

**Black Cockatoo
Habitat Tree Survey
CPS 8178/1**



**Crooked Brook Road
Shire of Dardanup**

March 2019
Version 1

On behalf of:
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FIGURE 1: CPS 8178/1 - Plan

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SUMMARY

The Shire of Dardanup has applied to clear up to 2.995 hectares (ha) of the vegetation within the Crooked Brook Road reserve to the Department of Water and Environmental Regulation (DWER) (CPS 8178/1) (Figure 1).

An initial tree survey over the permit area was undertaken by Jackie Nichol (Senior Environmental Officer – Shire of Dardanup) on 3 August 2018 during which time 101 “habitat” trees (DBH \geq 50cm) were identified, some with potential hollows. A subsequent inspection of the area by DWER confirmed the presence of potential black cockatoo breeding habitat (DWER 2019a) and as a consequence they have requested a more detailed black cockatoo habitat tree survey be undertaken (Item 2 - DWER 2019b). The results of this survey are presented here.

The follow up inspection of the permit area was carried out by Jackie Nichol and Greg Harewood (Zoologist) on the 21 March 2019.

The 101 previously identified “habitat” trees were examined for the presence of hollows suitable for black cockatoos to use for nesting purposes. The vast majority of these trees were not observed to contain hollows of any size. Two trees (tree 21 and tree 32) appeared to contain possible large top opening hollows (“spouts”). These two hollows were examined and photographed using a drone. The inspection revealed that neither tree contains a hollow/s suitable for black cockatoos to use for nesting.

Given that none of the trees within the permit area appear to contain hollows of a size suitable for black cockatoos or show any signs of use by black cockatoos it is the Authors opinion that their removal will have no direct impact on any of the three species known to frequent the general area.

This report should be forwarded to DWER for their consideration.

1. INTRODUCTION

This report details the results of a black cockatoo habitat tree survey carried out over a section Crooked Brook Road in the Shire of Dardanup (the Shire).

The Shire has applied to clear up to 2.995 hectares (ha) of the vegetation within the road reserve to the Department of Water and Environmental Regulation (DWER) (CPS 8178/1) (Figure 1).

An initial tree survey over the permit area was undertaken by Jackie Nichol (Senior Environmental Officer – Shire of Dardanup) on 3 August 2018 with data being provided to DWER. A subsequent inspection of the area by DWER confirmed the presence of potential black cockatoo breeding habitat (DWER 2019a) and as a consequence they have requested a more detailed black cockatoo habitat tree survey be undertaken (Item 2 - DWER 2019b). The results of this survey are presented here.

2. SCOPE OF WORKS

The scope of works are based on specifications provided in DWER's request for additional information (DWER 2019b) which states:

- Survey methodology must be consistent with the Environmental Protection Authority's (EPA) Technical Guidance: Terrestrial Fauna Surveys (December 2016), copies of which are available at the EPA's website.
- The survey is to be carried out by a *fauna specialist* and the survey is required to identify all trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater that contain a hollow(s) that may be suitable for breeding by black cockatoos.
- 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; and
 - the methodology for determining the evidence of use of each hollow and a description/photo of the evidence.
- All surveys must be submitted in accordance with the EPA's Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA), and be accompanied by a completed Metadata and Licensing Statement.

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*.

3. METHODS

An initial site survey of the permit area was undertaken by Jackie Nichol (Senior Environmental Officer – Shire of Dardanup) on 3 August 2018. The assessment involved the identification of all suitable trees species within the permit area that have a diameter at breast height (DBH) of equal to or over 50cm with special attention paid to those containing hollows or apparent hollows.

Target tree species included marri and jarrah and any other *Corymbia/Eucalyptus* species of a suitable size that are 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.

All the trees identified during the initial site inspection were re-examined on the 21 March 2019 by Jackie Nichol and Greg Harewood (Zoologist). Those trees identified as possibly containing large hollows potentially suitable for black cockatoos were examined in detail and all potential hollows photographed using a drone (DJI Mavic Air). These photographs were then used to determine the characteristics of any hollows present and their likely suitability for use by black cockatoos for breeding.

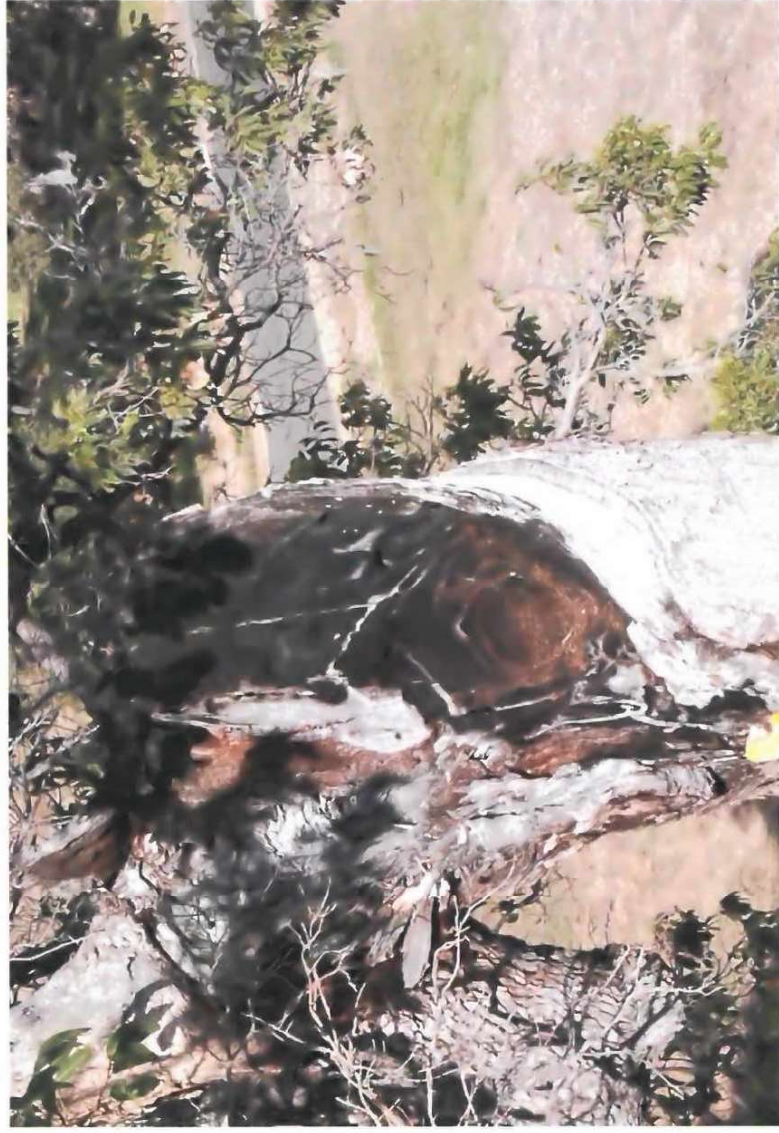
4. RESULTS

The permit area contains 101 “habitat” trees (i.e. DBH \geq 50cm). Details on each tree can be found in Appendix A.

The vast majority of these trees were not observed to contain hollows of any size. Two trees (tree 21 and tree 32) appeared to contain possible large top opening hollows (“spouts”). These two hollows were examined and photographed using a drone. The results of this inspection are provided in the plates below. The inspection revealed that neither tree contains a hollow/s suitable for black cockatoos to use for nesting.

CPS 8178/1 – CROOKED BROOK ROAD – DARDANUP - BLACK COCKATOO HABITAT TREE SURVEY
 MARCH 2019 – V1

ID	Location Data (MGA 94 -Zone 50)	390785 mE	6296648 mN	Species	Marri	Survey Date	21/03/2019
27	Comments	Marri with broken trunk at height. From ground level had the potential to be a large hollow spout but drone pictures indicate the presence of only a shallow depression that does not qualify as a hollow. No evidence of any use.			Classification	No Hollow	



ID	Location Data (MGA 94 -Zone 50)	390500 mE	6296661 mN	Species	Dead Marri	Survey Date	21/03/2019
32	Comments	Dead Marri with broken trunk at height. From ground level had the potential to be a large hollow spout but drone pictures indicate the presence of no hollows. No evidence of any use.			Classification	No Hollow	



5. CONCLUSION

The assessment reported on here was undertaken to identify any trees with existing hollows suitable or potentially for black cockatoos to use for nesting within the permit area.

No trees within the permit area which are to be or are likely to be cleared were observed to contain hollows suitable for black cockatoos. Given this fact it is the Authors opinion that the removal of these trees will therefore have no direct impact on any of the three species known to frequent the general area.

This report should be forwarded to DWER for their consideration.

6. REFERENCES

Department of Water and Environmental and Regulation (DWER) (2019a). CPS 8178/1 - Preliminary Assessment Report. 25 February 2019.

Department of Water and Environmental and Regulation (DWER) (2019b). Letter to Mr Mick Saunders – Manager Assets – Shire of Dardanup – Application to Clear Native Vegetation Permit 8178/1 under the Environmental Protection Act 1986 – Request for information. Ref: CPS 8178/1. 25 February 2019.

FIGURES

CPS 8178/1 - Map

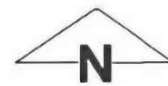


Legend

-  CPS areas applied to clear
-  Local Government Authorities
-  Roads
-  Cadastre

Image

-  Red: Band_1
-  Green: Band_2
-  Blue: Band_3



MGA 94
Geocentric Datum of Australia 1994

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986



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APPENDIX A

HABITAT TREE DETAILS

Habitat Trees

Tree number	Tree type, diameter, health comments etc	Additional comments
1	Jarraah, split stem, 14 m high, diameter less than 50cm, healthy.	
2	Marri, 12m high, Diameter less than 60cm, some tree damage right side	
3	Marri, 13m high, diameter less than 50cm, some damage right side,	
4	Marri, 13.5m, diameter less than 50 cm damaged base,	
5	Marri, small snapped, 5m high	
6	Marri, 10 m high, healthy, diameter less than 50cm	
7	Dying/dead marri, 10m high, diameter less than 50cm	
8	Marri, part dead, 14m, less than 50cm diameter	
9	Marri, 10m high, stem less than 50cm healthy	
10	Marri small stem damaged, height 7m, leans right	
11	Marri, 10m high branch to left diameter less than 50cm	
12	Jarraah, 15m high multistem, diameter greater than 50cm good condition	
13	Jarraah, multistem, 13m high, less than 50cm diameter good condition	
14	Jarraah, 13m 2 stems less than 50cm diameter	
15	Jarraah, small, 10m high 1 stem very straight diameter less than 50cm	
16	Marri dead 3 m high	
17	Jarraah multistem (3), 12m high,	
18	Jarraah, broken 10m no canopy branch to right, diameter less than 50cm	
19	Jarraah, split stem, 16m high, diameter greater than 50cm open canopy	
20	Marri, small, less than 10m high, diameter less than 50cm open canopy healthy	
21	Marri, very small, 5m high, diameter less than 50cm	
22	Dead tree, ID unknown, no canopy	
23	Marri , small less than 50cm diameter, no canopy	
24	Jarraah, very small 5m high	
25	Jarraah, multistem, 14m, greater than 50 diameter, healthy	
26	Marri? Small burnt tree damaged, no canopy, no habitat	
27	Marri to 30m, potential hollows, diameter 3.5m wide, shield scar on the bottom, Retain if possible	Possible Large hollow - examined with drone - too shallow
28	Marri leaning left less than 50cm diameter, no habitat (NB habitat tree directly behind to the west)	
29	Nearly dead marri, no canopy, burnt bottom, diameter less than 50cm	
30	Jarraah, 15m leaning left, 1.4m diameter	
31	Jarraah, 20m high, diameter 3m open high canopy	
32	Dead marri, potential habitat, no canopy but hollows present, stem 3m wide diameter height 11m	Possible Large hollow - examined with drone - no hollow evident
33	Jarraah small, damaged, to 7m, diameter less than 50cm	
35	Jarraah 6m high, regrowth stem as bottom has been cut, no habitat	
36	Marri, very straight, 12m high, diameter greater than 50 cm	
37	Marri, straight, to 9m, trunk about 30cm diameter	

Tree number	Tree type, diameter, health comments etc	Additional comments
38	Marri, straight 8m stem 30cm diameter	
39	Jarraah, 45-50cm diameter stem, 9m high nice form, canopy good	
40	Marri, damaged, 35cm diameter height 8m	
41	Marri, canker damaged, 1m diameter width, potential hollows but can't see	
42	Jarraah, damaged, epicornic growth no hollows 7m high	
43	Jarraah, to 3m.	
44	Small Jarraah, 7m high, no canopy	
45	Small Jarraah, 7m high, no canopy	
46	Small Jarraah, 6m high, no canopy	
47	Small Jarraj, 6m high, no canopy	
48	Marri, stem height 60cm, some canker, no canopy, no hollows	
49	Marri, height 25m, mult stem, large diameter, no canker	
50	Marri, leaning over road, stem 55-50cm diameter, 15-20m high, no habitat	
51	Marri, 18m high, leaning towards road, over 50cm diameter (1.4m), likely habitat	
52	Marri, 14m high, 40cm diameter, leaning over road	
53	Marri, 55-65cm stem height 14m, leaning over road	
94	Marri, small 7m - this tree cluster is back near tree 37 on west side of road	
95	Marri 12 m diameter 45cm no habitat, west side of road	
96	Marri, small 6m, ewst side of road	
97	Marri, 13m, diameter 50cm no nest hollows, stem burnt some canker, west side of road	
98	Marri, 14m, diameter 50cm no nest hollows, stem burnt some canker, west side of road	
99	Marri, 9m diameter 35cm, west side of road	
100	Marri, split stem, diameter over 50cm 91.3m)15m high, west side of road	
101	Marri 10m, diameter less than 50cm, west side of road	
102	Marri, 13m diameter 45cm, west side of road	
E54	East side of road, commencing same end as tree 53. Marri, 8m high, diameter 40cm	
E55	Marri, 10m high, Splits waist height no canker, no habitat	
E56	Marri, 14m high nice canopy, healthy	
E57	Marri, split stem 17m high, healthy, diameter 40cm	
E58	Marri, split half way 15m high, open canopy, healthy no canker	
E59	Marri, 58m 20cm diameter width healthy	
E60	Marri, 45cm diameter, 11m high, healthy	
E61	Cluster (4) Jarraah, multistem, height 6m no habitat	
E62	Jarraah, split stem height 4m no habitat	
E63	Marri, height 4m no habitat	
E64	Marri, height 7m 45cm diameter, nice shape	
E65	Marri, 40cm diameter, 10m high	
E66	Marri, 13m high, 40cm diameter, some canker, stem splits half way	

Tree number	Tree type, diameter, health comments etc	Additional comments
E67	Jarraah, 7m spindly, no habitat, diameter less than 50cm	
E68	Jarraah, 7m spindly, no habitat, diameter less than 50cm	
E69	Marri, split stem twists, height 5m, diameter less than 50cm	
E70	Marri, broken stem, 10 high, one stem over road, no canopy	
E71	Marri, straight, no canker, 15m Stem 50cm diameter	
E72	Dead tree, can't ID no bark, 4m high no habitat	
E73	Jarraah, split stem, 8m diameter less than 50cm	
E74	Jarraah, 4m high very small no habitat	
E75	Marri, 8m high, 30cm diameter stem, no canopy, straight	
E76	Marri, 9m high, 30cm diameter, straight, bigger canopy but no habitat	
E77	Marri, 8m high, 30cm diameter stem, no canopy, straight	
E78	Marri, split half way, some canker, 10m high, 40cm diameter	
E79	Marri, 6m, 45cm diameter, some canker, small heigh	
E80	NO photo. Marri 8m high, canopy broken, 30cm diameter, burnt	
E81	Dead tree no habitat	
E82	Marri, 12m high, split stem, nice canopy, 55cm diameter	
E83	Jarraah, 8m high, split stem, diameter less than 50cm	
E84	Jarraah, 7m very thin, no canopy	
E85	Marri, 12m intact canopy, 40cm diameter, some canker	
E86	Marri, 9m high, straight stem, 35cm diameter, some canker	
E87	Marri, large, 16m diameter over 1m	
E88	Marri, large, 18m diameter over 2m	
E89	Marri, just dead, 3m high, no habitat	
E90	Cluster of small Jarraah stems approx 8 trees, height 7m with 15cm diameter	
E91	Cluster of 4 small marri stems height 4m stem 10cm	
E92	Marri, Leaning across road, height 7m, stem 45cm burnt bottom	
E93	Marri, 12m high, stem 50cm diameter, no canker	

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 Greg Harewood (“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.

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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.

Tree number	Photo number	Tree type, diameter, health comments etc	Environment officer Recommendations	Additional comments
1	1	Jarraah, split stem, 14 m high, diameter less than 50cm, healthy.	No nest hollows, no known habitat unlikely	
2	2	Marri, 12m high, Diameter less than 60cm, some tree damage right side	No nest hollows, no known habitat unlikely	
3	3-4	Marri, 13m high, diameter less than 50cm, some damage right side,	No nest hollows, no known habitat unlikely	
4	3-4	Marri, 13.5m, diameter less than 50 cm damaged base,	No nest hollows, no known habitat unlikely	
5	5	Marri, small snapped, 5m high	No nest hollows, no known habitat unlikely	
6	6	Marri, 10 m high, healthy, diameter less than 50cm	No nest hollows, no known habitat unlikely	
7	7	Dying/dead marri, 10m high, diameter less than 50cm	No nest hollows, no known habitat unlikely	
8	8	Marri, part dead, 14m, less than 50cm diameter	No nest hollows, no known habitat unlikely	
9	9-11	Marri, 10m high, stem less than 50cm healthy	No nest hollows, no known habitat unlikely	
10	9-11	Marri small stem damaged, height 7m, leans right	No nest hollows, no known habitat unlikely	
11	9-11	Marri, 10m high branch to left, diameter less than 50cm	No nest hollows, no known habitat unlikely	
12	12	Jarraah, 15m high multistem, diameter greater than 50cm good condition	No nest hollows, no known habitat unlikely	
13	13-15	Jarraah, multistem, 13m high, less than 50cm diameter good condition	No nest hollows, no known habitat unlikely	
14	13-15	Jarraah, 13m 2 stems less than 50cm diameter	No nest hollows, no known habitat unlikely	
15	13-15	Jarraah, small, 10m high 1 stem very straight diameter less than 50cm	No nest hollows, no known habitat unlikely	
16	16-17	Marri dead 3 m high	No nest hollows, no known habitat unlikely	
17	16-17	Jarraah multistem (3), 12m high,	No nest hollows, no known habitat unlikely	
18	18	Jarraah, broken 10m no canopy branch to right, diameter less than 50cm	No nest hollows, no known habitat unlikely	
19	19	Jarraah, split stem, 16m high, diameter greater than 50cm open canopy	No nest hollows, no known habitat unlikely	
20	20	Marri, small, less than 10m high, diameter less than 50cm open canopy healthy	No nest hollows, no known habitat unlikely	
21	21	Marri, very small, 5m high, diameter less than 50cm	No nest hollows, no known habitat unlikely	
22	22-24	Dead tree, ID unknown, no canopy	No nest hollows, no known habitat unlikely	
23	22-24	Marri, small less than 50cm diameter, no canopy	No nest hollows, no known habitat unlikely	
24	22-24	Jarraah, very small 5m high	No nest hollows, no known habitat unlikely	
25	25	Jarraah, multistem, 14m, greater than 50 diameter, healthy	No nest hollows, no known habitat unlikely	
26	26	Marri? Small burnt tree damaged, no canopy, no habitat	No nest hollows, no known habitat unlikely	
27	27, 27A-B	Marri to 30m, potential hollows, diameter 3.5m wide, shield scar on the bottom, DO NOT CLEAR	CHECK HOLLOW WITH DRONE	
28	28	Marri leaning left less than 50cm diameter, no habitat (NB habitat tree directly behind to the west)	No nest hollows, no known habitat unlikely	
29	29	Nearly dead marri, no canopy, burnt bottom, diameter less than 50cm	No nest hollows, no known habitat unlikely	
30	30	Jarraah, 15m leaning left, 1.4m diameter	No nest hollows, no known habitat unlikely	
31	31	Jarraah, 20m high, diameter 3m open high canopy	No nest hollows, no known habitat unlikely	
32	32	Dead marri, potential habitat, no canopy but hollows present, stem 3m wide diameter height 11m	CHECK HOLLOW WITH DRONE	
33	33	Jarraah small, damaged, to 7m, diameter less than 50cm	No nest hollows, no known habitat unlikely	
34	34	Peppermint (<i>Agonis flexuosa</i>) height 8m, no visible dreys, split stem leaning toward road	No dreys evident- suggest possum spotter	
35	35	Jarraah 6m high, regrowth stem as bottom has been cut, no habitat	No nest hollows, no known habitat unlikely	
36	36	Marri, very straight, 12m high, diameter greater than 50 cm	No nest hollows, no known habitat unlikely	
37	37	Marri, straight, to 9m, trunk about 30cm diameter	No nest hollows, no known habitat unlikely	
38	38	Marri, straight 8m stem 30cm diameter	No nest hollows, no known habitat unlikely	
39	39	Jarraah, 45-50cm diameter stem, 9m high nice form, canopy good	No nest hollows, no known habitat unlikely	
40	40	Marri, damaged, 35cm diameter height 8m	No nest hollows, no known habitat unlikely	
41	41	Marri, canker damaged, 1m diameter width, no hollows evident	No nest hollows, no known habitat unlikely	
42	42	Jarraah, damaged, epicornic growth no hollows 7m high	No nest hollows, no known habitat unlikely	
43	43	Jarraah, to 3m.	No nest hollows, no known habitat unlikely	
44	44-45	Small Jarraah, 7m high, no canopy	No nest hollows, no known habitat unlikely	
45	44-45	Small Jarraah, 7m high, no canopy	No nest hollows, no known habitat unlikely	

46	46-47	Small Jarrah, 6m high, no canopy	No nest hollows, no known habitat unlikely
47	46-47	Small Jarrah, 6m high, no canopy	No nest hollows, no known habitat unlikely
48	48	Marri, stem height 60cm, some canker, no canopy, no hollows	No nest hollows, no known habitat unlikely
49	49	Marri, height 25m, mult stem, large diameter, no canker	No nest hollows, no known habitat unlikely
50	50	Marri, leaning over road, stem 55-50cm diameter, 15-20m high, no habitat	No nest hollows, no known habitat unlikely
51	51	Marri, 18m high, leaning towards road, over 50cm diameter (1.4m), likely habitat	No nest hollows, no known habitat unlikely
52	52	Marri, 14m high, 40cm diameter, leaning over road	No nest hollows, no known habitat unlikely
53	53	Marri, 55-65cm stem height 14m , leaning over road	No nest hollows, no known habitat unlikely
54	E54	East side of road, commencing same end as tree 53. Marri, 8m high, diameter 40cm	No nest hollows, no known habitat unlikely
55	E55	Marri, 10m high, Splits waist height no canker, no habitat	No nest hollows, no known habitat unlikely
56	E56	Marri, 14m high nice canopy, healthy	No nest hollows, no known habitat unlikely
57	E57	Marri, split stem 17m high, healthy, diameter 40cm	No nest hollows, no known habitat unlikely
58	E58	Marri, split half way 15m high, open canopy, healthy no canker	No nest hollows, no known habitat unlikely
59	E59-E60	Marri, 58m 20cm diameter width healthy	No nest hollows, no known habitat unlikely
60	E59-E60	Marri, 45cm diameter, 11m high, healthy	No nest hollows, no known habitat unlikely
61	E61	Cluster (4) Jarrah, multistem, height 6m no habitat	No nest hollows, no known habitat unlikely
62	E62	Jarrah, split stem height 4m no habitat	No nest hollows, no known habitat unlikely
63	E63	Marri, height 4m no habitat	No nest hollows, no known habitat unlikely
64	E64	Marri, height 7m 45cm diameter, nice shape	No nest hollows, no known habitat unlikely
65	E65	Marri, 40cm diameter, 10m high	No nest hollows, no known habitat unlikely
66	E66	Marri, 13m high, 40cm diameter, some canker, stem splits half way	No nest hollows, no known habitat unlikely
67	E67	Jarrah, 7m spindly, no habitat, diameter less than 50cm	No nest hollows, no known habitat unlikely
68	E68	Jarrah, 7m spindly, no habitat, diameter less than 50cm	No nest hollows, no known habitat unlikely
69	E69	Marri, split stem twists, height 5m, diameter less than 50cm	No nest hollows, no known habitat unlikely
70	E70	Marri, broken stem, 10 high, one stem over road, no canopy	No nest hollows, no known habitat unlikely
71	E71	Marri, straight, no canker, 15m Stem 50cm diameter	No nest hollows, no known habitat unlikely
72	E72	Dead tree, can't ID no bark, 4m high no habitat	No nest hollows, no known habitat unlikely
73	E73	Jarrah, split stem, 8m diameter less than 50cm	No nest hollows, no known habitat unlikely
74	E74	Jarrah, 4m high very small no habitat	No nest hollows, no known habitat unlikely
75	E75	Marri, 8m high, 30cm diameter stem, no canopy, straight	No nest hollows, no known habitat unlikely
76	E76	Marri, 9m high, 30cm diameter, straight, bigger canopy but no habitat	No nest hollows, no known habitat unlikely
77	E77	Marri, 8m high, 30cm diameter stem, no canopy, straight	No nest hollows, no known habitat unlikely
78	E78	Marri, split half way, some canker, 10m high, 40cm diameter	No nest hollows, no known habitat unlikely
79	E79t	Marri, 6m, 45cm diameter, some canker, small height	No nest hollows, no known habitat unlikely
80	E80	NO photo. Marri 8m high, canopy broken, 30cm diameter, burnt	No nest hollows, no known habitat unlikely
81	E81	Dead tree no habitat	No nest hollows, no known habitat unlikely
82	E82	Marri, 12m high, split stem, nice canopy, 55cm diameter	No nest hollows, no known habitat unlikely
83	E83	Jarrah, 8m high, split stem, diameter less than 50cm	No nest hollows, no known habitat unlikely
84	E84	Jarrah, 7m very thin , no canopy	No nest hollows, no known habitat unlikely
85	E85	Marri, 12m intact canopy, 40cm diameter, some canker	No nest hollows, no known habitat unlikely
86	E86	Marri, 9m high, straight stem, 35cm diameter, some canker	No nest hollows, no known habitat unlikely
87	E87	Marri, large, 16m diameter over 1m	No nest hollows, no known habitat unlikely
88	E88	Marri, large, 18m diameter over 2m	No nest hollows, no known habitat unlikely
89	E89	Marri, just dead, 3m high, no habitat	No nest hollows, no known habitat unlikely
90	E90	Cluster of small Jarrah stems approx 8 trees, height 7m with 15cm diameter	No nest hollows, no known habitat unlikely
91	E91	Cluster of 4 small marri stems height 4m stem 10cm	No nest hollows, no known habitat unlikely
92	E92	Marri, Leaning across road, height 7m, stem 45cm burnt bottom	No nest hollows, no known habitat unlikely
93	E93	Marri, 12m high, stem 50cm diameter, no canker	No nest hollows, no known habitat unlikely
94	94	Marri, small 7m -this tree cluster is back near tree 37 on west side of road	No nest hollows, no known habitat unlikely
95	95	Marri 12 m diameter 45cm no habitat, west side of road	No nest hollows, no known habitat unlikely

96	96	Marri , small 6m, ewst side of road	No nest hollows, no known habitat unlikely	
97	97	Marri, 13m , diameter 50cm no nest holows, stem burnt some canker, west side of road	No nest hollows, no known habitat unlikely	
98	98	Marri, 14m , diameter 50cm no nest hollows, stem burnt some canker, west side of road	No nest hollows, no known habitat unlikely	
99	99	Marri, 9m diameter 35cm, west side of road	No nest hollows, no known habitat unlikely	
100	100	Marri, split stem, diameter over 50cm 91.3m)15m high, west side of road	No nest hollows, no known habitat unlikely	
101	101	Marri 10m , diameter less than 50cm , west side of road	No nest hollows, no known habitat unlikely	
102	102	Marri, 13m diameter 45cm, west side of road	No nest hollows, no known habitat unlikely	

Crooked Brook Road Project

