

Treeferns, critical players in Ash Forest Ecosystems, are Being Smashed by VicForests

RFPG
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The broad aim of the Rubicon Forest Protection Group (RFPG) is to protect and promote the values of the Rubicon State Forest and to contribute to protecting the values of Victoria's native forests more widely. Our action priorities include:

- stopping unsustainable logging in the Rubicon Forest and promoting forest conservation in the Central Highlands more generally
- holding VicForests accountable for breaches of its own policies and guidelines and good forest practice generally, and
- encouraging visitors to spend time in the Rubicon Forest, enjoy the beauty and join the campaign to halt unsustainable logging.

Over the period 2016-2019, RFPG met on a semi-regular basis with VicForest to plead our case generally and in relation to particular coupes and in 2017, we met with the Minister for Energy, Environment and Climate Change to explain our views on why logging need to be massively and urgently curtailed.

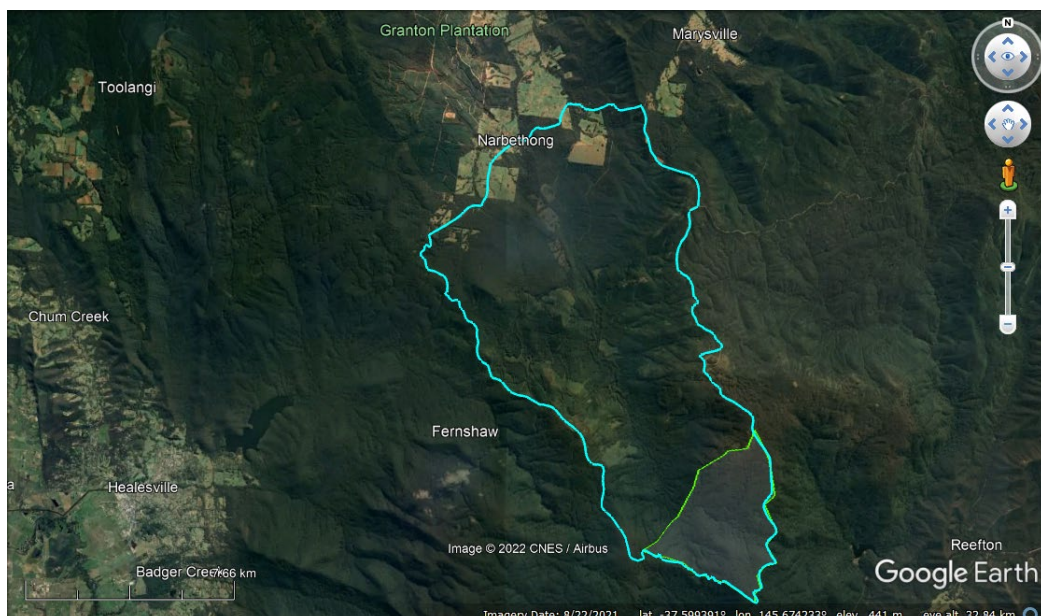
Over the period since 2015, we have published a wide range of policy documents, submissions to VicForests, other State Government entities and forest auditors, letters to Ministers and factual papers. These can be found on [RFPG's website](#) as can several opinion pieces prepared for various newspapers, including The Age, The Weekly Times and the Alexandra Standard.

We have lodged approximately 60 reports alleging breaches of the Code or and/or the *Flora and Fauna Guarantee Act 1988* (as amended in 2019). It was partly in response to these breach allegations, most of which were dismissed by the Timber harvesting Compliance Unit in DELWP, that the Government felt obliged to amend the Code in 2021 and earlier this year.

The purpose of this paper is to show the impact that logging has had on treeferns in the upper Acheron Valley, with a specific focus on coupes Troop 309-505-0002 and Rookery 309-505-0001, and to propose a range of possible actions to arrest further losses here and elsewhere.

The biogeographic context

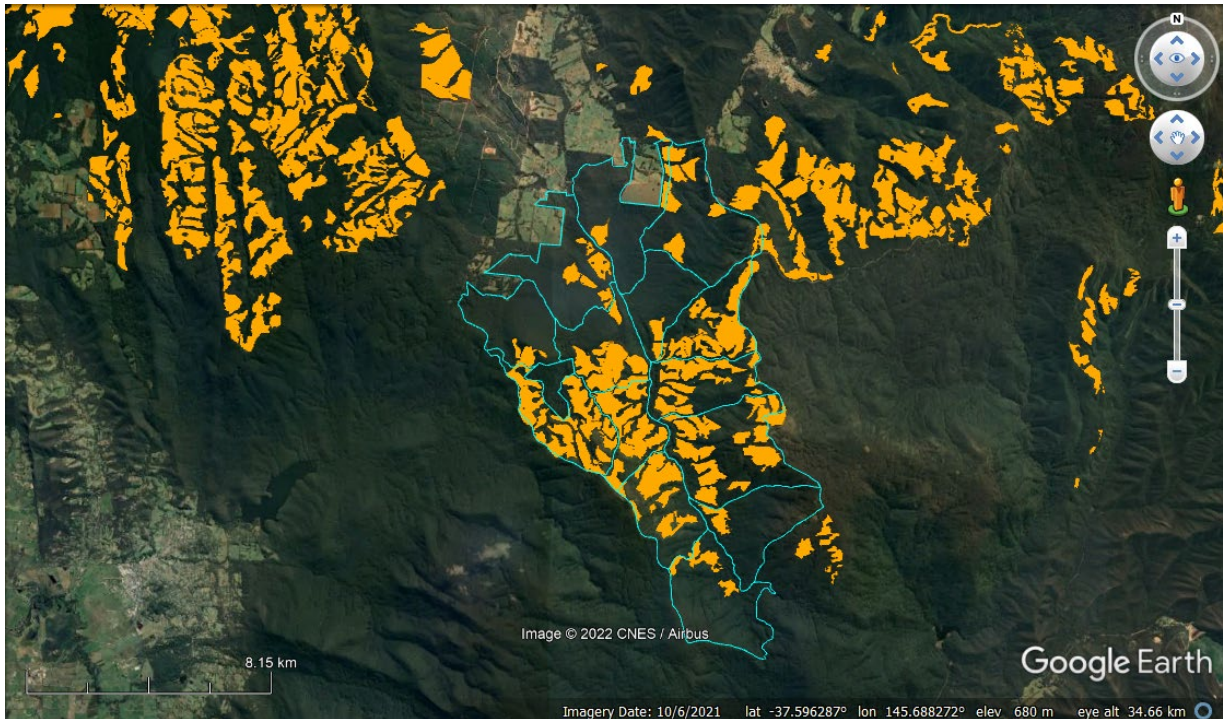
The Acheron Block (Block 309) is an area of public native forest south of Marysville from Narbethong and to the Acheron River headwaters. Allowing for a small area of farmland in the north, and it is bounded to the east and west by the Yarra Ranges National Park, which also includes 1240 ha at the southernmost end of the block outlined in the Google Earth Image below:



Much of this area was heavily affected by the 2009 Murrindindi fire with the official DATAVIC dataset reporting salvage logging of over 200ha. Salvage logging is significantly more ecologically harmful than ordinary logging, especially because so much is taken and any natural regeneration is crushed.

Logging in the Central FMA had already accelerated due to timber losses elsewhere in two previous megafires in Eastern Victoria (2003 and 2006-7) in areas that had been slated for logging. Despite the further losses in the Murrindindi fire, logging rates in the Central FMA did not abate over the ensuing decade.

The total area of the State Forest compartments of Block 309 are 10,038 ha, which covers almost the entire area of that block. In the image below areas logged since 1980 are shaded in orange with Block 309 and its compartments outlined in blue:



The logged areas are mainly in the middle of the block in compartments 505-512 which, according to the DATAVIC area statistics on blocks and compartments¹, have an area of 5,302 ha. According to the official DATAVIC logging history records (accessed mid 2022) the area logged since 1980 in these blocks totals 2,178ha, or 41 per cent of the area. 73 per cent of this was recorded as clearfelling.

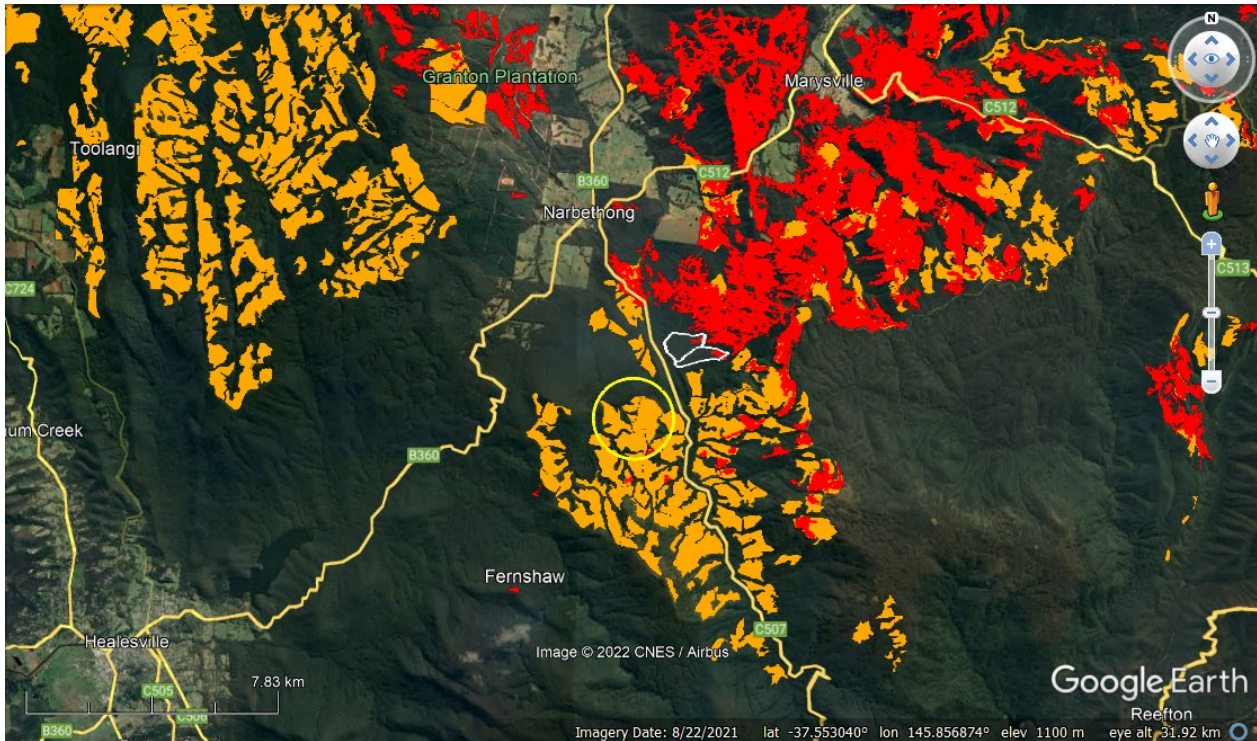
The area recorded as logged since 2009-10 totals 744 ha, although this is closer to 800 ha since the record for at least one coupe, The Curd 509-503-003, is currently missing from the official dataset.

Within this mid-block area coupes Troop and Rookery (discussed later) are outlined in white, while areas of Fire Severity Class 1 on Black Saturday are shown in solid red². A logged area 1.6km southeast of Troop and Rookery is encircled. It comprises five coupes in Compartment 507³ with a contiguous logged area of 102 ha formerly rich in treeferns and will also be discussed later.

1 DATAVIC Forest Management Blocks and Compartments accessed in 2020

2 DATAVIC Victorian Bushfires Severity Map 2009, accessed 2018

3 Maidei, Kenya, Tanzania, Mont Blanc, The Eiger



Past logging practices have clearly paid insufficient attention to the protection of long-lived understory species, especially treeferns, contrary to Code cl 2.2.2.10. The ability of treeferns to eventually return to logged areas at pre-logging population levels in the face of climate change is uncertain. In the near term their situation is certainly serious enough and possibly irreversible to trigger the Precautionary Principle under Code cl 2.2.2.2.

It is also at odds with the acknowledgement by the Victorian and Commonwealth Governments in the current Central Highlands RFA that

integrating Climate Change adaptation into Forest Management, including the management of Listed Species and Communities and other MNES, is required to build resilience and manage climate risks and meet the objectives of ESFM the need to maximise the ecological resilience of our forests (Para 66E(d)).

Many would regard treeferns to be 'capstone' species given the multiple roles they play in forest ecosystems and allowing them to be decimated by logging is the opposite of what building ecological resilience requires.

Others agree. The need for added treefern protection has been recognised in the 'modernised' Central Highlands RFA, clause 62C of which states that

Victoria will use its best endeavours to conserve and protect all EVCs, with a particular focus on vulnerable, rare and endangered EVCs, both within the CAR Reserve System and off reserve (non-CAR Reserve components of State Forests and Private Land), [including] by (b) increasing the protection of hollow bearing trees and tree ferns in relevant EVCs to maintain ecological processes.

Similar clauses exist in other RFAs, incl East Gippsland (para. 49C(b)), Gippsland (para. 64C(b)), etc.,

The 2019 amendments to the Flora and Fauna Guarantee Act 1988 also recognise that ecosystem protection was too narrowly conceived. In her second reading Speech, Minister D'Ambrosio said that the Act '*no longer reflects contemporary international and national approaches to biodiversity conservation*' and that the amendments '*introduce contemporary practices in biodiversity management, regulation and government accountability*'⁴.

A key change to the Act was the introduction of an entire new section obliging, s 4B (*Ministers and public authorities to give proper consideration of objectives*), which obliges decision-makers to consider cumulative impacts and wider impacts across space and time.

While the most common treeferns (*Cyathea australis* and *Dicksonia cunninghamii*) are not currently a threatened species, under the FFG Act they are 'protected species' that cannot be taken (incl killed by logging)

⁴ Parliament of Victoria, Legislative Assembly, Hansard, 19 June 2019, p.2273

without authorization. VicForests is not currently authorized to kill treeferns and has been lacking such authorization since the FFG Act amendments came into force in 2020.

[RFPG's submission on the 2020 TRP](#) highlighted the issue as follows

VicForests is aware, through the many Code breach reports submitted by WOTCH and Warburton Environment to the Timber Harvesting Compliance Unit, of its failure to plan to protect many tree geebungs. So lamentable is this failure that it is now the subject of legal action. Even more widespread is the routine loss of tree ferns, especially in mountain ash forests, and especially near creek and rainforest margins. While tree ferns may not be listed threatened species, they serve a critical ecological role, both as host for a myriad of epiphytes and as shelter for the recovery of other understorey species. They also perform a critical role in protecting rainforests from bushfires by preventing the margins from becoming too dry. While the Code specifies a minimum buffer width of 40m for rainforest and 20m for water courses, these are quite insufficient for the requirements of this clause to be met. For tree ferns to be adequately protected, for their own sake and to safeguard rainforest and streamside communities, and their dependent fauna, far larger buffers are needed.

Treeferns are not the only long-lived understory species disregarded by VicForests. In a coupe 25km to the north on the eastern flanks of the Black Range near Taggerty, part of a large stand of young Cinnamon Wattle (*Acacia leprosa var uninervia*) was bulldozed to create a log landing, with no mention of this in the Coupe Plan or Operations Map⁵.

Forest Block 309

While treeferns may be common in parts of the nearby Yarra Ranges National Park as any trip through the Black Spur will attest, the central area in Block 309 – the most heavily logged – is a critical wildlife, botanic and ecosystem migration corridor connecting opposite sides of the Yarra Ranges National Park. Also, much of the area to the north of the coupes Troop and Rookery was impacted by SEV1 fire - the most destructive – which killed many treeferns and is an added reason why those that remain must be protected.

We have examined an area of five unlogged coupes in the lower Fisher Creek valley abutting the north side of the encircled area in the image only a kilometre or so to the west – which has been so far remained unlogged apart from four coupes along White Hill Track. One of these coupes so far spared, Mozambique 309-507-0014, has 173 Tree Geebungs (*Persoonia arborea*) recorded in it, with habitat trees and treeferns widespread. The logging of these five coupes would mean that almost the entirety of a pristine river catchment of around 2,000 ha will have been logged in just 30 years with a consequent massive loss of treeferns.

Similarly, in the logged area encircled in para 8 above (102 ha) many treeferns were absent from the logged areas. None were visible in The Eiger, and in Kenya, as the following images show, few remained in the logged area, despite their abundance in the unlogged northern part of that coupe.



Kenya



⁵ This is now being investigated by OCR under Case 2022-0133

Earlier this year we surveyed an area of older coupes (Strickland Spur Ash 309-005-0005, [u/k] 309-005-0002) immediately south of Troop and Rookery and everywhere treeferns had largely gone from the areas logged. In the part Strickland Spur Ash inspected, the regeneration, much of it wattle, was so dense that treeferns that may have survived the logging would have succumbed to lack of light.

Despite the extensive discussion of treeferns in the Central Highlands Regional Assessment on which the RFAs are based, and despite the work of the Victorian Silvicultural Systems project on protecting them, treeferns have continued to be lost across large areas (excluding streamside buffers and SPZs) due to the insufficient regard that has been had for them, both by VicForests and DELWP.

Given their critical ecological role, treeferns should be afforded the same practical protections as VicForests affords habitat trees, as the wording of Code Cl. 2.2.2.10 implies. Indeed, the history of past losses means that treeferns in the Central Highlands must be given at least that level of protection. The obvious solution is to ensure that there are sufficient habitat islands – including treeferns plus sufficient understorey islands⁶ to allow a high likelihood of treefern regeneration throughout any coupe. However for those coupes that are particularly rich in tree ferns in areas where they have been otherwise decimated, coupes, the Precautionary Principle, the FFG Act and the RFAs should require them to remain unlogged.

VicForests should be required to include a comprehensive contextual ecological/biogeographic analysis of each coupe to be logged in the published coupe plans and maps, so that a proper view can be formed as to whether the required protections in any coupe are being met.

Troop and Rookery

These two coupes are unusually rich in treeferns, singly and in clumps, and not just along streams. Despite their abundance, the coupe plans and operations maps that VicForests has published made no mention of treeferns. The access road to the coupe along Strickland Spur Track off Granton Road illustrates the abundance of treeferns in this coupe.



After logging that had started in December 2021 halted (by an injunction in a different proceeding) it was possible to see the extent of the damage treeferns sustained. Within a logged area of 3-4ha, we counted many dozen dead treefern trunks buried within slash heaps. Only two remained alive, one of which was buried in a slash heap and the other is adjacent to another slash heap (images follow).

6. E.g. as implemented in the Warra silvicultural trials in Tasmania. See <https://doi.org/10.1080/00049158.2012.10676397> and <http://dx.doi.org/10.1071/BT11081>



We lodged a Code breach report in relation to the prospective treefern loss but the report was not accepted for investigation on the grounds that some treeferns would be protected in reserved areas and habitat islands. We appealed to the Chief Conservation Regulator with a dossier of further evidence, focusing on the wider context, challenging OCR's decision not to investigate. Our appeal was handed to one of Ms Gaven's directors and dismissed even more quickly.

It is important to note that *Cyathea australis* was the only species we observed in these coupes and in Block 309 generally, which is an added concern since it does not regenerate if knocked over, unlike *Dicksonia antarctica*⁷.

⁷ The breach report sent to OCR mistakenly referred to the treeferns in the coupe as *Dicksonia antarctica* when they are *Cyathea australis*, however this mistake was immaterial to OCR's dismissal of the case since no investigation occurred.