

Indigenous Communities, Peri-urbanism and Bushfire Issues in Northern Australia

Briefing Paper No 1

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Indigenous Communities, Peri-urbanism and Bushfire Issues in Northern Australia.

1. Introduction

The Bushfire CRC Understanding Communities project is primarily focused on peri-urban regions in areas where intensive bushfires are possible. However, in the course of exploring peri-urbanism and its complexity, Indigenous communities arose as a special case deserving some attention. Therefore, this briefing paper aims to identify key issues for possible future research for bushfire issues and Indigenous communities in Australia. While this paper concentrates on bushfires they should not be seen as a stand alone issue but part of an overall natural disaster management plan for communities. This briefing paper consists of two main facets:

- i. Review of existing literature
 - Review of themes in existing academic literature
 - Peri-urbanism and Indigenous communities
 - Possible future research for bushfire issues and Indigenous communities in Australia
- ii. Summary of work undertaken by Tropical Savannas CRC in an appendix

2. Summary

Most research on the topic of bushfires and Indigenous communities relates to ecological and land management issues as reflected larg

to the European conception of the annual climate cycle, Indigenous people in northern Australia recognize more complex seasonal calendars, which may vary subtly between different language groups” (Bowman et al., 2004). The timing also varies in relation to the onset and conclusion of the wet seasons and intra-seasonal rains (Bowman et al., 2004).

- Improving understanding of effects of fire on biodiversity from both western and Aboriginal perspectives, and
- Increasing public awareness and education of fire in northern Australia.” (Parr et al., 2004)

There are two initiatives; one is to establish a new fire research and education program at the Territory Wildlife Park near Darwin and the second is to work closely with a family of traditional owners in Kakadu National Park to better understand the benefits of Aboriginal fire management to the wetlands of the South Alligator River from both cultural and biodiversity perspectives.

3.2 Ecological and land management issues including fire

The second theme identified is that of research on ecological and land management issues which to some extent overlaps with the Indigenous fire practices papers but concentrates more on sustainability in tropical savanna landscapes. The debate on the role of Indigenous burning is also discussed in this second group of papers which is predominately work undertaken by the Tropical Savannas CRC (refer to ‘Summary of work undertaken by Tropical Savannas CRC’). Papers from the international conference “Fire and savanna landscapes in northern Australia- regional lessons and global challenges” held in Darwin in July 2002, were published in a special edition of the *International Journal of Wildland Fire*. In the preface Russell-Smith notes that “rapid progress has been made in our understanding of regional fire patterns” and that there is a strong commitment to community participation in research “especially for remote Indigenous communities and pastoral enterprises that typically have limited economic, infrastructure and information resources” (Russell-Smith et al., 2003a).

There is concern at the evidence showing that Indigenous control over fire has broken down over much of the northern Australian savanna and how best to redress this. Mapping data has been used to assess the pattern of fire regimes over landscapes in north Australia to better understand the impact of fire. Russell-Smith acknowledges that while the importance of fire patchiness to maintain biodiversity is increasingly understood more work is required on this and related fire intensities (Russell-Smith et al., 2003b). The Kimberley region of West Australia has less documented data than the top end of the northern Territory concerning traditional fire use. Vigilante in his study comparing management regimes of different landholders in the North Kimberley concludes that indigenous people “achieved sustainable land management outcomes by utilizing fire for the full duration of the dry season”. He also observes that due to the rugged and inaccessible country in the north Kimberley, “Aboriginal burning practices tend to centre around communr

3.3 Indigenous Native Title and land rights issues as they relate to land management

The third theme identified includes a number of articles concerning land rights and Native Title and this briefing is not intended to cover these in detail. However, these issues should be considered in any planning process as future changes may affect the implementation of fire management plans. Hughes examines the legal basis for Indigenous burning under the Bushfires Act 1980 (NT) and suggests that “trans

Lane examines current approaches to Indigenous land management and programs undertaken. He states that there “has been no systematic, comprehensive approach to indigenous land management in Australia.” Lane analyses different models and concludes that a hybrid of the institutional and community-based approaches would be an improved model which he refers to as “mediated community-based natural resource management” (Lane, 2002).

The Desert Knowledge CRC, theme 3 “Governance, and m

4. Fire risk in Aboriginal peri-urban landscapes in North Australia Case studies from western Cape York Peninsula

In his paper Monaghan examines the fire risk in Aboriginal communities of far North Queensland with particular reference to two communities, Pormpuraaw and Kowanyama. As outlined in Monaghan's paper, Aboriginal settlement is of three main kinds:

- Aboriginal towns
- Town camps
- Aboriginal communities

In addition, outstations are increasing in number and this situation is explained by Monaghan "outstations are the main features of the peri-urban landscape, which are now emerging around Aboriginal communities; they are small settlements that are located in the traditional country of their residents and are mainly occupied in the dry season, which is also the time of the greatest fire risk in the landscape" (Monaghan, 2004)

The association of traditional owners with the land and the reasons for fire setting are summarized as "an expression of identity, of control of the physical, mythical and social world, as well as a land management technique." (Monaghan, 2004)

Monaghan describes the fire behaviour and fire risk in the region with reference to fire frequency maps. Extracts from the fire management plans for both Pormpuraaw and Kowanyama demonstrate the scale at which fire management plans have been developed for these communities. The following points are pertinent when considering the needs for fire management plans in Aboriginal communities:

"The Pormpuraaw study also identified the following issues as germane to effective natural hazard risk management"

argues that it is essential “to recognise the diverse range of natural resource interests and the local polities that exist within communities in the Peninsula” (Monaghan, 2004). He also stresses that “despite the widespread structural similarities in homeland group characteristics in Aboriginal Australia there are considerable differences in their ‘modus operandi’, even between two adjacent communities such as Pormpuraaw and Kowanyama, which preclude generalisations that might be made about fire management or regional scale peri-urban trends in remote Aboriginal communities.”(Monaghan, 2004)

Monaghan suggests elements which are important to the consultation process based on his experience when developing the Pormpuraaw Natural Disaster Risk Management Study (2003, Monaghan and Taylor cited in Monaghan, 2004):

- Recognition that time must be spent in community consultation to ensure an understanding of each particular Aboriginal community. Surveys or reference groups do not gain sufficient information to ensure that subsequent plans will work.
- In conjunction with this, an understanding that comments about bushfire or land management made by different people in the community can vary depending on that person’s authority or relationship to the land and “the social context of the informant has to be known before their statements can be interpreted” (Monaghan, 2004).
- The aims of community consultation need to be presented “clearly and unambiguously” so that language barriers can be overcome to enable participants to contribute. Monaghan has found that using geographical information systems to display the landscape and hazards based on known landmarks is effective in communities he has developed plans with.

In conclusion, Monaghan draws attention to the changes occurring as a result of the introduction of Shire councils and of ongoing Native Title determinations.

5. Possible future research for bushfire issues and Indigenous communities in Australia

Since the “Country in Flames” symposium in 1994, research on fire and land management and the role of Indigenous fire practices has increased appreciably, particularly with the Tropical Savannas CRC. There has been a rise in indigenous community-based ranger groups and the formation of the North Australian Indigenous Land and Sea Management Alliance (NAILSMA) which aims to share knowledge across the north and develop collaborative arrangements with western science agencies. The first meeting was held in August 2004 at Mennggen Aboriginal Land Trust west of Katherine.

However, debate on the benefit of Indigenous fire practices and their role in contemporary fire management across northern Australia continues. While it appears to be increasingly recognized that Indigenous patterns of fire may be beneficial for biodiversity there is considerable discussion about the timing of Indigenous burning and its role in land management. If fire management plans are to be developed for Indigenous communities, it would seem necessary to be clear that there is no consensus by western ecologists about the role of Indigenous fire practices. In addition, there is a diverse knowledge within Indigenous

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Appendix 1. Summary of work undertaken by Tropical Savannas CRC

This review summarises research and publications undertaken by the Tropical Savannas CRC from the Tropical Savannas CRC website (October 2004). Information relevant to the “Understanding Communities” Bushfire CRC program is presented in three parts as follows:

1. Overview of strategic directions and research themes for 2003-2007
2. Research relevant to “Understanding Communities” in Bushfire CRC
3. Publications relevant to “Understanding Communities” in Bushfire CRC

1. Overview

- Development and validation of models and systems of adaptive management if ecological, economic and social goals to be achieved.
 - Specific systems relevant to Indigenous land management and multiple land use are needed.
3. Regional Planning and management. Coordinator Dr Peter Whitehead CDU, Darwin.
- An understanding of the social and economic dynamics of rural regions to meet the needs of both the environment and the people.
 - Develop frameworks to allow sustainable planning and management to meet this complex of public and private needs, responsibilities, benefits and costs.

2. Research relevant to “Understanding Communities” in Bushfire CRC

Round 1

Extension, vocational education and training

Richard Fell, Tropical Savannas CRC and NTU

This project includes a section on fire management with learning package and materials on fire management under following:

- Fire management book
- Case studies of practical fire management

Book published *Savanna Burning: Understanding and Using Fire in Northern Australia*, 2001, featured a number of fire management case studies to illustrate the book with real situations (see publications)

Learning processes of pastoralist stakeholders in the tropical savannas

Professor Allan Arnott, NTU Darwin

This examined the nature of current communication processes and some of the related communication issues with pastoralists. Final report published “*More than can be said: A study of pastoralists’ learning*”, 2001 (see publications).

Fire and Savanna Landscapes

Dr Jeremy Russell-Smith, Bushfires Council of NT, Darwin

Book published *Savanna Burning: Understanding and Using Fire in Northern Australia*, a practical guide and information resource for managing fire in Australia’s tropical savannas. Completed consultancies:

- “Assessing fire patterns and their environmental impacts for national SoE reporting” to Environmental Australia’s State of the Environment Unit.
- “Developing a sustainable satellite fire monitoring program for rural northern Australia” to the Rural Industries Research and Development Corporation.

Indigenous Projects

First round focused on issues of regional importance in various places across northern Australia

Papers from the international conference “Fire and savanna landscapes in northern Australia-regional lessons and global challenges” held in Darwin in July 2002, were published in a special edition of the *International Journal of Wildland Fire* (Vol 12, 2003)

Round 2

FIREPLAN: Fire management fo

3. Publications relevant to “Understanding Communities” in Bushfire CRC

More than can be said: A study of pastoralists' learning

Fire on the Savannas: Voices from the Landscape

Edited by Dennis Schulz

Published by Tropical Savannas CRC

The booklet is based on interviews conducted at the CRC's fire management workshop held in March 1998. This workshop brought together pastoralists, indigenous land managers, scientists, conservationists, tour operators, miners and the military.

While the booklet is not an authoritative text on fire management, it is a fascinating account of viewpoints to fire management in the north, illustrating where these views diverge and meet. Proceedings of the workshop are also now in print.

The booklet's views are from:

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Cover of Fire on the Savannas: Voices from the Landscape