

The identification of Koala refugia in Myrtle State Forest, Supplementary report 1.

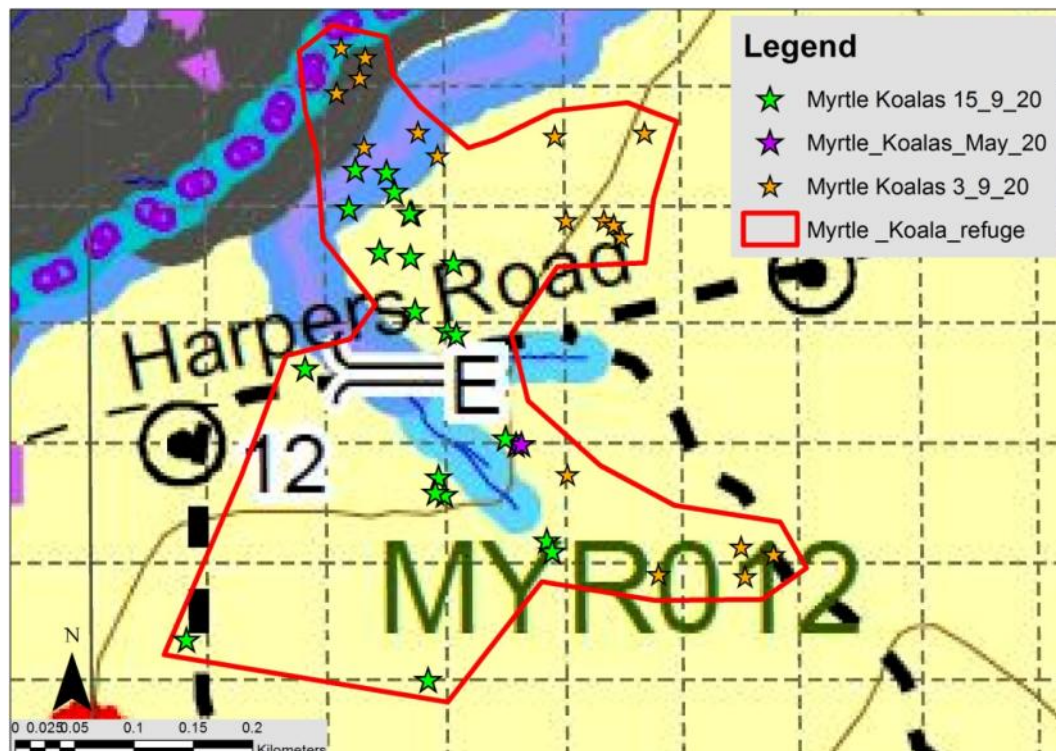
Dailan Pugh, NEFA, September 2020.

On 15 September NEFA undertook a supplementary survey to better assess the extent of an important Koala fire refugia previously identified in an area of Myrtle State Forest proposed for imminent logging.

NEFA undertook a brief and quick survey on 3 September over some 7 hectares of burnt forest in Myrtle State Forest, adjacent to where we had previously identified 2 trees with Koala scats. This identified 1,118 Koala scats under an additional 18 trees, with 516 scats under one tree, in an area where the Forestry Corporation have never identified Koalas.

The report '[The identification of Koala refugia in Myrtle State Forest](#)' documents our findings of 3 September, and provides the background to these supplementary findings.

On 15 September NEFA located a further 564 Koala scats under 21 trees, with distinctive Koala scratches on an additional tree. It appeared that scats were from a few Koalas due to different sizes and were of a variety of ages, with some within the last week. The 21 Koala trees measured (one wasn't) varied from 24cm to 56 cm diameter (dbh), with an average of 37 cm, again showing a preference for larger trees relative to their availability. Of these, 5 were over 45 cm dbh and 10 were 30-45cm dbh, the same tree sizes being targeted for large and small sawlogs respectively.



Koala records and extent of Koala refugia identified to date (overlaid on harvesting plan - yellow is logging area). Note the refugia identified mirrors the search area and is obviously more extensive, and that there are likely additional areas where Koalas survived the fires.

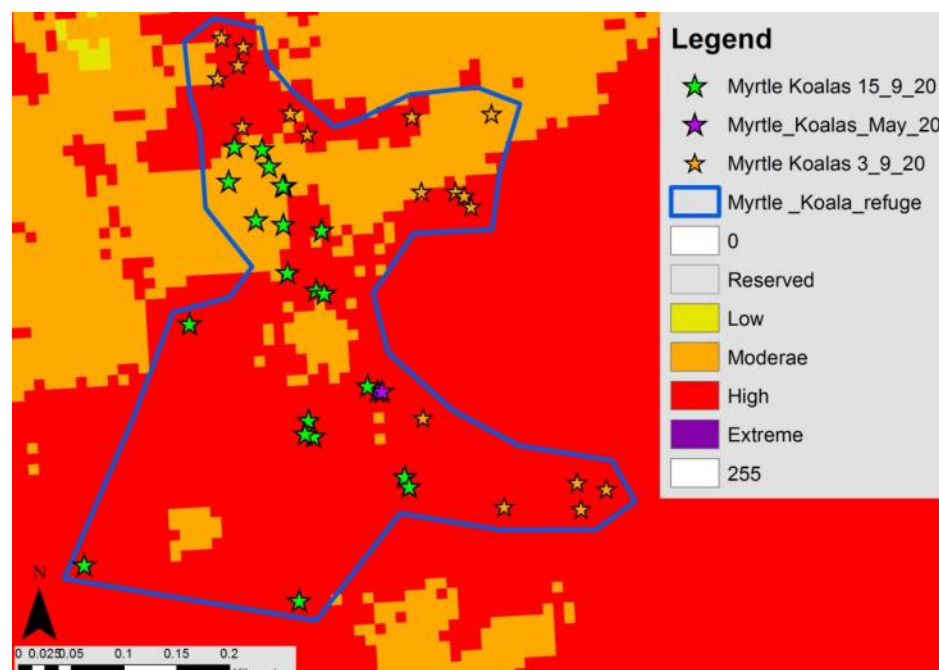
Seven of the 22 trees were Spotted Gums, including one with 234 scats showing repeat usage. Across all assessments of this high use area 10 of the 43 Koala trees identified were Spotted Gums. This is particularly significant because the assumed feed trees of Coastal Grey Box (*Eucalyptus moluccana*), Forest Red Gum (*E. tereticornis*), Slaty Red Gum (*Eucalyptus glaucina*) and/or Small-fruited Grey Gum (*E. propinqua*) were primarily targeted for searches, indicating likely higher use of Spotted Gum than documented.

This assessment increases the total area of occupancy to some 14 hectares. The area was not systematically searched and a number of trees with scats would have been missed. It is clear that the full extent of this Koala refuge has still not been identified, as it extends outside the search area. A total of 31 (72%) of the Koala trees so far identified are within the net logging area.

This survey reinforces the need for a comprehensive survey to identify all remaining and potential core Koala habitat. We again reiterate that there is a need to deploy scat detection dogs to identify the full extent of this and other Koala refuges in the forest before logging commences.

The Banyabba Koala population has been decimated by the Busbys Flat and Myall Creek fires. All remaining areas of Koala occupancy must be protected, along with suitable habitat to allow them to expand back into as they recover from the fires and can repopulate previously occupied habitat.

Under the old (pre-2019) logging rules significant parts of this refugia would qualify as Koala High Use Areas and have to be protected. If the Koala SEPP applied to public forests most of this forest would likely qualify as core Koala habitat and require protection.



Koala records overlaid on Government's fire intensity mapping (FESM 20200420).
Note that the whole area has been burnt, likely burning all scats then present, though most trees survived. The majority of Koalas are likely to have been killed, so survivors are vital to rebuild the population.

APPENDIX 1: Scat Records for 15 September 2020



LEFT: 22 scats (some very fresh), Red Gum, 24 cm DBH (6771602.8, 500351.3) **RIGHT:** 40 scats, Grey Box, 27 cm DBH (6771693.5, 500302.4)



LEFT: 39 scats, Grey Box, 34.5 cm DBH (6771710.1, 500275.3) **RIGHT:** 234 scats, Spotted Gum, 38.2 cm DBH (6771750.4, 500307.5)



LEFT: 12 scats (very old), Spotted Gum, 24.8 cm DBH (6771755.9, 500271.3) **RIGHT:** 15 scats, Grey Box, 55.7 cm DBH (6771792.5, 500272.4)



LEFT: numerous scratches, Grey Gum, 40.2 cm DBH (6771792.7, 500270.6) **RIGHT:** 8 scats, Spotted Gum, 29 cm DBH (6771811.0, 500257.8)



LEFT: 16 scats, Spotted Gum, 2 stems 47&43 cm DBH (6771829.5, 500224.8) **RIGHT:** 60 scats, Spotted Gum, 25 cm DBH (6771827.2, 500251.1)



LEFT: 6 scats, Spotted Gum, 39 cm DBH (6771796.8, 500219.3) **RIGHT:** 1 scat, Grey Box, 43.5 cm DBH (6771760.1, 500245.3)



LEFT: 15 scats, Grey Box, 27.1 cm DBH (6771690.5, 500310.0) **RIGHT:** 26 scats, Red Gum, 46 cm DBH (6771570.0, 500295.0)



LEFT: 1 scat (very old), Grey Box, 31 cm DBH (6771555.2, 500299.9) **RIGHT:** 6 scats, Grey Box, 31 cm DBH (6771516.6, 500386.1)



LEFT: 12 scats, Red Gum, 35 cm DBH (6771507.4, 500390.6) **RIGHT:** 32 scats, Grey Gum, 54 cm DBH (6771399.4, 500286.2)



LEFT: 3 scats, Grey Box, 42 cm DBH (6771433.0, 500082.5) **RIGHT:** 9 scats, Grey Gum, 39 cm DBH (6771661.6, 500182.3)

Not Photographed: 5 scats, Red Gum, 46 cm DBH (6771557.2, 500292.1)

Additional record (unmapped):

2 scats, Spotted Gum

