

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

Copyright and Photocopying

© The Australian Rangeland Society. 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 *n*th 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

BRINGING TOGETHER TRADITIONAL OWNERS AND PASTORALISTS IN THE USE OF FIRE MANAGEMENT THROUGH THE GULF FIRE PROJECT

K. Anderson, B. Benham, C. Curry, T. Howard, and L. Gammon

Southern Gulf Catchments, 81 Miles St., Mount. Isa, Queensland 4825
admin@southerngulf.com.au

ABSTRACT

The Gulf Fire Project was a concept put together by the lower Gulf of Carpentaria Traditional Owners (TOs) along with Southern Gulf Catchments, Rural Fire Service, the North Australian Indigenous Land & Sea Management Alliance (NAILSMA), Carpentaria Land Council Aboriginal Corporation pastoralists and District Inspector Trevor Howard. The principle of this project was to put in place working relationships between TOs and pastoralists in regards to the use of fire management. The region's TOs use fire for a number of reasons, one such reason is to thin out wooded country by burning early in season to produce 'green-pick' for hunting and food gathering later in the dry-season so they won't need to travel long distances for food and most important, to protect sacred sites. On the other hand, the pastoralists use fire late in the dry when the first couple of storms move through to burn off the old standing grass and to induce a fresh crop for next season while at the same time reducing ground fuel in case of wild fires. Through this project, traditional knowledge of early burning was re-established when a wild fire broke at the end of last year. Indigenous fire rangers, the Rural Fire Brigade and National Parks responded along with graders and water tankers from the local council. Due to the early burning patterns of one of the pastoralists and TOs, it saved time and effort in establishing fire breaks and most importantly decreased damage to the environment by having early burnt breaks. Now, plans for next year are put in place to carry out early burning to prevent large scale fires ever happening again. The most important outcome is that everyone can work together and feel safe and accept that we all carry good knowledge of fire in the Gulf.

BACKGROUND

Trevor Howard explains in the Project Overview that substantial areas of north-west Queensland and the southern Gulf of Carpentaria are under Aboriginal ownership and management. These areas include Mornington Island, the Deed of Grant in Trust (DOGIT) lands, former pastoral leases acquired through the Gulf Communities Agreement negotiated under the *Native Title Act 1993* and various land parcels purchased by the Indigenous Land Corporation.

There is a large Aboriginal population across the area including the township of Doomadgee which has a population of about 1200. This town has many social problems, very high unemployment and very few opportunities for young people. Mornington Island has a similar population and social situation while the small town of Burketown also has a significant indigenous community. The Aboriginal people across the entire region come from a number of language and family groups, with each having special attachments to particular parts of the landscape (Haynes, 1985). As a result a number of outstations have been developed away from the main townships.

Community members have a high interest in the role of fire in the landscape, and there is a strong desire to reintroduce traditional burning across large tracts of Aboriginal land surrounding Doomadgee, as well as outside Gununa, the main township on Mornington Island. Traditional links with neighbouring groups in the Northern Territory underpin and reinforce this approach to managing the cultural landscape with fire.

Given the extent of Aboriginal landholdings and the frequency of ignition by lightning, and a high potential for fires lit for such cultural purposes to cross land tenure boundaries. Each year there have been tensions with adjoining pastoralists due to uncontrolled fires, with losses of feed, fencing and stock as well

as high suppression costs. With wildfires regularly crossing the Qld/NT border, some negative attitudes about this situation have become entrenched over many years.

Aerial prescribed burning (APB) early in the year could significantly reduce these problems by creating strategic firebreaks and mosaics of burnt and unburnt country (Price *et al.*, 2007). However, the adoption of APB has been limited and *ad hoc* in this part of the country due to a number of factors including,

- the availability of suitable aircraft,
- the timing of operations to suit different curing rates across the landscape,
- and a lack of appreciation by landowners of the potential benefits despite the relatively low cost.

There is a need to involve all landowners in planning and coordination, and training landowners to conduct their own APB operations may improve results.

In addition to the issues arising from fires and multiple land use, there is a need for the targeted use of fire to control rubber vine *Cryptostegia grandiflora*, a Weed of National Significance (WONS) to maintain the rubber vine containment line 60km east of the Northern Territory border to prevent spread. This pest plant occurs on a range of land types and tenures in northwest Queensland and there are numerous infestations on land under Aboriginal ownership. Fire is a valuable control method when used as part of an integrated approach.

Within the context of northern Australia, in recent years there have been numerous projects focusing on fire and environmental management in the Kimberly region of Western Australia, the Victoria River district and Arnhem Land in the Northern Territory, and Cape York Peninsular in Queensland (Russell-Smith *et al.*, 2003). These initiatives have engaged scientists, government agencies and indigenous landowners and have attracted considerable external funding and support.

Some small but significant advances in community development have also been made as a result of these projects. Of particular note are the successes in Western Australia and the Northern Territory involving training and resourcing young Aboriginal people to participate in contract employment associated with fire and natural resource management. Not only have these ventures brought direct benefits to the people and indigenous communities involved, but there have also been some major improvements in neighbour relations as well as some positive attitude shifts in the broader population.

A PROJECT FOR NORTH WEST QUEENSLAND

From either the environmental or community development viewpoints, the north-west of Queensland stands out as an area with both problems and potential. There has been limited fire research conducted in this area with Leasia Felderhof's doctoral research as a notable exception (Felderhof, 2007) and there is a need for capacity building initiatives aimed at involving Aboriginal elders and youth in rural fire management. Given the dispersed population due to the outstation movement, the development of safe and sustainable communities is also a priority. In addition, there are potential commercial opportunities for young Aboriginal people in contracting for hazard reduction and prescribed burning, weed control, fencing of riparian vegetation and other natural resource management activities.

One of the keys to success in the interstate initiatives has been that projects have generally been driven at a community level, not by government agencies. With external funding mainly through the Natural Heritage Trust and the support and technical assistance of research institutions and government agencies, community ownership and direct benefits have maintained momentum.

Given the threats from cyclones and other natural hazards, and the dispersed population due to the outstation movement, the development of safe and sustainable communities was a priority. In addition,

there are potential commercial opportunities for young Aboriginal people in contracting for hazard reduction and prescribed burning, weed control, fencing of riparian vegetation and other natural resource management activities.

Preliminary discussions involving representatives of the Carpentaria Land Council, the Tropical Savannas CRC, the North Australia Indigenous Land and Sea Management Alliance and the Rural Fire Service indicated Aboriginal people in north-west Queensland are very keen to seek support to develop fire and community capacity building projects. Separate discussions with local pastoralists also indicated efforts to coordinate and improve fire management on Aboriginal lands would be strongly supported.

PROJECT ACHIEVEMENTS

- A Project Officer commenced in Burketown in May 2006 working under the day-to-day direction of the Carpentaria Land Council.
- Traditional land-owning groups and key stakeholders, primarily on the mainland, have been identified and consulted.
- A ranger crew of 10 fulltime employees to undertake land management activities on the indigenous estate has been formed. Training has been provided in fire management, equipment use, herbicide safety and first aid. Burning for land management, wildfire mitigation as well as rubber vine *Cryptostegia grandiflora* control has also been carried out across a large area.
- Extension work is supporting indigenous and non-indigenous land owners with computer access to regularly use basic remote sensing and mapping tools such as the North Australian Fire Information (NAFI) website (www.firenorth.org.au) to monitor and manage fires. Also, further mapping of fire scars at scales suitable for environmental management, the compilation of fire histories, the analysis of fire regimes, and the development of prescriptions based on scientific and traditional knowledge.
- Indigenous membership of the Doomadgee and Burketown Rural Fire Brigades has tripled (rural fire brigades exist to provide fire services across the community whereas ranger crews are made up of indigenous land owners managing their own land). Business cases have been presented to the Rural Fire Service to start two more Class 1 Brigades in the Gulf to give Queensland Fire Service legislative power to mandate fire regime changes to the Traditional country and Traditional owners.
- Brigade members and ranger crews have worked closely with pastoralists in burning boundaries and suppressing wildfires, and very positive relationships have resulted. After the large wildfires in late 2007, an early fire management plan with the pastoralists and Traditional owners was put into place creating a solid relationship with Burke Shire Council.
- A review and re-configuration of fire warden (community members appointed and authorised to issue permits to burn) and rural fire brigade boundaries by the Rural Fire Service to better reflect traditional and non-traditional land ownership and use.
- An expansion of the current project activities that focus largely on the mainland to include Mornington Island, plus the development of better linkages with NT counterparts to have a whole-of-Gulf focus.
- Interest has been expressed by other entities – government agencies, utilities and mining companies etc. – for the future engagement of ranger crews to carry out burning and other land management works on a commercial basis.

DISCUSSION

It is recognised the southern Gulf of Carpentaria region needed a program to allow Traditional Owners to manage the landscape through a fire management plan and that by resourcing the local indigenous groups (Garawa, Ganggallida and Wellesley Island groups) there would be a benefit to the community. Establishment of the Gulf Fire Project has achieved these goals and project stakeholders are constantly

scanning for new directions, funding options and commercial opportunities to sustain the initiative and these remote rural communities into the future. Further outcomes recognised are as follows:

- Trialling and adoption of new technologies for APB – e.g. Skyfire and Raindance systems – to enable more flexibility in conducting operations, as well as consideration of the forthcoming national accreditation standards and training packages for bushfire air operations and the potential provision of suitable training for landowners.
- Monitoring for NRM and biodiversity outcomes, not only to meet current project requirements, but also as part of a long-term north Australian program.
- Development of linkages with the sustainable grazing land project (Akers, 2006) for information sharing, workshops etc.
- Establishment of a suitable business entity and structure for contracting by indigenous teams to clarify and maintain functional boundaries with other entities – rural fire brigades, ranger crews etc.
- Consideration of changing institutional arrangements – e.g. the end of the Tropical Savannas CRC – and the associated challenges and opportunities.
- Consideration of new initiatives concerned with greenhouse emissions abatement and environmental offsets – greenhouse and biodiversity – and their potential application to the Gulf.

REFERENCES

Akers, D. (2006). Sustainable management and conservation of grazing lands in Queensland's rangelands, *Range Management Newsletter*, No. 06/3, 16-17.

Felderhof, L. (2007). The Fire Patchiness Paradigm: A Case Study in Northwest Queensland. PhD. James Cook University.

Haynes, C. (1985). The Pattern and Ecology of *munwag*: Traditional Aboriginal Fire Regimes in North-central Arnhem Land. In 'Ecology of the Wet-Dry Tropics.' (Eds M. Ridpath & L.K. Corbett). *Proceedings of Ecological Society of Australia* 13:203-14.

Price, O. F., Edwards, A. C. and Russell-Smith, J. (2007). Efficacy of permanent firebreaks and aerial prescribed burning in western Arnhem Land, Northern Territory, Australia. *Int. J. of Wild. Fire*. 16(3):2950307.

Russell-Smith, J., Cooke, P., Edwards, A., Dyer, R., Jacklyn, P., Johnson, A., Palmer, A., Thompson, P., Yates, C. and Yibarbuk, D. (2003). Country needs fire: Landscape management in northern Australia, *Proceedings of the National Landcare Conference*, 28 April – 1 May 2003, Darwin.