# A NYUNGAR PERSPECTIVE ON FOREST BURNING

For tens of
thousands of years,
the Nyungar
Aboriginal people
of the south-west of
Western Australia
have used fire in
their management
of the land.
Here, one member
of the Nyungar
Community gives
his perspective of
past and present
burning practices.

BY GLEN KELLY

n recent times, we have seen the issue of prescribed burning escalate into one of the most divisive environmental issues ever seen in the south-west of Western Australia. Many scientific arguments have been presented both for and against.

Until now, very few people have considered the views and knowledge of the Nyungar people: the traditional owners of the *Boodja* or country in question. But some may ask, 'why should consideration be given to the views of Aboriginal people?'.

Quite often, the misconception arises that Nyungar people have little knowledge or memory of land and its processes, but nothing could be further from the truth. The land of the southwest is the land that Nyungar culture and cosmology spring from. We are of this land, and this land is of us. It has been that way for many tens of thousands of years. Our knowledge base and cultural identity is closely intertwined with the land, and our people—especially our elders—still possess a vast pool of traditional

knowledge. This, combined with our growing self-determination, means that we are more able to successfully fulfil our obligations to care for country. Obligations that are set out in our *Nyitting* (or Dreaming, as it is more commonly known): to care for the land not only for ourselves, but for the sake of the health of country and all that lives upon it.

We see this relationship as a reciprocal one. If we take care of the country and maintain its needs, it will in turn take care of us—both on a physical and spiritual level. We are equal to what exists on our land, we do not have dominion over it, we are simply custodians.

While the voracity of European settlement has destroyed much of our land, there are still some major areas of country (whether they are large tracts or small but important sites) to which we have a strong attachment. When it comes to environmental issues (or, as we term it, caring for country), the only people on Nyungar land that have the benefit of tens of thousands of years of land management experience is us, the Nyungar people. This is why we feel it is important that our views are heard.

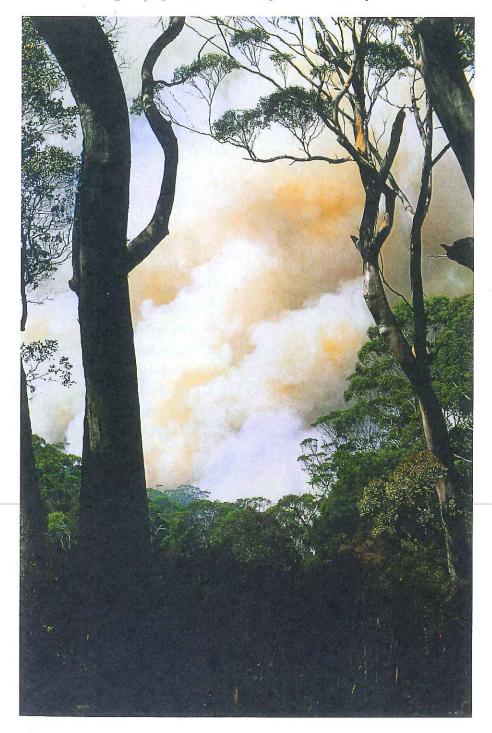
# NYUNGARS AND FIRE

Before passing comment on contemporary fire ideologies and methods, it must be understood that Nyungar people have used fire as one of the main tools in caring for country for tens of thousands of years. It has, in fact, been so integral to Nyungar land management, that the land we all inherit today is one that has been shaped by us through our use of fire.

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Main: Fire has been a feature of the south-west of Australia for thousands of years. Intensely hot fires can do tremendous damage to the land, but cooler burns (see inset) can promote growth and protect habitat.

Main photo – Brett Dennis/Lochman
Transparencies. Inset photo – Jiri Lochman

Left: Hot fires such as this over large stretches of country can have detrimental effects on all sections of the forest—depleting the seed stock and promoting germination that is too intense, destroying ground cover, and destroying canopy and the fauna that is associated with it. Photo – Jiri Lochman



Karl (fire) is at the very heart of our culture. In our language, karl not only describes fire, but also our immediate or nuclear family. This is referred to as 'hearth' in academic circles. It represents the importance of fire as a centrepiece for family and daily necessities of life, such as cooking, warmth and light. An extension to this is karlup, the name given to my home country. Literally translated, it is the place of my fire, my family place, my home.

Fire and smoke also have a prominent position in our ceremonies. While light is the most important thing a fire provides, the smoke can also be used to cleanse spirit. Even in contemporary times, fire remains at the centre of family and other gatherings.

As a people, we have many uses for fire and many reasons for using it (such as promoting a particular type of growth through frequent burning, or protecting other habitats and vegetation by less frequent burning). But what must be made absolutely clear, is that the rules for fire and fire use are many and varied, and are dependent upon an intimate knowledge of the physical and spiritual nature of each portion of the land. Without this knowledge, it is impossible to care for country in the appropriate way.

# USES FOR FIRE

Generally speaking, there are two types of fire that Nyungar people use—cool fire, or burns of lower intensity (which are the most common), and fires of higher intensity.

Cool fires are generally performed to clear undergrowth. Because the fires are low in intensity, they do not damage the middle or upper layers of the bush being burnt, or promote the germination of a large amount of the seed bank that is stored in the soil.

They do, however, promote easier access and movement through the country. This is vital to Nyungar culture. Not only so that cultural pursuits can be carried out and sacred sites tended, but also because the land itself is dynamic and changes with the cycle of the seasons. Rather than challenge the rhythm of the land, we must travel to more suitable regions as the season dictates, without the hindrance of thick undergrowth.





Cool fire is also used to promote new growth. The plant species that are the first to re-establish after a cool burn, the primary successional species, tend to be those that have the highest food value, both to humans and animals. Furthermore, the plants that grow after a mild fire tend to be of a broader species range, so diversity in the understorey remains balanced.

Cool fire can also be used solely to promote grass growth. Large tracts of land (both open and woodland) along the south coast have been maintained specifically as a grazing habitat for thousands of years. In these areas, cool fires need to be lit in a mosaic pattern on a two year rotation. If this does not occur, as is now the case in many areas, a dramatic and negative ecological shift occurs. It can't be stressed enough, that

Top: A regenerating wattan thicket on the south coast that has been killed by a low intensity prescribed burn.

Photo – Glen Kelly

Above: If open land is left unburnt for too long, wildfire and the destruction it causes is inevitable. To us, this country is dead and will take decades of nurturing before it regains any semblance of life.

Photo – John Kleczkowski/Lochman
Transparencies

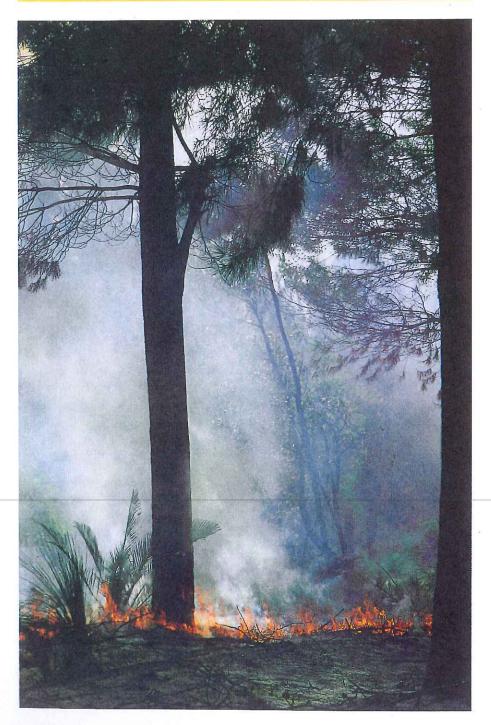
cool fires, conducted in an appropriate manner and in the right places, are of great benefit to country.

Maintaining thick growth in some areas is a further aim of Nyungar fire patterns. It is poorly understood that in many areas, vegetation and habitat requires a longer rotation of fire in order to maintain its structural integrity. Areas that provide a habitat

### LAND MANAGERS AT WORK

While travelling from the Albany District to Perth in November 1830, John Lort Stokes wrote that:

"On our way we met a party of natives engaged in burning the bush, which they do in sections each year. The dexterity with which they manage so proverbially a dangerous agent as fire is indeed astonishing. Those to whom this duty is especially entrusted, and who guide or stop the running flames, are armed with large green boughs, with which, if it moves in a wrong direction, they beat it out . . . I can conceive no finer subject for a picture than a party of these swarthy beings engaged in kindling, moderating and directing the destructive element, which under their care seems almost to change its nature, acquiring as it were, complete docility, instead of the ungovernable fury we are accustomed to ascribe to it. Dashing through the thick underwood, amidst volumes of smoke—their dark active limbs and excited features burnished by the fierce glow of the fire—they present a spectacle which rarely falls to our lot to behold, and of which it is impossible to convey any adequate idea with words."



for wallabies and quokka (where they still exist), and thickets, such as the Wattan or spearwood thickets of the south coast, spring to mind.

The vegetation in these areas needs a high germination rate so that it grows in extremely dense stands. After around 10 to 15 years, the stands open and begin to lose their structure. At this point, a hot fire is required to re-start the cycle and promote new growth. The need to protect these areas from cool fires during this cycle is extremely important, because they can kill the thickets before a good seed bed has re-developed. If this happens, the vegetation and habitats they provide are lost.

These are but a brief outline of fire types and uses, and only a very small portion of the knowledge base that exists. There are many other types of fire, such as those used for game drives, protection of upper canopy species, and making particular root crops more palatable. Each has its own set of rules that must be followed. And each is strongly dependent on the type of country and its particular needs.

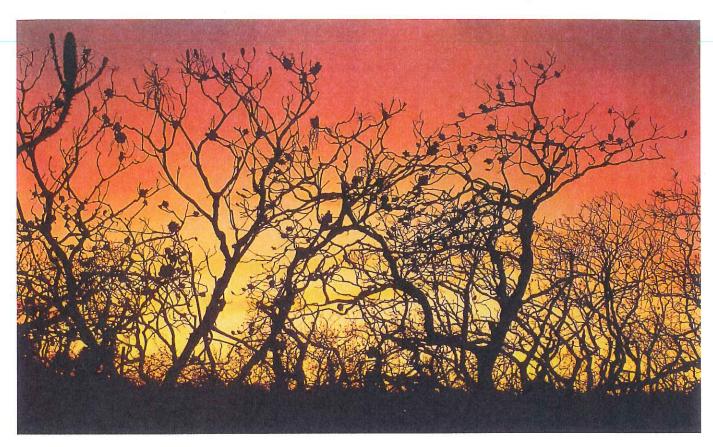
### CONTEMPORARY FIRE

In all cases, when a Nyungar's perspective is given, it is based on a traditional lifestyle and knowledge. We often come under the criticism that these are no longer relevant viewpoints, because we no longer live fully traditionals lifestyles and have no need to pursue traditional methods.

There are many reasons why this is not the case, but what is most relevant here, is that upon the cessation of Nyungar land management practices, dramatic changes occur to the land. Up until 20 or 30 years ago, Nyungar land management practices, which involved frequent cool fires over much of the country, were maintained to a large extent by the cattlemen of the south coast. They used the skills shared with them at the time of settlement, when a major part of the rural work force was Nyungar people. In the last few decades, however, we have witnessed some parts

A cool burn—this type of fire does not damage upper layers of the forest, and if performed correctly, leaves seed bed, fauna and country intact.

Photo - Dennis Sarson/Lochman Transparencies



of our coastal land move from productive and vital areas to what we consider sick (*mindytch*) or dead country (*noinch boodja*).

Today large sections of the coastal heath and woodlands are either left unburnt or are burnt at long intervals. To us this is clearly inappropriate. We have witnessed the mixed grasslands and woodlands of the south coast (which have been maintained for thousands of vears) become colonised with dense thickets of a few dominant plant species. We have seen our coastal woodlands be destroyed by high intensity fires that have been fueled by the heavy build-up of undergrowth that has been allowed to develop in the absence of frequent cool fires. The replacement of the woodlands by thickets and heaths has in turn resulted in repeated hot fires. It is possible that these woodlands may take many decades to re-establish and be restored to their original state.

But the no burn ideology is not the only one that has been detrimental to our country. Prescribed fires that have been lit either at the wrong time of the years, or not frequently enough have resulted in changes in many parts of our Nyungar land. We have seen many of our Wattan and other thickets burnt out and lost through burning that is too frequent and too low in intensity. I believe this has

been brought about due to a lack of intimate knowledge of the land, and a lack of recognition that different types of vegetation need to be treated differently.

We believe then, that the no burn ideology leads to the destruction of much that has been maintained by us for tens of thousands of years, and in many cases inappropriate prescribed burns do exactly the same.

## TIME TO LISTEN

We believe that the experimental non-use of fire and inappropriate use of fire that has been applied on the southwest coastal lands for the past few decades has been detrimental to the land of our origin. The fault for this does not lie at the feet of any one group or agency, but is a collective responsibility that needs to be recognised and rectified, quickly.

While the debates and hypotheses continue, we, the Nyungar, are

From fire comes life, as will be the case with these Banksias. To us though, fires that strip this type of vegetation bare are inappropriate and a better use of fire must be made.

Photo - Dennis Sarson/Lochman Transparencies

gradually witnessing a serious degradation of our country. It is time for the land managers and scientists alike to take the Nyungar people and our knowledge into account. Rather than asking 'what is the effect of burning?', a more appropriate question might be 'what is the effect of no or inappropriate burning?'.

I believe that with the combination of Nyungar traditional knowledge and modern scientific method, it will be possible to create an extremely robust and effective land management system. A cross-cultural land ethic, if you like. I also believe, very strongly, that this can ensure the long term survival of the land we now share.

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The information in this article is gained from personal experience in the Lower South West region of Western Australia—an area that supports tall karri, open jarrah and marri forests, to coastal woodlands and heaths. Although this is an Aboriginal perspective, Mr Kelly does not claim to represent all Nyungar people, or speak for other people's country aside from his own.