

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

PLUMBAGO STATION: AN EXAMPLE OF PASTORAL AND CONSERVATION LANDUSES

D. Wilson

Plumbago Station, via Olary, SA 5440

Plumbago Station is a working example of multiple landuse in the rangelands through the incorporation of conservation goals and activities into the pastoral enterprise, ensuring not only long-term sustainable pastoral production but also the protection and recovery of a threatened species of rock-wallaby.

Located in the North-East chenopod shrublands of South Australia, approximately 150 km west of Broken Hill, Plumbago is a sheep station with an average rainfall of 230 mm and a carrying capacity of approximately 14,000 DSE as set by the Pastoral Board of SA. The 89,000 ha property is located in the Olary Ranges, now home to the largest single population of the Yellow-footed Rock-wallaby (*Petrogale xanthopus*) in South Australia.

Thirteen years ago Plumbago Station was heading in a familiar direction of over-grazing from large numbers of feral animals as well as too many sheep, resulting in severe degradation of native vegetation communities and large weed infestation problems. Rock-wallaby habitat was being destroyed by feral goats, high rabbit numbers were suppressing recruitment of native plant species, and foxes were having a large impact on the native animals as well as the domestic stock. Aerial surveys of the rock-wallabies revealed a risk of local extinction in the long-term if measures weren't taken to secure them, and though not quite as threatened, the pastoral enterprise required similar urgent attention.

With a change of management the focus shifted from being just a sheep station to being a pastoral enterprise that was committed to long-term sustainable landuse with conservation values as a large component of this. The protection of the Yellow-footed Rock-wallaby became a high priority when making management decisions and a list of priorities and strategies on how we could start the recovery program for our property was developed. These included:

- Reduce total grazing pressure.
- With an estimated feral goat population of 10,000, goat control became a very high priority. Mustering and trapping goats started immediately, continuing until numbers were deemed too low to be profitable to muster and a shooting policy was adopted which stands to this day.
- Sheep numbers reduced.
- A total of 5500 sheep were removed immediately.
- Rabbit control.
- Rabbit warren ripping has been conducted around wallaby colonies and continues to be an active part of Plumbago's management. With the introduction of the Rabbit Calicivirus (RHD) in 1995, we've been able to capitalise on low rabbit numbers, which remain very low at present.
- Fox baiting.
- 1080 dried meat baits are laid twice a year for fox control. This started 13 years ago and the results from this are hard to measure other than to see a fox on Plumbago now is very rare but you don't need to travel far where fox baiting does not happen and foxes are quite prolific.
- Weed control.
- African Box Thorns had started to take over a watercourse on Plumbago. With a D6 dozer we took out over 1000 large plants. With two follow-up programs, the box thorns are under control with the watercourse now being very productive for sheep grazing. Other weeds including Pepper trees, Onion Weed and Bathurst Burr have become high priority weeds for Plumbago and new programs to control these are currently being developed.

All of the above require a long-term commitment, which has been Plumbago's philosophy from the beginning. Through implementing our revised management philosophy, a major turnaround has occurred on Plumbago in terms of both the pastoral production business and the viability of the Yellow-footed Rock-wallaby population, as summarised below:

- Yellow-footed Rock Wallaby recovery from a base population of less than 50 in 1991 to now exceeding an estimated 2000 with continuing expansion of animals into long-disused habitat areas.
- Feral goat population from a high of 10,000 + to effectively goat-free. During a local aerial culling operation in April 2004, a total of two goats were found on the property and it is rare that the total number would exceed twenty.
- Fox and cat numbers significantly reduced such that feral predation does not appear to be a limiting factor for rock-wallaby (or lamb) survival.
- Pastoral production increasing with lambing percentages 25 to 30% better than neighbouring properties.
- The ability to maintain stock numbers during drought without feeding supplements and without degrading the resource base.
- Cost of production down due to a lower maintenance requirement on infrastructure previously damaged by feral goats as well as more time to spend on the sheep side of the business and other projects like weed control.
- High recruitment and recovery of native, palatable 'indicator' plants like Bullock Bush as well as Mulga trees, which have in the past failed to recruit or have been heavily grazed.

We believe that we are genuinely operating two distinct yet obviously compatible landuses on Plumbago, rather than just inheriting a species with a conservation requirement that may or may not match our pastoral activities. This is evidenced by our management operations which include active conservation measures designed to protect and recover the rock-wallabies. It should also be noted that the Department for Environment and Heritage (SA) consider our conservation efforts to be not only effective, but essential, and they rely on Plumbago to ensure the species is secure in this area of its former range.

The uptake of multiple landuse in the rangelands is going to become increasingly important in many areas and to many sectors, whether it be production, tourism, conservation or a host of other potential activities. The biggest challenge to us appears to be in convincing other pastoralists that they can have conservation and pastoralism working together and be a viable business.

There is much interest from within the rangeland community on what we are doing and we have received acknowledgement and recognition from government agencies, the Nature Conservation Foundation of SA and through a Banksia Environmental Award in 2003 for Environmental Leadership in the Rural Sector. However, the negativity from within sections of the local community is quite disappointing, despite the obvious benefits that have been proven and documented on Plumbago.

What has been done at Plumbago is viewed by some neighbouring properties as not sustainable, but it is quite the opposite; Plumbago management believes it is the way of the future. Government agencies i.e. the Pastoral Board of SA need to be a lot more proactive rather than reactive. Instead of waiting until there has been everlasting damage done to the rangelands they need to step in and prevent it from happening in the first place. Plumbago needs to continue to put itself out there, to be scrutinised, so that potentially one day in the future some, if not all of its management practices will be adopted when managing the rangelands.

A major challenge for Plumbago management is the ongoing protection of not only the Yellow footed Rock Wallabies but also the overall land systems forever, regardless of management or ownership. It's taken a lot of effort to recover, but it wouldn't take long to undo the gains given a small amount of short-term thinking.