

## **Submission to the Royal Commission into National Natural Disaster Arrangements By John Andrews, MCAV Treasurer (2020)**

This submission was originally prepared for the 'Inquiry into the efficacy of past and current vegetation and land management policy, practice and legislation and their effect on the intensity and frequency of bushfires and subsequent risk to property, life and the environment'. Therefore it focusses heavily on land management but has relevance to matters a, b, e, f, and g set out in the Letters of Patent of the Bushfires Royal Commission.

While this submission is based on my understanding of practices and conditions in my home State of Victoria, with particular focus on the High Country with which I am very familiar, I suspect that most issues and problems are consistent across Australia.

Bushfires do not respect boundaries between States, Wilderness Areas, National Parks, public land, and private property so it seems self-evident that coordination and cooperation between those responsible for land management is of paramount importance if we are to limit the devastating loss of life, property, and wildlife and the environmental destruction caused by bushfires. Preparation for and response to bushfires is constantly hampered by inconsistent regulations and practices between various levels of government, their departments and regulatory bodies. It may be utopian to expect everyone involved in land management to work with a singular purpose towards achieving a common goal but, unless we do, we will not diminish the suffering which inevitably occurs from natural disasters. It is essential that vegetation and land management policy, practice and legislation takes a long-term view if it is to successfully limit the intensity and frequency of bushfires.

The disastrous wildfires of 2019-20 were not started by drought or heat. Fires require ignition and the majority of bushfires are ignited by lightning. The entrenched view that most bushfires are ignited by human activity probably dates back to the Stretton Royal Commission into the 1939 fires.

Stretton was wrong! It is OK to be wrong, but it is not OK to stay wrong.

Reference to Bureau of Meteorology and CSIRO data will readily reveal the extraordinary number of lightning strikes occurring constantly across Australia. We need to acknowledge that we CANNOT PREVENT bushfires igniting so we need to work on minimising their impact.

Once ignited, fires require fuel. The recent devastation is not the result of something that occurred in the last year or two. It is the result of *catastrophic fuel levels* built up over many years of neglect during which the recommendations of Royal Commissions and Inquiries have been ignored, and there has been a refusal to accept the advice and knowledge of experienced fire experts and bushmen.

Current management philosophies and practices are discredited, and our public land is a mess. Unless and until we give greater credence to the indigenes, the foresters, and those who work in and understand the bush, until we value their advice and experience ahead of theory and centralized management, our lives and property continue to be at unnecessarily high risk.

We certainly need to consider climate change, but it is a mistake to link land management policy with climate change policy. To do so runs the risk of compromising effective long-term land management by trying to accommodate short-term emissions reduction considerations.

We should all recognize that a great deal of what we are currently pumping into the atmosphere can't be doing us much good, and we need to do something about that as soon as possible. But quite separately we should all recognize that, although Earth is in an ice age that started about 3 million years ago, we are currently in a warm interglacial that began about 11,000 years ago. Earth's climate is changing (as it always has) so in addition to trying to modify climate we need to learn to work with it, given that our ability to make positive modifications to it is unproven.

Considering that our climate entered a warming phase 11,000 years ago it makes little sense to focus on the last 200 years and ignore the practices that shaped Australia for the previous 50,000 years. Land management practices employed by Aboriginal Australians involved extensive use of fire as a management tool. The practice of using fire to shape the landscape and the environment is well-documented and we need to learn from this. Fortunately there is still a handful of elders around who have the knowledge if we are willing to listen and learn.

Bill Gammage in 'The Biggest Estate on Earth: How Aborigines Made Australia' writes in considerable detail about the success that systematic cool burning achieved in controlling the summer fires inevitably caused by lightning strikes; all without the help of fire-bombers, bulldozers, and fire appliances.

Gammage references numerous early writings from all parts of Australia, all of which comment on the 'park-like' appearance of the Australian bush with many comparisons to the domains of English gentlemen.

Don Watson in 'The Bush' writes about land clearing in South Gippsland in the 1870's and notes that the "remarkable anthropologist and bushman Alfred Howitt" who spent a great deal of his time in Gippsland getting to know the Aborigines was convinced that :

*"much of the dense forest the Europeans were clearing had been open forest managed by Aboriginal cool-burning regimes until the 1851 Black Thursday holocaust destroyed it .....and many of the parts that had not burned then were a tangle because the Aboriginal managers had gone. No one can say if the 1851 fires were started by Aborigines or by lightning and it hardly matters. European occupation brought an end to Aboriginal supervision of the forest, and wherever it was absent infernos were endemic."*

Cattlemen, who were grazing their herds in the high country before John Batman landed on the banks of the Yarra, observed these management practices and learnt to fight fire with fire. The mountain cattlemen sadly were prevented from continuing their Autumn cool burning practices by well-meaning authorities, so the fuel loads on their grazing runs in the High Country began to increase.

Early explorers' notes make consistent references to 'native fires' but none of their notes record the mile after mile after mile of dead mountain ash and snowgum that we see today as a result of recent management practices. These practices have changed the landscape, possibly forever.

## Current Policy and Practice

For many years now our land management policies and legislation have been dictated by a philosophy of preserving a pristine environment through an ever-increasing network of Wilderness Areas and National Parks. But we keep destroying them.

We should take care not to allow romanticism to override rationality. If we do, the dreams we have of preserving something special for future generations will go up in smoke – literally.

Disastrous wildfires which did not occur under earlier land management regimes will keep happening unless we change our practices; but we seem determined not to learn. Time after time the recommendations of Royal Commissions and Inquiries have either been ignored or not fully implemented.

For example, the 2009 Victorian Bushfires Royal Commission recommended that annual fuel reduction burns should cover 385,000 hectares (5%) of public land, *including* National Parks. The Department responsible for complying with this Recommendation, DEPI (now the Department of Environment, Land, Water and Planning), had a fuel reduction target of 250,000 hectares in 2012-13. The Department's Fuel Management Report for that year says:

*"A good period of suitable weather for fuel management activities in autumn 2013 allowed DEPI to treat 255,226 hectares of public land with planned burning – 58,077 hectares more than the previous year. "*

So, in a year favoured by the conditions, DEPI still fell 34% short of the Royal Commission Recommendation and, as the report implies, 197,149 hectares were treated in the previous year which is 49% short. Barely half of the Royal Commission Recommendation was achieved.

Over the 3-year period commencing 2011-12 the responsible authority managed to achieve fuel reduction burning over 599,418 ha which is just over *half* of the Royal Commission's recommended area. Clearly fuel reduction efforts fell alarmingly short of the Royal Commission Recommendation and the responsible authority was not even aiming to achieve the recommended levels. The situation is now even worse! In the most recent 3-year period reported by Forest Fire Management Victoria 319,367 ha was burned to reduce fuel. A pitiful achievement amounting to less than 28% of the Royal Commission Recommendation.

It is hardly surprising then that the Royal Commission's Implementation Monitor, Neil Comrie, said that he was "*not convinced*" the fuel reduction target is "*achievable, affordable or sustainable*".

In a May 2015 report the Inspector-General for Emergency Management recommended replacing the hectare-based target with a risk reduction target. The report said the 5 per cent target *did not encourage other ways to reduce fuel levels like slashing, mulching and grazing*. It went on to say a risk-reduction approach would encourage better fire risk planning on public and private land and avoid the health impacts of air pollution from planned burns.

The 2009 Bushfires Royal Commission made its fuel-reduction Recommendation for the purpose of saving lives and property, but its Recommendation cannot achieve its intended purpose if it is neither affordable nor sustainable. It seems self-evident that we must explore and test any and every means of fuel reduction that can supplement burning.

This needs to include grazing, especially given that consideration of grazing as a management tool was not included in the Terms of Reference of the 2009 Bushfires Royal Commission.

It is unfortunate that grazing on public land in Victoria became a political issue for more than twenty-five years and in that process the value of grazing to reduce fuel was lost in political and academic activism.

As the President of the Mountain Cattlemen's Association of Victoria Bruce McCormack of Merrijig said recently:

*"Grazing is a passive method of reducing fuel and creating firebreaks in the grazing zones of the High Country especially above 1200 meters. It is not the complete answer of course but it is indisputably an important tool in reducing fuel, especially grass, in the bush and on the High Plains".*

Current practice is that no fuel reduction burns are conducted at altitudes above 1200 meters. Back in the time when summer grazing was common practice on the high plains it was part of mountain folklore that "bushfires don't cross the divide", meaning that grazing was effective in limiting the spread of fire. It is difficult to understand the implacable opposition to the practice here in Australia when transhumant grazing is actively encouraged in many places. The practice is widespread in Europe and North America, indeed the annual movement of herds to high pastures is celebrated each year in places like the Pyrenees and the Swiss Alps.

Given the pressing need to find ways to reduce the impact of bushfires it is essential to properly study supplementary methods of fuel reduction, so it defies reason that within days of being elected in 2014 the new Victorian Minister stopped the Government's fuel reduction grazing trial that was being conducted in the Wonnangatta valley. This surely is a decision based on short-sighted political payback rather than any genuine concern for the safety of people and the preservation of the natural environment.

Consider the facts.

- The Wonnangatta valley is not alpine. It is generally less than 500 meters above sea level, a fact easily verified from Natmap.
- The Wonnangatta valley is not cleared land. When Alfred Howitt discovered the valley in 1860 he described it in his diary as "*open grassland scattered with trees*".
- The Wonnangatta valley is not pristine. A National Parks Service Memorandum confirms that the "*Wonnangatta Valley is a very disturbed environment*" and it was continuously grazed for more than 120 years until cattle were removed in 1988.

Unlike feral herbivores, cattle can be directed and controlled making them ideal for conducting a trial in an area like the Wonnangatta valley, a topographically self-contained valley that is not environmentally sensitive.

## **Environmental Considerations**

Everybody knows bushfires are a danger to people and property, but few people address the serious environmental issues resulting from bushfires. We do not yet have estimates of the CO2 emissions from the 2019-20 bushfires, but Professor Mark Adams of the Bushfire Co-operative Research Centre estimated that the 2009 bushfires on Black Saturday created

165 million tonnes of CO2 emissions. Australia's total annual emissions of CO2 average around 330 million tonnes.

Therefore, by burning for just a few days, the Black Saturday bushfires created the equivalent of half our average annual emissions of CO2. The average annual CO2 emissions from bushfires is 110 million tonnes or, to put it another way, one third of Australia's total CO2 emissions is generated by bushfires. Lobby groups and governments grapple with expensive and divisive regulations which seek to achieve a 5% or 10% reduction in CO2 emissions, but at the same time practically ignore the incidence and impact of bushfires which create 33% of the problem they are trying to solve.

Water quality is another environmental problem that is clouded (no pun intended) by misinformation and disinformation. The degradation of water quality resulting from accelerated, ash-laden runoff of rainwater after a bushfire makes it abundantly clear that bushfires are a major problem for water supply and water quality. Added to this is the major damage to groundcovers, especially mossbeds, caused by bushfires. Mossbeds provide a natural filtration system for our water supply, but they are obliterated in large hot fires and take years to recover from severe fire damage, if indeed they ever do. Much is said about the damage to mossbeds caused by animals foraging for water. In fact most animals will choose to drink from open water which won't be far downstream, so animal damage is minute compared with bushfire damage.

Many species of eucalypts regenerate quickly after bushfires but snowgum and mountain ash do not. Snowgums regrow from lignums, but very slowly and take a generation to recover. A second fire in that time will most likely mean the end of the tree. Mountain Ash and Alpine Ash do not seed under 40 years, so if two intense fires go through the forest in that time-frame the stands will most likely vanish and be replaced with other species. Over millenia those species adapted to the Aboriginal regime of cool burning and in fact relied on fire to break open their seedpods for regeneration. Cool fires trickle along the ground burning litter and undergrowth, but the hot fires that have become commonplace under recent management practices burn everything including the seedpods, so the trees cannot regenerate and our environment is permanently altered. Unless we adopt a policy of harvesting our native timber at maturity and then replanting, our hardwood forests may very well disappear forever.

## **Legislation and Regulations**

In many respects current legislation and, more importantly, the regulations implementing that legislation seem to be drafted with pre-determined outcomes in mind.

Applications under the Environment Protection and Biodiversity Conservation Act have no provision for inclusion of the *benefits* of a proposal: applications only require that *adverse environmental impacts* are to be specified. This would seem to ensure consent will be denied even before an experimental process can begin. During the process which considered the grazing trials in the Wonnangatta Valley in 2014 (mentioned above), it seems that the EPBC application to conduct the trial could not refer to the benefits of fuel reduction in the Alpine National Park. Nor could the application mention the benefits of ensuring the heritage and culture of the Mountain Cattlemen being preserved with no serious or irremediable effect on the landscape. The application was only permitted to detail the *potential impacts* of the

grazing trial proposal. In other words, unless you can prove the outcome of an experiment before you start you will not be given permission to commence. How does that work?

Another anomaly is that climate change legislation, regulation, and targets are hampered by the lack of any consistent international convention stating what to measure and how to measure it. There is however consistent agreement that greenhouse gas emissions calculations should only consider anthropogenic emissions. As far as I can ascertain this means CO<sub>2</sub> emissions from controlled burns are included in the emissions calculations because they are manmade, but CO<sub>2</sub> emissions from bushfires are not included because they are not manmade.

Does failure to meet fuel reduction targets impact positively on emissions targets?

How much CO<sub>2</sub> was pumped into the atmosphere by the recent bushfires?

And how much CO<sub>2</sub> absorption was destroyed in the process?

But it seems the bushfires will be a net positive for our greenhouse gas emissions targets.

Surely we need a more balanced approach than that if we are going to call it science.

## Summary

For the preservation of our forests, for the protection of the environment, for the safety of our people, and for the protection of property, we must learn to reduce the incidence and severity of bushfires.

I respectfully submit that:

- the intensity of the recent bushfires and subsequent damage to property, life and the environment is the result of many years of neglecting adequate fuel reduction.
- there needs to be a 'top to bottom' review of public land management practices to embrace policies that will minimize the frequency and intensity of bushfires.
- the review needs to emphasize the imperative of adequate fuel reduction and the need to implement supplementary methods of reducing fuel loads if burning alone cannot achieve the required outcome.
- future land management policies need to draw on the knowledge of people who understand the bush and have successfully worked with the vagaries of weather and climate over time. Policies should be developed giving due credence to the experience of people such as aborigines, foresters, mountain cattlemen, and rural firefighters.
- legislation and regulation should be reviewed to achieve proper balance and successful outcomes.
- Fuel reduction and future land management practices including suppression of going bushfires should be conducted on a landscape wide scale in the best interests of the land, not conducted differently within a National Park .

Yours Sincerely,

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