

## Book review

### Managing and Conserving Grassy Woodlands

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This book arose from two projects conducted to determine the most appropriate management for grassy woodlands in south-east Queensland for productive and conservation purposes.

The authors recognise four levels of land use — intensive (cropping or sown pastures), cleared native pastures, grazed woodland, and core conservation areas — and present six general principles for the management and conservation of grassy woodlands in eastern Australia. These principles are generally applicable to variegated and moderately fragmented landscapes, rather than to intact or heavily fragmented ones.

These principles are as follows:

- Property planning and management should include a long-term vision which considers the whole of the property and its place in the catchment;
- Soils should be managed to prevent erosion and to maintain productive capacity and water quality;
- Pastures should be managed for production and to maintain the variety of plants and animals;
- Local native trees should be maintained for the long-term ecological health of the property and catchment;
- All properties require core conservation areas for species that are sensitive to agricultural land uses; and
- Watercourses and riparian areas are particularly important to the ecosystem and grazing enterprise and require special management.

There are three to six specific principles within each of these general principles, giving 25 principles in all. Some are suggestions or have heavy qualifications, while others are supported directly by scientific evidence. In total, there are six principles that provide thresholds for management and conservation, *e.g.* there should be a minimum of 30% woodland or forest cover on properties. The fact that only 6 of the 25 specific principles contain threshold values is testament to the difficulty of the task and the complexity and variability of landscapes within grassy woodlands.

These principles represent a concerted effort to use science to guide management and conservation decisions. Input from land managers was provided throughout the derivation of the principles and feedback is provided in the last section of the book on the practicality plus social and economic impact of some of the recommendations. It is rare to find detailed feedback from landholders in such a book. A refreshing admission by the authors is the high cost of implementing some of the principles, involving direct costs (fencing of riparian areas) as well as income foregone (the reduction in animal production associated with having a maximum of 30% of the property under intensive land use). Discussion of private benefits to landholders versus community good from the implementation of these principles is provided from the authors and landholders participating in the project and from interviews after the completion of the project.

Another positive from the book is that it shows a way forward from where landholders are currently to where the authors consider they should be. As a part of this implementation, the authors have listed those principles that should be applicable to landscapes other than grassy woodlands, although the threshold values would necessarily have to be re-evaluated.

The issue of weeds was covered in various places. However, there seemed to be greater concern about exotic pasture grasses than herbaceous weeds and woody weeds. Where weeds were mentioned, the emphasis was on the problems created in riparian areas and conservation areas, rather than in the landscape as a whole. A more thorough coverage of weed and pest animal issues would have enhanced the book. In the section on monitoring, the authors fail to refer to various methods/documents on monitoring. Given the high cost of implementation, greater emphasis could have been given to monitoring of the results of management change. The recent Natural Resource Monitoring Guide is not highlighted.

The book is well written, free of annoying spelling and grammatical errors, and is referenced thoroughly. Extensive use is made of pictorial diagrams rather than graphs, and many issues are presented in self-contained boxes, which parallel the text. These tend to make the

book more user friendly, especially for people not used to reading a large 'text-book' style document. The authors are well qualified to put together such a book, with long-term experience and significant prior publications in production and conservation plus economic and other social aspects of managing agricultural systems in Queensland.

This book is an important addition to the available literature for researchers, students and practitioners in Queensland and is good value for a

hardcover. It makes a significant contribution to existing knowledge of the interface between science and implementation. It would be a useful addition to the libraries of land managers, extension staff, landcare facilitators and property planners as well as State agency staff endeavouring to come to grips with the seemingly impossible task of balancing productive use and conservation in grazed systems.

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