Leadbeater's Possum Detection Report

288-517-0005 'Fruit Fly' Snobs Creek Road, Rubicon State Forest



Report on the detection of a Leadbeater's Possum (Gymnobelideus leadbeateri) via the use of a remote motion-sensing camera, adjacent to VicForests scheduled logging coupe 288-517-0005 'Fruit Fly', Rubicon State Forest.

Abstract

A remote motion-sensor camera was set up adjacent to VicForests logging coupe 288-517-0005 'Fruit Fly' to assess the presence/absence of the Critically Endangered Leadbeater's Possum (Gymnobelideus leadbeateri). Leadbeater's Possum was identified during this survey. This investigation concludes that VicForests has scheduled logging operations in an area of forest currently inhabited by Leadbeater's Possum. The methodology employed, the results of the investigation and the report's conclusions and recommendations are detailed below.

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Wildlife of The Central Highlands Inc.

Approximate dates of investigation: 2/10/2020 - 11/11/20 **Date of report:** 18/11/2020

Introduction

VicForests scheduled logging coupe 288-517-0007 'Fruit Fly' is listed on the VicForests Timber Release Plan. It is located in Rubicon State Forest and on Snobs Creek Road.

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 adjacent to logging coupe 288-517-0005 using a remote motion-sensor camera.

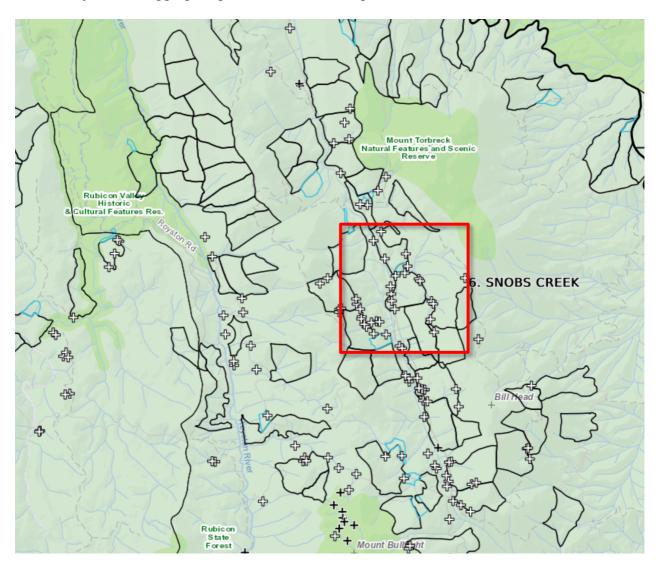


Figure 1 – Map showing the location of the logging coupe, with nearby Leadbeater's Possum detections and buffers. Source: Screenshot from DELWP's 'Leadbeater's Possum Interactive Map' http://lbp.cerdi.edu.au/possum map.php>.

Method

Method used: Remote motion-sensing camera

- Field surveys were undertaken within and adjacent to VicForests logging coupe 288-517-0005 to identify potential Leadbeater's Possum habitat and nesting trees.
- A remote motion-sensing camera was deployed at a height of approximately 8 meters in a wattle tree (*Acacia spp.*) to detect motion and changes in temperature and photograph any LBP foraging or moving through the forest mid-story. The camera was deployed on 2/10/2020 and retrieved on 11/11/2020, remaining in situ and collecting data for 40 nights.
- A baiting station, primarily consisting of PVC piping, was filled with creamed honey then 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: Wildlife of the Central Highlands has a specific permit for the use of a remote motion-sensing camera to detect LBPs.

Results

Summary

- 1. This investigation detected Leadbeater's Possum adjacent to logging coupe 288-517-0005 'Fruit Fly'.
- 2. Multiple photographic images of Leadbeater's Possum were captured on a remote motion-sensing camera on 9 separate nights during a 40-day period. Appropriate evidence including video footage of the camera trap setup along with GPS coordinates of the detection location were also recorded.

Results are provided in the following sections:

- Results 1: Images
 - Figures 2 to 14 are still images captured from the remote motion-sensing camera containing a Leadbeater's Possum
 - Figure 15 is a screenshot of GPS coordinates taken from the video recording of the investigation site
- Results 2: Attachment 1 is a video file excerpt of the camera site and Attachment 2 is a GPX file with waypoint marked at the camera site
- Results 3: Figure 16 is a map of the Leadbeater's Possum detection location with indicative 200m and scientifically recommended 1km buffers.

Results 1



Figure 2: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 6 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 3: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 21 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 4: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 21 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 5: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 21 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 6: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 21 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 7: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 23 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 8: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 26 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 9: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 28 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 10: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 28 October 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 11: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 5 November 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 12: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 9 November 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 13: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 9 November 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 14: Still image of a Leadbeater's Possum captured from the remote motion-sensing camera on 10 November 2020 at approximately 55 H 0405167 5862131 (UTM/Zone 55).



Figure 15: Screenshot of GPS coordinates taken from the video recording of the investigation site

Results 2

Refer to Attachment 1 for a video file excerpt of the camera site and Attachment 2 for a GPX file with waypoint marked at the camera site.

Results 3

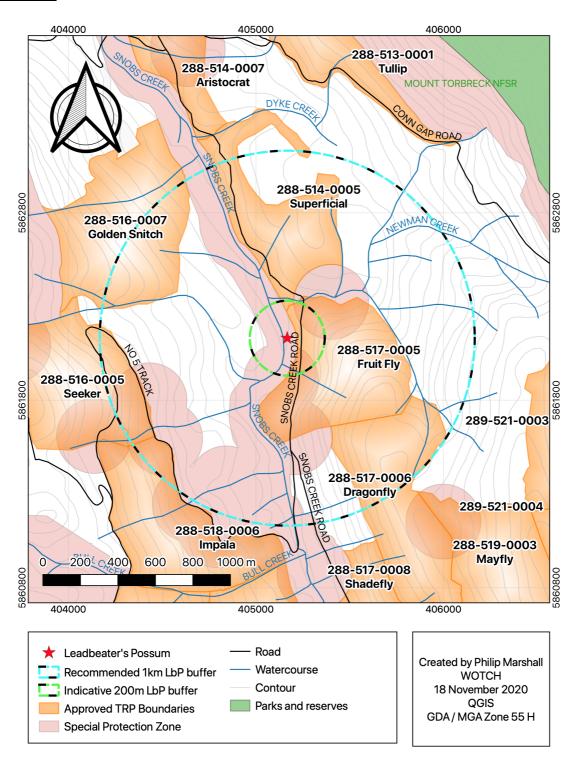


Figure 16: Map of Leadbeater's Possum detection adjacent to VicForests logging coupe 288-517-0005 with indicative

200m and scientifically recommended 1km Leadbeater's Possum buffers

Discussion

This report has detailed the detection of Leadbeater's Possum adjacent to VicForests scheduled logging coupe 288-517-0005. It is critical that management actions are taken to protect Leadbeater's Possum.

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, the Department of Environment, Land Water and Planning 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 17 below 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.

4.2 Fauna – fixed zoning:

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).

4.3 Fauna - detection based zoning

Table 4. Establish a SPZ of 200 m radius centred on each verified Leadbeater's Possum colony.

Figure 17: excerpt from page 20 of the Planning Standards, under subheading 'Table 3 Fixed FMZ rules for fauna'.

Figure 18 below shows prescriptions for addressing biodiversity conservation risks in the Code.

2.2.2 Conservation of Biodiversity

Mandatory Actions

Addressing biodiversity conservation risks considering scientific knowledge

- 2.2.2.2 The precautionary principle must be applied to the conservation of biodiversity values. The application of the precautionary principle will be consistent with relevant monitoring and research that has improved the understanding of the effects of forest management on forest ecology and conservation values.
- 2.2.2.3 The advice of relevant experts and relevant research in conservation biology and flora and fauna management must be considered when planning and conducting timber harvesting operations.

Figure 18: 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 habitat for critically endangered Leadbeater's Possum. Further management actions must be implemented by VicForests and DELWP to protect it.

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

Recommendations

- 1. DELWP, as a minimum, should refrain VicForests from commencing forestry operations within scheduled logging coupe 288-517-0005 that fall within the prescribed 200m Special Protection Zone around the detection as seen in Figure 16.
- 2. VicForests and DELWP should adhere to the relevant scientific advice for the species and establish a 1km Leadbeater's Possum buffer around the detection as seen in Figure 16.
- 3. Further comprehensive surveys should be undertaken throughout the entirety of this and nearby coupes to determine the locations of any other Leadbeater's Possum individuals that may be present in or around the coupe.
- 4. The coupe should be removed from the Timber Release Plan as this area contains important habitat for the critically endangered Leadbeater's Possum.