

## **BLACK COCKATOO HABITAT SURVEY LOT 3314 COWALLA ROAD, WANARIE.**

The purpose of the survey was to assess breeding, feeding and roosting habitat suitable for use by black cockatoos *Calyptorhynchus spp.* at Lot 3314 Cowalla Rd.

### **BLACK COCKATOO SPECIES BACKGROUND INFORMATION.**

Three species of black cockatoos occur in the south-west of Western Australia, Carnaby's Cockatoo *Calyptorhynchus latirostris*, Baudin's Cockatoo *C. baudinii* and the Forest Red-tailed Black Cockatoo *C. banksii naso*. Carnaby's and Baudin's Cockatoos are known collectively as 'white-tailed black-cockatoos'.

Both Baudin's and Carnaby's Cockatoos are listed (Endangered) under the Biodiversity Conservation Act (BC Act) 2016, and the Environment Protection and Biodiversity Conservation Act (EPBC Act).

The Forest Red-tailed Black Cockatoo is listed as Vulnerable under the BC Act and the EPBC Act.

Carnaby's Cockatoo is the only species occurring at the survey area.

### **TREE SPECIES INFORMATION RELATIVE TO THE SURVEY AREA.**

The tree species which could provide breeding hollows at the survey area were Marri *Corymbia Calophylla*. This species needs to have reached a diameter at breast height (DBH) of at least 500mm to be large enough to provide a black cockatoo breeding hollow (*Department of the Environment and Energy*, 2017).

Black cockatoo breeding hollows need to have an entrance of at least 120mm diameter and lead to a sheltered nest chamber of 300mm diameter or larger.

Note. The only other tree at the survey area which reaches 500mm DBH is Prickly Bark *Eucalyptus tottiana*. This species is not known to provide black cockatoo breeding hollow. It accounts for approximately a quarter of the larger trees at the survey area.

### **FOOD SPECIES AT THE SURVEY AREA.**

Food species at the survey area include were:

- Marri – seeds, nectar and grubs taken
- Prickly Bark - nectar occasionally taken. Possibly grubs and seeds
- *Banksia menziesii* – seeds, nectar and grubs taken.

### **ROOST SPECIES AT THE SURVEY AREA.**

Marri is the only species at the survey likely to be utilised by Carnaby's Cockatoo as a roosting site.

The survey was undertaken using the following guidelines provided by the Department of Water and Environmental Regulation (DWER) 13<sup>th</sup> January 2022.

**‘The assessment/survey is to be carried out by a *fauna specialist* (see below for relevant definitions) and the survey is required to identify all trees that have a diameter, measured at 1.3 metres from the base of the tree, of 50 centimetres or greater that contain a hollow(s) that may be suitable for breeding by Carnaby’s cockatoo.**

**The survey must document:**

- the date(s) of the survey;**
- the GPS locations (i.e. eastings and northings or decimal degrees) of all trees identified as containing hollows which may be suitable for black cockatoos;**
- the methodology for determining the evidence of use of each hollow; and**
- a description/photo of the evidence of use.**

**The suitability of the vegetation, along with any evidence of foraging or roosting by Carnaby’s cockatoo observed during the survey should also be documented, along with any opportunistic sightings of this species’.**

The survey was undertaken by Tony Kirkby who has over 20 years of experience conducting black cockatoo surveys in the south-west of Western Australia.

#### **METHODOLOGY AND TIMING.**

All trees with a suitable DBH at the survey area were inspected from ground level using binoculars for the presence of hollows large enough to be used by Carnaby’s Cockatoo.

Evidence of foraging was searched for beneath species which may provide food for Carnaby’s Cockatoo.

Evidence of roosting such as droppings and feather which accumulate beneath roosting sites were searched for.

Opportunistic sightings of Carnaby’s Cockatoos were noted.

GPS locations were taken using handheld GPS. Eastings and Northings. GDA 94.

The survey was undertaken on 25<sup>th</sup> January 2022.

## RESULTS AND DISCUSSION.

### Breeding hollows.

No breeding hollows suitable to be used by black cockatoos were located at the survey area. There also appeared to be a lack of hollows at any size (Galah and small parrot). The trees at the survey area appear in good condition and don't look very old or to have lost many branches and aren't senescing as would be the case with trees above 500mm DBH in a forest environment. It may be the case that many of these trees are regrowth from the original clearing activities and not yet old enough to provide hollows. Although they are above 500mm DBH they are growing with very little competition and attain this diameter at a much younger age than forest trees.

### Foraging.

Evidence of feeding on seeds from *Banksia menziesii* was noted at two locations. One of these was outside the projected clearing area. It is represented at the survey area by only a few individuals.

No evidence of feeding on Marri or Prickly Bark was located. Marri is often taken by Carnaby's Cockatoos at some locations and the reason for the lack of foraging evidence is unknown. It may be possible that the nearby Moore River National Park provides richer foraging opportunities on banksia species.

### Roosting.

All stands of Marri at the survey area were inspected and no roosting sites were located.

### Sightings.

A flock of eight Carnaby's Cockatoo were observed heading in a south easterly direction over the survey area at 08:30 hrs.

Tony Kirkby

26<sup>th</sup> January 2022

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