# Appendix D – Preliminary Western Ringtail Possum Surveys (Harewood 2018)

Greg Harewood Zoologist PO Box 755 BUNBURY WA 6231 12 July 2018

Talison Lithium Pty Ltd PO Box 31 GREENBUSHES WA 6254

**Attention: Carmel Griffin** 

**Dear Carmel** 

RE: Greenbushes - Preliminary Western Ringtail Possum Surveys - June 2018

### 1. BACKGROUND

The following letter report details the results of some preliminary western ringtail possum (*Pseudocheirus occidentalis*) (WRP) surveys carried out within and near Talison Lithium Pty Ltd's Greenbushes mine in June 2018.

## 2. METHODS

The surveys have involved a brief daytime survey of bushland near Schwenke's Dam and Greenbushes Pool (Norm Lyndsay Reserve) on the 11 June 2018 looking for evidence of WRPs in the form of dreys, scats and individuals. Night surveys were also undertaken on the 13 and 15 June 2018. These surveys were carried out in an area on the western side of the proposed Mine Development Envelope (MDE) followed by a survey around Schwenke's Dam and Greenbushes Pool (Norm Lyndsay Reserve) (Figure 1). The night surveys were done on foot using a head torch with the aim of locating WRPs by way of eyeshine. The first night survey covered about 4.5 kilometres (km) while the second night survey covered 7.1 km.

In addition to these specific surveys opportunistic observations for evidence of the species (and habitat quality) were made while undertaking a review of black cockatoo tree hollows in and around the MDE area on the 11, 13, 15 and 19 June 2018.

Survey work was carried out by Greg Harewood with assistance from Lydia Perenzin (Talison) on the first night survey.

#### 3. RESULTS

The results of the various surveys are shown in Figure 1.

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During the day survey undertaken on the 11 June around Schwenke's Dam and Greenbushes Pool (Norm Lyndsay Reserve) three WRP dreys were found in paperbark trees. These dreys appeared to be old and unmaintained given a lack of fresh plant material in their structure and an absence of any WRP scats in the vicinity. Dreys can last for many years after initial construction (even without maintenance) and therefore their age is difficult to determine. Some may also be in current use even if not obviously maintained. These dreys are in close proximity to two records of WRPs made on motion cameras by the Blackwood Basin Group (BBG) in 2014 (Pers Christensen pers. comms.).

During the first night survey on the western side of the MDE no WRPs were recorded, with the only animal detected being a south-western brush-tailed phascogale.

During the second night survey two common brushtail possums were detected with again no WRPs being recorded.

No evidence of WRPs was found during the course of other survey work in and around the MDE. Generally speaking, much of the vegetation observed seems to represent poor or marginal habit for WRPs at best. This conclusion is based on the fact that much of the area has been historically logged and lacks a coherent midstorey component, a structural unit most often favoured by WRPs, though it is not possible to totally discount their presence in some areas (subject to suitable habitat being present). Based on the paucity of WRP records shown in NatureMap for the wider area it would seem that even if WRPs are present in the general area, densities would be very low.

# 4. CONCLUSION

No conclusive evidence of WRPs being present with the MDE area was found though it should be noted that the survey work undertaken to date has been limited and largely opportunistic. Observations made during other survey work does however suggest that much of the MDE is likely to be unsuitable or marginal for the species, primarily due to the poor quality of midstorey vegetation, a consequence of historical logging practices. If the species does occur, it is likely to be at low densities and confined to small areas of denser vegetation (if and where this occurs).

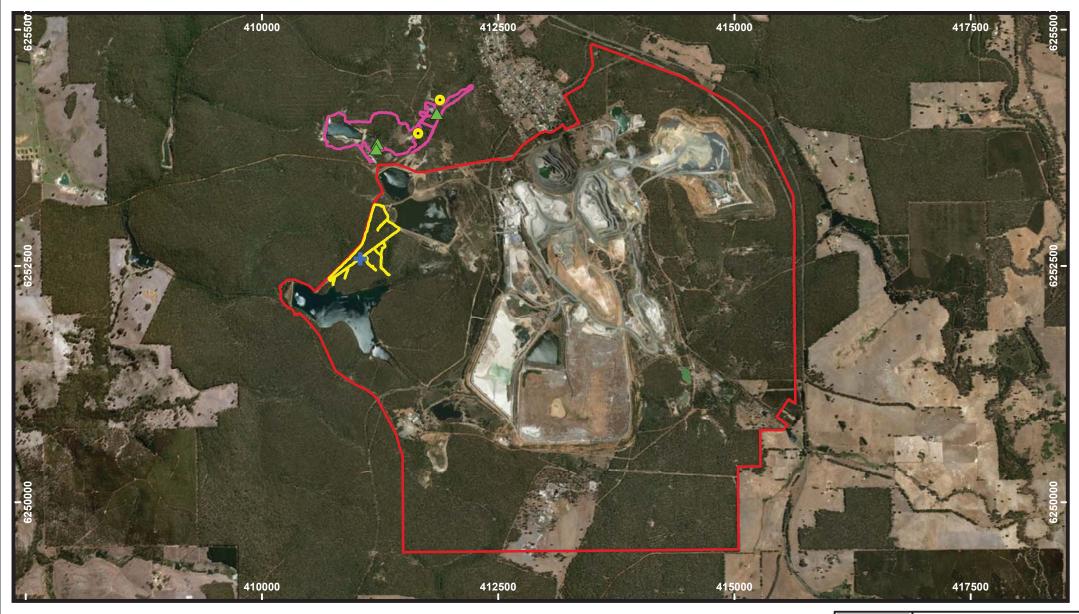
If you have any questions or queries relating the information provided here please contact the undersigned on 0402 141 197 / gharewood@iinet.net.au

Greg Harewood Zoologist

Attachments

Figure 1: WRP Survey

Harewood



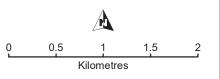
# Legend

Mine Development Envelope (MDE)

WRP Night Transect 13 June 2018

WRP Night Transect 15 June 2018

- △ Old WRP Drey (11 June)
- South-western Brush-tailed Phascogale (13 June)
- Common Brushtail Possum (15 June)





Western Ringtail Possum Survey Talison Lithium Pty Ltd

WRP Survey

Date: July 2018 Scale: 1:40,000

Projection/Coordinate System: UTM/MGA Zone 50

Figure: 1