

Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020
Email: secretary@mcav.com.au Ph: 03 5775 1127
www.mcav.com.au

MCAV SUBMISSION TO THE INQUIRY INTO ECOSYSTEM DECLINE IN VICTORIA

This submission relates specifically in the terms of reference to:

- (A) The extent of the decline of Victoria's biodiversity and the likely impact on people, particularly First Peoples, and ecosystems, if more is not done to address this, including consideration of climate change impacts;
- (E) Opportunities to restore Victoria's environment while upholding First Peoples connection to country, and increasing and diversifying employment opportunities in Victoria; and
- (F) Any other related matters.

BACKGROUND:

The Mountain Cattlemen's Association of Victoria (MCAV) was formed in the late 1950s and represents families who engage, both past and present, in Alpine grazing in the Victorian High Country.

Alpine grazing in Victoria is recorded as going back to 1830's, when cattleman James McFarlane seeking respite from drought in southern N.S.W., pushed his cattle across the Snowy and Ingeegoodbee rivers into the area now known as McFarlane's Flat through to Cowombat Flat. McFarlane settled in the area somewhere between 1832 and early 1834. He can be authoritatively placed on the Omeo Plains in 1835.

Other early cattlemen established the Cobungra and Tawonga runs. These runs are recorded historically as being established in 1842 and 1847 respectively (State Library of Victoria) – and so began the practice of what is now referred to as Alpine Grazing: where families would take their cattle to the High Country for the summer months, returning to 'low' runs over the cold winters.

For 186 years cattlemen have worked on the high plains of Victoria, forging relationships with the First Peoples as contact was made.

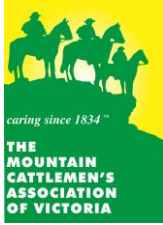
Grazing in the Alpine National Park was banned in 2005. Some families still graze in State Forest.

The MCAV have long argued that the decision to remove cattle has resulted in increased bushfire fuel loads and the mega blazes experienced since then the result.

An independent three-year trial in 2014 in Wonnangatta to prove or disprove the value of grazing on public land was stopped after 12 months following a change of Government, with no data available due to the time frame.

For the purposes of this submission, the MCAV will focus on bushfire fuel loads located in Victoria's High Country areas, though there are similar practices undertaken in New South Wales.

Terms of reference response:



Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020
Email: secretary@mca.vic.gov.au Ph: 03 5775 1127
www.mca.vic.gov.au

(A) The extent of the decline of Victoria's biodiversity and the likely impact on people, particularly First Peoples, and ecosystems, if more is not done to address this, including consideration of climate change impacts

According to the dictionary, Biodiversity is described as "the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable".

The MCAV have always stated that the single biggest threat to biodiversity in the Victorian High Country is the devastating effects of wildfire.

Wildfires, as seen in 2003, 2006/2007, 2009 and most recently in 2019/2020, are more than just a bushfire. Now referred to as mega blazes, these decimate everything in their path – flora and fauna included.

On January 8, 2020, Professor Chris Dickman, an expert from the University of Sydney's Faculty of Science in the ecology, conservation and management of Australian mammals, estimated that more than one billion animals nationally had been killed in the 2019/2020 bushfires.

Professor Dickman's estimate was widely reported, including overseas, and an RMIT Fact Check article, published by the ABC on January 31, suggested it was also generally supported by other experts in the field, noting that it was a conservative estimate.

Various modelling also suggests that wildfires have had a significant impact on many rare and threatened animals, plants and insects.

On January 20, 2020 the Australian Government's Department of Agriculture, Water and the Environment released an initial list of threatened and migratory species that have more than 10% of their known or predicted distribution in areas affected by wildfires in southern and eastern Australia from 1 August 2019 and 13 January 2020.

The analysis was conducted by comparing fire maps from state fire agencies.

Preliminary results indicated that '49 listed threatened species have more than 80% of their modelled likely or known distribution within the fire extent'.¹

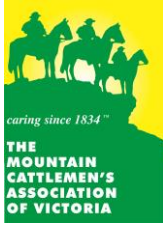
It was also reported that threatened plants were affected, noting that 'twenty-nine of the 30 species that have had more than 80% of their range burnt are plants' and that several species of plants have had 'their entire range consumed by the fires'.

An article published on January 15, 2020 by the Australian National University stated:

'Australia's current bushfire crisis could wipe out some of our rarer insect species, according to a group of experts. Associate Professor Michael Braby from The Australian National University (ANU) says the bushfires will have a huge impact on our native insects, as well as the plants and animals that rely on them.'

An article published on January 4 2020 by *The Guardian* explained:

¹ Information taken from Parliament House of Australia research, available at [ww.aph.gov.au](http://www.aph.gov.au)



Mountain Cattlemen's Association of Victoria

Inquiry into Ecosystem Decline in Victoria

August 2020

Email: secretary@mca.v.com.au Ph: 03 5775 1127

www.mca.v.com.au

'Bushfires don't just burn animals to death but create starvation events. Birds lose their breeding trees and the fruits and invertebrates they feed on. Ground-dwelling mammals that do survive emerge to find an open landscape with nowhere to hide, which one ecologist said became a "hunting arena" for feral cats and foxes'.²

The best way to combat the decline in Victoria's biodiversity, with its devastating effect illustrated above, is to reduce the intensity of wildfires. This can only be achieved by better managing bushfire fuel loads.

As listed in the Terms of Reference (A), we need to consider climate change and its affects not just on flora and fauna but also on the likelihood of mega fires and their re-occurrence.

However, it is a mistake to link land management policy with climate change policy. To do compromises effective long-term land management by trying to accommodate short-term emissions reductions.

We need to recognise, not just as a state but as a country and indeed as planet, that our climate is changing and always will. In addition to trying to modify it we need to learn to work with it, given that our ability to modify it is unproven.

It is well documented that our climate entered a warming phase 11,000 years ago, so it makes little sense to focus on the last 200 years and ignore the practices that shaped Australia for the previous 50,000 years.

What is un-arguable is that mega fires drastically increase Australia's net emissions of Carbon Dioxide.

The Australian Government Dept of Industry, Science, Energy and Resources has made a preliminary estimate of net emissions for the 2020 fire season of around 830 million tonnes of carbon dioxide equivalent (MtCO₂-e) based on the fires up to February 11.³

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.

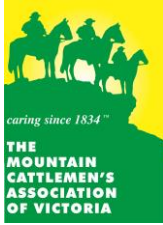
If government is to reduce emissions from mega fires and to make a healthy and safe landscape for all peoples and ecosystems, more effort needs to be made to reduce fuel loads.

Terms of Reference response:

(B) Opportunities to restore Victoria's environment while upholding First Peoples' connection to country, and increasing and diversifying employment opportunities in Victoria.

² Information taken from Parliament House of Australia research, available at ww.aph.gov.au

³ Australian Government Department of Industry, Science, Energy and Resources, Data and Publications Report, Estimating greenhouse gas emissions from bushfires in Australia's temperate forests: focus on 2019-20, April 2020



Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020
Email: secretary@mca.vic.gov.au Ph: 03 5775 1127
www.mca.vic.gov.au

Upholding First Peoples' connection to country is interwoven with the Mountain Cattlemen's way of life.

For 186 years members of the MCAV worked alongside First People, learning first hand their methods of cool burning – the way both the MCAV and First People advocate as being most effective at controlling bushfire fuel loads.

This knowledge, learnt through intergenerational experiences, is referred to as Traditional Ecological Knowledge (TEK). This term has been used since the 1980s and is recognised globally.

The definition of TEK according to natural resource use scholar, Bikret Ferkes, is defined as:

*"...a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment."*⁴

The Forest Stewardship Council in Canada define TEK as the following:

*"An accumulated body of knowledge that is rooted in the spiritual health, culture, and experiences of those who are close to the lands. It is based on an intimate knowledge of the land, its physiographic and natural features, climate, and wildlife, and the relationships between all aspects of the environment. Although in many uses it refers to knowledge of Indigenous peoples, others with intimate knowledge and experience of the land also have developed traditional ecological knowledge."*⁵

TEK is used collaboratively in management practices of public land in many countries.

The Mountain Cattlemen have a great wealth of knowledge (TEK) and need to be involved in assisting other land managers to make better decisions for the Victorian High Country.

Ever since European settlement, the Mountain Cattlemen have been strong advocates of grazing combined with mild burning to achieve fuel reduction.

Cool/mild burning is a method pioneered by the First People, and involves small fires being ignited and allowed to 'trickle' through the floor of the bush, creating a low intensity fire that eradicates much undergrowth without harming the canopy top.

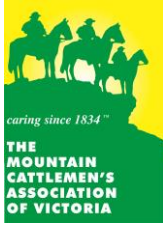
"The Biggest Estate on Earth, how the Aborigines made Australia", by Professor Bill Gammage, noted the following:

"Fire is necessary to burn the grass and form these open forests, but for this simple process the Australian woods had probably contained as thick a jungle as those of New Zealand or America" (Gammage book introduction, quoting Thomas Mitchell 1847).

"With details of land management from around Australia, The Biggest Estate on Earth rewrites the history of this continent, with huge implications for us today. Once Aboriginal people were no longer able to tend their country it became overgrown and vulnerable to the hugely damaging bushfires we

⁴ Bikret Ferkes, *National Geographic*, **Voices for Biodiversity** April 2012

⁵ Forest Stewardship Council, Canada, 2006



Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020
Email: secretary@mca.vic.gov.au Ph: 03 5775 1127
www.mca.vic.gov.au

now experience. And what we think as virgin bush in a national park is nothing of the kind."
Introduction on the cover of the Biggest Estate on Earth.

Imitating practices being undertaken by First People, cattlemen and their families lit fires as they took their cattle home in the Autumn. These fires caused a mosaic effect and kept the undergrowth and fuel under control.

In turn this 'patch burning', as it was known by Europeans, reduced the intensity of summer wildfires. The Cattlemen were eventually stopped from continuing this practice. Some defied the law in the 1920s, when patch burning was banned, and continued the practice up until recent times in some isolated areas until further legal ramifications saw the process halted altogether. Some MCAV members were taken to court over the issue.

Those directly involved with the High Country have always known that under modern management some areas have become unsuited to even cool/mild burning due to increasing fuel loads. In the absence of the Aborigines, the cattlemen knew the answer was grazing.

The areas not suited to cool/mild burning under modern management include the higher snow grass plains and the Mountain and Alpine Ash country. When grazed, these areas enjoyed reduced fuel loads in the event of a wildfire. As outlined earlier, before settlement, these higher sensitive areas were burnt using cool/mild fire methods.

Without First People and Cattlemen to conduct cool/mild burns and monitor cattle grazing, and then the cessation of patch burning in the 1920s, vegetation has grown unchecked and gradually choked the forests with scrubby understory.

Current practice is that no fuel reduction burns are conducted at altitudes above 1200 meters, leaving the latter area free to grow increasingly inhospitable. Many species of eucalypts regenerate quickly after bushfires, but Snowgum and Mountain Ash - that grow in these higher altitude areas - do not. Snowgums regrow from lignums and take a generation to recover.

Given the modern management practice of no burning above 1200 metres, the only conceivable way to limit the understory is through monitored cattle grazing.

The MCAV acknowledges that in a dry year with high temperatures there is nothing that can be done to stop raging wildfires, with no amount of cool/mild burns or grazing able to prevent the ecological disaster. These have occurred throughout the decades, and are well documented.

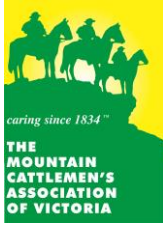
However, we submit that together the MCAV and First People are able to reduce fire intensity through a combination of cool/mild burns and grazing. We are not claiming that fuel reduction, burning and grazing stops all wildfires in their tracks, but it reduces the intensity.

Terms of Reference response:

(F) Any other related matters

The single biggest threat to biodiversity and ecosystem decline in the Victorian High Country are the devastating effects of wildfire caused by heavy fuel loads.

The management of public land, including fire management, has been a source of constant debate since European settlement in Australia.



Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020
Email: secretary@mca.vic.gov.au Ph: 03 5775 1127
www.mca.vic.gov.au

Mountain Cattlemen have extensive intergenerational experience of the Victorian High Country dating back to the first European settlement in 1834.

Almost from the start the views on land management of people living and working in the country have differed from people living in urban environments.

The knowledge offered by Mountain Cattlemen should not be dismissed and denigrated as has happened in the past - an attitude not dissimilar to the experiences of Indigenous people in this country.

"Green" public land management policies enacted over the last 40 years have been an unmitigated disaster. The reasons are many, but it cannot be denied that excessive fuel loads not only significantly contribute to the problem but also exacerbate it.

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.

The reality is, leaving these areas 'locked up' is not working and, we believe, is the worst possible outcome for the landscape.

Introduced feral animal numbers are increasing at alarming rates, as do weed species.

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 literally go up in smoke.

Disastrous wildfires which did not occur under earlier land management regimes will keep happening unless we change our practices.

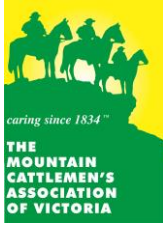
Time after time the recommendations of Royal Commissions and Inquiries have either been ignored or not fully implemented. For example, the 2009 Victorian Bushfires Royal Commission recommended that annual fuel reduction burns should cover 385,000 hectares (5% rising to 8%) of public land, including National 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.



Mountain Cattlemen's Association of Victoria

Inquiry into Ecosystem Decline in Victoria

August 2020

Email: secretary@mca.v.com.au Ph: 03 5775 1127

www.mca.v.com.au

In an attempt to discredit grazing as a viable option, ARC Future Fellow, University of Melbourne writer, Michael McCarthy, published the following:

"Grazing is an effective tool to mitigate fire extent or severity at landscape scales under the weather conditions that lead to large fires, such as during hot dry, windy days. Assuming that because stock eat grass (and other fuels) and therefore achieve this mitigating effect is insufficient. Grazing also needs to be shown to be more effective than alternative methods, such as fuel reduction burning, that have measurable effects on fire behaviour."⁶

What McCarthy, and many others, fail to understand is that fuel reduction burning is not being carried out at levels recommended by the Governments' own Bushfire Inquiries. We cannot move forward if we repeatedly choose to ignore our mistakes of the past.

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.

Grassland that is not grazed by cattle quickly becomes long and rank. Areas in the High Country that were grazed by cattle until 2005 remained short and green. It is documented by the MCAV and others, through irrefutable photographic evidence, that the fires in 2003, 2006 and 2009 were reduced in intensity, or extinguished altogether, when they reached grazed areas.

Hot fires also threaten sphagnum moss beds, which formerly had the protection of short green grass a result of grazing and before grazing, cool fires. The Bogong High Plains mountain cattlemen observed - and told subsequent inquiries - how grazed Snow grass on the South Bogongs protected the bogs from fire in 2003. This observational evidence was ignored.

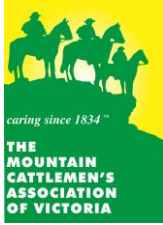
This was a primary example of traditional ecological knowledge - an observation that was totally ignored.

Included below are examples of the latter:



Image taken on the Nunniong Plateau. The fenced plot (ungrazed) demonstrates that grazing reduces fuel loads. The visual evidence is indisputable. If the senescent snow grass growing in the plot was extrapolated to the wider scene and a fire was to be ignited, a crown fire would ensue destroying the snow gums and all other flora and fauna in its way.

⁶ Article written by Michal McCarthy online at www.theconversation.com Jan 2013



Mountain Cattlemen's Association of Victoria

Inquiry into Ecosystem Decline in Victoria

August 2020

Email: secretary@mcaav.com.au Ph: 03 5775 1127

www.mcaav.com.au



Image taken in the Kosciusko national park where grazing had been prevented for more than 20 years at the time. A monoculture of senescent snow grass. Cattle grazing/cool burns would make it fire safe, improve biodiversity and water yield. The fuel loads pictured, when fired, would have enormous power which would result in catastrophic consequences to ecosystems.

In conclusion:

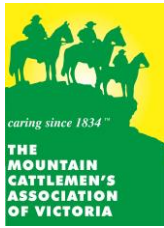
The MCAV respectfully submit the following ways in which Victoria can combat ecosystem decline:

- The best way to halt eco-system decline in High Country and Alpine areas of Victoria is to re-instate cattle grazing licenses to combat fuel build up where suitable and appropriate.
- That a cool/mild burns program be undertaken each year in line with the original recommendations of the 2009 Bushfire Inquiry findings. These cool burn programs should include areas above 1200 metres and be overseen by bushmen with local knowledge in conjunction with appropriately skilled and experienced First People. (TEK)
- Future land management policies need to draw on the knowledge of people who understand and work with the vagaries of weather and climate. Policies should be developed giving due credence to the experience of people such as the First People, Cattlemen, foresters, and rural firefighters.
- Firestick ecology as practiced by the Aborigines and Mountain Cattlemen must be further investigated for other ways to utilise its advantages in the Victorian bush and High Country.

The MCAV is happy to provide clarification, further details, more photographic evidence and additional comment at the request of the Inquiry.

We can be contacted via email at secretary@mcaav.com.au, or by phone on 03 5775 1127. Our website is also available for viewing and includes many scientific documents and past submissions at www.mcaav.com.au

Rhyll McCormack (on behalf of the MCAV)
Office Manager
Mountain Cattlemen's Association of Victoria



Mountain Cattlemen's Association of Victoria
Inquiry into Ecosystem Decline in Victoria
August 2020

Email: secretary@mcav.com.au Ph: 03 5775 1127
www.mcav.com.au