sion specialists to managers. The authors address many current questions in grassland ecosystem management from a systems perspective. Large-scale issues such as overpopulation of grasslands in underdeveloped countries and under population of grasslands in developed countries, global change, and biodiversity are included.

References are collected in a single section at the end of the book rather than at the end of each chapter. About 900 citations are included, the vast majority coming from Great Britain, Australia, and New Zealand. This may reduce the appeal of the book to North American readers. While native plant species are occasionally mentioned, the overwhelming emphasis is on domesticated grasses and legumes. A brief listing of three to five suggested readings are included at the end of each chapter.

The authors are complete in their coverage of the subject of grassland agronomy but do not go into depth on any given subject. The writing style is straightforward and rather terse. I would compare it to an expanded outline. The direct presentation is not necessarily a disadvantage. A large amount of knowledge is compressed into a relatively small space. The authors clearly attempted to present principles of grassland management rather than an exhaustive list of management recommendations for specific situations. However, lower level undergraduate students would struggle if this were their first exposure to grassland systems. Instructors should prepare to add considerable explanatory material if this book is used as an introductory text.

I would recommend this book to all persons involved in the management of grassland ecosystems. The topical coverage is complete though somewhat brief. The perspectives are fresh and forward looking. All practitioners will benefit from exposure to and critical examination of the ideas presented in this book.

Robert L. Gillen  
Southern Plains Range Research Station, USDA-ARS, 2000 18th Street, Woodward, OK 73801  
(bgillen@ag.gov)


This book is the 15th volume in a series that has become indispensable to advanced students of plant breeding. It will be useful whether in the throes of completing a dissertation or striving to maintain competence in a rapidly changing scientific field. As usual, some chapters are broadly applicable while others are specifically valuable to a small audience. For each article, the authors should be commended for providing extensive, and Cloning’ provides a substantial review of the status in the area and would provide good practical background for students to evaluate the potential and to plan future studies. The review is certainly timely. Current cultivars offered by seed companies of crops increasingly contain characteristics contributed by unrelated species or genera. The generation of these traits is rapidly increasing and much of these traits is a normal consequence. Therefore, it is quite timely.

In a very theoretical bent, chapter nine, “Genetic Plant Breeding”, challenges readers of all competencies to reexamine traditional explanations of simple gene action at a single locus or at interacting loci. Perhaps, the obsevations will provide a better understanding of the nature of gene action. Chapters six and seven, comprehensive reviews of the current status of breeding in Spelt [Triticum aestivum L. em. Thell. group] and Cowpea [Vigna unguiculata (L.).] with the absence noted, the content would benefit from additional examples of these species, notably Red Clover (Trifolium pratense) with substantial incompatibility work has been published with the absence noted, the content would benefit from additional examples of these species, notably Red Clover (Trifolium pratense) with substantial incompatibility work has been published.

Overall, the 15th volume of Plant Breeding is a very useful reference. It should benefit many scholars and researchers with appropriate coverage and useful topics. The first chapter, by itself, is an outstanding modern plant breeder. Volume 15 is a very useful reference niche in the plant breeding.