

## Book review

### Grassland Techniques and Management

By L.N. SINGH, A. SINGH and J. SINGH.

Published by Scientific Publishers, Jodhpur, India, 2000. 181 pp. Price US\$15.

As the title suggests, this small (181 pages) book is about methods for studying grasslands (covered in 1 chapter of 40 pages) and grassland management (covered in 5 chapters totalling 84 pages). These are supported by 2 introductory chapters, references, glossary and index. This book is really 2 publications — ‘grassland techniques’ and ‘grassland management’ — and there is no attempt to integrate them. There is a strong emphasis on India throughout the book.

The ‘techniques’ chapter provides a good listing of techniques but little guidance on how to use them. For example, when discussing cutting and sorting species to determine botanical composition, no information is provided about numbers and sizes of quadrat to use or how this might be determined. There are also statements that are inadequate and potentially misleading, *e.g.* a 0.5 kg sample of pasture is sufficient — but is this fresh or dry weight? There are also confusing statements. For example, visual estimation of botanical composition is described as “... useful for rough estimates of changes in botanical composition” but on the next page it is stated that “No great differences have been found between the two methods” (dry weight rank and hand-separating cut samples). Some techniques are listed in incorrect or inappropriate locations, *e.g.* “Plant or tiller density” as a measure of “Ground Cover”.

While the brevity of the book has advantages, it also leads to superficial coverage. For example, the section on “Forage Variety Evaluation” (covering from preliminary observations on

spaced plants to grazing trials and on-farm tests) is less than 4 pages, and “Range condition” is covered in less than 3 pages.

The book has a large font size, which assists the reader, but there are a number of other aspects of the publication that make the book difficult to read. Unfortunately, the English expression is poor and this makes it difficult to follow in many places — there are missing words, lack of punctuation, incorrect words (*e.g.* drought for draught, deed for dead), and spelling mistakes (*e.g.* quardrat, facces). Some of the figures are poorly defined and hard to read. Abbreviations are used without definitions and then defined later in the text. Mixtures of imperial and metric units are used, sometimes in the same section. There are some inaccuracies (*e.g.* liveweight gains of 1–12 kg/day, which should be 1–1.2 kg/day). There are statements with no context, which can be misleading, *e.g.* “A well managed grassland can sustain stocking rate of 5 animals/ha.” Where? What grassland? Which animals?

The book contains 163 references, but only 15% of these are from the 10 years prior to publication in 2000.

This book can serve as an introductory text for students but they will need other more detailed books for further study. There is a real danger that they will be misled by some statements. The level of knowledge of most pasture scientists should already be above the level of this book. Farmers will find the book superficial, of little practical value, and with little consideration of financial aspects. The emphasis on India will limit the value to readers in other locations.

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