and hydrology as 'ecohydrology' – a sub-discipline of hydrology dealing with ecological aspects of the water cycle.

The first chapter explains the background to ecohydrology and the structure of the book: Chapters 2–7 deal with hydrological and chemical drivers of aquatic systems; Chapters 8–10 concern ecological impacts of natural and modified flows; Chapters 11–14 present integrated ecohydrological analyses of catchments and river basins; and Chapters 14–16 address past, present and future challenges.

The 30 authors illustrate their chapters with conceptual diagrams, maps, figures and tables. Chapters are interspersed with models, which are also the subject of a chapter specifically addressing the risks and benefits of ecohydrological models. A 62-page compilation of up-to-date references completes the book.

On the whole the quality of the chapters is high; the chapter on ecohydrology driving a tropical savanna ecosystem merits special mention as a clear and succinct analysis of the interactions of hydrology and ecology in a defined area – the Serengeti National Park.

This book is a valuable resource for researchers in the fields of both hydrology and ecology and will play a key role in the evolution of inter-disciplinary approaches to water resource issues. Given the widespread human impacts on aquatic ecology and water flows, the next logical step should be the more explicit integration of human ecology into the disciplinary mix.

Eric T. Craswell

Expl Agric. (2009), volume 45, © *Cambridge University Press 2009*
doi:10.1017/S0014479709990305

Environmental Impact of Pasture-based Farming. Edited by R. W. McDowell. Wallingford, UK: CABI International (2008), pp. 200, £75.00.ISBN 978-1-84593-411-8.

This is a topical publication. For long, livestock have been associated with degradation of natural grazing land under extensive management, which is noted but is not the subject of this book. Nowadays intensively managed pastures and grasslands have increasingly negative environmental effects in the form of greenhouse gas emissions, land pollution and water pollution. The book has two sections: the first discusses environmental quality; the second describes the impact of different pastoral sectors on the environment. Environmental issues are dealt with under four headings: grazing livestock and greenhouse gases; impact of grazing management on soil quality; grazing and the aquatic environment; and socio-economic issues. The six groups of systems discussed mainly involve dairy and beef cattle, with one involving sheep; other species of grazing livestock are mentioned in passing. The systems discussed are all large-scale and commercial. Many single disciplines study environmental subjects. The book stresses the importance of interactions between the factors in grazed ecosystems and its 16 authors have brought the various disciplines together in a concise and readable form. Chapters have detailed bibliographies. The stated readership is researchers, students and policy makers interested in the environmental aspects of agriculture; it is of interest to all who are involved in large-scale livestock-based farming and the management of grazing lands. Some parts, especially those concerned with dung and manure, are applicable to monogastric production systems. This book should be in the library of all research and teaching institutions interested in rural planning and farming as well as farmers and graziers.

J. M. Suttie

Expl Agric. (2009), volume 45, © *Cambridge University Press 2009*
doi:10.1017/S0014479709990317

Integrated Pest Management. Concepts, Tactics, Strategies and Case Studies. Edited by E. B. Radcliffe, W. D. Hutchison and R. E. Cancelada. Cambridge: Cambridge University Press (2009), pp. 529, £35.00(paperback). ISBN 978-0-521-69931-0.

Overall the book is clearly set out. Individual chapters cover the concepts and paradigms of integrated pest management (IPM), economic impacts of implementation, and the most important ecological considerations of theory and practice regarding sampling and multi-species interactions. Most of the 40 chapters are broad ranging but often rather brief. As a result they often give a superficial introduction to grouped topics under