

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

Official publication of The Australian Rangeland Society

Copyright and Photocopying

© The Australian Rangeland Society 2015. 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:

Bastin, G., Sparrow, A., Scarth, P., Gill, T., Barnetson, J. and Staben, G. (2015). Are we there yet? Tracking state and change in Australia's rangelands. In: 'Innovation in the Rangelands. Proceedings of the 18th Australian Rangeland Society Biennial Conference, Alice Springs'. (Ed. M.H. Friedel) 5 pages. (Australian Rangeland Society: Parkside, SA).

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.



The Australian Rangeland Society

Semi-continental scale rangeland conservation: developing an agenda

Rolf Gerritsen

Professorial Research Fellow, Charles Darwin University, PO Box 795, Alice Springs NT 0871. rolf.gerritsen@cdu.edu.au

Abstract

This paper is a development of earlier work (Schlesinger & Gerritsen 2010, Salmon & Gerritsen 2013). The Australian continent's rangelands have small populations scattered over huge areas and are characterised by extreme temporal variability and threatening eco-climatic processes and changes wrought over the past century or so. Conservation of these vast rangelands needs money, the informed involvement of rangeland stakeholders; some measure of the trade-offs between production and conservation and clearer ideas about social and cultural benefit. It is difficult to assign widely agreed values to both these trade-offs and the social and cultural elements of rangeland conservation. So rangeland management has remained contested and riven by sometimes conflicting objectives.

Rangeland conservation needs to have four characteristics: broad-scale management, flexibility of responses to eco-climatic change; long implementation time frames and outcomes established via monitoring. Salmon & Gerritsen (2013) proposed a New Integrated Conservation system that featured a new fiscal ecology (introducing private capital to augment government grants), multiplex governance and mixed management multiple objectives. This paper elaborates and advances this development by both considering new approaches to conservation valuation and by applying Ostrom-like theory to create mechanisms that seek to replace current vertical networked interests to achieve horizontal networks and ultimately an Australian rangeland "commons".

Introduction

As noted above, this exploratory paper is a development from earlier work (Schlesinger and Gerritsen 2010, Salmon and Gerritsen 2013). It proposes a systematic way of achieving semi-continental conservation processes across Australia's rangelands. This is a formidably complicated and necessarily long-term task.

The ecological and climatic challenges to the rangelands are well known (eg. Stafford Smith M. and McAllister R. 2008). Less considered are the institutional challenges. These include the different land use regulatory systems across the five states/territories. The rangelands contain powerful and persistent resource-based industries like mining and pastoralism. Aboriginal land ownership in WA and the NT and the potential of native title in Queensland is central to any future conservation system. The advent of politically important "post-productivist" interests in the rangelands – as expressed in government national parks and perhaps the IPA system, is a relatively new factor in our conservation equation.

So any conservation system needs money and to be long term, to account for climatic variability. It also requires the informed involvement of the communities of the rangelands, and some measure of trade-offs between productivism and post-productivism, and between social and cultural interests and new forms of productivism such as tourism. Inevitably, there needs to be trade-offs.

The trade-offs

It is difficult to assign values to these trade-offs. For example, Aboriginal people value both their socio-cultural (religious) connection to the land and its productivist, food-providing, capacity. Pastoralists value introduced pasture grasses, like buffel, and dams, while ecologists are critical of

these. Both interests are concerned for the sustainability of the rangelands. These trade-offs complicate any assessment of the value of rangeland conservation.

The characteristics of semi-continental scale conservation

Salmon and Gerritsen (2013) proposed three elements new to current conservation systems:

- A new *fiscal ecology* that moved away from short term grants and introduced Market-based Instruments and Payment for Ecological Services as well as private funding.
- *Multiplex governance*, instead of command-and-control government. This recognises and incorporates the role of local knowledge (see also Schlesinger and Gerritsen 2010 157, fig. 9.2); and
- *Mixed multiple objectives* that included people in the landscape as integral to conservation management.

My agenda for a future rangelands conservation system adds two new ideas: a new system of conservation valuation and a new approach to developing rangeland conservation governance based on a development of Ostrom's theory of the commons (Ostrom 1990).

Developing the agenda

This involves two tasks: outlining a rangeland valuation system and establishing a rangeland "commons".

1. The new conservation valuation

The new conservation valuation may require a leap past the orthodox economic valuation of conservation. This calculus of economic value is based on factors such as money spent on or saved by conservation (what Adam Smith labelled "use value" or nowadays is labelled "impact value"). So the value of a national park, for example, is decided by contingent valuation ("willingness-to-pay" or "travel time" cost). The neo-liberal economic valuation of conservation might confine itself, for example, to dollars expended per invasive species controlled. It would have difficulty coping with Aboriginal hunting and gathering, valuing this simply by the market equivalent cost of the produce garnered. Such a calculation misses incorporating the "value" of the socio-cultural benefits of Aboriginal hunting and gathering (cf. Altman 2009).

Applying orthodox microeconomic methodologies of valuation is usually disadvantageous to the rangelands because they contain few people (taxpayers/voters). And they are remote and so perform poorly in contingent valuation tests. The consequence of this can be seen in the current (mal) distribution of conservation expenditure (Robbins and Dovers 2007).

A new conservation valuation would aim eventually to be expressible in dollars but would start with expressing what Bourdieu described as "symbolic" values (as against economics' instrumental values). This symbolic, transcendent, valuation would include the number of bioregions in the rangelands, the fact that it is a more pristine environment than most other parts of Australia and the spiritual-cultural values of the rangelands' Aboriginal inhabitants. The current economic valuation of conservation does not include the time spent on activities that conserve the rangelands, or the psychological benefits that derive to its inhabitants of such conservation. To influence national policy-makers, such benefits need to be quantified. This quantification can be developed using methodologies adapted from recent advances in ecological and cultural economics. It will still be fiendishly complicated because core concepts like time, amenity and preservation can have different values, which ultimately depend more on moral philosophy than scientific (sic) economics. For example, social discount rates (whether Pure Time discounting, Growth discounting or Opportunity Cost discounting) deal with time. A zero discount rate (such as Nicolas Stern used for climate change costing) means that the current generation bears all the costs of adaptation, hardly a device

calculated to generate popular support. So the discount rate has to be agreed communally, probably initially by each conservation interest common. Similarly notions such as the value of amenity and of preservation are not scientifically certain. They reveal contests over values. We can see this in arguments about the degree of precaution needed in evaluating new productivist initiatives such as shale gas fracking.

2. Developing a rangeland conservation commons

The rangelands commons would be an evolution of the Salmon and Gerritsen (2013) proposals for multiplex governance to replace accountability-biased government. It would be semi-continental and cover the area now managed in seven NRM regions in N-W Queensland, the NT, northern SA and WA's Rangelands NRM region. Essentially I propose that the rangelands commons would be developed in two stages:

- Stage 1: *The interest commons*

This recognises two obstacles to the development of a semi-continental rangeland management system: governments and the mutual suspicion between interests. Consequently, the first organisation stage is to develop cross-jurisdictional common interests. For example, Aboriginal land and conservation interests would be organised under Land Councils and Native Title Representative Bodies. Pastoralists could use their existing associations. The point of this stage is twofold: to take governments – both state and territory as well as federal – out of the equation in determining the objectives of conservation according to each “interest”, and to get those interests to transcend their jurisdiction-bound interest and approach problems and solutions on a whole-of-rangelands scale.

- Stage 2: *The rangelands commons*

The second stage of my proposed system is to start the process of negotiation of joint objectives and approaches between each interest common. Ultimately the rangelands have to be managed on a semi-continental scale, so the interest commons have eventually to agree on a joint approach. Eventually this joint approach will realise a semi-continental rangeland conservation common.

Conclusion

Government and its grants should cease to be the driver of conservation in each rangelands jurisdiction. Instead conservation should be driven by the rangeland population, ultimately in a single common. When the conservation commons is established in Australia's rangelands, then a more holistic notion of conservation value can be mainstreamed and be capable of quasi-orthodox valuation in both economic and conservation terms. My agenda may seem utopian but I cannot see the point of the failing status quo. So some alternative is needed and here is one.

References

- Altman, J. (2009). Manwuurk (fire drive) at Namilewohwo: a land-management, hunting and ceremonial event in western Arnhem Land. In *Culture, Ecology and Economy of Fire Management in North Australia's Savannas* (J. Russell-Smith, P. Whitehead and P. Cooke, eds). CSIRO, Collingwood, Vic.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, Cambridge.
- Robbins, L. and Dovers, S. (2007). NRM regions in Australia: the “haves” and the “have nots”. *Geographical Research* 45, 273-290.

Salmon, M. and Gerritsen, R. (2013). A more effective means of delivering conservation management: a 'New Integrated Conservation' model for Australian rangelands. *The Rangeland Journal* 35, 225-230.

Schlesinger, C. and Gerritsen, R. (2010). Conservation in the northern deserts: issues and agendas,. In: Rolf Gerritsen, R. (ed.) *North Australian Political Economy: Issues and Agendas*. Charles Darwin University Press, Darwin.

Stafford Smith M. and McAllister R. (2008). Managing arid zone natural resources in Australia for spatial and temporal variability – an approach from first principles. *The Rangeland Journal* 30, 15-27.