Black Cockatoo

Nesting Tree Survey

of

Proposed Clearing Area (CPS 7631/1)



Lot 102 Stirling Road

Channybearup

May 2020 Version 1

On behalf of: Villmaggiore Pty Ltd PO Box 29 PEMBERTON 6260

Prepared by:

Greg Harewood Zoologist PO Box 755 BUNBURY WA 6231 M: 0402 141 197 E: gharewood@iinet.net.au

TABLE OF CONTENTS

SUMMARY

1.	INTRODUCTION	2
2.	SCOPE OF WORKS	2
3.	METHODS	3
4.	SURVEY CONSTRAINTS	4
5.	RESULTS	4
6.	CONCLUSION	5
7.	REFERENCES	6

FIGURES

SUMMARY

This report details the results of a black cockatoo nest tree survey carried out over a section of Lot 102 Stirling Road, Channybearup..

The landowner (Villmaggiore Pty Ltd) has been given a Permit to clear up to 16.6 hectares of vegetation from within the property by the Department of Water and Environmental Regulation (DWER) (CPS 7631/1 - DWER 2020) (Figure 1). The black cockatoo nest tree survey detailed here seeks to satisfy some of the required conditions contained within the Permit.

An inspection of the permit area was carried out by Greg Harewood (Zoologist - 17 years' experience) on the 26 May 2020.

No hollows suitable for black cockatoos to use for nesting purposes were observed, with most trees being too young/small to have developed hollows of any size. Clearing can therefore be carried out without compromising conditions of the Permit relating to this matter.

In accordance with condition 5 of the Permit this report should be forwarded to DWER on or before June 30 2020 as evidence of compliance with condition 2 of the Permit.

1. INTRODUCTION

This report details the results of a black cockatoo nest tree survey carried out over a section of Lot 102 Stirling Road, Channybearup.

The landowner (Villmaggiore Pty Ltd) has been given a Permit to clear up to 16.6 hectares of vegetation from within the property by the Department of Water and Environmental Regulation (DWER) (CPS 7631/1 - DWER 2020) (Figure 1). The black cockatoo nest tree survey detailed here seeks to satisfy some of the required conditions contained within the Permit.

2. SCOPE OF WORKS

The clearing permit condition <u>relevant to this survey</u> states:

2. Fauna Management

- (a) Prior to undertaking clearing authorised under this Permit, the area shall be inspected by a *fauna specialist* who shall identify *black cockatoo nesting tree(s)* suitable to be utilised by the forest red-tailed black cockatoo *(Calyptorhynchus banksii subsp. naso), Carnby's cockatoo (Calyptorhynchus latirostris)* and Baudin's cockatoo *(Calyptorhynchus baudinii);*
- (b) Prior to clearing, any habitat/ black cockatoo nesting tree(s) identified by condition 2(a) shall be inspected by a fauna specialist for the presence of fauna listed in condition 2(a);
- (c) Where a *black cockatoo nesting tree(s)* being utilised by Carnaby's cockatoo, Baudin's cockatoo or forest red-tailed black cockatoo is identified, the Permit Holder shall monitor the *black cockatoo nesting tree(s)* to determine when the chick(s) has fledged, as determined by the *fauna specialist;* and
- (d) The Permit Holder shall not clear a *black cockatoo nesting tree* identified as being utilised by Carnaby's cockatoo, Baudin's cockatoo or forest red-tailed black cockatoo until the chick(s) has fledged, as determined by the *fauna specialist*.

4. Records must be kept

- (b) In relation to condition 2:
 - (i) the location of the black cockatoo nesting tree(s) identified as being utilised by Carnaby's cockatoo or forest red-tailed black cockatoo recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Bastings and Northings or decimal degrees;
 - (ii) the evidence by which it was determined the black cockatoo nesting tree(s) was being utilised including the date of that determination; and

(iii) the evidence by which it was determined the chick(s) had fledged including the date of that determination.

Definitions

The following meanings are given to terms used in the Permit by DWER:

black cockatoo nesting tree/s means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater (or 30 centimetres or greater for *Eucalyptus salmonophloia* or *Eucalyptus wandoo*) that contain hollows suitable for nesting by Carnaby's cockatoo or forest red-tailed or Baudin's black cockatoo;

fauna specialist means a person:

- (a) Who holds a tertiary qualification specializing in environmental science or equivalent, has a minimum of two years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed and holds a valid fauna licence issued under the *Wildlife Conservation Act 1950;* or
- (b) Who does not have appropriate professional qualifications, but has a minimum of seven years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed and holds a valid fauna licence issued under the *Wildlife Conservation Act 1950.*

3. METHODS

An inspection of the Permit area was carried out by Greg Harewood (Zoologist - 17 years' experience) on the 26 May 2020.

The black cockatoo nesting tree survey involved the inspection of all trees within the Permit area for evidence of hollows suitable for black cockatoos to use for nesting purposes. The entire permit area was traversed on foot along a series of close spaced transects.

Target tree species will include karri, marri and jarrah or any other *Corymbia/Eucalyptus* species of a suitable size that were present. Peppermints, *banksia*, sheoak and *melaleuca* tree species (for example) were not be assessed as they typically do not develop hollows that are used by black cockatoos.

For the purposes of this survey a tree containing a potential cockatoo nest hollow was defined as:

Generally, any tree which is alive or dead that contains one or more visible hollows (cavities within the trunk or branches) or possible hollows suitable or potentially suitable for occupation by black cockatoo for the purpose of nesting/breeding. Hollows and apparent hollows that had an entrance greater than about 10cm in diameter and would allow the entry of a black cockatoo into a suitably orientated and sized branch/trunk, were recorded as a "potential nest hollow".

Any identified hollows were to be examined using binoculars for evidence of actual use by black cockatoos (e.g. chewing around hollow entrance, scarring and scratch marks on trunks and branches). Trees with possible nest hollows were also to be scratched/raked with a large stick/pole in attempt to flush any sitting birds from hollows and calls of chicks were also listened for. It should be noted that the survey may have be conducted outside of the main breeding season of one or more of the three species of black cockatoo and therefore any lack of nesting activity may be a consequence of this fact.

If the ground based assessment of possible large hollows was inconclusive a drone (DJI Mavic Air) and a pole mounted camera were available for use (if considered warranted and feasible) to examine and photograph potential hollows in more detail.

4. SURVEY CONSTRAINTS

No seasonal sampling has been carried out as part of this fauna assessment. The conclusions presented are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of the field assessments. It should also be recognised that site conditions can change with time.

During the black cockatoo nest tree survey trees with hollows were searched for. It should be noted that identifying hollows suitable for fauna species from ground level has limitations. Generally, the full characteristics of any hollow seen are not fully evident (e.g. internal dimensions). It is also difficult to locate all hollows within all trees as some are not observable from ground level, though to a certain extent some of these limitations can be overcome by using a drone or pole camera to examine possible hollows in more detail (where considered warranted and feasible).

5. RESULTS

As detailed by DWER (2020), the Permit area contains a closed karri (*Eucalyptus diversicolor*) forest over scattered marri (*Corymbia calophylla*), sheoak (*Allocasuarina decussata*), water bush (*Bossiaea webbii*), braken (*Pteridium esculentum*), free-flowering lasiopetalum (*Lasiopetalum floribundum*), *Malvaceae* spp., native wisteria (*Hardenbergia comptoniana*) and *Tetraria* spp. Scattered specimens and groves of peppermint (*Agonis flexuosa*) also occur but were not reported by DWER (2020).

No trees within the Permit area were found to contain hollows suitable for black cockatoos to use for nesting purposes. Vegetation within the Permit area appears to represent young regrowth from an extensive historical clearing event with the vast majority of the trees being relatively small.



Legend

Permit Area (7631/1)

0 25 50 75 100 Metres



CPS 7631/1 Stirling Road Villmaggiore Pty Ltd

Aerial Photograph

6. CONCLUSION

The assessment reported on here was undertaken to identify trees within the Permit area that contain hollows suitable for use by black cockatoos for nesting purposes.

No hollows suitable for black cockatoos to use for nesting purposes were observed, with most trees being too young/small to have developed hollows of any size. Clearing can therefore be carried out without compromising conditions of the Permit relating to this matter.

In accordance with condition 5 of the Permit this report should be forwarded to DWER on or before June 30 2020 as evidence of compliance with condition 2 of the Permit.

7. **REFERENCES**

Department of Water and Environmental Regulation (DWER 2020). Permit, Plan and Decision Report - CPS 7631/1. 4 September 2018.

DISCLAIMER

This fauna assessment report ("the report") has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Ecoedge ("the Author"). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. In accordance with the scope of services, the Author has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also, it should be recognised that site conditions, can change with time.

Within the limitations imposed by the scope of services, the field assessment and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

In preparing the report, the Author has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise stated in the report, the Author has not verified the accuracy of completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. The Author will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to the Author.

The report has been prepared for the benefit of the Client and no other party. The Author assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of the Author or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

The Author will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.