Caring for Country with Fire

Fire has always been used to care for country in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands. Burning was conducted for a variety of reasons including for immediate requirements (access to country, cooking, hunting, clearing camp sites), the promotion of plant and animal resources, and the protection of areas from unplanned fires. Fire remains an important part of Anangu cultural traditions.

Lightning can cause 'Natural' ignitions in the summer months. Historically, the severity and extent of such fires was limited by low fuel loads due to regular burning by Anangu.

In recent years, reduced access to country and the encroachment of buffel grass have substantially altered the fire regime and increased the potential for damaging wildfires. Staff from the Department of Environment and Heritage (SA) have listed fire in the top 3 threats to biodiversity in the APY Lands. Large wildfires reduce habitat heterogeneity and have a greater impact on fire sensitive plants and habitats, particularly in the ranges of the APY 1 ands



This patch burn was lit to reduce spinifex fuel around Nganamara habitat in the Walalkara IPA. On a cool day, fires move slowly into the wind or burn back on themselves and usually self extinguish at night. Photo: Munty Robin



After this big rain, we have a lot of grass now, all over the A.P. Lands. It is good that we have lots of food for the animals but it is getting dry now.

Maybe big bushfires could start soon from lightning or other accidents. The bushfires could go all over the A.P. Lands and further.

We have got to start now, thinking about patch burning to protect our land.

If big bushfires start, they might go to important places and burn all the trees and chase all the animals away.

What about we get together and discuss a plan for managing the patch burning. Kunmanara Baker 1989

Wildfires in the APY lands between 1997 and 2009.

In 1989 Anangu became worried about the high fuel loads around homelands and communities (see box). A patch burning workshop was conducted with assistance from scientists and Anangu rangers from Mutitjulu community. Anangu were shown how to use drip torches and other equipment and issues such as resources and training were discussed.

Patch Burning has been an integral part of management in the Indigenous Protected Areas, Watarru and Walalkara since 2000. These IPAs support the last known populations of the threatened Nganamara (malleefowl) in the APY Lands. In other parts of the APY Lands there has been limited funding for Anangu to conduct patch burning and extensive wildfires have occurred (see wildfire map above). Wildfires have caused long term damage to sensitive plant communities and may have affected the status of threatened plant and animal species.

A fire management strategy was produced in 2004. It recommended that burning programs be initiated within 10 fire management regions (FMR) which make up the APY lands. Despite APY Land Management's best attempts to implement this strategy it has never been successful due to a lack of funds in all but the IPA regions.



Sammy Dodd and Wally Dodd burning spinifex in the proposed Sandy Bore Indigenous Protected Area. Photo: K. Dodd

In 2009 a Caring for our Country fire planning project was supported through funding from the Australian Government's Caring for our Country and Indigenous Land Corporation Threatened Species projects. Operational fire management plans are being developed for two key FMR's, the Mann Ranges FMR and the Musgrave Ranges FMR. These regions support key threatened species, including the Black-flanked Rock-wallaby, Orange-crowned Toadlet, *Basedowia tenerrima, Goodenia brunnea*, and



Trainee fire rangers burning spinifex to protect sensitive vegetation on the hills near Angatja. Photo: W. Powrie



Warru Ranger, Sharada Stanley, burning introduced buffel grass in an attempt to reduce fuel loads around the endangered Warru (black flanked rock wallaby) colony. Photo: A. Dent

Acacia tenuior. These areas have also been prioritised due to their proximity to large communities (Pipalyatjara, Pukatja and Amata) and the increasing homogenous nature of the grasslands dominated by either Spinifex or the introduced buffel grass. Trial burning in the Musgrave Ranges and Mann Ranges FMRs was very successful, however high winter rainfall prevented some burns from carrying.

Trial burns were reviewed in November and December 2009. Habitat that was previously dominated by Spinifex grass showed significant regeneration of a diversity of plants. It was exciting to see the diversity of plants regenerating Particularly important to Anangu was a number of food plants, including two different types of bush tomato (*Solanum spp.*) and some grasses whose seeds are made into flour.

It is vital that APY Land Management is funded to support Anangu to continue and expand on these burning programs in the future. There is a pressing need to engage young people in fire management work while a significant but diminishing number of knowledgeable senior practitioners remain active. Significant support is also needed to ensure that Anangu can gain training in new technologies such as satellite imagery. APY Land Management's long term aim is to employ a fire management officer and seasonal Anangu fire rangers for each of the 10 fire management regions (FMR) outlined in the 2004 strategy. APY Land Management is working with the Central Land Council and the Ngaanyatjarra Land and Culture unit to ensure that fire management is conducted across borders.

Fire management plans for the Musgrave Ranges and Mann Ranges fire management regions, produced on behalf of APY Land Management by Desert Wildlife Services, are available below. Thankyou to everyone who provided comments.





Top: Barbara Baker surveying regeneration near Kanpi, and Bottom: a Bush tomato plant she found four moths after the trial patch burns. Photo: T. Partridge