

**PROCEEDINGS OF THE AUSTRALIAN RANGELAND SOCIETY  
BIENNIAL CONFERENCE**

**Official publication of The Australian Rangeland Society**

**Copyright and Photocopying**

© The Australian Rangeland Society 2012. All rights reserved.

For non-personal use, no part of this item may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission of the Australian Rangeland Society and of the author (or the organisation they work or have worked for). Permission of the Australian Rangeland Society for photocopying of articles for non-personal use may be obtained from the Secretary who can be contacted at the email address, [rangelands.exec@gmail.com](mailto:rangelands.exec@gmail.com)

For personal use, temporary copies necessary to browse this site on screen may be made and a single copy of an article may be downloaded or printed for research or personal use, but no changes are to be made to any of the material. This copyright notice is not to be removed from the front of the article.

All efforts have been made by the Australian Rangeland Society to contact the authors. If you believe your copyright has been breached please notify us immediately and we will remove the offending material from our website.

**Form of Reference**

The reference for this article should be in this general form;  
Author family name, initials (year). Title. *In*: Proceedings of the nth Australian Rangeland Society Biennial Conference. Pages. (Australian Rangeland Society: Australia).

For example:

Anderson, L., van Klinken, R. D., and Shepherd, D. (2008). Aerially surveying Mesquite (*Prosopis* spp.) in the Pilbara. *In*: 'A Climate of Change in the Rangelands. Proceedings of the 15<sup>th</sup> Australian Rangeland Society Biennial Conference'. (Ed. D. Orr) 4 pages. (Australian Rangeland Society: Australia).

**Disclaimer**

The Australian Rangeland Society and Editors cannot be held responsible for errors or any consequences arising from the use of information obtained in this article or in the Proceedings of the Australian Rangeland Society Biennial Conferences. The views and opinions expressed do not necessarily reflect those of the Australian Rangeland Society and Editors, neither does the publication of advertisements constitute any endorsement by the Australian Rangeland Society and Editors of the products advertised.



*The Australian Rangeland Society*

# THE GLOVE BOX GUIDE TO TACTICAL GRAZING MANAGEMENT FOR THE SEMI ARID WOODLANDS

*T.A. Campbell\*<sup>1</sup> & R.B. Hacker<sup>2</sup>*

<sup>1</sup>NSW Agriculture, Cobar, NSW 2835

<sup>2</sup>NSW Agriculture, Trangie Agricultural Research Centre, NSW 2823

## ABSTRACT

A grazing management guide has been developed for the semi-arid woodlands to enable pastoralists to better monitor the condition of their land and incorporate this information into management decision making. The guide provides a description of tactical grazing management which involves setting paddock condition objectives and tactical responses to changing conditions.

The guide is divided into three parts. The first is a collection of techniques for assessing landscapes, pastures and animals together with a technique for determining total grazing pressure. As these techniques need to be quick and easy, many are based on photostandards. The second part details how to establish a property monitoring system. The third provides a method for determining an appropriate short term stocking rate.

The guide has been designed for field use, and compartmentalised to facilitate use of parts rather than the whole.

## INTRODUCTION

The project, Management Aids for Rangeland Pastoralists conducted by NSW Agriculture with support from the Natural Heritage Trust, had three objectives:

- to develop a shared understanding between land managers and government agencies of the requirements of practical vegetation management;
- to produce a field guide to the key pasture plants of Western NSW to improve managers ability to recognise and assess pasture growth;
- to develop assessment aids by which graziers can better monitor the state of their land and incorporate this information into management decision making;

To meet these objectives a management guide as well as a plant identification guide was proposed. This management guide would have to be field use, contain simple techniques that would enable land managers to rapidly obtain objective assessments and encourage resource monitoring as an essential part of the management decision making-process.

## METHOD

The guide was produced from the suggestions of pastoralists, experienced NSW Agriculture, Department of Land and Water Conservation and CSIRO staff, and the results of an extensive search of literature concerned with monitoring techniques for pasture biomass, shrub cover, pasture and animal condition, total grazing pressure, soil cover and soil surface condition.

Throughout the development of the guide drafts were reviewed by pastoralists and experienced agency staff to ensure accuracy and suitability. Some grazier comments on an early draft suggested that to do everything would be too time consuming. With this in mind care was taken to present the guide as a collection of methods from which land managers could pick and chose those they wished to utilise.

During development of the guide a close relationship was established with a CSIRO-QDPI team developing tools for tactical management of total grazing pressure in the mulgalands. This

cooperation resulted in the inclusion of procedures for Landscape Function Analysis (developed by D. Tongway, CSIRO), in the guide.

## **RESULT**

The guide is robust B5 sized manual in the same design as the Glove Box Guide to the Plants of the NSW Rangelands. It is highly visual with many colour illustrations and templates for all recording sheets discussed with many worked examples included.

The guide has the following structure;

### **Part 1** Monitoring Techniques

*Section A Landscape Function Analysis*

*Section B Pasture and Vegetation Assessment*

*1 Forage Availability*

*2 Fuel Availability*

*3 Utilisation of Key Species*

*4 Shrub Cover*

*Section C Total Grazing Pressure*

*Section D Soil Cover*

*Section E Animal Condition*

### **Part 2** Long Term Monitoring

### **Part 3** Determining a Suitable Short Term Stocking Rate

Workshops will be conducted to familiarise graziers with the use of techniques in the guide.

The guide is most suitable for use in the semi arid woodlands of north west NSW and south west Queensland, particularly the poplar box / mulga woodlands. This is mainly a function of the photostandards used. If photostandards were developed for other vegetation types the guide would be suitable for a larger area of semi-arid NSW, SA and Queensland.

## **DISCUSSION**

It is yet to be seen how extensively the management guide will be utilised by graziers. However we expect that the stand alone nature of many of the methods will encourage their use by a larger number of land managers than would be prepared to use the guide in total.

The challenge will be to demonstrate to land managers that the benefits obtained far outweigh the time taken.