

Cherry Tree State Forest is core Koala habitat, so why are they allowed to log it?

Dailan Pugh, North East Forest Alliance, 23 November 2021

In a pre-logging survey in 1999 the Forestry Corporation found Koalas to be widespread in compartments 3 and 4 of Cherry Tree State Forest. This year citizen science surveys assessed 6 different areas in the forest and identified trees with Koala scats in all of them, as well as recently hearing 3 Koalas calling.

Given this evidence of a widespread Koala colony NEFA assessed a randomly chosen sample area of 2 ha for Koala use and found most suitable feed trees to be used by Koalas.

There is no doubt that Koalas are widespread in compartments 3 and 4 of Cherry Tree State Forest, and have been for at least the past 23 years, and it appears they are using most suitable feed trees. The forest in the logging area is dominated by *Koala use tree species*, and thus is *highly suitable Koala habitat*. While State Environmental Planning Policy (Koala Habitat Protection) 2021 (SEPP 2021) only applies to private lands, these forests qualify as *core Koala habitat* in accordance with the definition in SEPP 2021.

If this core Koala habitat was identified in a council Koala Plan of Management it would be prohibited from logging under the Private Native Forestry Code. Why then is a Government agency exempt from having to undertake an assessment to assess whether it is core Koala habitat, and allowed to log it?

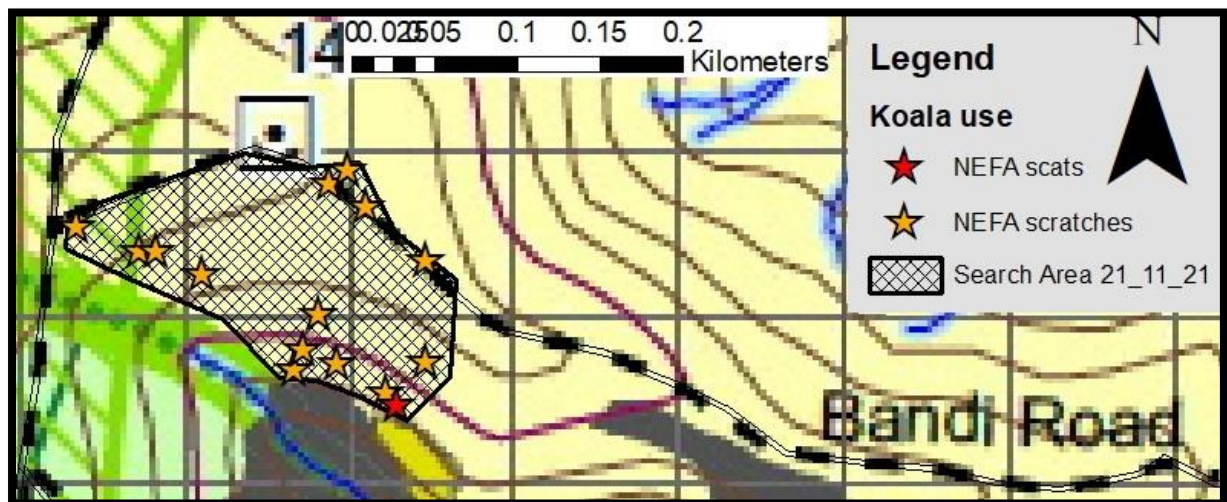
The Koala Wars erupted early last year at the instigation of loggers fearing that the revised 2019 Koala SEPP would result in more core Koala habitat being identified which they would not be able to log. This has yet to be resolved, though logging of identified core Koala habitat still remains prohibited.

The NSW Government needs to lead by example, not exempt themselves from requirements applying to others, and ensure they are protecting core Koala habitat on public lands.

Previous logging has likely impacted this colony. Half the planning area for this operation was intensively logged in 2015, since then protections for Koalas have been reduced and logging intensity increased. The current logging will result in the removal of most of the mature Koala feed trees being used within the logging area, which will reduce the resources available for Koalas and thereby their population. Logging is now proposed for the forests to the south next year. Once this population is reduced below a critical threshold it may become unviable.

Over 20 years on the north coast Koala populations declined by over 50% before the 2019-20 wildfires burnt 30% of their habitat. Koala populations to the south and west of Cherry Tree State Forest were decimated in the fires, with an estimated 78-89% loss of Koalas in burnt areas on the Richmond River lowlands. If we want to avoid Koalas becoming extinct by 2050 then we must protect places like Cherry Tree State Forest from further degradation.

The NSW Government must step up and protect core Koala habitat on public lands from logging now.



Extract of Harvesting Plan (yellow is the logging area) overlaid with trees found to be used by Koalas during a brief NEFA assessment on 21 November.

On Sunday 21 November two experienced members of the North East Forest Alliance spent 3 hours assessing a randomly selected 2 ha patch of the forest to assess Koala occupancy. The area was chosen for ease of access before entering the forest, and covered an area between Bandi Road and exclusions along a creek. Over this area they identified 11 trees with old Koala scratches, 3 with old and fresh (since bark shedding) scratches and one (without scratches) with six very recent scats (faecal pellets) likely deposited the night before. All identified use trees were Grey Gum (*Eucalyptus biturbinata*). (Appendix 1).

Searching during NEFA's assessment was hampered by the dense understorey, recent bark shedding, and rain. This made it very difficult to find Koala scats, and time did not permit thorough scat searches, thus it was by no means a comprehensive assessment.

Grey Gum is a dominant species in the area assessed. NEFA's extensive searches on the Richmond lowlands have shown the closely related Grey Gum (*Eucalyptus propinqua*) to be the most preferred Koala feed tree, with most larger trees showing evidence of Koala usage in the form of scratches left on the bark and scats found beneath them. Koala scratches left by the forepaws, with 2 digits opposing 3 digits, can be distinctive, particularly the distinctive two parallel scratches. Older Grey Gum bark is relatively easily scratched, and old bark around bases can persist for years, making them particularly important for identifying historical usage.

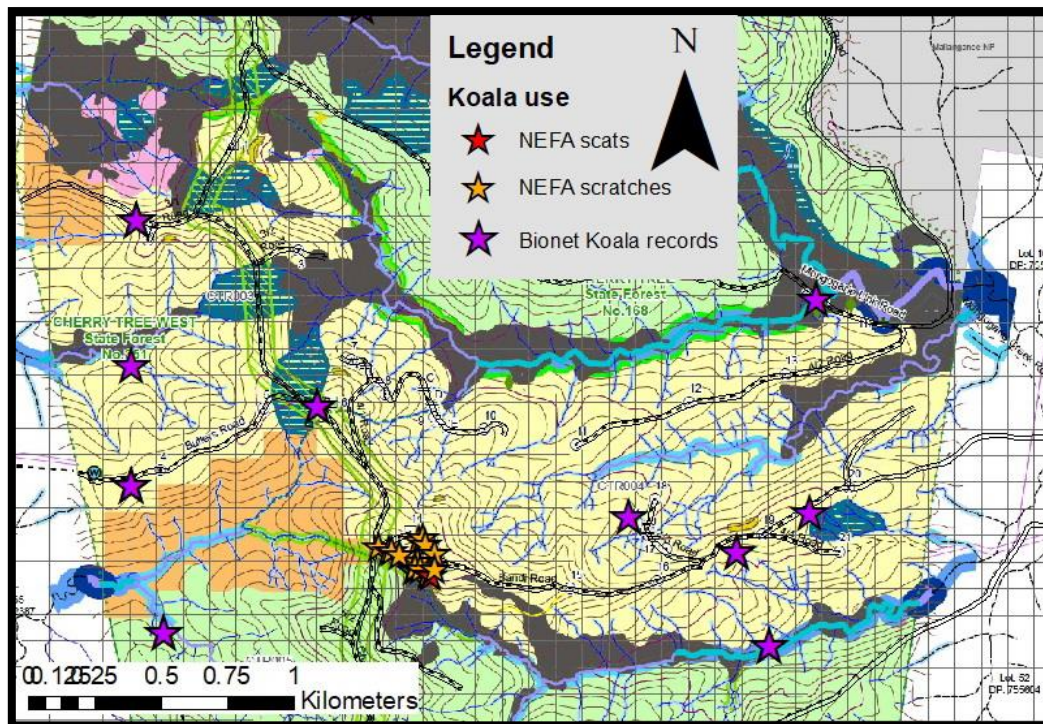
In this area the Grey Gum has recently shed its bark, including most of its basal bark, so as well as older bark retained on the trunk, recently shed bark around their bases was also inspected. Decay of some shed bark had already commenced hampering assessments. Most older Grey Gum bark appeared to have some scratches, though only those trees displaying clear Koala scratches were counted, with photos taken of representative scratches. The fresh bark is less easily marked, so recent usage is not so apparent.

The 6 Koala scats found were very fresh, likely deposited the night before or earlier that day. This tree had lost all its older bark and no scratches were evident.

NEFA's small sample is further evidence that Koalas are widespread in these compartments and are likely utilising all suitable feed trees. This suggests the forest is likely at maximum carrying capacity (given its partially degraded condition), meaning that the logging of feed

trees will reduce the available resources and, at least, correspondingly reduce the population.

There are 8 Koala records in Bionet across these compartments, 7 from Forestry Corporation records made from a pre-logging assessment in 1999 (6 from scats and one observation), and one observation from a person made in 2017. These illustrate that Koalas are widespread across the logging area. It is revealing that Forestry Corporation have entered no records since, particularly for this operation, as they are no longer required to do pre-logging surveys and are not looking.



Bionet Koala records (along with NEFA's records) overlaid on Harvesting Plan (yellow areas are proposed for logging).

Six citizen science days have identified Koala scats at widespread localities throughout compartments 3 and 4 of Cherry Tree State Forest this year. Jim Morrisson reports (Appendix 2) they found Koala scats on each occasion in different parts of the forest, and have heard 3 calling. Though he only has locations and details for 5 trees found with Koala scats: with 3, 5, 10, and 48 Koala scats found under Tallowwood trees, and 5 scats under a Spotted Gum.

NEFA's 2015 assessment to the north identified 3 high use trees (>20 scats), two Tallowwood (*E. microcorys*) and one Steel Box (*E. rummeryi*). In this vicinity Red Gum (*E. tereticornis*) is known to be used (Jim Morrisson pers. com) and NEFA have found Grey Box (*E. moluccana*) to be regularly used on the Richmond lowlands. As has been found elsewhere, Tallowwood and Grey Gum are apparently key feed trees, though given that Koalas prefer areas with a variety of feed tree species, all identified species are likely to be important for maintaining this colony.

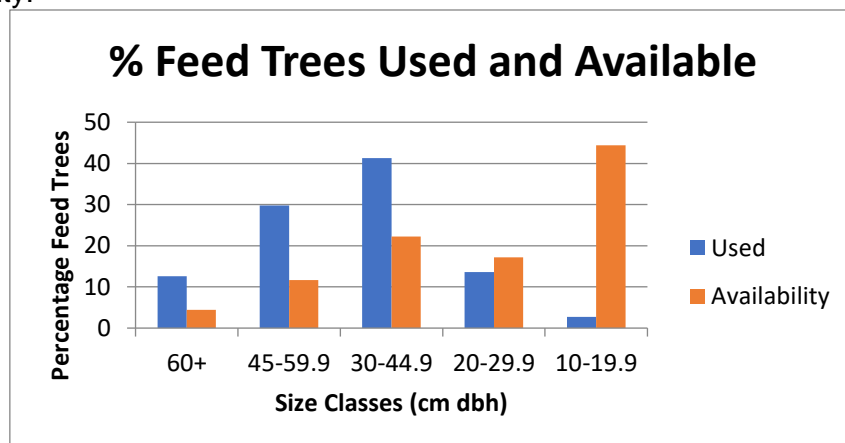
In this brief assessment, NEFA identified Koala use trees were 38-115 cm diameter (dbh) with over 7.5 trees being utilised per hectare. This is an under-estimate of use. While the larger of these require retention as hollow-bearing trees, most of these trees will not be required to be protected due to the large numbers of small feed tree species available to

satisfy retention requirements and the requirement that 50% of trees retained be Tallowwood or Red Gum.

For these compartments, the new 2018 CIFOA Koala rules (Prescription 2) require the retention of only 5 *Koala browse trees* >20cm diameter (dbh) per hectare within the net logging area. For these compartments at least 50% of the retained trees need to be Tallowwood or Red Gum, with the balance Grey Gum, Grey Box or Sydney Blue Gum. There is no requirement to assess whether the trees are utilised by Koalas. There is also a requirement to look around for Koalas ahead of logging, though if one is spotted the only requirement is to wait for the Koala to leave before cutting down its tree.

For Royal Camp and Carwong State Forests the [EPA \(2016\)](#) found a strong positive relationship between the size class of feed trees and usage by koalas, noting "*Analysis of size class data for Carwong, Royal Camp and Clouds Creek indicate that koalas preference for utilisation of feed trees by koalas is towards larger trees (higher diameter at breast height >30 centimetres)*".

Within NEFA's [proposed Sandy Creek Koala Park](#), of the 475 trees found to be used by Koalas (where species and diameters were recorded) across all our surveys, 85% had a 30cm diameter (dbh) or larger. Despite being most abundant, trees under 20 cm dbh comprised only 2.7% of trees used. Overall tree usage increased with tree size relative to tree availability.



The current and proposed logging is targeting for removal the mature feed trees preferred by Koalas for food and roosting. While the flawed recent NRC (2021) report claims that logging has no impact on Koalas, their methodology was not appropriate for assessing impacts and is contrary to numerous other studies, including that by the [EPA \(2016\)](#) in nearby forests. This forest is likely at maximum carrying capacity (for its current degraded state), meaning that the logging of mature feed trees will reduce the available resources and, at the least, proportionally reduce the population.

ABC North Coast Facebook (15 November) reports:

Forestry Corporation is defending its logging operation at Cherry Tree State Forest, near Mallanganee west of Casino, saying it's taken all precautions to protect koalas and their habitat.

This is clearly incorrect as Koala habitat and feed trees are being logged.

Since March 2020 there has been considerable controversy over Koala SEPPs, and whether core Koala habitat identified by a council should be excluded from logging and clearing.

State Environmental Planning Policy (Koala Habitat Protection) 2021 defines **core koala habitat** to mean—

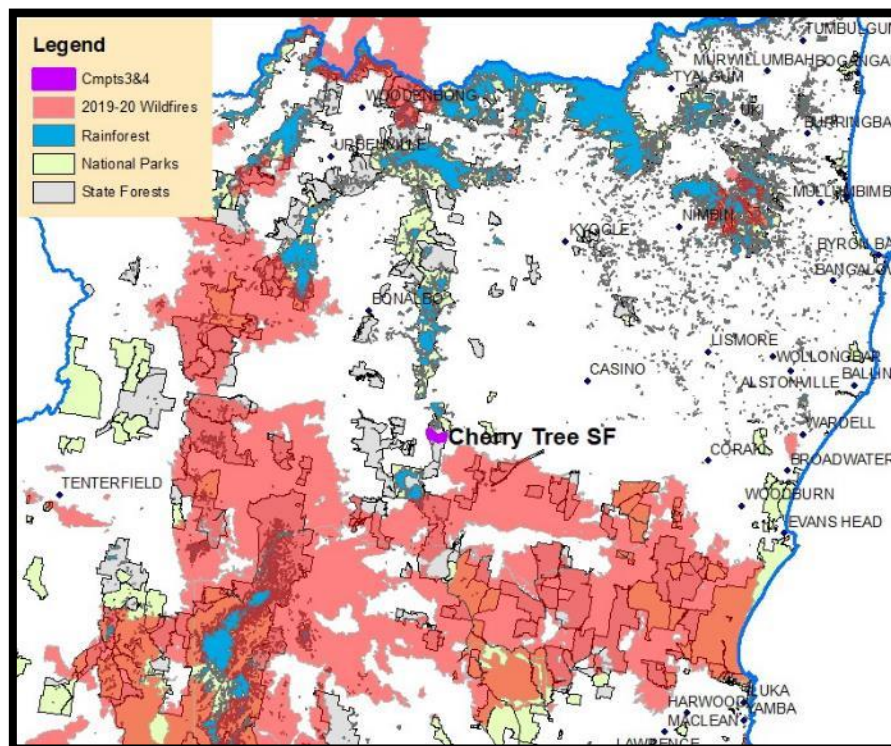
(a) an area of land which has been assessed by a suitably qualified and experienced person as being highly suitable koala habitat and where koalas are recorded as being present at the time of assessment of the land as highly suitable koala habitat,

Highly suitable koala habitat is where 15% or greater of the total number of trees forming the canopy are Koala use tree species. The **Koala use tree species** identified in Koala SEPP 2021 for the North Coast koala management area lists 46 species, as well as Tallowwood, Red Gum, Grey Gum, Grey Box and Sydney Blue Gum, the SEPP additionally includes species such as Spotted Gum, White Mahogany, Narrow-leaved Ironbark, Steel Box and Grey Ironbark, Slaty Red Gum, and Pink Bloodwood. There can be no doubt that the logging area, or most of it, comprises highly suitable koala habitat.

While limited, NEFA's assessment confirms the Forestry Corporation and citizen science survey's findings that Koalas are widespread in the forest, making the whole forest occupied **highly suitable koala habitat** and thus **core Koala habitat**, with home ranges expected to be focused on patches with relatively high numbers and variety of larger feed trees.

While Koala Habitat Protection SEPP 2021 only applies to private lands, there is no doubt that compartments 3 and 4 of Cherry Tree State Forest qualify as core koala habitat in accordance with the definition of State Environmental Planning Policy (Koala Habitat Protection) 2021.

Cherry Tree SF is particularly important regionally as part of a patch of unburnt eucalypt forest that escaped the devastation of the 2019-20 wildfires and the immense impacts they had on eucalypt dependant species such as the Koala. Across NEFA's [proposed Sandy Creek Koala Park](#) we assessed a 78-89% loss of Koalas, which highlights the importance of the nearby Cherry Tree SF as a Koala refuge and source area for Koala repopulation.



Extent of the 2019-20 Wildfires in the vicinity of Cherry Trees SF.

Appendix 1:

NEFA's records from 21 November 2021:



Koala scats 6, very fresh, Grey Gum, 40cm DBH. AMG: 6796748, 475729



Koala scratches, Grey Gum, 98cm DBH, old, numerous. AMG: 6796882, 475688



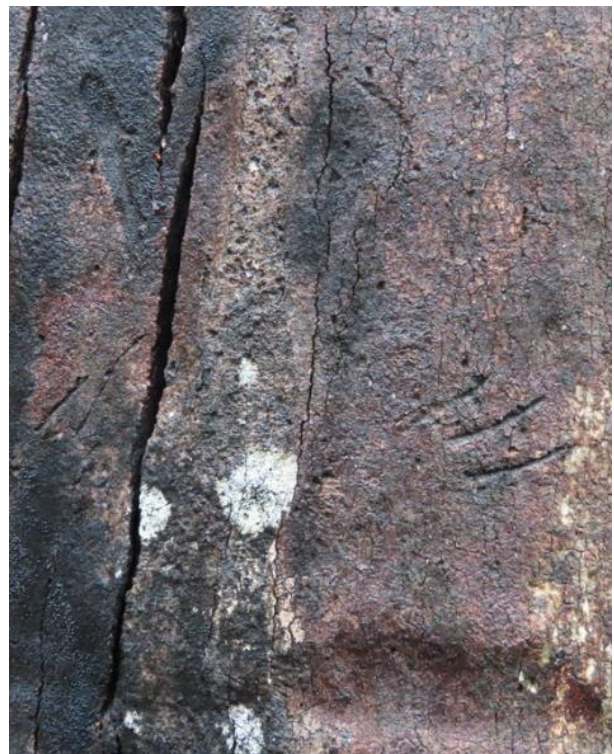
Koala scratches, Grey Gum, 43cm DBH, old, some. AMG: 6796890, 475699



Koala scratches, Grey Gum, 64cm DBH, old, numerous. AMG: 6796868, 475710



Koala scratches, Grey Gum, 80cm DBH, old, numerous. AMG: 6796835, 475746



Koala scratches, Grey Gum, 94cm DBH, old, some. AMG: 6796803, 475681



Koala scratches, Grey Gum, 110cm DBH, old, some. AMG: 6796770, 475667



Koala scratches, Grey Gum, 86cm DBH, old, some. AMG: 6796781, 475672



Koala scratches, Grey Gum, 40cm DBH, old, some. AMG: 6796827, 475611



Koala scratches, Grey Gum, 38cm DBH, old/fresh, some. AMG: 6796773, 475693



Koala scratches, Grey Gum, 115cm DBH, old/fresh, some. AMG: 6796756, 475722



Koala scratches, Grey Gum, 60cm DBH, old, numerous. AMG: 6796774, 475746



Koala scratches, Grey Gum, 73cm DBH, old/fresh, some. AMG: 6796856, 475535



Koala scratches, Grey Gum, 50cm DBH, old, some. AMG: 6796841, 475573



Koala scratches, Grey Gum, 62cm DBH, old, some. AMG: 6796841, 475583

Appendix 2:

Notes from Jim Morrison 22 November 2021:

We have undertaken at least 6 citizen science days in Cherry Tree. On each occasion koala scats were identified in different parts of the forest, unfortunately not all recorded on GPS but can give approximate location from map.

About 10 found under Tallow Wood south of Bandi road by Geoff Findlay approx. 28.957064,152.771350, he found them late in the day but believes there would be a lot more if more time to search further down the gully.

I found three scats in a short time near the habitat clump further down Bandi road under Tallow Wood at approx. 28.954903,152.764410.

I located 48 under a small tallow wood 15m just north of Butlers road 28.951187,152.742359 and a further 5 under a large tallow wood 40m nearby at 28.952483,152.744532. (accurately recorded in epi collect).

On another outing five scats were found under a spotted gum (a bit of a surprise) north of Butlers road at 28.939162,152.740840 (also on epi collect)

I am aware that the crew found quite a few the morning after they camped out to the east of Butlers road, though I am not sure of the results.

I also heard a koala calling down Bandi road about a month ago and they were heard calling on both sides of Cherry tree road last Friday evening.

As a long term local resident and ecologist I am confident that koalas are wide spread throughout Cherry tree State Forest as most searches over a reasonable area will reveal the presence of scats at most locations. NB I have been prioritizing tallow wood in my search, the scats under the spotted gum were found by another person on the crew but were confirmed by myself. I am aware that both grey gum and red gum are also heavily utilised but it would be time consuming to search each species with limited volunteers. Although it is apparent that koalas periodically occupy most parts of the forest, further searches will be required to define the highest use areas.