

I am writing this submission out of concern for and awareness of the role of forests in this time of the Anthropocene. I am a resident of Melbourne and a visitor to the Mountain Ash forests of the Central Highlands. I am also a drinker of the water these forests provide to Melbourne.

There has been significant human impact on atmospheric levels of carbon, both carbon dioxide and other gasses such as methane. These changes in our atmosphere are having significant and noticeable effects on our climate. This is concerning on a number of levels. Climactic changes that are predicted to become more extreme include among others, heat, drought. The impact of reduction of tree cover in Melbourne's water catchment is of dire concern. The current methods of logging, industrial clear-felling with subsequent high temperature burning, leave coupes naked and exposed to direct heat and drying sun. Subsequent seedings result in less complex and therefore less resilient forest that would best be described as plantations rather than the complex interplay of species both vegetative and animal that it replaces. The young simple coupes do not have the same water production as before the clear-fell logging occurred.

In this time of changing climate, it is critical that the forest that surround us and that provide our cities, towns and our agriculture with water are prioritised, due to potential increased demand because of a drying climate, and potentially the water retaining properties of vegetation in the event of flood inducing extreme rainfall events. The changing climate that we are now facing will also increase the risk of conditions that give rise to the catastrophic bushfires that Victoria has endured in the past in 1939 and 1983.

Forests are not however only for human use and the production of the water that is critical for us. These forests are home to precious species that exist nowhere else.

The present highlands of south-eastern Australia represent the remains of a deeply eroded mountain chain with a protracted and tortuous history starting about 500 million years ago. <https://museums victoria.com.au/longform/forest-secrets/>

The story of the forest of the highlands is a story that begins in ancient Gondwana. That story unfolds, with increasing complexity as evolution and migration weave a more complex tapestry as mammals join the ancient forest of trees, ferns, fungi, arthropods, reptiles and birds.

Due to circumstances such as the fires in 1939, large areas of Victorian Mountain Ash forests are relatively young. Mountain Ash do not begin to form the hollows that are critical to nesting animals until around 120 years. When younger "regrowth" forests are logged, it deprives the forest of the chance to develop fully into the complex habitat that many mammal species require to survive.

"These grand and critical trees are in rapid and catastrophic decline. Chief among the threats to large old hollow-bearing mountain ash are logging, fire and climate change (and the interaction of these drivers of decline)."

<http://www.nespthreatenedspecies.edu.au/news/protecting-our-mountain-giants>

This rapid decline is illustrated by the declining estimates of available saw logs.

2011:405,000 m³ pa (quoted in VAGO report, Dec 2013)

2012:443,000 m³ pa (quoted in VAGO report, Dec 2013)

2013:350,000 m³ pa (quoted in VAGO report, Dec 2013)

2013: 215,000 m³ pa (VF Media Release, May 2013)

2014: 210,000 m³ pa (VF Resource Outlook 2014)

2017: 132,000 m³ pa (VF Resource Outlook 2017)

[VAGO 2013 report, *Managing Victoria's Native Forest Timber Resources*, p.24]

In the Rubicon State Forest west of Snobs Creek, including the Rubicon Historic Area, RFGP analysis shows that of a total ash forest area of ~13,000 ha, only 17% will be intact '39 ash regrowth forest once the scheduled coupes are all logged, while 42% of the ash forest area will be <20 years old due to logging and fires. [Burns, Lindenmayer, Stein, Blanchard, McBurney, Blair & Banks. (2015). *Ecosystem assessment of mountain ash forest in the Central Highlands of Victoria, Southeastern Australia*. *Austral Ecology* 40:386-399]

Logging around old-growth trees is an unacceptable threat to the endangered species that are reliant on the oldest trees for habitat. Our ongoing logging of regrowth Mountain Ash means that these threatened, endangered species are deprived of the future habitat that might have been provided if such trees were allowed to reach full maturity.

It is critical that we address the factors within our control that are putting our forests at risk. We can and must work towards achieving lower levels of carbon dioxide in the global atmosphere. However one particular factor is completely under our control, here and now, and that is the logging of these forests. In order to protect the forest and forest dependent species we must stop the large scale disturbance that is the industrial clear-felling of our precious and fragile ecosystems. The cessation of industrial clear-fell logging need not preclude selective logging that will enable the development of highly skilled, highly prized products such as furniture and timber panneling.

Stopping the industrial clear-felling of our Mountain Ash forests will preserve them, which will allow the continued values of protecting our water system, and biodiversity, including the preservation of Victoria's Faunal Emblem the now endangered leadbeaters possum.

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Member Climate Action Moreland

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