Soil and Water Conservation Handbook. By P. W. Unger. London: Haworth Food and Agricultural Products Press (2006), pp. 248, US $29.95. ISBN-10-1-56022-330-8. doi:10.1017/S0014479707005054

Paul Unger has produced a book which, whilst it is not one you will sit down and read from cover to cover, is certainly one which anyone working in the field of soil and water conservation will want to keep handy and use frequently. Essentially the book is a very practical glossary of some 700-plus terms in the area of soil and water conservation. These terms are grouped together under broad headings. In some cases there are entries which cover a single subject, for example there are six lines on infiltrability. In other cases there are broad entries with embedded sections. For example, the entry on Climate includes sections on Climate Change, Characterisation of Regions using the Ratio of Precipitation to Potential Evapotranspiration, Drought, Flash Floods, Growing Period, Temperature, Weather, Wind and Rain/Other Precipitation including notes on intensity, kinetic energy, probability, etc. Similarly the section on Cropping Systems/Sequences details a wide range of topics including Alley Cropping, Continual Cropping, Fallowing, Intercropping, Opportunity Cropping, Shifting Cultivation and Strip Crop Farming. The entries are clear and concise and provide a practical explanation of the terms without lapsing into substantial amounts of technical detail, thereby meeting the book's target of providing information in a practical, non-technical format. Paul Unger brings his lengthy practical experience in the field to this text, both in terms of the selection of topics to be included and in the clear practical content of the descriptions. It should greatly assist communication between field scientists, land users, and policy makers. I recommend this text as a most useful companion for those working in the broad field of soil and water conservation.

Stephen Nortcliff

Soil Erosion and Sediment Redistribution in River Catchments. Edited by P. N. Owens and A. J. Collins. Wallingford, UK: CAB International (2006), pp. 352, £75.00. ISBN 978-0-85199-050-7. doi:10.1017/S0014479707005066

The editors provide a comprehensive overview of recent developments and promising technologies in erosion research. Although many papers are UK-focused the book is larded with examples from around the globe. Articles are grouped in three sections: measurement, modelling and management. Each section starts with a clear overview and ends with a concluding chapter. The general introduction is a mixture of well-known facts and recent developments, ranging from plot measurements to fingerprinting. In fact, the book is multi-dimensional in many respects; regarding scale, from point data to catchment data, regarding population density, from undisturbed forests to inner-cities, and regarding erosion, from source to sink. The first section handles erosion measurement, including the latest developments in the area of fingerprinting and sediment budgeting. Fingerprinting can detect erosion sources, which may lead to targeted protection of vulnerable areas. The second section provides an excellent overview of papers on modelling, where the author pleads, very sensibly, for the use of worst-case scenarios rather than design storms. The third section on erosion management discusses the old dilemma: who is to blame for accelerated erosion? Interventions should be rooted in the society, like the Australian land care approach. Without early involvement of stakeholders in the decision-making process any development project is doomed to fail. The editors state in the concluding chapter that the time has come to return to collection and use of databases that closely match the output of soil erosion models. The link between old and new science is crucial for the development of the discipline. This book is recommended to a wide range of environmental scientists; it gives a clear picture of the state of the art as well as the way to go forward.

Paul Kiepe

Soil Respiration and the Environment. By Y. Luo and X. Zhuo. Burlington, MA, and San Diego, CA, USA: Academic Press (2006), pp. 320, £39.99. ISBN-10: 0-12-088782-7. doi:10.1017/S0014479707005078

It might be a risk to write a book only on soil respiration, but not the broader context of soil carbon dynamics, particularly, if the motivation was to write this book in a context of climate change, and to target not only researchers but also non-scientists that are involved in political decision making, carbon trading, agriculture, or forestry. However, the authors of this book have taken the risk and succeeded. They have provided a detailed and informational book about one of the most crucial, but also of the less understood, processes in the carbon cycle of single ecosystems as well as the whole planet.