

A Rangelands Dialogue Towards a sustainable future

EDITOR
Paul Sattler



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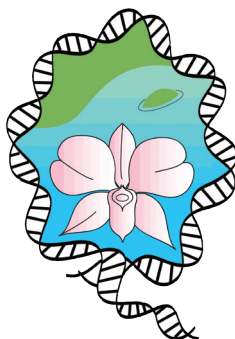
A Rangelands Dialogue
Towards a sustainable future

Editor: Paul Sattler OAM

Contributing Editors: Ross Hynes and Geoff Edwards

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FRONT COVER ILLUSTRATION

Combo waterhole on the Mitchell Grass Downs, part of the inspiration for Banjo Paterson's *Waltzing Matilda*; a song that captured the spirit of Australia (Photos: P. Sattler).

BACK COVER ILLUSTRATION

Photo: Fiona Leverington

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RANGELAND DECLINE



1. Galloping to a lick (of molasses and urea), but are we galloping to a dust bowl? (Photo: C. Nason).
2. Prickly Acacia (*Acacia nilotica*), a Weed of National Significance, now invades more than 6.6 million hectares of Queensland (Photo: G. Edwards).
3. The introduction of *Bos indicus* breeds, whilst increasing production, has further increased pressure on native pastures (Photo: DAF).
4. Distressed landscape in the Mulga Lands; beyond private capacity to repair (Photo: P. Sattler).
5. Deteriorating stock route infrastructure (Photo: G. Edwards).

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FOREWORD

The rangelands, covering about 80% of Australia, are renowned for their highly variable climate and low and erratic rainfall: they are indeed “A land of droughts and flooding rains” (*My Country* by Dorothea Mackellar). Unfortunately, these lands are progressively degrading from the cumulative effects of recurrent droughts and chronic and/or widespread under-management, amongst a range of other factors. In many locations, traditional pastoral enterprises are uneconomic, particularly at the scale of the family farm, which undermines towns and communities as less money is spent in local businesses, jobs are lost and people leave looking for work in larger centres.

The rangelands are being placed under increasing pressure by a changing climate. Acceptance of climate change by some landholders who are already dealing with a highly variable climate is recognised. This influences the level of preparedness that is undertaken or indeed possible for pastoral production to be ecologically sustainable.

The need for new economic settings for viable production, possibly new tenure for repair and protection of multiple values, and government support for the management of ecosystem services, will require a new public/private partnership.

Increasingly, a social compact will be required between urban and rural communities to match their expectations of how the land and its resources are valued and managed. Already investment in pastoral lands for carbon sequestration is occurring. Clarification of the duty-of-care responsibilities between government and landholders in managing land and water will be important, particularly to protect ecosystem services and special values.

This collection of papers is not only about pastoral production. There is a continuing degradation of biodiversity and a lack of representative national parks across many rangeland bioregions. There is a significant and growing nature-based tourism industry, and the Grey Nomad phenomenon provides a baseline of economic support for many towns. The tourism industry may become increasingly constrained by lack of access to natural places, and the industry could be invigorated by consolidation of the park estate.

This Dialogue has raised many questions that require extensive, ongoing research and analysis, for example:

- *Are community expectations unrealistic regarding a sustainable future for the rangelands when in terms of the spectrum of values and purposes identified, most properties are under-resourced, under-staffed and under-managed?*
- *How is it possible to adequately resource, staff and manage these properties to achieve a sustainable future for the rangelands?*
- *Do rangeland industries need a social licence to operate and thrive?*
- *Are the problems of rangelands economically intractable for individuals?*
- *What should be the agricultural policy direction in a modern advanced economy?*
- *How can we encourage groups of people to make their homes in the empty places outback?*

Many of these questions appear intractable at this point in time. This Dialogue and these *Proceedings* have strengthened the conversation amongst some of the key stakeholders and provide a focus for multidisciplinary enquiry to inform policy makers and the broader community.

The key message is that the productivity, viability and resource condition of large parts of our unique rangelands will rapidly decline unless existing policies, economic drivers and management practices are urgently reviewed.

Paul Sattler OAM, Ross Hynes and Geoff Edwards



No. 1 bore at Murweh Station, Warrego District, depth 1800 feet, estimated flow 3,000,000 gallons per day when tapped in 1897. For the next 100 years groundwater flowing freely from numerous bores supported pastoral development across vast rangeland areas of the Great Artesian Basin. Significant loss of pressure led to a joint government and landholder scheme (the Great Artesian Basin Sustainability Initiative – GABSI) to cap the bore heads and to progressively replace the wasteful open bore drains with polypiping in the 1990s and 2000s. Some of the most rare and threatened elements of biodiversity in the rangelands exist in the small artesian-fed springs around the Basin, as documented in ‘Springs of the Great Artesian Basin’, *Proceedings of The Royal Society of Queensland*, Volume 126, accessible at <http://www.royalsocietyqld.org/springs-special-issue-vol-126/> (Photo: Queensland State Archives).

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The papers in these *Proceedings* originated as briefing papers for the Rangelands Dialogue convened by The Royal Society of Queensland, AgForce and Natural Resource Management Regions Queensland in July 2019. They take the form of either short communications or opinion pieces. The editing has been conducted in a way to maintain the views of a cross-section of stakeholders from pastoralists to scientists and therefore is categorised as lightly peer-reviewed.



This special edition of the *Proceedings of The Royal Society of Queensland* presents a compelling case for change in the management of the rangelands to achieve a sustainable and vibrant future.

No longer is a 'business as usual' model going to prevent further deterioration in the natural and human capital, let alone repair the damage to natural capital wrought over past eras. Together with biophysical degradation is the social strain on individuals and the decline of rural communities and regional support structures.

It will require the broader Australian public to listen to those who live in the rangelands and the scientists who are monitoring significant change, to forge a new direction for the vast and iconic outback.