

**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

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

DELIVERING PEST MANAGEMENT SOLUTIONS IN THE SOUTH AUSTRALIAN ARID LANDS

B. Greenfield^{1,3}, B. Shepherd¹ and J. Pitt²

¹Rural Solutions South Australia, PO Box 357, Port Augusta, SA, 5700

²Rural Solutions South Australia, PO Box 822, Clare, SA, 5453

³Corresponding author. Email: greenfield.beth@saugov.sa.gov.au

ABSTRACT

Pest plant and animals directly impact or threaten all social, economic and environmental assets of the South Australian Arid Lands (SAAL). This extensive region is sparsely populated and financial resources rarely match pest management requirements. Pest management must therefore be strategic and coordinated throughout the region to achieve efficient and effective outcomes and minimise impacts.

The Animal and Plant Control team of Rural Solutions South Australia provides technical services to a range of arid lands stakeholders, who recognise the need for planning, coordination, strategic surveys and effective on-ground outcomes.

THE WHOLISTIC APPROACH

Successful pest management requires coordination at all stages, from planning and survey to implementation and monitoring. Rural Solutions SA has a key role in delivery of pest management programs in the SA Arid Lands including:

Regional planning

This involved developing a process and structure for determining common pest management objectives and regional priorities through the development of the SA Arid Lands Pest Management Strategy (SAAL PMS). In conjunction with this document the Alintyara Wilurara Pest Management Strategy was also produced, assisting the development of complimentary objectives and actions across NRM boundaries. These strategies identify pest species present, their impacts, legislative and administrative frameworks, stakeholder groups and mechanisms for the Board to prioritise pests and on-ground actions.

Species or area specific management plans

Within the framework of the regional strategic plans, the development of priority pest or area specific plans is the next step towards achieving effective pest management with measurable outcomes. Rural Solutions SA is currently writing management plans for priority species determined by the SAAL NRM Board, such as feral camels, *Opuntia* sp. and buffel grass (*Cenchrus ciliaris*).

Distribution and density assessment

In order to produce realistic objectives for the management of pest species, their population range and density must be understood. Desktop analysis and mapping of existing data, landholder surveys and targeted aerial and on-ground surveys all contribute to gathering this knowledge. Area specific surveys have also been undertaken as a basis for the development of management plans for key biodiversity sites such as the Gammon Ranges, Gawler Ranges and Bimbowrie National Parks and the Arkaroola Sanctuary.

Surveys and monitoring also allow for early detection of new incursions, enabling early intervention. In the SA Arid Lands, riparian systems are considered to be at higher risk of invasion from pest species. They can act as vectors for the spread of weeds and corridors for the movement of feral animals into the region. Periodical, strategic aerial surveys for woody weeds and pigs are therefore carried out on the Diamantina, Warburton and Coopers Creek systems.

On-ground works, follow-up and ongoing monitoring

On-ground works is where the real action happens – where impacts to the region are reduced or ultimately reversed. But it doesn't stop there. Commitment to follow-up control ensures that all the resources utilised for pest management have not been wasted. Finally monitoring and evaluation of pest control programs is vital to assess success, improve methodology, ensure management objectives are met and to provide feedback for adaptive management. Priority areas or priority species that have been targeted include oleander (*Nerium oleander*) control trials in the Parachilna Gorge and a long-term mesquite (*Prosopis* sp.) control program across the region. With management plans completed, combined with successful funding programs, the on-ground component of pest management is set to accelerate in the SA Arid Lands region.

Co-ordination and community involvement

Effective pest management, through all stages, requires cooperation from multiple stakeholders. It is important that pest coordinators are committed to ensuring stakeholders are involved in defining management actions and developing solutions to build their capacity and develop 'ownership' of control activities and outcomes. The Animal and Plant Control team of Rural Solutions SA has provided the coordination and collaboration role for the region, as well as across boundaries through their networks with neighbouring NRM Boards and representation on interstate projects such as the Cross Catchment Weeds and Feral Animal Initiative.

CONCLUSION

The relationship between the Animal and Plant Control team of Rural Solutions SA and its various sponsors, combined with an on-going commitment to the rangeland NRM regions, has enabled many successful, strategic pest management projects to be undertaken in the South Australian Arid Lands region.