

Book reviews

Grassland nitrogen. Written by D. C. Whitehead and published in 1995 by CAB International, United Kingdom. ISBN 0–85198–915–2. Price: £49.95 (US\$90.00 Americas only). 397 pages.

“Grassland nitrogen” is a comprehensive review of nitrogen (N) in temperate grassland systems. The author has admirably met his objective of producing a review of all aspects of the transformations of N in grassland.

The 16 chapters consist of a general introduction, 3 chapters on the source and role of N in grazed pastures, 5 chapters on N transformations in the soil-pasture-animal-atmosphere system, a chapter on the use of fertiliser N and slurry N, 3 chapters detailing influences on the response of grassland to fertiliser N, a chapter each on the influence of fertiliser N on the composition and nutritional quality of herbage, and on N balances in contrasting grassland systems, and a conclusion that includes an examination of environmental issues and future research needs. Each chapter is divided into headed sections. Topics are introduced at a general textbook level and then analysed and interpreted using the relevant references. Tables and figures are used sparingly to support the main points. There is a short glossary of specialised terms like bulk density, N fixation, and tiller. Over 1000 references are provided with particularly good coverage of New Zealand research.

The author regularly compares research results from the United Kingdom, New Zealand, and the Netherlands throughout the book, but there is also a reasonable coverage of research in other parts of Europe, United States of America, and Australia. Although the focus is usually on temperate grassland in the generic sense, some sections emphasise the situation in the United Kingdom, especially with regard to EC policies on N pollution. Nevertheless, with the increased use of fertiliser N in New Zealand it is timely to be reminded of the policies on N pollution and the sustainability of farm systems being enforced in Europe.

The strength of the book is its erudite coverage of the individual sources and transformations of N

in grassland. Everything from N fixation through the response of grasses to N and ammonia volatilisation to N balances in New Zealand hill pastures is deftly explained and discussed. If you have a question about an aspect of grassland N, then the book will at the very least provide a starting point. However, the review of N balances in grassland systems marks the boundary of the book. A call is made for more research on the movement of N in and out of whole farm systems but system analysis is largely left for others.

Overall, this is a well conceived book that presents a coherent and interpretative review of grassland N. The text is exceptionally well written. “Grassland nitrogen” sets the standard for texts on this subject and will be widely used by scientists, students, and advisors.

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World animal health 1994. Published in 1994 by Office International des Epizooties, Paris, France. ISBN 92–9044–357–X. Price: FrF 400/US\$74 (P & P included). 808 pages.

“World animal health” is issued annually by the Office International des Epizooties (OIE) in Paris and the report for 1994 comes in two volumes.

Part 1 (392 pages) reports on the animal health status and disease control methods employed by the various member countries of the OIE and is divided into 5 sections. The first section gives a general summary of the world animal disease status (and changes hereto), highlighting the most important outbreaks of List A and B diseases, such as foot and mouth disease, vesicular stomatitis, swine vesicular disease, rinderpest etc. in the world in 1994, but also lists declarations of country freedom from a number of List A and B diseases. Section 2 discusses diseases of fish, molluscs, and crustaceans in a similar fashion, giving a general

