

LONG-FOOTED POTOROO DETECTION REPORT

Pikes Saddle Kuark Forest Block - East Gippsland 830-507-0023

Report on Long-footed Potoroo (*Potorous longipes*) detection
within VicForests scheduled logging coupes 830-507-0023

Abstract

The Long-footed Potoroo (*Potorous longipes*) is listed as 'endangered' in Australia under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act); 'endangered internationally under the The International Union for the Conservation of Nature (IUCN) "IUCN Red List of Threatened Species"; and 'threatened' in Victoria under the Flora and Fauna Guarantee Act 1988 (FFG Act).

Sections of VicForests' scheduled logging coupe 830-507-0023 was investigated to assess the presence/absence of Long-footed Potoroos (*Potorous longipes*). A Long-footed Potoroo was identified during this investigation within scheduled logging coupe 830-507-0023. This investigation concludes that VicForests, within coupe 830-507-0023 have scheduled logging in an area of forest currently inhabited by the endangered Long-footed Potoroo.

Relevant Legislation

The detection of the endangered Long-footed Potoroo within VicForests' scheduled and commenced (with logging presently suspended though expected to recommence imminently) coupe 830-507-0023 requires appropriate responsive management action including in order to comply with:

1. the Flora and Fauna Guarantee Act (1988) ("FFGA") "Action Statement No. 58 (revised in 2009) for the Long-footed Potoroo *Potorous longipes*' Appendix I 'Prescriptions to be applied in State Forest'", and;
2. the Code of Practice for Timber Production 2014, Department of Environment and Primary Industries, The State of Victoria, 2014, and;
3. the "Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014", Department of Environment and Primary Industries, The State of Victoria, 2014, and;
4. the "Planning Standards for timber harvesting operations in Victoria's State forests 2014, Appendix 5 to the Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014", Department of Environment and Primary Industries, The State of Victoria, 2014

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29/12/2016 – 05/01/2016

Date of report

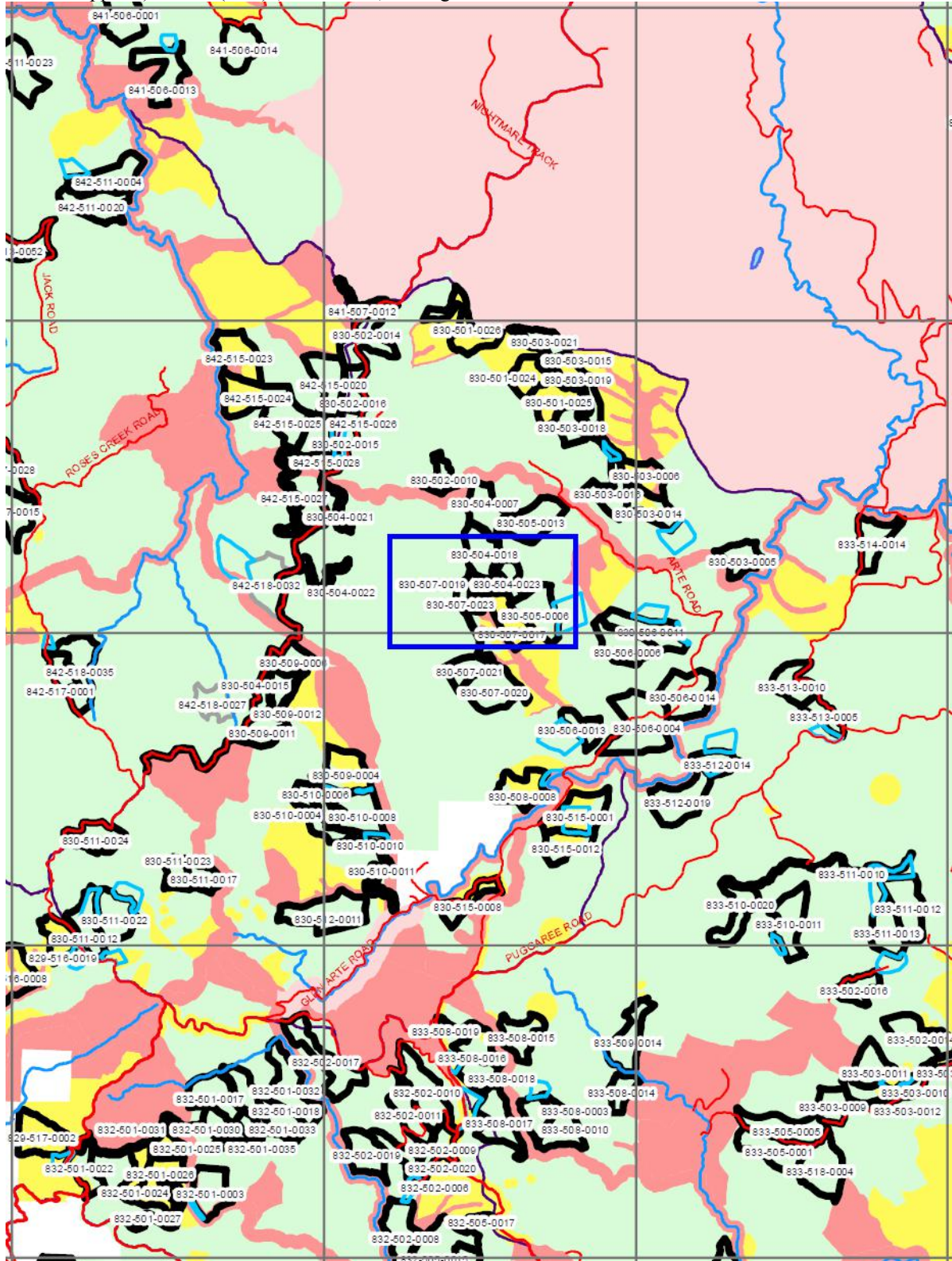
07/01/2016



Location details

Within VicForests scheduled logging coupe 830-507-0023 along Pikes Hill Road (Pikes Saddle) in the “Kuark Forest Block” of East Gippsland.

Figure A. Detail from: "Approved Timber Release Plan Map – 2013-2016 Change Map; August 2015 (with all approved amendments applied) Orbost (East)", VicForests, 31 August 2014



* Investigation location within blue box.

Method (Remote Camera Survey – method used)

Remote Camera Survey [29/12/2015 – 05/01/2016]

Survey technique and Method used:

1. On the 29/12/2015 within VicForests scheduled logging coupe 830-507-0023 two motion triggered infra-red night vision capable cameras were deployed with each directed at a steel container with a bait attractant comprising of oats, honey, peanut butter and truffle oil.
2. Each of the cameras were placed at the following locations and were configured with the following settings:

Camera Details	Waypoint:	PSCAM01	PSCAM02
	Location (GDA94/UTM):	55 H 657196 // 5845501	55 H 657415 // 5845434
	Brand/Type	Little Acorn	Reconyx HC500 Hyperfire
	Mode/Settings	10 Second Video	10 Pictures

3. On the 05/01/2016 the cameras were retrieved from the field.
4. The pictures and video captured on each of the cameras were inspected for the presence, among other fauna species, of the the Long-footed Potoroo.
5. **See the “Results” section below for further details of the detection of the Long-footed Potoroo.**

Figure B. “PSCAM01” camera placement at: [55 H 657196 // 5845501](#) (GDA94 UTM)



Method 2a (analysis/recommendations/legislation considered [as at August 2015])

From: “*Flora and Fauna Guarantee Act (1988) Action Statement No. 58 (revised in 2009) for the Long-footed Potoroo [including] Appendix I 'Prescriptions to be applied in State Forest'*”¹

“Conservation Objective

Long term objective

To ensure that the Long-footed Potoroo can survive, flourish and retain its potential for evolutionary development in the wild.

Intended Management Actions

The intended management actions listed below are further elaborated in DSE’s Actions for Biodiversity Conservation (ABC) system. Detailed information about the actions and locations, including priorities, is held in this system and will be provided annually to land managers and other authorities. It is intended that the targets specified below be met within the five year timeframe of this Action Statement.

...

Action 4

Protect Long-footed Potoroo habitat at detection sites on public land outside the Core Protected Area

Establish additional protected areas where Long-footed Potoroos have been detected in State forest or other public land outside the Core Protected Area. In State forest, apply the protection measures specified in Appendix I. The protection measures will be formally reviewed in 2014.

Responsibility: DSE, VicForests

Appendix I: Prescriptions to be applied in State forest:

1. Each Long-footed Potoroo (LFP) detection site outside the Core Protected Area will generate a Special Management Zone (SMZ) of approximately 150 ha.
2. As far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses.
3. Within each SMZ, at least one third (~50 ha) will be protected from timber harvesting and new roading.
4. This will be known as Long-footed Potoroo Retained Habitat.
5. The LFP Retained Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes.
6. The LFP Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the Code of Practice for Timber Harvesting.
7. The SMZ will also have a general restriction of one third of the total area that can be harvested in any three year period. If more than one coupe is to be harvested in an SMZ in the same year, the coupes must be separated by at least the equivalent of another coupe width.
8. The SMZ, with the LFP Retained Habitat clearly delineated, will be shown as part of the Forest Management Area zoning scheme.
9. The SMZ will be designed by DSE, in consultation with VicForests, and approved by DSE.
10. If the ~150 ha area includes any part of an existing conservation reserve or Special Protection Zone (SPZ), these areas will retain their existing reservation or zoning status but will be considered for inclusion as part of the area of retained habitat. In such cases, the final area designated as SMZ may be correspondingly smaller.”

1 “Flora and Fauna Guarantee Act (1988) (“FFGA”) Action Statement No. 58 (revised in 2009) for the Long-footed Potoroo *Potorous longipes*”, [when published] Department of Sustainability and Environment's, Victorian Government Department of Sustainability and Environment [now Department of Environment and Primary Industries], Melbourne, August 2009, pp. 7-8, 13

Method 2b (analysis/recommendations/legislation considered [as at August 2015])

From: “Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014”, Department of Environment and Primary Industries, The State of Victoria, 2014.²

“2. Planning and Record Keeping

2.1 FMZ and planning information

2.1.1.3 Where evidence of a value that requires protection via the establishment or amendment of an SPZ or SMZ is found in the field application must be made to the Secretary or delegate prior to commencement of the timber harvesting operation to create or amend an SPZ or SMZ in accordance with Appendix 5 the Planning Standards. SMZ applications must be accompanied by an SMZ plan and must be complied with during timber harvesting operations.

4. Biodiversity

4.2 Fauna

4.2.1.1 Apply management actions for rare and threatened fauna identified within areas affected by timber harvesting operations as outlined in Appendix 3 Table 13 (Rare or threatened fauna prescriptions).

Table 13 Rare or threatened fauna and invertebrate prescriptions.

FMA	Common name	Scientific name	Management action
East Gippsland	Long-footed Potoroo	<i>Potorous longipes</i>	Where evidence of this value is found in the field follow clause 2.1.1.3 of this document using table 4 in Appendix 5 the Planning Standards for information.



² “Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014”, Department of Environment and Primary Industries, The State of Victoria, 2014, p. 23, 32, 36, 76, 79

From: “Planning Standards for timber harvesting operations in Victoria’s State forests 2014, Appendix 5 to the Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014”³

4. Biodiversity

4.2 Fauna – fixed zoning

4.2.1 Statewide

4.2.1.1 Plan management actions for rare and endangered fauna in accordance with Table 3 (Fixed FMZ rules for fauna) below.

4.2.1.2 Maintain FMZ schemes for rare and endangered fauna in accordance with Table 3 (Fixed FMZ rules for fauna) below.

4.3 Fauna - detection based zoning

4.3.1 Statewide

4.3.1.1 Apply the management actions outlined in Table 4 (Detection based FMZ rules for fauna) below for zoned rare or threatened fauna.

4.3.1.2 Implement FMZ amendments and reviews in accordance with Table 4 (Detection based FMZ rules for fauna) below for new verified rare or threatened fauna records and FMZ amendment requirements outlined in section 2.

Table 4 Detection based FMZ rules for fauna.

FMA	Common name	Scientific name	Zoning management actions	Management actions	Review
East Gippsland	Long-footed Potoroo	<i>Potorous longipes</i>	Establish a SMZ of approximately 150 ha for each Longfooted Potoroo detection site that is outside the Core Protected Area (i.e. within existing SPZ and conservation reserves). As far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses.	Within each SMZ, at least one third (50 ha) will be protected from timber harvesting and new roading. This will be known as Long-footed Potoroo Retained Habitat. The LFP Retained Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes. The LFP Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the Code. The SMZ will also have a general restriction of one third of the total area that can be harvested in any three year period. If more than one coupe is to be harvested in a SMZ in the same year, the coupes must be separated by at least the equivalent of another coupe width. The SMZ, with the LFP Retained Habitat clearly delineated, will be shown as part of the Forest Management Area zoning scheme. If the 150 ha area includes any part of an existing conservation reserve or SPZ, these areas will retain their existing reservation or zoning status but will be considered for inclusion as part of the area of retained habitat. In such cases, the final area designated as SMZ may be correspondingly smaller.	

³ “Planning Standards for timber harvesting operations in Victoria’s State forests 2014, Appendix 5 to the Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014”, Department of Environment and Primary Industries, The State of Victoria, 2014, pp. 16, 17, 20, 44

Results 1 – Figures 1(a-b). and Figure [map] 2.

Summary

The presence of the Long-footed Potoroo (*Potorous longipes*) was detected on one of the two remote survey cameras deployed within the study location. Two 10 second video records of the Long-footed Potoroo were obtained and their details including date, time and location of recording as well as a representative still image from each of the two videos are presented below. Following the images below is a map (Figure 2.) showing the spatial location of the Long-footed Potoroo detection location and this report's recommended amendments to the Forest Management Zone scheme.

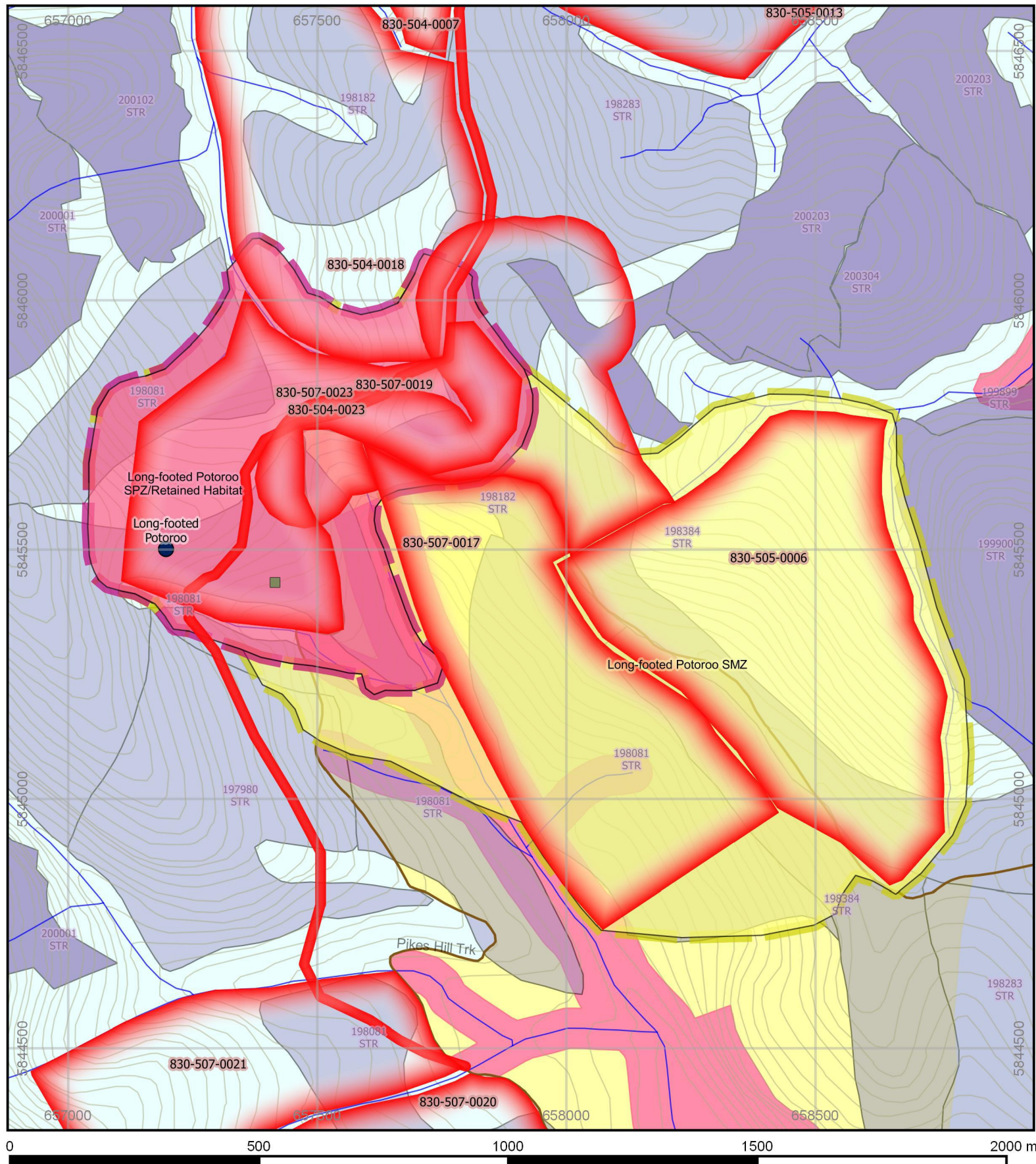
Figure 1(a). “PSCAM01”, Long-footed Potoroo detection (detail from 10 second video motion #28 12:15am 01/01/2016; [55 H 657196 // 5845501](#) (GDA94 UTM))



Figure 1(b). “PSCAM01”, Long-footed Potoroo detection (detail from 10 second video motion #29 12:16am 01/01/2016; [55 H 657196 // 5845501](#) (GDA94 UTM))



Results 1. Figure 2. Pikes Saddle (830-507-0023) - Long-footed Potoroo detection location; Proposed responsive Forest Management Zoning; Forest Management Zoning [DEPI; June 2014; FMZ100] (existing); Scheduled logging (VicForests; TRP, August 2015); Prior Logging History




Legend

- Long-footed Potoroo remote camera detection location
- Remote camera location
- Long-footed Potoroo (proposed) "Retained Habitat" SPZ
- Long-footed Potoroo (proposed) Special Management Zone
- Scheduled Logging Coupes (VicForests, TRP) [Approved_TRP_August_2015]
- Forest Management Zones [existing] [FMZ100; DEPI; June 2014]
- Special Protection Zone
- Special Management Zone
- General Management Zone
- Roads
- Watercourses
- Contours

- Prior Logging History [LASTLOG25]
- 196970
 - 197980
 - 198990
 - 199900
 - 200910
 - 201011
 - 201213
 - 201314

Projection: EPSG: 28355
GDA94/MGA Zone 55

Map Scale:
1:10,000



Results Summary/Discussion/Conclusions/Recommendations

Long-footed Potoroo detection records

1. A Long-footed Potoroo detection record was obtained on 01/01/2016 within scheduled logging coupe 830-507-0023 at the location detailed in the preceding “Results” section including Figure [map] 2”.
2. Figure [map] 2. shows the “Long-footed Potoroo Detection” location.
3. The *Long-footed Potoroo FFGA Action Statement* requires that each “*Long-footed Potoroo (LFP) detection site outside the Core Protected Area will generate a Special Management Zone (SMZ) of approximately 150 ha.*” Also, the FFGA Action Statement requires that “*as far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses*”, and “*within each SMZ, at least one third (~50 ha) will be protected from timber harvesting and new roading,*” and that “*this will be known as Long-footed Potoroo Retained Habitat.*” and that “*the LFP Retained Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes.*”
4. The “*Planning Standards for timber harvesting operations in Victoria’s State forests 2014, Appendix 5 to the Management Standards and Procedures for timber harvesting operations in Victoria’s State forests 2014*” requires the following for each Long-footed Potoroo detection:
 - “Establish a SMZ of approximately 150 ha for each Longfooted Potoroo detection site that is outside the Core Protected Area (i.e. within existing SPZ and conservation reserves). As far as possible, SMZ boundaries will follow recognisable landscape features such as ridges, spurs and watercourses.
 - Within each SMZ, at least one third (50 ha) will be protected from timber harvesting and new roading. This will be known as Long-footed Potoroo Retained Habitat. The LFP Retained
 - Habitat will include the best LFP habitat in the SMZ, which will generally be in gullies and on lower, sheltered slopes. The LFP Retained Habitat may include areas otherwise unavailable for timber harvesting due to restrictions under the Code. The SMZ will also have a general restriction of one third of the total area that can be harvested in any three year period. If more than one coupe is to be harvested in a SMZ in the same year, the coupes must be separated by at least the equivalent of another coupe width. The SMZ, with the LFP Retained Habitat clearly delineated, will be shown as part of the Forest Management Area zoning scheme. If the 150 ha area includes any part of an existing conservation reserve or SPZ, these areas will retain their existing reservation or zoning status but will be considered for inclusion as part of the area of retained habitat. In such cases, the final area designated as SMZ may be correspondingly smaller.”
5. In *Environment East Gippsland v VicForests* [2010 VSC 335] His Honour Justice Osborne included in his judgment criticism by a DSE biodiversity officer of a proposed LFP Retained Habitat area that failed to cover the detection site itself at [419]:

“1. The intent of the SMZ and especially the Retained Habitat (RH) is to provide protection for the habitat of the LfPs [Long-footed Potoroos] around the detection site, partly so we can demonstrate that we are NOT knowingly logging forest likely to be the home range of the individual detected.

“2. The home range of LfPs appears to be in the order of 10 to 20 ha, with some animals ranging over larger areas (up to 100 ha). Thus, the RH should be designed to try to capture an area of this order (ie low tens of ha) around the detection site (which is why the Action Statements states the RH is to be about 50 ha). Designing the RH so that it is greater than a few hundred metres from the detection site is not within the purpose and spirit of the prescription. Lee’s recommended SMZ design places about half of the RH further than 500 m from the detection size and thus well outside the expected home range of the detected

individual.”

6. His Honour also stated at [420] that:

“The formulation of the retained habitat must [...] take into account each of the first, second and third detections.”

7. Figure [map] 2. shows a recommended Long-footed Potoroo “Special Management Zone” (SMZ) of approximately 150 ha for which the spatial delineation takes into account the ridges, spurs and watercourses of the local terrain and the remaining most proximate best available habitat for the species in the fragmented forested landscape surrounding the study location.
8. This “SMZ” contains an area of approximately 50 ha (the “Long-footed Potoroo Retained Habitat”) of the best available habitat comprising the area of known Long-footed Potoroo occupancy.
9. The recommended “Long-footed Potoroo Retained Habitat”, ~50 ha, shown in Figure [map] 2. “takes into account” the detection and aims to cover, owing to what can be ascertained from the available evidence, the home range of the LFP's detected.
10. The Department of Environment, Land, Water and Planning (DELWP) must restrain VicForests and VicForests must refrain from logging within coupe 830-507-0023 until all necessary management actions triggered responsive to the Long-footed Potoroo detections detailed above are completed and should ensure that the recommended FFGA AS #58 LFP SMZ's with one third protected as LFP RH provided and shown in Figure [map] 2. is implemented.
11. In addition, VicForests must conduct (and the Department of Environment, Land, Water and Planning must require that VicForests conduct) appropriate presence/absence surveys for the Long-footed Potoroo in all areas scheduled for logging within the distributional range of the Long-footed Potoroo prior to the commencement of any logging operations and implement responsive management actions that actually protect species threatened with extinction from the impacts of logging where they are found to exist in the forest.

APPENDIX A:

- The Fauna and Flora Research Collective has detected the Long-footed Potoroo and corresponded on the appropriateness of responsive forest management planning for at least 38 locations in State Forests within scheduled logging coupes from 2009 to the present. The details of each detection is contained in over [28 survey reports and letters](#) submitted to the Department of Sustainability and Environment (“DSE”), then DEPI and now Department of Environment, Land, Water and Planning and VicForests. Serious ongoing disagreement concerning the quality and appropriateness of the design, approval and spatial arrangement of each of the SMZ's required to be enacted following each of the LFP detections demands the need for special attention to the appropriate design and implementation of any further FFGA AS#58 LFP SMZ's with one third protected as LFP RH in accordance with the meaning and intention of the Flora and Fauna Guarantee Act (1988). Further details can be found here: <http://faunaandfloraresearchcollective.wordpress.com/lfp-smz-review/>

