

**Clearing Permit Application number CPS 8556/1
(R & EM Pessotto)**

Black cockatoo habitat tree assessment/survey

Background

An application to thin an area of mostly regrowth jarrah forest on their property north east of Manjimup was submitted by R & EM Pessotto in July 2019.

On 13 November 2019, DWER wrote to the landowners, stating that a black cockatoo habitat tree assessment/survey would be necessary to progress the application. In particular, DWER required that:

- (1) the assessment/survey be carried out by a fauna specialist;
- (2) all trees above a dbhob of 500mm at breast height be assessed for the presence of hollows that may be suitable for breeding by any of the three species of native black cockatoo found in Western Australia; ie Carnaby's, Baudin's and Forest red-tailed;
- (3) trees identified as containing hollows which may be suitable for breeding have their GPS positions recorded;
- (4) the methodology for determining evidence of use of the hollows be documented; and
- (5) a description/photo of evidence of use of each hollow be recorded.

Details and results of the assessment/survey

The total area of forest subject to the original application was assessed/surveyed on Wednesday 26 November 2019 by fauna specialist John Clarke.

The total area was walked and every tree with potential for hollows was inspected.

Four trees were identified, and marked, as containing hollows which may be suitable for black cockatoo breeding:

Tree 1: dead jarrah - GPS location: 34 degrees, 8 minutes, 11 seconds S, 116 degrees, 14 minutes, 16 seconds E. Hollow potentially suitable but not showing any evidence of current or recent use, such as birds in the vicinity, bird droppings on the ground below or on adjacent branches, or wear and tear around entrance to the hollow.

Tree 2: over-mature marri - GPS location: 34/8/1 S, 116/14/16 E. Hollow potentially suitable but showing no evidence of current or recent use.

Tree 3: dead marri – GPS location: 34/7/54 S, 116/14/19 E. Hollows potentially suitable but showing no evidence of current or recent use.

Tree 4: over-mature jarrah – GPS location 34/7/56 S, 116/14/44 E. Hollows potentially suitable but showing no evidence of current or recent use.

Photos of all four trees are appended.

Comments and conclusions

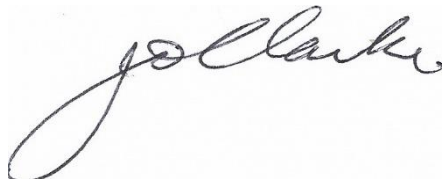
Because the area of native forest involved in this clearing permit application is regrowth forest resulting from past, mostly uncontrolled, harvesting activity, relatively few trees exist which contain hollows suitable for black cockatoos.

No trees with suitable hollows were identified in any of the patches of forest involved except the patch at the northern end of the property adjacent to State forest. This particular patch contains a number of remnant jarrah and marri trees which are either dead, senescent or over-mature, four of which were identified as containing hollows of sufficient size and depth to potentially be suitable for cockatoos.

Research has shown that Forest red-tailed black cockatoos generally nest in very old marri trees with hollows with an average entrance size of 30 x 34 cm. Baudin's cockatoos seek vertical hollows in marri, karri and wandoo. Likewise, Carnaby's cockatoo seeks hollows of at least 30cm in diameter.

Although the four trees identified contain hollows which have been assessed to possibly be of sufficient size and depth, there was no evidence of recent or current use. This is probably because any local breeding of cockatoos would likely be occurring in State forest surrounding the property, particularly to the north. Forest red-tailed black cockatoos were heard during the survey period in State forest north of Whim Landing Road.

Importantly, there has been and is no plan or intention by the landowner to fell/harvest/clear any of the identified trees containing hollows. Nor is there any intention to fell/harvest/clear other dead, mature or over-mature trees which contain hollows of any size. These trees will comprise the habitat trees for all and any species of tree dwelling or nesting fauna, as per the silvicultural/harvesting prescription included in the management plan which accompanied the Clearing Permit application.



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30 November 2019

References

Johnstone, R.E., Kirkby, T. and Sarti, K (2013). The breeding biology of the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia naso* Gould) in south-western Australia. I. Characteristics of nest trees and nest hollows. Pacific Conservation Biology Vol 19: 121-142.

Johnstone, R.E. and Kirkby, T. (2008). Distribution, status, social organisation, movements and conservation of Baudin's Cockatoo (*Calyptorhynchus baudinii*) in South-west Western Australia. Records of the Western Australian Museum 25: 107-118.

Johnstone, R.E., Kirkby, T. and Mannion, M. (2015). Trials on the use and effectiveness of artificial nest hollows for Carnaby's cockatoo at Cataby, Western Australia. The Western Australian Naturalist 29(4): 250-262.



Fig 1: Tree number 1 (dead jarrah)



Fig 2: Tree number 1 showing close-up of hollow



*Fig 3: Tree number 2 (over-mature marri)
hollow*



Fig 4: Tree number 2 showing close-up of hollow



Fig 5: Tree number 3 (dead marri). Hollows at top branches.



Fig 6: Tree number 4 (senescent jarrah)



Fig 7: Tree number 4 showing close-up of hollows