Submission No 474

INQUIRY INTO MANAGEMENT OF PUBLIC LAND IN NEW SOUTH WALES

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Managing Country in 1788.

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In November 1840, in the far south of Western Australia, John Lort Stokes
met a party of natives engaged in burning the bush, which they do in sections every year. The dexterity with which they manage so proverbially dangerous an agent as fire is indeed astonishing. Those to whom this duty is especially entrusted, and who guide or stop the running flame, are armed with large green boughs, with which, if it moves in the 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.
In Victoria at that same time, docile fires were
common during the summer [note]... The flames came on at a slow pace... as the grass happened to be short, the fiery line seldom rose above the fuel on which it fed; and it would have been no difficult matter to have leapt across it... The frequency of these fires is the principal cause of the absence of underwood, that renders the forest so pervious in all directions, and gives to Australia the park-like appearance which all agree in considering its characteristic feature.
These examples illustrate a crucial difference in how Australians see landscape fire. Non-Aborigines know it as a threat, capable of destroying people and property with "ungovernable fury". Aborigines know it as an ally, as much a friend in the bush as in the fireplace. One group reduces fire to "complete docility"; the other cannot imagine that this is possible.

This is no small difference. It means that landscape fire almost completely changed its character after 1788: from being tame, it became wild. A Central Australian elder stated, "before the arrival of white people Anungu did not know about really large bushfires, but now they do... the country had been properly looked after and it was not possible for such things as large scale bushfires to occur", and a Darling River pioneer noted "a remarkable characteristic of the aborigine... the care taken by them to prevent bushfires. In my long experience I have never known any serious bushfire caused by the blacks". Compare this with Black Saturday, or Black Thursday, or Ash Wednesday, or any other black day.

"1788 fire... was planned; it was precise; it could be repeated hence predicted; it was organised locally; and it was universal — like songlines it united Australia. People accepted its price. They must be mobile, constantly attendant, and have few fixed assets. In return they could ration fire's feed, unleash but never free it, and move it about, sustaining more diversity than any natural fire regime could conceivably maintain. It was scalpel more than sword, taming the most fire-prone country on earth to welcome its periodic refreshing, its kiss of life. Far from today's safe and unsafe fires, campfire and bushfire were one; far from a feared enemy, fire was the closest ally".

Fire was almost infinitely varied: big, little, hot, cool, patch burns, sheet burns, changes in extent, frequency, timing and thus intensity according to season, purpose and circumstance. Please don't assume, as many do, that "fire-stick farming" is all that 1788 fire was. In 1969 Rhys Jones coined this term to describe one kind of harvest fire: patch burning grass to bring on green pick to lure grazing animals. This was common in 1788,

but was always done on ground other fires made ready long before. The misunderstanding reflects how blind most of us are about sustainable fire management: we miss how much it depends on prior planning and preparation. To think "fire-stick farming" all people did in 1788 is like confusing burning sugarcane with farming sugar.

Across the variety of 1788 fire and no fire, one factor was constant: fire was controlled. As Ludwig Leichhardt put it in 1845, it was part of the "systematic management" of country. It was part of Law, universal in how it was understood and respected. Law united Australia philosophically, fire united it ecologically. Local expertise was crucial not because of universal fire, but because of local plant variety, from spinifex to rainforest. The genius of 1788 fire was that no matter what the plant community, people everywhere used fire successfully to make country useful, abundant and beautiful.

After "bush", the most common word newcomers used to describe Australia's landscape was "park", a word marking how Europe's gentry made land useful and beautiful. "The country looked very pleasant and fertile", Sydney Parkinson wrote in 1770, "and the trees, quite free from underwood, appeared like plantations in a gentleman's park". In November 1826 Robert Dawson thought the country inland from Port Stephens
truly beautiful: it was thinly studded with single trees, as if planted for ornament... It is impossible therefore to pass through such a country... without being perpetually reminded of a gentleman's park and grounds. Almost every variety of scenery presented itself... [but] the traveller's road generally lies through woods, which present a distant view of the country... The first idea is that of an inhabited and improved country, combined with the pleasurable associations of a civilized society.
For a century or so hundreds of such remarks followed, from every terrain and plant community. You don't often hear them now. Fire worked its magic across Australia.

People worked hard to make parks. Plants, animals and fire were life studies. Seasons vary, rain is erratic, plants have life cycles, animals populate unevenly, fire has long and short term effects, people differ on what to favour. Senior people were responsible for any fire, even a campfire, lit on land in their care. They decided what to burn, when, and how, but in deciding obeyed strict protocols with ancestors, neighbours and specialist managers. "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". "You sing the country before you burn it. In your mind you see the fire, you know where it is going, and you know where it will stop. Only then do you light the fire".

"You sing the country before you burn it". In other words you blend hard-won local expertise with knowing fire as a living part of the Dreaming, subject to Law via ceremony. The gains were immense. Fire's challenge became opportunity. Controlled fire averted uncontrolled fire, and fire or no fire distributed plants with the precision of a flame edge. In turn this attracted or deterred grazing animals and located them in habitats each preferred, making them abundant, convenient and predictable. All was where fire or no fire put it. Australia was not natural in 1788, but made.

Can we learn from this? Two examples – trees, and fire:

Trees are central to what Europeans think a "natural" landscape. Grass, or in rainforest grass edges, was central to thinking in 1788. Grassland carried many useful plants and

most animals with most meat. It was a firebreak, it made seeing and travelling easier, and it confined forest, making forest resources more predictable. Almost always it took the best soil, and probably there was more grass then than now.

But we let trees run wild, including over 1788 grass. Our talk of "pristine wilderness" is an oxymoron, because in 1788 not an inch of country avoided Aboriginal mind and Law. Thick forest was deliberate and confined, and there was significantly less of it than now. In 1788 Australia had no wilderness, no *terra nullius*. It has both now. In national parks and nature reserves forests thicken and spread. This inevitably means hot fires, and advantages some plants and animals and disadvantages others. We discriminate against grassland species unless they can survive on farms or in cities. In my Canberra suburb for example, currawongs replace sparrows and wrens as trees and bushes grow.

We need to burn more. A few months after Victoria's February 2009 fires, TV showed people delighted at the bush coming back green. Such regeneration simply begins another cycle, ending in another killer fire 40-50 years on. In 1788 people would never have let that happen, because if it did they could not have survived it. Instead, as soon as possible after the fire, as autumn and winter permitted, they would have lit small patch fires to clear seedlings, saplings and regenerating scrub. These fires are cool, but scrub needs hot fire to regenerate, so the mid-height plant layer, the scrub which would otherwise lift flames from ground to canopy, never takes hold. It was no accident that newcomers admiring in 1788's parks so often reported no "underwood".

Today many non-Aborigines object to extensive burning. Black ground is ugly and dirty; smoke is unpleasant, unhealthy, causes asthma, dirties washing and so on. All true, but should such difficulties justify letting fuel build up for killer fires like Black Thursday? And will the results of control fires really remain ugly when so many early newcomers wrote with delight at how much country was beautiful and park-like? Of course we make more black ground and more smoke now than in 1788, because we have let fuel build up into scrub and dense forest. It is a daunting task to return to 1788's safer balance, but 1788 shows us the rewards if we do.

Fire is far and away the best and cheapest way to control fuel. Are there other ways? None so good, but one under debate is letting cattle into mountain "parks". Cattlemen say that this would reduce fuel and give national parks income. Opponents say that cattle introduce weeds, selectively eat out native grasses, and unbalance species, and that cattlemen start fires, degrade land, and let in rampaging shooters and off-road drivers. Both sides may well be correct, but as things are they are bound to clash.

Relating this, very sketchily, to 1788 management, the key is still to reduce fuel loads. Will cattle do this? They prefer grass, not seedlings, and historically they did not stop trees and scrub regenerating on the lower country. Yet locking country up doesn't reduce fuel either. Intensive late spring grazing on ground burnt in early spring might reduce fuel without threatening species extinction, or it might not, or it might sometimes and not others. On the other hand 1788 fire would make more grass and favour the return of native grass and therefore animal species, and that might be combined with light grazing loads as in 1788. 1788 management took account of how many of each species each small part of the country could carry, and the answer was never none, and rarely big mobs of the heaviest grazers. We need to learn more.

Unfortunately we lack 1788 baselines, but 1788 has given us a great gift: controlled fire can manage country successfully. I see five purposes of 1788 fire:

1. Control fuel
2. Maintain diversity
3. Balance species
4. Ensure abundance
5. Locate resources conveniently and predictably.

Non-Aborigines today battle to achieve stage 1, admire the objectives of stages 2-4, and can't imagine stage 5. Yet the stages show not only the value of allying with fire, but the benefits of managing land with fire. Aboriginal fire expertise can guide land management towards a philosophy which preferences all five stages together. Making fire an ally works.

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