

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



LOOKING AFTER COUNTRY

Implementation of the Kimberley Science and Conservation Strategy is moving forward apace, through partnerships with Indigenous rangers, communities and pastoralists.

by Carolyn Thomson-Dans,
Daryl Moncrieff and Amanda Moncrieff

The Kimberley is a spectacular place, renowned for its natural and cultural significance as well as its raw beauty. It holds a special place for many people, locally, in Western Australia, Australia and across the world.

The state government's \$63 million Kimberley Science and Conservation Strategy, released in June 2011, is a bold vision to ensure the region's long-term conservation (see 'Protecting the Kimberley wilderness', *LANDSCOPE*, Summer 2011–12). The strategy has four major themes: conserving the Kimberley's unique natural environment; working with and employing local Aboriginal people and maintaining the Kimberley's rich culture; increasing knowledge to support informed decision-making, planning and management; and providing opportunities for people to experience the Kimberley's natural and cultural wonders.

A key objective of the Kimberley strategy is to manage the north Kimberley at a landscape scale (known as the landscape-scale conservation

initiative). This means managing threats—such as fire, feral animals and weeds—cooperatively across property boundaries and in partnership with traditional owners and key stakeholders including pastoralists and the Australian Wildlife Conservancy (AWC), to increase the resilience of ecosystems across the whole landscape.

From the outset, the state government has been determined to ensure that the Kimberley strategy engages and involves people who live and work in the central and north Kimberley. For Aboriginal people, this approach has the potential to create employment opportunities, helping to maintain the rich culture of the Kimberley. Numerous government agencies, non-government organisations and Aboriginal communities across the state are now working together to make the vision a reality, bringing about better on-ground management of country through control of weeds and feral animals and through enhanced prescribed burning programs.



Connection to country

The Kimberley has a diverse and living Aboriginal culture. Aboriginal people have inhabited the region for up to 60,000 years and today almost half of Kimberley residents are of Aboriginal descent. Traditional owners maintain a relationship to land in accordance with traditional laws and customs. Traditional ecological knowledge has been handed down from generation to generation and can be used in conjunction with modern science to inform land management practices and decisions.

Aboriginal people working on their own country, in the coordinated management of fire, feral animals and weeds as part of the landscape-scale conservation initiative, will deliver significant social and environmental outcomes. The Department of Environment and Conservation (DEC)

Previous page

Main Mitchell Falls in Mitchell River National Park is within Uunguu Country. Photo – David Bettini

Above Kimberley scrub fire. Photo – Jiri Lochman

Left Traditional owners controlling weeds on their country. Photo – Bel Catchside/DEC



Above The Bunuba traditional owners have been involved in constructing new visitor facilities at Geikie Gorge (pictured above) and Tunnel Creek national parks. Photo – Jiri Lochman

is working with a number of Indigenous ranger groups, including those managed by the Kimberley Land Council (KLC) and the Bunuba people, to implement the Kimberley strategy, and is hoping to establish similar arrangements with other traditional owner groups.

The state government recently passed the *Conservation Legislation Amendment Act 2011* through Parliament to allow for joint management of conservation reserves between DEC and other parties, including traditional owners. Successful joint management programs are already in place in Broome and Kununurra, with the Yawuru and Miriuwung-Gajerrong traditional owners respectively, employing more than a dozen Aboriginal staff. The Act also expands the range of Aboriginal customary activities that can be undertaken in conservation reserves.

Managing fire

The Kimberley strategy is integrating contemporary science with traditional Aboriginal practices and knowledge by carrying out prescribed burning to create a mosaic of burnt and unburnt country in the late wet

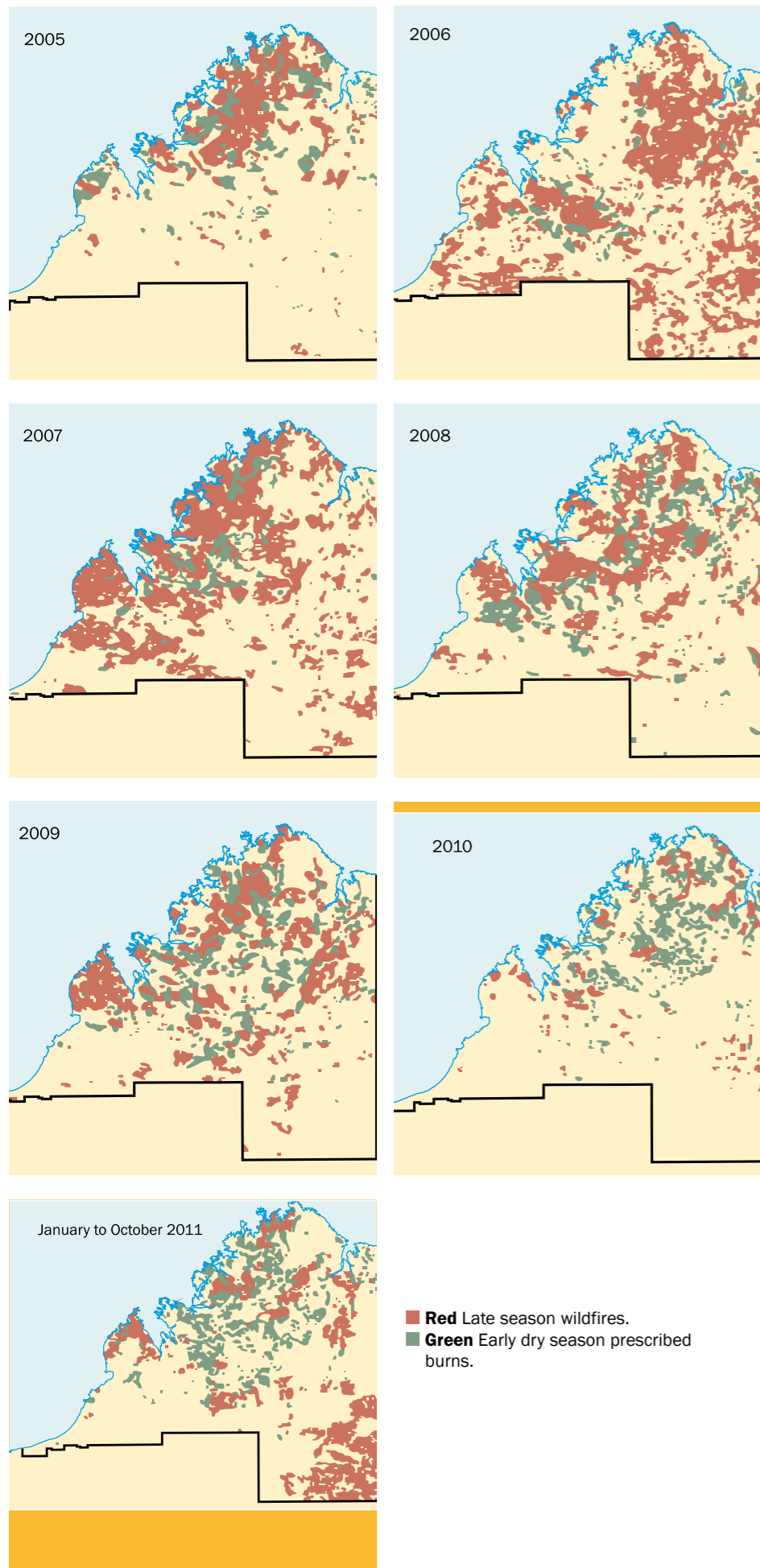
and early dry seasons. The resulting patchwork effect (see maps on page 48) reduces the amount of fuel available to burn and therefore reduces the risk of large, intense and damaging fires later in the dry season.

Changes in the vegetation structure are already evident as a result of burning programs such as *Ecofire*, a multi-stakeholder initiative coordinated by AWC. Originally funded through Rangelands Natural Resource Management as a short-term project, funding by DEC through the Kimberley strategy will enable *Ecofire* to continue in the future. Several years of managed prescribed burning by both AWC and DEC over multiple properties and land tenures has resulted in a range of vegetation of different ages across the Kimberley, which inhibits the occurrence of massive fires and improves biodiversity outcomes.

The Kimberley strategy is providing funding to expand these prescribed burning programs and to substantially increase the involvement of Aboriginal people in this work. In February and March each year, DEC staff meet with traditional owner groups to discuss

which areas they would like to burn. Once an aerial burning program has been agreed upon, DEC conducts the prescribed burns and takes traditional owner representatives in the aircraft. In addition, Indigenous rangers are offered DEC's wildfire awareness training and some nominated rangers have already been trained to operate in more 'hands-on' roles. About 60 Aboriginal rangers, traditional owners and people from the four main claim groups in the north Kimberley took part in early dry season burning for 2011, which involved 300 hours of flight time in two aircraft.

In readiness for the 2012 burning season, DEC provided further basic and advanced firefighting courses (including training for incendiary operators and aerial navigators) for up to four representatives from each of the relevant claim groups across the Kimberley in February and March.



DEC has also begun discussions with traditional owners about the possibility of claim groups helping to undertake ground-based burning activities around cultural and fire-sensitive sites within the Wilinggin and Unguu claim areas in advance of aerial burning.

DEC has installed multi-frequency radios in some KLC vehicles to improve on-ground communications between DEC and the KLC ranger groups. The Kimberley strategy has also funded the provision of a number of fire trailers, which are available for use by Aboriginal ranger groups.

Tackling feral animals

A program to eradicate feral pigs in the northern and central Kimberley is being developed by DEC and local Aboriginal ranger groups. Feral pigs are recognised as a significant threat to biodiversity conservation in the Kimberley due to habitat destruction, particularly along waterways. They can also transmit a range of endemic and exotic diseases. It is important for land managers to learn more about feral pig distribution and densities across the Kimberley and determine priorities for control actions.

A week-long feral pig training workshop held in Fitzroy Crossing in early August 2011 provided a great opportunity for Aboriginal rangers and land management organisations to exchange knowledge and plan the future management of feral pigs in the Kimberley. The workshop involved DEC staff, Miriuwung-Gajerrong rangers employed by DEC, Lake Argyle joint management rangers, KLC rangers and independent Aboriginal ranger groups from across the Kimberley. The training covered the impact of feral pigs and different control options, including trapping, shooting and baiting. This was followed by practical on-ground activities, such as building, setting and checking traps. The week concluded with a planning day in conjunction with KLC and the Department of Agriculture and Food WA, which focused on sharing knowledge and mapping areas where pigs were known to be present. This information will be used as a basis

Right Setting traps for feral pigs.
Photo - DEC

Below right Cathy Goonack from the Kandiwal community recording mammal measurements being taken by DEC's Ian Radford.
Photo - Richard Tunnicliffe/DEC

for developing joint works programs between DEC and Aboriginal ranger groups for feral pig control in the northern and central Kimberley.

Using additional resources made available through the Kimberley strategy, DEC has been able to expand the feral animal control program that has been in place for a number of years at Mitchell River National Park in the north Kimberley. Throughout the whole region, feral cattle, horses and donkeys create substantial grazing pressure on natural vegetation and impact on wetlands, streams and rivers, decreasing habitat values for native animals. In partnership with the Department of Agriculture and Food WA and neighbouring pastoralists, DEC has increased the duration and coverage of its operations to cull feral animals from strategic areas. DEC will continue to consult with pastoralists, non-government organisations and Aboriginal communities about future culling operations that may be feasible and about where other options such as fencing and/or mustering are warranted.

Joint weed control efforts

Collaborative weed control work is an important component of the Kimberley strategy. The strategy aims to facilitate the training and employment of Aboriginal rangers to undertake collaborative activities targeting weed invasion and biodiversity conservation.

DEC's West Kimberley District has developed an important partnership with the Wungurr Aboriginal ranger group to work together; share knowledge, skills and training; and facilitate on-country land management activities. As part of this, DEC and the Wungurr rangers recently began to eradicate an infestation of taro (*Colocasia esculenta* var. *aquatilis*) in King Leopold Ranges Conservation Park.



The species, introduced in the 1980s, had been spreading along a tributary of the Barker River at the Mount Hart homestead. While taro is native to the east Kimberley, in the west Kimberley it is an invasive weed and has the potential to spread rapidly and choke river systems.

An expedition in August involved a trial program to survey the extent of the infestation and test different weed control methods. Spraying foliage with herbicide was found to be the most effective method, and almost two hectares of taro were sprayed twice in a follow-up expedition in September. DEC and Wungurr rangers will continue to re-treat the affected area in the coming months and further survey work will be undertaken downstream to check for potential infested pockets.

Bunuba rangers have also been employed by DEC to conduct weed control activities in the southern half

of King Leopold Ranges Conservation Park. Earlier this year DEC supported the rangers in completing courses within Certificate II and III in Conservation and Land Management that are applicable to controlling weeds and using chemicals. This was followed directly by employment for the rangers in several week-long blocks of work to control calotropis (*Calotropis procera*) along the Milliewindie Track.

Other partnerships

A number of Wunambal Gaambera traditional owners from the Kandiwal community near Mitchell River National Park worked with DEC staff in 2011 in monitoring a suite of sites in the Mitchell Plateau. These sites are being monitored to collect baseline data so that the impact of management actions on native vegetation and fauna can be measured over time. Such short-term employment opportunities



Left Setting a feral pig trap.
Photo – Richard Tunnicliffe/DEC

Below King Leopold Ranges Conservation Park.
Photo – David Bettini

provide a forum to exchange knowledge on plants and animals found in the area. DEC hopes to expand its involvement of traditional owners in the monitoring program in coming years.

The aim is also for Aboriginal rangers to work with tour operators and visitors to promote positive visitor experiences while protecting cultural values.

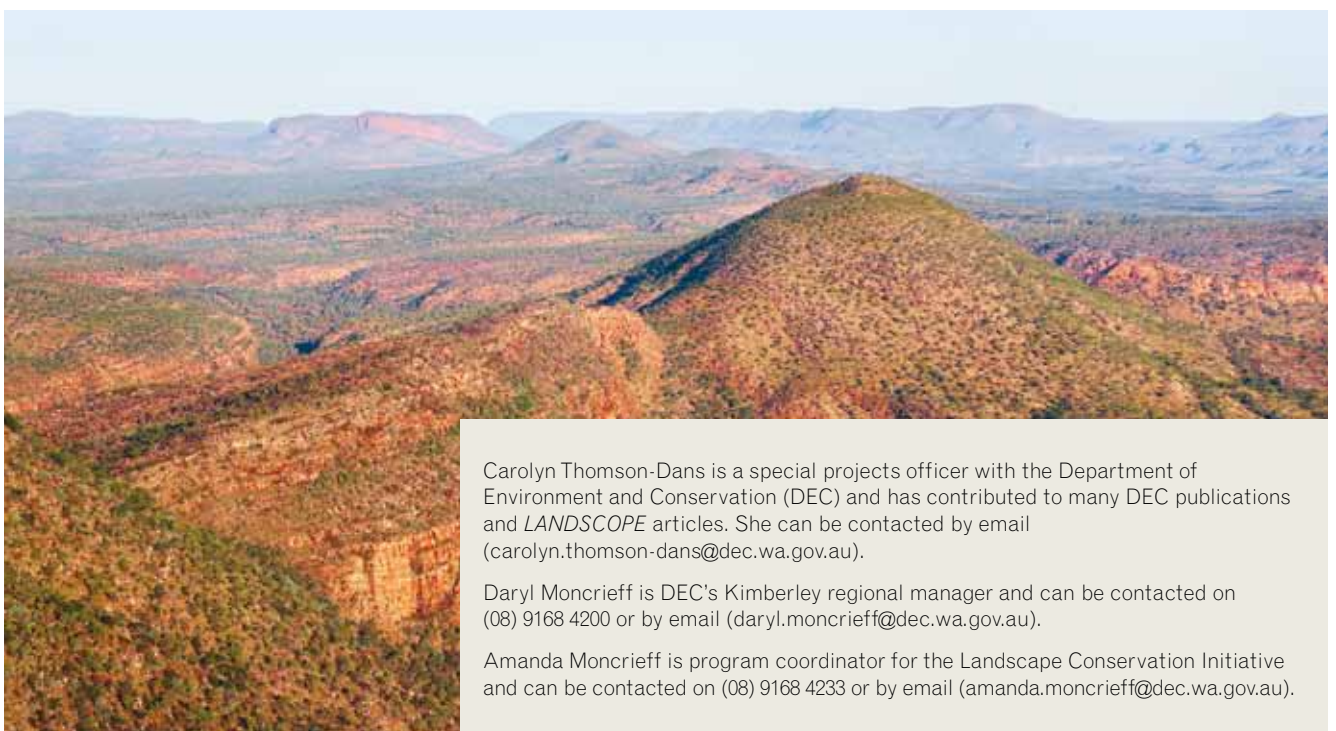
The Kimberley strategy will offer support to Aboriginal communities to identify and develop culture- and nature-based tourism opportunities at key sites, including those along

the Kimberley coast visited by cruise ships. This offer includes Tourism WA and other stakeholders working together to develop up to 10 existing Aboriginal tourism businesses and establish tourism products to service the cruise tourism market. There are also opportunities to further enhance the tourism experience at Mimbi Caves on Mount Pierre Station.

As part of the marketing and development of Kalumburu Road as a 'tourism corridor', DEC has collaborated with Drysdale River Station to address rubbish management issues along one section of the road.

Looking for partnership opportunities where sustainable land management outcomes can be achieved is at the heart of many of the programs and projects that sit under the Kimberley strategy.

Protecting the Kimberley is not just a government responsibility or imperative. It will not be possible to achieve long-term conservation of the Kimberley without partnerships between Aboriginal communities, the wider Kimberley community, pastoralists and agriculturalists, the resources sector, the tourism industry, non-government organisations, research institutions, and governments at the local, state and federal levels. Implementation of this strategy will involve different partners, playing different roles and carrying out different responsibilities, depending on their capacities and interests.



Carolyn Thomson-Dans is a special projects officer with the Department of Environment and Conservation (DEC) and has contributed to many DEC publications and *LANDSCOPE* articles. She can be contacted by email (carolyn.thomson-dans@dec.wa.gov.au).

Daryl Moncrieff is DEC's Kimberley regional manager and can be contacted on (08) 9168 4200 or by email (daryl.moncrieff@dec.wa.gov.au).

Amanda Moncrieff is program coordinator for the Landscape Conservation Initiative and can be contacted on (08) 9168 4233 or by email (amanda.moncrieff@dec.wa.gov.au).