



Leadbeater's Possum Detection Report

Coupe 288-520-0009 'Baker Street'
Bullfight Road, Rubicon State Forest



Report on Leadbeater's Possum (*Gymnobelideus leadbeateri*) detections using remote-sensing cameras at VicForests scheduled logging coupe 288-520-0009, Rubicon State Forest.

Abstract

Remote motion-sensor cameras were set up in and adjacent to VicForests scheduled logging coupe 288-520-0009 'Baker Street' to assess presence/absence of the critically endangered Leadbeater's Possum. WOTCH surveyors detected a Leadbeater's Possum. The investigation shows that VicForests has scheduled logging operations in areas of forest currently inhabited by Leadbeater's Possum. The methodology, results and conclusions are detailed below.

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Introduction

VicForests logging coupe 288-520-0009 is listed on the VicForests Timber Release Plan approved in December 2020. The coupe, referred to by VicForests as 'Baker Street', is located on Bullfight Road in the Rubicon State Forest.

WOTCH has assessed the habitat quality in the area and found large patches of forest to be suitable habitat for the critically endangered Leadbeater's Possum. The abundance of wattle (*Acacia spp.*), mid-storey connectivity and presence of hollow-bearing trees (live and dead) provides habitat for the Leadbeater's Possums in the area (refer to Figure 1 below).

Accordingly, WOTCH assessed the presence/absence of the critically endangered Leadbeater's Possum in and adjacent to logging coupe 288-520-0009 using remote motion-sensor cameras.

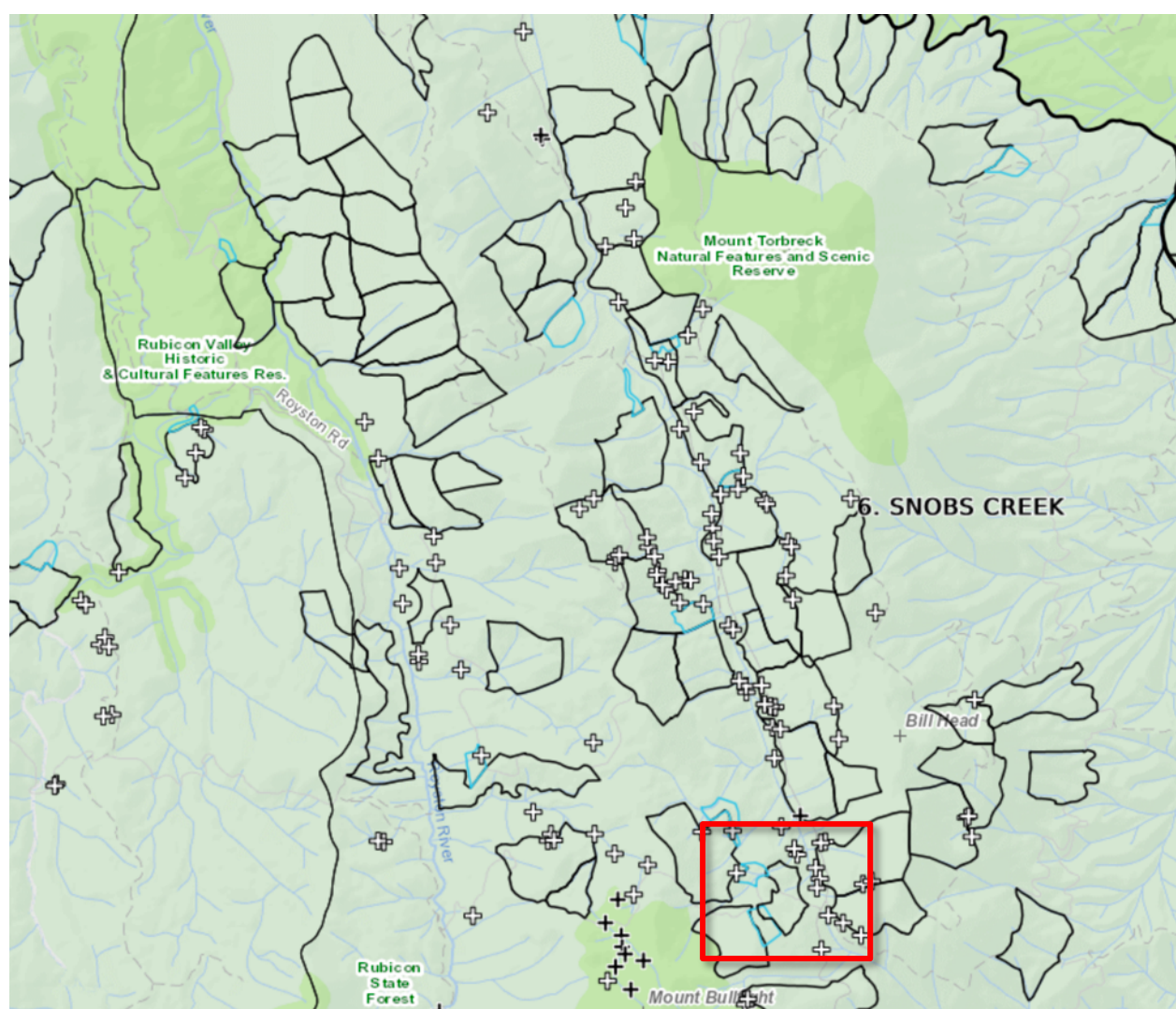


Figure 1 – Map showing the location of the logging coupe, with nearby Leadbeater's Possum detections and buffers.
Source: Screenshot from DELWP's 'Leadbeater's Possum Interactive Map' <http://lbp.cerdi.edu.au/possum_map.php>

Method

Remote motion-sensor cameras were used:

- Field surveys were undertaken within and adjacent to VicForests logging coupe 288-520-0009 to identify potential Leadbeater's Possum habitat and nesting trees
- Remote motion-sensing cameras were deployed in wattle trees (*Acacia spp.*) to detect motion and changes in temperature and photograph any Leadbeater's Possum foraging or moving through the forest mid-storey:
 - 'Camera 1' was deployed on 7 January 2021 and retrieved on 2 February 2021, remaining in situ and collecting data for 25 nights
 - 'Camera 2' was deployed on 14 January 2021 and retrieved on 12 May 2021, remaining in situ and collecting data for 118 nights
- Baiting stations, consisting of PVC piping and vent cowls, were filled with creamed honey and installed opposite the remote motion-sensing camera
- A digital camera and Global Positioning System (GPS) were used to capture video footage of the remote motion-sensing camera position facing the bait station and its location coordinates.

Note: WOTCH has a permit for the use of remote motion-sensing cameras to detect Leadbeater's Possum.

Results

Summary

This investigation detected Leadbeater's Possum at two locations at VicForests scheduled logging coupe 288-520-0009:

- Camera 1 at GPS coordinates 0405753 5858226 (GDA / MGA Zone 55 H)
- Camera 2 at GPS coordinates 0405788 5857855 (GDA / MGA Zone 55 H).

Results are provided in the following sections:

- Results 1: Attachments 1–4 are video files of the remote-sensor camera setup and GPS coordinates, and GPX files of the locations
- Results 2: Figures 2 to 9 are still images captured from the remote motion-sensing camera containing a Leadbeater's Possum and a screenshot of the detection location (GPS coordinates)
- Results 3: Figure 10 is a map of the Leadbeater's Possum detection locations and recommended buffers.

Results 1

Refer to attachments 1–4.

Results 2

Camera 1



Figure 2 – Leadbeater's Possum detection at Camera 1



Figure 3 – Leadbeater's Possum detection at Camera 1



Figure 4 – Leadbeater's Possum detection at Camera 1

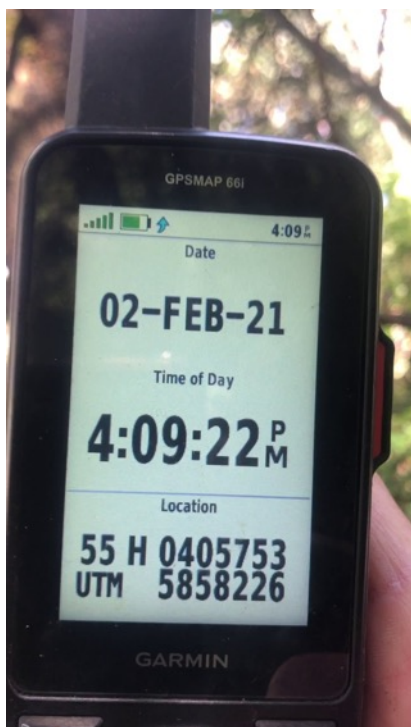


Figure 5 – Screenshot of location of Camera 1 (GPS coordinates)

Camera 2



Figure 6 – Leadbeater's Possum detection at Camera 2



Figure 7 – Leadbeater's Possum detection at Camera 2



Figure 8 – Leadbeater's Possum detection at Camera 2

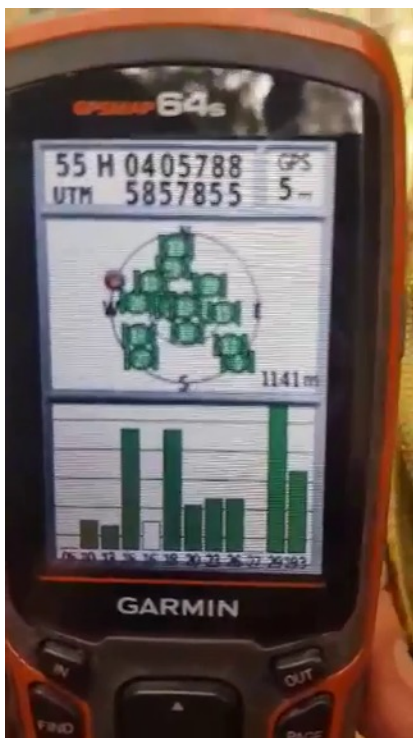


Figure 9 – Screenshot of location of Camera 2 (GPS coordinates)

Results 3

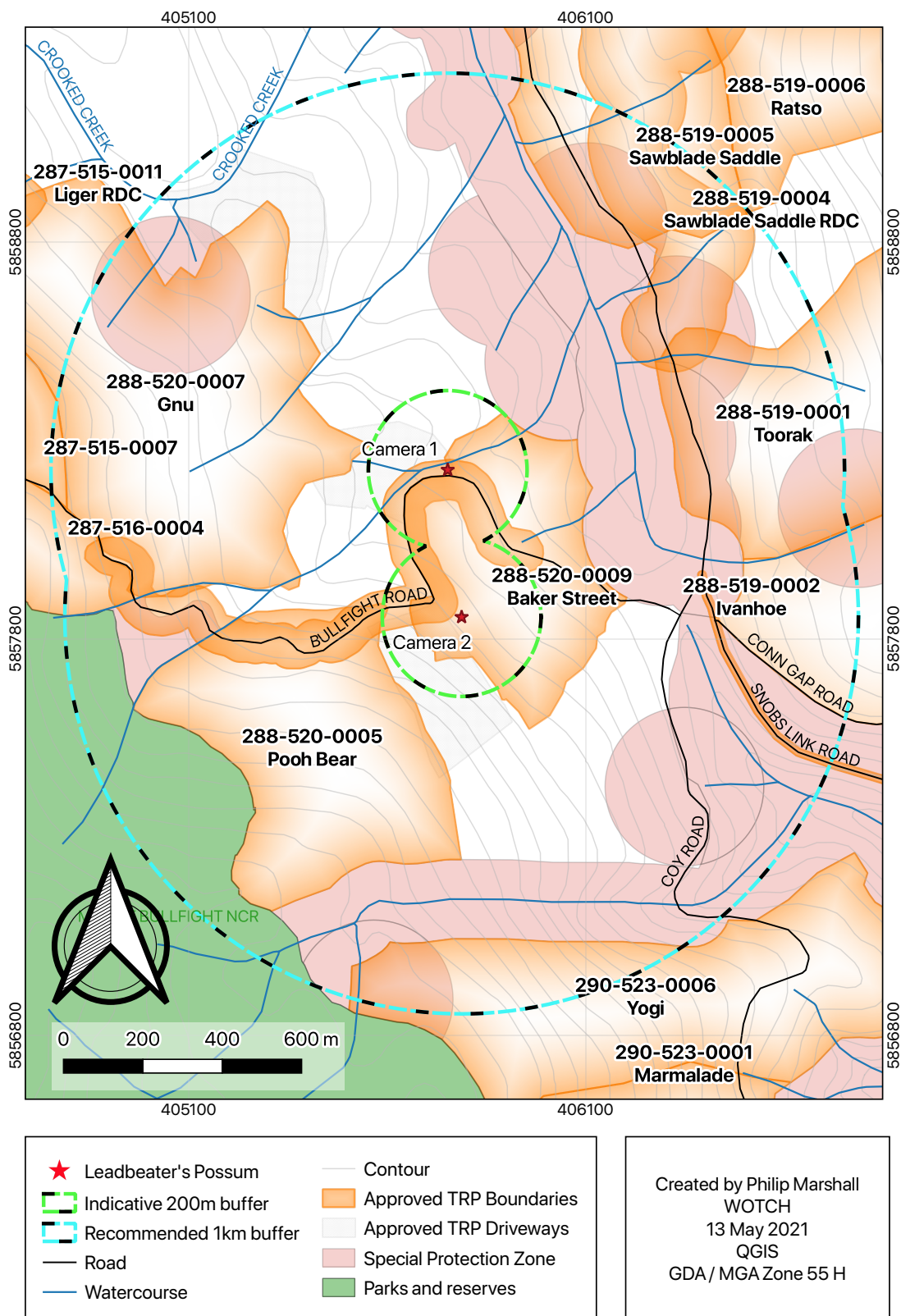


Figure 10 – Map of the Leadbeater's Possum detections at VicForests logging coupe 288-520-0009 with indicative 200m and scientifically recommended 1km Leadbeater's Possum buffers.

Discussion

This report has detailed the detection of Leadbeater's Possums at VicForests scheduled logging coupe 288-520-0009.

Recommended prescriptions

The following prescriptions relevant to this report were recommended by David Lindenmayer, David Blair, Lachlan McBurney and Sam Banks from the Australian National University in their paper produced in July 2013, *New Restoration Forest Management Prescriptions to conserve Leadbeater's Possum and Rebuild the cover of Ecologically Mature Forest in the Central Highlands of Victoria*:

Prescription 2 – Protection of recorded locations

2.1 All locations where Leadbeater's Possum has been recorded present in the past 15 years will be protected by a 1 km buffer from which logging (both clearfell and thinnings) is excluded.

Prescription 3 – Protection of Hollow-bearing Trees

3.1 Each hollow-bearing tree (whether living or dead) will be surrounded by a buffer of unlogged forest measuring 100 m in radius.

3.3 All trees 100 or more years old should be protected and surrounded by a buffer of unlogged forest measuring 100 m in radius.

Prescription 5 – Protection of Streamside Buffers

5.1.1 Streamside buffers will be widened to a minimum of 100 m either side of a stream, whether permanent or temporary/seasonal.

Mandatory prescriptions

It is mandatory for VicForests, DELWP and any other organisations undertaking timber harvesting operations in state forest of Victoria to comply with all prescriptions outlined in the Code of Practice for Timber Production 2014 (the Code).

Figure 11 shows prescriptions in the *Planning Standards for timber harvesting operations in Victoria's State Forests 2014*, a document in the Code that must be enforced by DELWP, following the detection of a Leadbeater's Possum.

<p>4.2 Fauna – fixed zoning:</p> <p>Table 3. Establish and maintain SPZs of 200 m radius centred on each verified Leadbeater's Possum colony found since 1998 that is not located within forest areas severely impacted by the 2009 wildfire (Exclude colonies within Fire Severity classes 1 and 2).</p> <p>4.3 Fauna - detection based zoning</p> <p>Table 4. Establish a SPZ of 200 m radius centred on each verified Leadbeater's Possum colony.</p>
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Figure 11 – excerpt from page 20 of the *Planning Standards*, under subheading 'Table 3 Fixed FMZ rules for fauna'.

Figure 12 shows prescriptions for addressing biodiversity conservation risks in the Code.

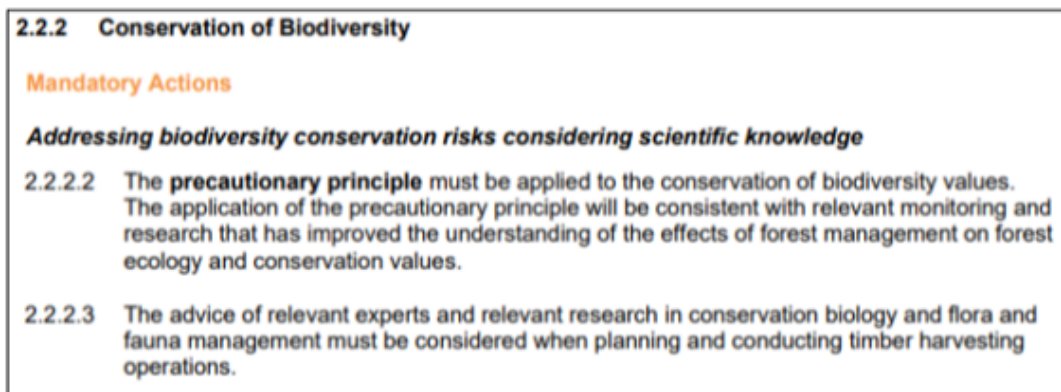


Figure 12 – excerpt from page 34 of the Code, under subheading '2.2 Environmental Values in State Forests'.

Conclusion

This investigation has revealed that VicForests has scheduled clearfell logging operations in high quality habitat for the critically endangered Leadbeater's Possum. Management actions must be implemented by VicForests and DELWP to protect this significant population of Leadbeater's Possum.

DELWP, as a minimum, must enforce the indicative 200m Special Protection Zone buffers around the Leadbeater's Possum detection locations in this report. However, to best support this population of Leadbeater's Possum, DELWP should enforce a 1km buffer around the detections and remove the subject coupes from the Timber Release Plan.

Recommendations

1. DELWP, as a minimum, should refrain VicForests from commencing forestry operations within scheduled logging coupe 288-520-0009 that fall within the prescribed 200m Special Protection Zone around these detections as seen in Figure 10.
2. VicForests and DELWP should adhere to the relevant scientific advice for the species and establish 1km Leadbeater's Possum buffers around the detections as seen in Figure 10.
3. Further comprehensive surveys should be undertaken throughout the entirety of the coupe and surrounding coupes to determine the locations of any other Leadbeater's Possum individuals that may be present in or around the coupes.
4. The coupe should be removed from the Timber Release Plan as this area is of high significance to the critically endangered Leadbeater's Possum.

