to counteract the scenario that 'Species by species, the biotic bleeding will become a great gathering river that drains away the biotic lifeblood of a continent'.

This book provides an important contribution to the literature on plant conservation and a timely reminder for conservationists to use all the information already available within natural history collections. Measures to more rapidly read and utilise the centuries of accumulated information are being developed as natural history museums and botanic gardens collectively respond to

the ambitious targets of the CBD's Global Strategy for Plant Conservation.

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**Biological Diversity and Function in Soils** edited by Richard D. Bardgett, Michael B. Usher & David W. Hopkins (2005), xiv + 411 pp., Cambridge University Press, Cambridge, UK. ISBN 978 0 521 84709 4 (hbk) USD 130; ISBN 978 0 521 60987 9 (pbk) USD 65.

This journal typically deals with species of fauna and flora that we can see. But the trees, tigers, and thrushes that are usually found on these pages are utterly dependent upon fauna and flora that is too small for most of us to see with the naked eye. Furthermore, the biological diversity of our soils receives amazingly scant attention even from those who specialize in soils; they tend to focus much more on soil chemistry and distribution of soil types than they do on the biodiversity of soils.

Fortunately, this blind spot is now receiving attention from more ecologists. The book under review, part of the Cambridge University Press series of Ecological Reviews, contains 20 chapters with 65 contributors from all of the continents. The book is the proceedings of a 2003 Symposium of the British Ecological Society that had the theme *Biological Diversity and Function in Soils*.

Following a comprehensive introduction on new perspectives from current soil biodiversity research (which tends to focus on ecosystem functioning and ecosystem services such as carbon sequestration), the book then has three chapters describing the soil environment, five chapters on patterns and drivers of soil biodiversity, six chapters on consequences of soil biodiversity, and four chapters on the applications of soil biodiversity. The latter section focuses especially on restoration ecology and nature conservation, with a comprehensive chapter on the latter by Michael Usher. Providing a comprehensive overview of soil biodiversity, the book concludes by focusing especially on the functional role of soil biota, especially in terms of resilience, linkages between aboveground and belowground biodiversity, the impact of biodiversity on individual organisms, and the complexity of soil biodiversity. A perhaps surprising conclusion is that biodiversity in terms of species richness is of little functional consequence, but the functional repertoire of the soil biota is what really counts. Soil food webs often work differently than those aboveground, but it is clear that we still have much to learn about soil biodiversity. Less than 5% of the soil-dwelling species have been described, and one estimate quoted in the

book is that the earth contains about as many species of soil fungi as the number of described species of organisms (c. 1.5 million).

In short, this book is an excellent introduction and overview of the topic of soil biodiversity. It is a comprehensive and stimulating, yet succinct, review of a part of biodiversity that has been hidden beneath our feet for far too long. It is time for all of us working on biodiversity to give appropriate attention to the belowground biodiversity that drives so many of the ecosystem services that benefit the aboveground biota we are seeking to conserve. Too bad the price is not as user-friendly as the book.

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**Palms of the Fiji Islands** by Dick Watling, illustrated by George Bennett (2005), 192 pp., Environmental Consultants, Fiji. ISBN 982 9047 02 4 (pbk), USD 39.95 (for ordering see <http://www.environmentfiji.com>).

This book describes the ecology, distribution and conservation of the 31 known species of palm, 25 of which are indigenous and of which 23 or 24 are endemic, growing in the wild in the Fiji Islands. Each species is illustrated with colour plates. The introductory sections include a

consideration of the conservation of Fijian vegetation and of the palms in particular.

**Lapland: A Natural History** by Derek Ratcliffe, illustrated by Mike Unwin (2005), 352 pp., T & A.D. Poyser, London. ISBN 0 7136 6529 7 (hbk), GBP 40.00.

This book provides the first in-depth study of the natural history of Lapland in English. It includes a number of colour photographs of landscapes and wildlife, and numerous distribution maps. Following four introductory chapters there are six chapters dealing with the major habitats and a chapter on wildlife conservation.

**The Top 50 Mediterranean Island Plants. Wild Plants At the Brink of Extinction, and What is Needed to Save Them** edited by Bertrand de Montmollin & Wendy Strahm (2005), x + 110 pp., IUCN, Gland, Switzerland. ISBN 2 8317 0832 X (pbk). Unpriced.

This short, non-technical book presents a selection of 50 of the most threatened plant species growing on Mediterranean islands. A double page spread is presented for each species, including a colour photograph and distribution map. The aim is to draw attention to the vulnerability of island floras in the Mediterranean. The Top 50 website is at <http://www.iucn.org/themes/ssc/plants/top50>, from where a copy of the book is also available as a PDF file.