

PROCEEDINGS OF THE AUSTRALIAN RANGELAND SOCIETY BIENNIAL CONFERENCE
Official publication of The Australian Rangeland Society

Copyright and Photocopying

© The Australian Rangeland Society 2014. 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

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 15th 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

GRAZING LAND MANAGEMENT IN CENTRAL AUSTRALIA, WHERE TO FROM HERE?

A. Johnson

Centralian Land Management Association, PO Box 2534, Alice Springs, NT 0871

ABSTRACT

As the impacts of grazing on the rangeland environment are increasingly being scrutinised by the wider community, the central Australian beef industry has an opportunity to review current management systems, and identify land management priorities for the future. This paper provides a background to the industry and outlines the future opportunities and challenges faced by pastoralists in the arid rangelands of central Australia.

INTRODUCTION

Pastoral leasehold land covers over 40% of central Australia, and beef production is the second largest industry to tourism. Alice Springs is the regional centre for most properties, including pastoral leases in northern South Australia. The grazing system relies mostly on native pastures, and there are several hundred pasture species that grow in the Alice region. Pasture growth and composition is highly variable and is dependent on a complex interaction of many factors, including timing and intensity of rainfall, and land type. High climate variability is the most influential and challenging factor in managing pastures and grazing.

Pastoral leases range in size, but the average property is around 3,500 sq km. The industry relies on numerous different market opportunities for turning off livestock and the region supports both *Bos taurus* and *Bos indicus* cattle breeds. Grazing systems in central Australia are extensive, and require very few inputs. The arid climate means there are few parasitic or disease related problems associated with livestock management, and low humidity allows standing pasture growth to be reserved without significant deterioration. Most properties are virtually chemical free, which provides a potential market advantage for beef producers. These markets are not currently utilised to potential, largely due to consumer and economic forces.

LAND MANAGEMENT ISSUES – THE NUTS AND BOLTS

There are numerous external and internal forces and issues that influence the way in which the pastoral community is able to respond to, and manage, land condition. Some of the major implications and factors influencing sustainable grazing management are included in Table 1.

Table 1. Major factors influencing grazing land management in central Australia.

Issue	Impact
Feral animals	Competition with livestock for available pasture, uncontrolled grazing
Exotic weeds	Competition with native plants, change in fire regimes, threat to native habitat
Woody weeds	Shrub encroachment, change in landscape ecology, competition with pasture
Uncontrolled wildfires	Loss of available forage and ground cover, change in landscape ecology, damage to, and loss of, infrastructure
Unpredictable climatic conditions	Risk of drought – loss of cover and species, overgrazing
Soil erosion	Loss of topsoil, land degradation, poor water infiltration
Decrease in species diversity	Loss of palatable pasture species, loss of biodiversity and decreased rate of production, threats to native flora and fauna
Increase in interest rates & overhead costs	Reduced ability to invest in, and spend time on, land management activities
Market forces	Influences ability to turn-off livestock and maintain a profitable business

FUTURE OPPORTUNITIES FOR GRAZING LAND MANAGEMENT IN CENTRAL AUSTRALIA

The Centralian Land Management Association (CLMA) is actively involved with developing and promoting sustainable grazing management practices for present and future generations of beef producers in the Alice Springs region. CLMA enjoys a membership of over 80% of cattle stations in the region, and the organisation has a strong history of establishing sound relationships with and between land managers, research agencies, community groups and conservation organisations. As the pastoral community becomes more involved with the use of electronic communication and embraces the tools and information support services of the World Wide Web and computer software, land management is taking on a new level. Access to digital data, maps and remote sensing images has raised awareness of property and regional scale issues and systems, and enables managers to engage in a holistic management approach.

The direction in which the industry and the CLMA is now moving is to marry existing knowledge and land management experience with innovative technology and education programs. Combining historic data and local experience with technology will improve and develop better decision support systems for producers. In addition to grass roots and on-ground support (eg. access to and provision of local native pasture seed, weed management advice etc.) the CLMA is now engaged with developing projects and partnerships to raise the level of awareness and understanding of ecological and economical principles of grazing management in arid rangelands.

Current projects being implemented and developed by the CLMA include:

- Environmental Management Systems (EMS) project.
- Grazing Land Management (GLM) education program.
- Community education and awareness – increasing awareness of the beef industry's involvement with natural resource management.
- Regional natural resource management plans (initiated by the Australian, State and Territory Governments). CLMA is involved in consultation with beef producers and community groups to contribute to NRM planning processes for regions covering central Australia.

SUMMARY

The future of sustainable grazing land management in central Australia is not solely dependent on producers. Sound grazing management will require the input, experience, and committed investment from government bodies, research agencies, conservation groups and the general public. The ability of producers to be proactively involved with natural resource management will be dependent on:

- Maintenance and development of strong communication networks;
- Establishment and maintenance of sound relationships between key stakeholder groups; and
- The encouragement of leaders in the industry to find new markets and opportunities to make managing grazing land both sustainable and economical.