



Australian Black Cockatoo Specialists

Survey of thirty-four (34) nominated trees in the proposed Anketell Road Upgrade for their nesting value for black cockatoos.



Main Roads
Western Australia

October 2024

1 INTRODUCTION

As one of Australia's leading Black Cockatoo specialists (ABCS), I am pleased to submit this report to the Department of Main Roads Western Australia (MRWA) regarding the assessment of thirty-four (34) trees for their suitability as Black Cockatoo nesting hollows. This survey is part of the Anketell Road widening and upgrade project, located in the Shire of Anketell.

MRWA required an experienced consultant to:

- Assess the nesting value of black cockatoo species in the trees listed in the Biota consolidated report for the Anketell Road Upgrade (Categories 1-6, 34 trees), and perform a cursory assessment of Category 7 trees (547 trees) in the proposed project area.
- Conduct a close visual inspection using drones, pole cameras, telephoto lenses, and ladders for Category 1-6 trees.
- Produce a report detailing the suitability of these trees for Black Cockatoo nesting, for publication on the Main Roads website and submission to regulatory agencies.

2 BACKGROUND

MRWA is planning to upgrade and widen Anketell Road as part of the outer harbour transport corridor project. The road planning involves assessing the habitat value of trees along the route, particularly for the Black Cockatoo species.

Biota conducted preliminary biological surveys throughout 2023, which identified a total of 608 trees with suitable Diameter at Breast Height (DBH) that could potentially serve as Black Cockatoo nesting trees. Their findings included:

- **1 tree** classified as Category 2 (with a potentially suitable hollow showing signs of use, though not confirmed).
- **10 trees** classified as Category 3 (with suitable hollows but no signs of use).
- **4 trees** in Category 4 (with marginally unsuitable hollows).
- **3 trees** in Category 5 (with potential hollows but not fully confirmed due to access restrictions).
- **16 trees** in Category 6 (with hollows confirmed as unsuitable for Black Cockatoos).
- **574 trees** in Category 7 (suitable DBH, but no present hollows).

The goal of this survey was to closely assess these trees, particularly those in Categories 1-6.

3 SURVEY OF NOMINATED HOLLOWES

Between 14 and 15 October 2024, ABCS conducted a thorough assessment of thirty-four (34) nominated trees by:

- Performing close visual inspections using a high-resolution 14m camera pole and telephoto lens.
- Capturing high-resolution photographs of each hollow's nesting activity and condition.
- Analysing the photos to assess each hollow's suitability for nesting.
- Recording details of any current usage by both target and non-target species.

All trees except two (#406 and #267) were successfully located using GPS coordinates, and their positions were verified against the MRWA Black Cockatoo Fauna Habitat Tree Register. The trees were located within 1-3 meters of the provided coordinates. ABCS was not granted access to survey Trees# 187, 188 and 270, therefore we are unable to confirm if any hollows in these trees are suitable for Black cockatoos.

For each tree, a minimum of three high-quality photographs were taken: one showing the tree's profile, one for each hollow entry, and one of the hollow's interior. These photographs are available upon request.

The survey confirmed that seven (7) trees (#186, #269, #275, #281, #459, #460, and #ALO2) contained hollows suitable for Black Cockatoo nesting. However, no signs of recent Black Cockatoo breeding were observed in any of the suitable hollows.

See Annexes B, C, and D for detailed analysis and high-resolution photographs of all surveyed trees and hollows. This includes tree profiles, hollow entries, and contents, along with annotations on each hollow's suitability and potential use.

4 ADDITIONAL FINDINGS

Tree #ALO2: This tree, which was not included in the original thirty-four, contained a suitable hollow for black cockatoos with cockatoo chipping, likely from Corella or Galah species.

Tree #281: A hollow in this tree contained four Little Corella nestlings, 5-6 weeks old. This hollow is suitable for black cockatoos

Forest Red-tailed Black Cockatoos: Four individuals were observed approximately 30 meters south of Anketell Road. A female was flushed from a shallow, burnt hollow in **Tree #AL01**, which was deemed unsuitable for black cockatoo breeding. The female's behaviour suggests prospecting, a common occurrence even in unsuitably shallow hollows.


Tree #551: A brush-tailed possum was photographed inside a hollow, which was found to be too narrow for Black Cockatoo use.

Duck Eggs: Eggs and down were found in the hollows of **Trees #186, #269, and #459**, indicating that these hollows are of suitable size for Black Cockatoo breeding.

Southern Brown Bandicoot (Quenda): One was observed on the pathway near Tree#155.

5 RECOMMENDATIONS

- Several large, old trees, particularly **Tree #273** with a DBH of 1920mm, are of significant ecological value and should be preserved if possible. These trees provide important potential habitat for Black Cockatoos and other wildlife, and their preservation would be beneficial for maintaining biodiversity in the area.
- If clearing occurs during the breeding season, all suitable hollows should be inspected on the day of clearing to ensure that they are not in use by Black Cockatoos.
- Spotters should be present during any clearing activities, particularly in the western end of the project area where Southern Brown Bandicoots were observed. These spotters should be tasked with monitoring wildlife and assisting with relocation if necessary.



Rick Dawson
Director
Australian Black Cockatoo Specialist

25 October 2024

Attachments

Annex A.	Details of Tree Survey
Annex B	Detailed analysis and high-resolution photographs from Tree#187 to Tree #267
Annex C	Detailed analysis and high-resolution photographs from Tree#282 to Tree #596
Annex D	Detailed analysis and high-resolution photographs from Tree#573 to Tree #ALO2

Annex A – Details of Tree Survey

No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
187	Jarrah	1150	-32.210643	115.856322	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	Unknown	Unable to get access to land. Drone photos not conclusive. Galah's prospecting in the upper and middle hollows. Bees in lower hollow.
270	Jarrah	710	-32.21043	115.856153	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	Unknown	Unable to get access to land. Unable to get Drone close enough.
263	Jarrah	1390	-32.209988	115.848366	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 71. Orientation unsuitable.	NO	No suitable black cockatoo hollows. Burnt
186	Jarrah	610	-32.208148	115.845029	3	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Fragile dead stag. Top hollows too small, Middle hollow duck eggs, suitable size for black cockatoos , lower hollow some duck down however too shallow. No sign of black cockatoo use.
599	Tuart	1750	-32.212449	115.829895	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 272. Not suitable for egress.	NO	No suitable black cockatoo hollows. Upper hollows bees, lower hollow too small. Quenda
275	Euc	1270	-32.21249	115.829911	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Dead stag, one hollow that joins other, one suitable size for black cockatoos
462	Tuart	860	-32.210829	115.829696	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	NO	No suitable black cockatoo hollows. Side split in main hollow. Bees in lower hollow
584	Tuart	1290	-32.211533	115.824859	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt base of tree

273	Tuart	1920	- 32.211414	115.822851	1	2 Suitable DBH Tree with a potential suitable hollow with signs of use (not confirmed). Suitable nesting tree. Feathers presence but of unknown species.	NO	It is burnt, they do not use. It is open and provides no protection .No chewing observed. The hollow at the base is very small – see comparison to Owl scat size. Barn Owl flushed when camera pole used. NO SUITABLE BLACK COCKATOO HOLLOW.
406	Tuart	620	-32.21132	115.822839	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree.	Unknown	Can not locate tree from Lat/Long provided
261	Jarrah	1310	- 32.211365	115.822598	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. SEE GOPRO
267	Jarrah	1640	- 32.211315	115.81893	0	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree.	Unknown	Can not locate tree from Lat/Long provided
282	Jarrah	1300	- 32.211317	115.81861	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt out base
185	Jarrah	690	- 32.211404	115.818494	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt dead stag
460	Jarrah	1210	- 32.211357	115.81604	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Middle hollow suitable size black cockatoo hollow , suspect all join together.
459	Tuart	1230	- 32.211406	115.813232	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Upper hollow Suitable for black cockatoos, small amount of duck down.
281	Tuart	1160	- 32.211232	115.81277	2	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Little Corella flushed from upper hollow. Brooding four nestlings, Suitable black cockatoo hollow
183	Tuart	970	- 32.211409	115.812522	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Both hollow small with uneven floors and open to the floor
184	Tuart	1420	- 32.210965	115.808299	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Hollow full of wood shards

461	Tuart	1280	- 32.211066	115.807828	2	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Second hollow suitable. Hollow could not be assessed - bees. Checked with camera.	NO	No suitable black cockatoo hollows. Both hollows unsuitable, too small, shallow and open the elements. Bees in lower hollow.
269	Euc	960	-32.21116	115.806322	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Duck eggs and down. One suitable black cockatoo hollow.
222	Jarrah	830	- 32.210662	115.80611	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree.	NO	No suitable black cockatoo hollows.
188	Jarrah	710	- 32.210111	115.806566	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	Unlikely	No access to area. From the size (DBH of 710) of the tree and hollow entries(burnt) viewed by 500m lens camera it is unlikely to have suitable black cockatoo hollows.
596	Tuart	1450	- 32.208764	115.798986	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 184. Too small for entry.	NO	No suitable black cockatoo hollows. All hollows very small
573	Tuart	1150	- 32.207868	115.796791	3	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree. Tree ID 191. One of three hollows looked suitable.	NO	Largest hollow suitable diameter, however, sides splitting open and unsuitable for suitable black cockatoo hollows. Upper hollow large entry with chewing however very shallow and unsuitable.
574	Tuart	1150	- 32.208589	115.796259	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 190. Too small for entry.	NO	No suitable black cockatoo hollows all too small.
551	Tuart	940	- 32.207979	115.795018	1	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree. Tree ID 186	NO	No suitable black cockatoo hollows. All hollows very small. Possum hollow is small and narrow at base and unsuitable for black cockatoos Bees in lower hollow.
285	Euc	1210	- 32.208484	115.794699	3	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 179. Stag	NO	Very large dead stag. . No suitable black cockatoo hollows Largest hollow on northside is the right size diameter however very shallow and not suitable. All other hollows very small, shallow and uneven floor.

265	Jarrah	1480	- 32.208285	115.790682	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 161. Confirmed with camera.	NO	Large dead stag. No suitable black cockatoo hollows. All hollow small, shallow and burnt out.
155	Jarrah	600	- 32.207811	115.790166	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 160. Confirmed with camera.	NO	Large dead stag. No suitable black cockatoo hollows. Quenda on path near tree.
223	Jarrah	830	-32.20767	115.788935	3	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 163. Confirmed with camera.	NO	No suitable black cockatoo hollows. Very small and shallow unsuitable hollow.
271	Jarrah	1030	- 32.207481	115.78863	3	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees. Tree ID 117.	NO	No suitable black cockatoo hollows. All hollows very small
238	Jarrah	930	-32.20833	115.788147	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 162. Confirmed with camera.	NO	On large entry hollow, however floor not even and unsuitable for black cockatoos.
29	Tuart	112	- 32.205161	115.783845	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Hollow is present but small, too small for black cockatoo use.	NO	No suitable black cockatoo hollows.
AL01	Jarrah	N/A	- 32.211872	115.825051	1	N/A	NO	Female Forest Redtail flushed from upper hollow, no signs of chipping, hollow uneven, hole inside and burnt, not a suitable hollow. Believe she was only prospecting.
AL02	Tuart	1001	- 32.211345	115.813448	1	N/A	YES	Chipping on entry most like Corella or Galah. One suitable black cockatoo hollow.

Annex B – Photographs of hollow in Nominated Trees

Tree # 187

Galah entered hollow, unable to determine if suitable.



Not suitable hollow with Bees



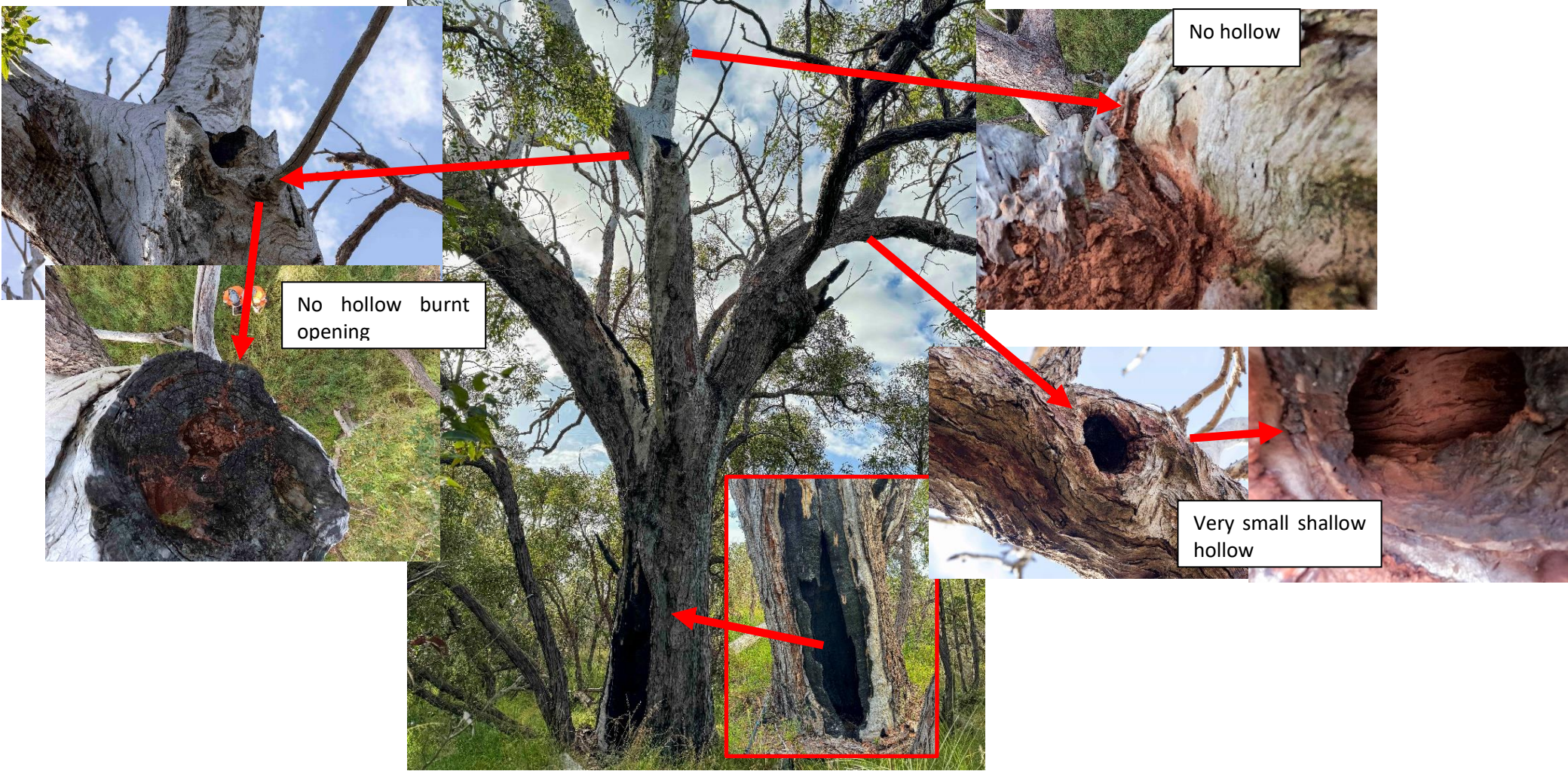
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
187	Jarrah	1150	32.21064	115.85632	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	Unknown	Unable to get access to land. Drone photos not conclusive. Galah's prospecting in the upper and middle hollows. Bees in lower hollow.

Tree # 270



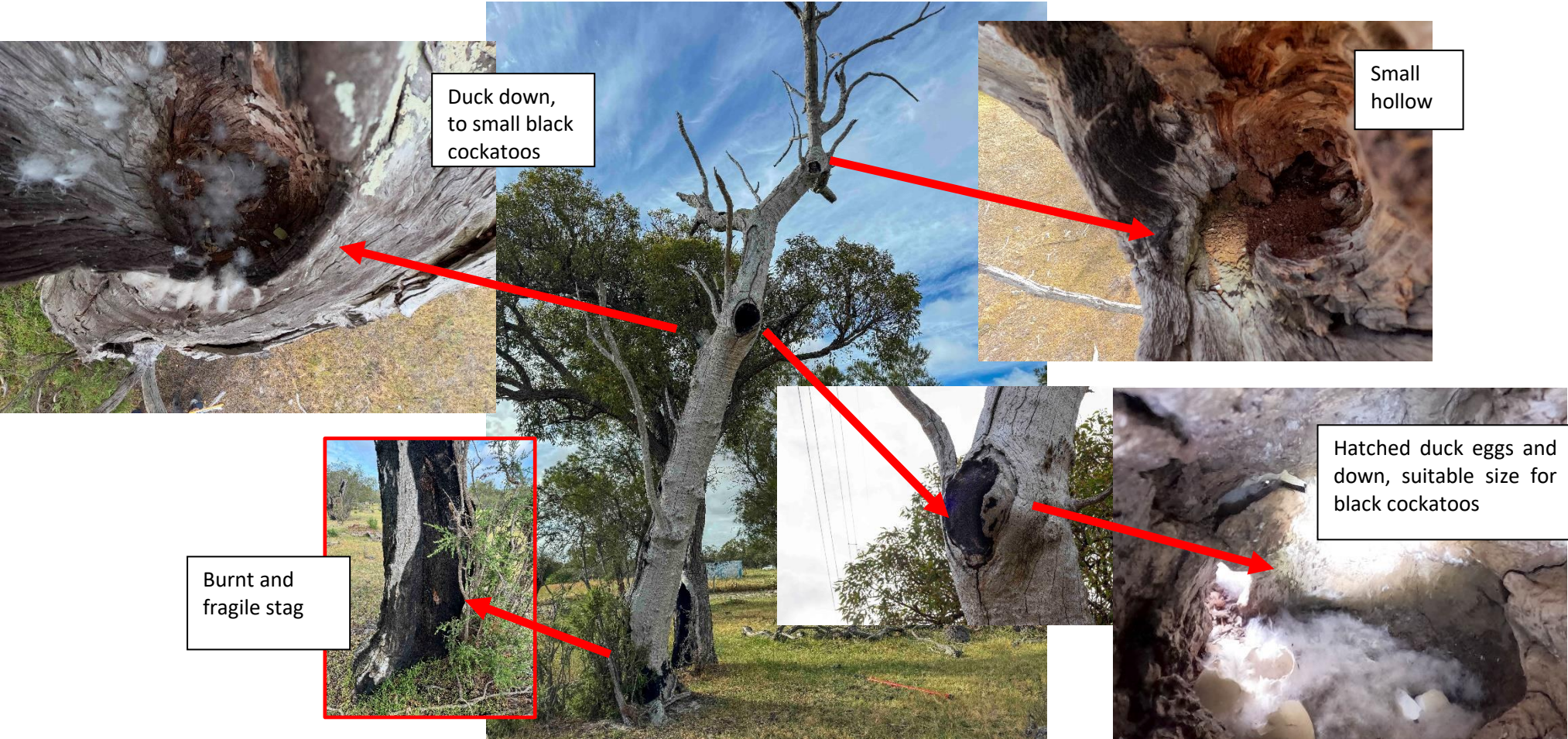
No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
270	Jarrah	710	32.21043	115.85615	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	Unknown	Unable to get access to land. Unable to get Drone close enough.

Tree # 263



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
263	Jarrah	1390	-	115.84837	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 71. Orientation unsuitable.	NO	No suitable black cockatoo hollows. Base of tree badly Burnt

Tree # 186



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
186	Jarrah	610	32.208148	115.845029	3	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Fragile dead stag. Top hollows to small, Middle hollow duck eggs, suitable size for black cockatoos , lower hollow some duck down however too shallow. No sign of black cockatoo use.

Tree # 599



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
599	Tuart	1750	32.212449	115.829895	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 272. Not suitable for egress.	NO	No suitable black cockatoo hollows. Upper very small hollows bees, lower hollow too small



TREE # 275



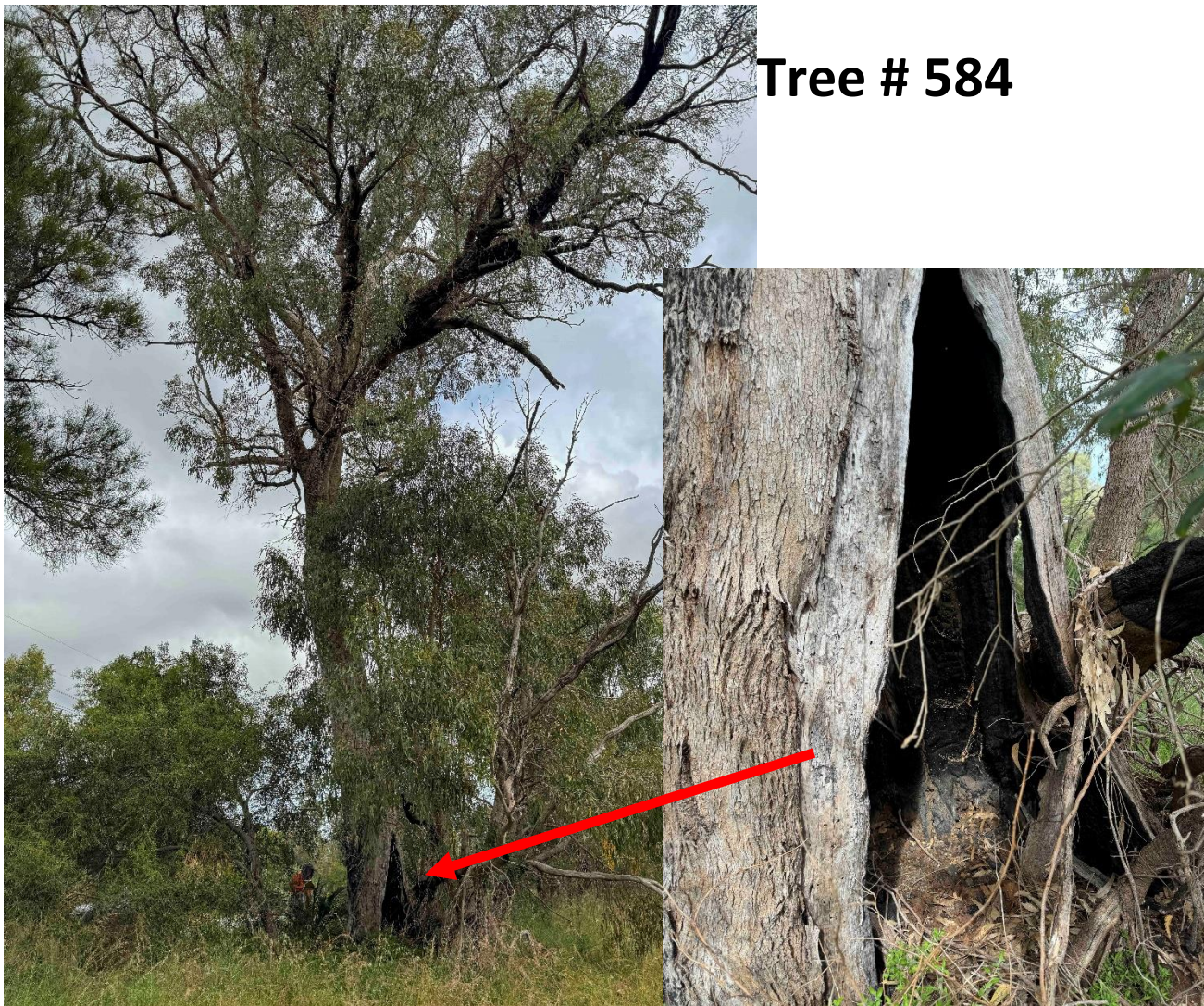
No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
275	Euc	1270	-32.21249	115.829911	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Dead stag, one hollow that joins other, one suitable size for black cockatoos

Tree # 462



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
462	Tuart	860	32.210829	115.829696	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	NO	No suitable black cockatoo hollows. Side split in main hollow. Bees in lower hollow

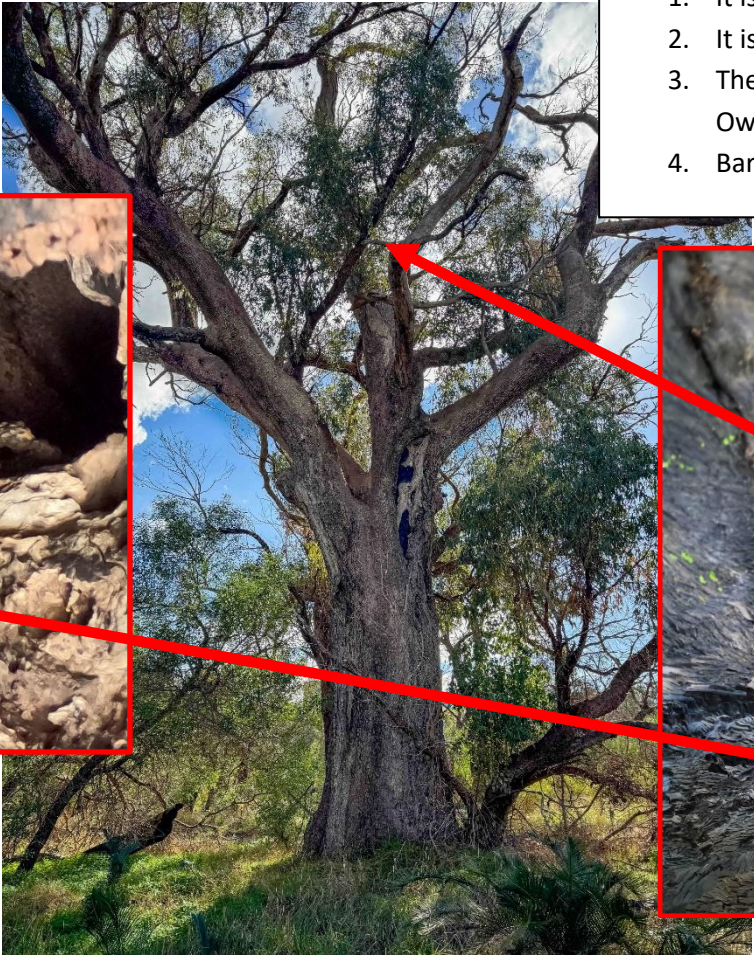
Tree # 584



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
584	Tuart	1290	- 32.211533	115.824859	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt base of tree

Tree # 273

- This is not a black Cockatoo hollow
- 1. It is burnt, they do not use.
 - 2. It is open and provides no protection
 - 3. The hollow at the base is very small – see comparison to Owl scat size
 - 4. Barn Owl flushed when camera pole used.



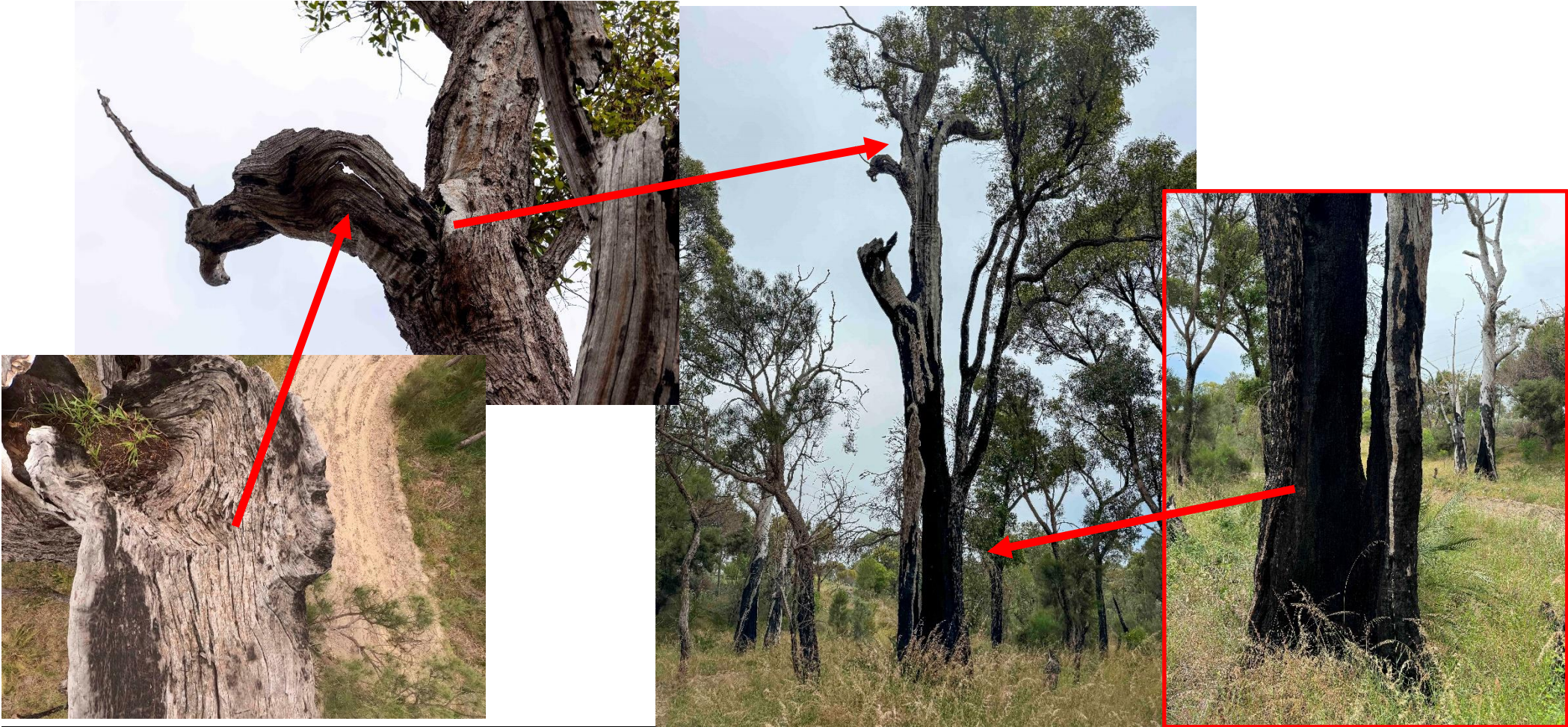
No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
273	Tuart	1920	32.211414	115.822851	1	2 Suitable DBH Tree with a potential suitably hollow with signs of use (not confirmed). Suitable nesting tree. Feathers presence but of unknown species.	NO	It is burnt, they do not use. It is open and provides no protection. The hollow at the base is very small – see comparison to Owl scat size. Barn Owl flushed when camera pole used. NO SUITABLE BLACK COCKATOO HOLLOWES.

Tree #406

Can not locate tree

No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
406	Tuart	620	-32.21132	115.822839	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree.	Unknown	Can not locate tree from Lat/Long provided

Tree # 261



No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
261	Jarra h	1310	32.211365	115.822598	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Tree badly burnt at base

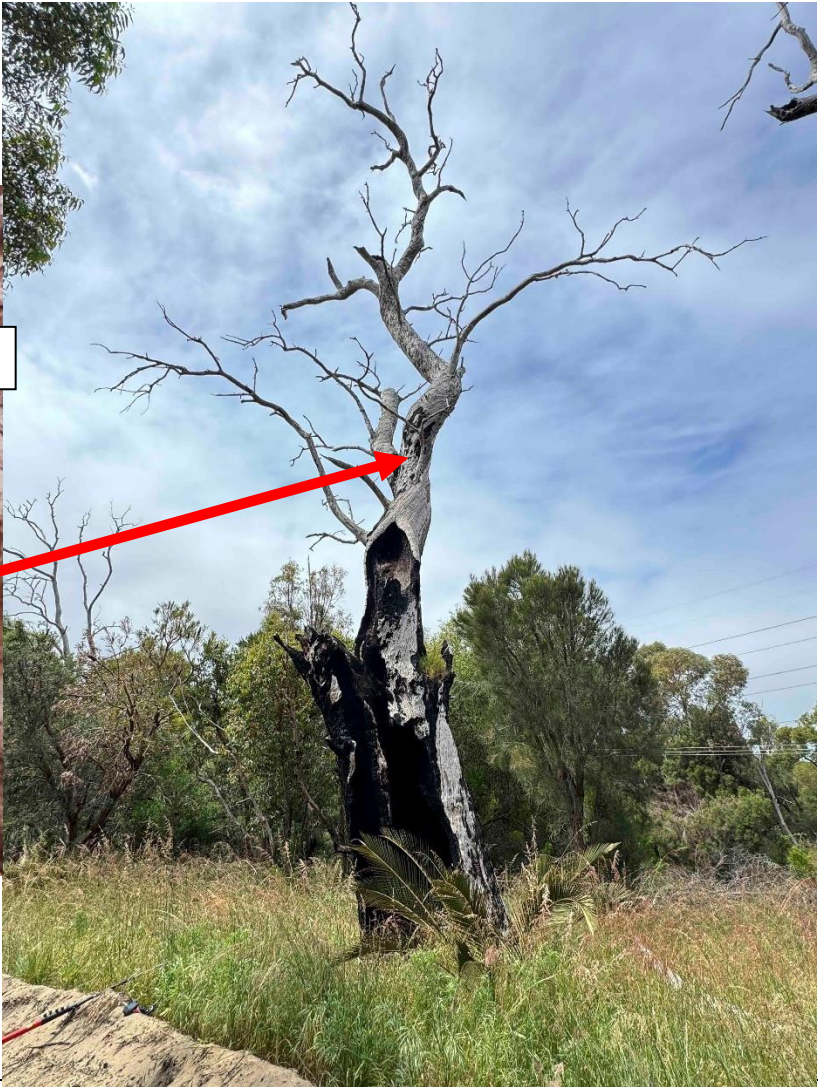
Tree # 267

Can not locate tree

No	Tree	DBH mm	Latitude	Longitude	Previously assessed Hollows	Previous Survey details	Suitable	ABCS Survey
267	Jarra	1640	-32.211315	115.81893	0	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree.	Unknown	Can not locate tree from Lat/Long provided

Annex C – Photographs of hollow in Nominated Trees

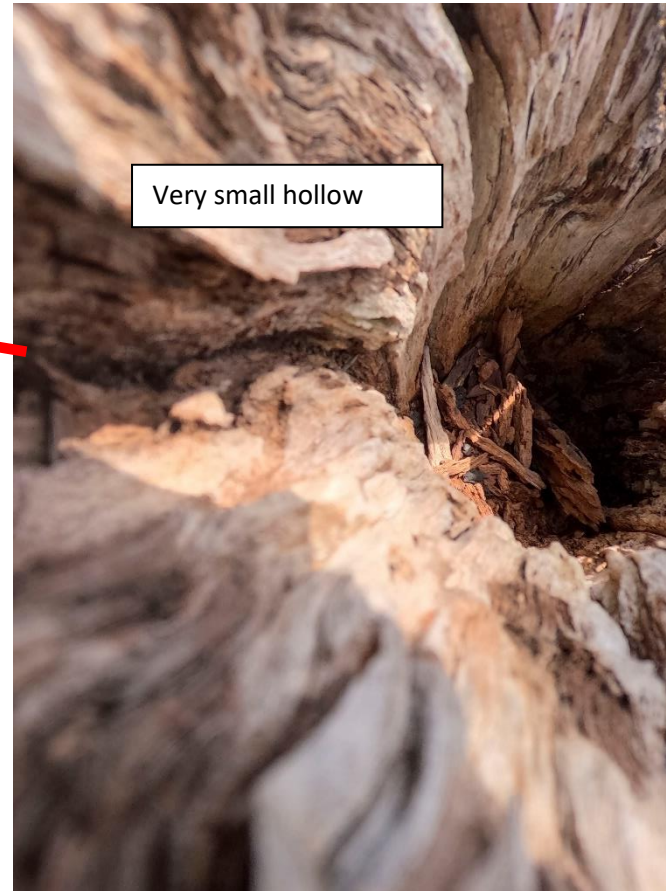
Tree # 282



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
282	Jarrah	1300	- 32.211317	115.81861	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt out base

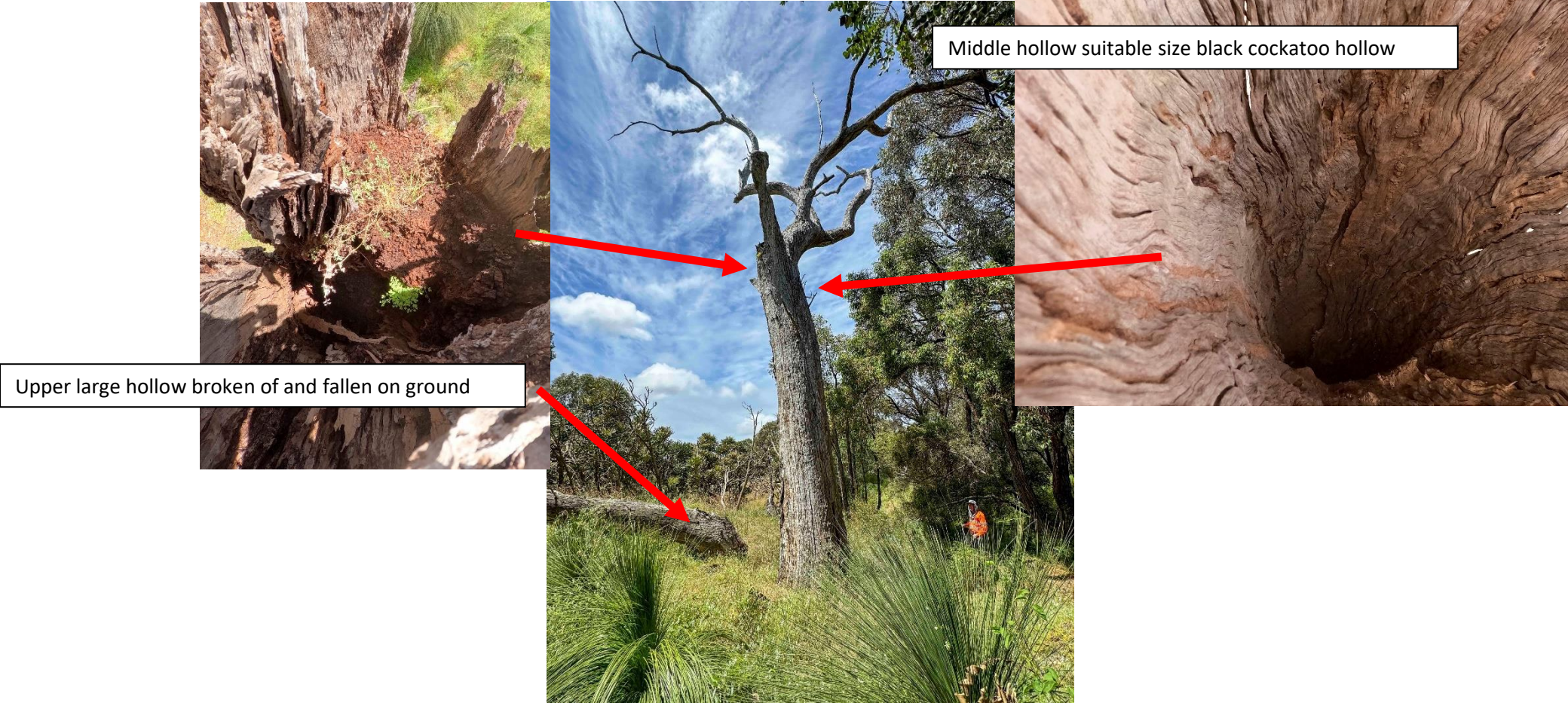


Tree # 185



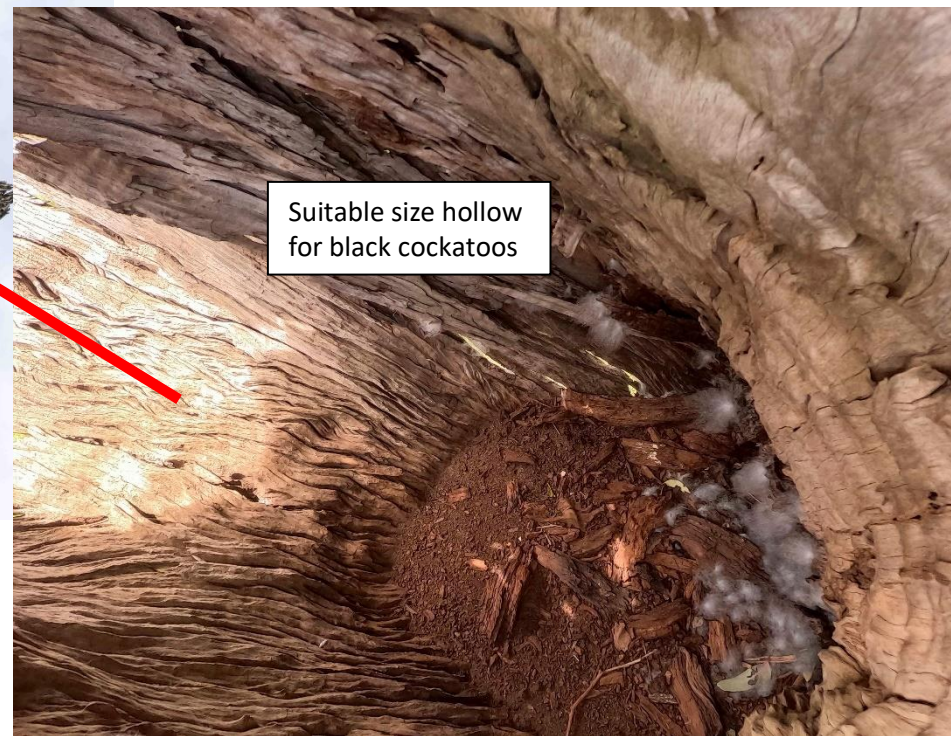
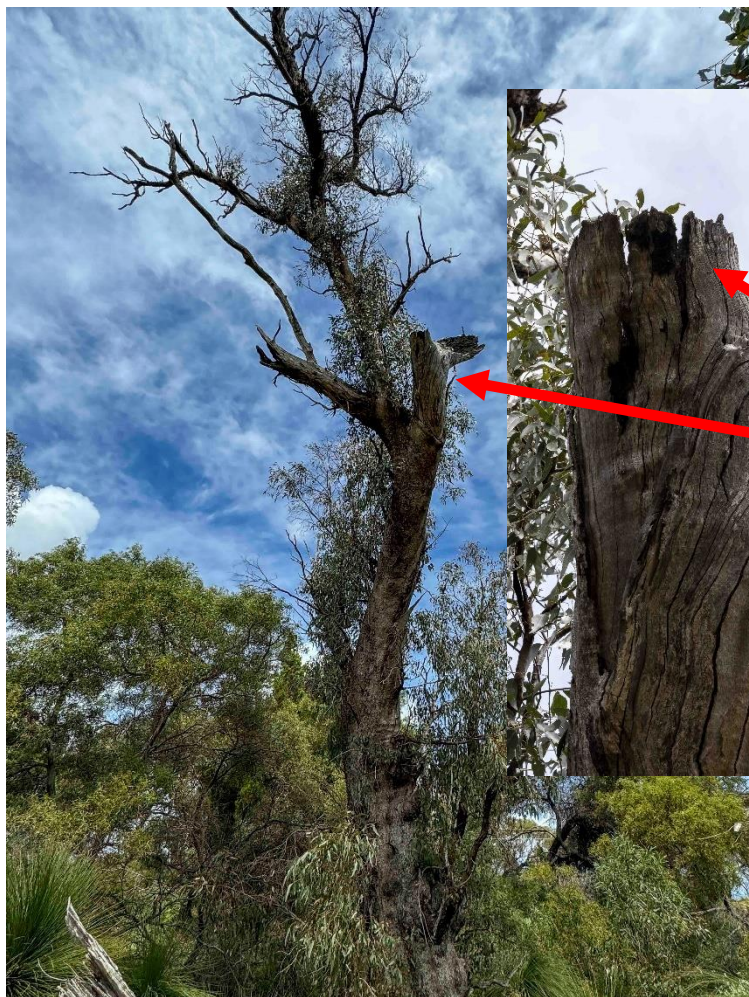
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
185	Jarrah	690	- 32.211404	115.818494	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Burnt dead stag

Tree # 460



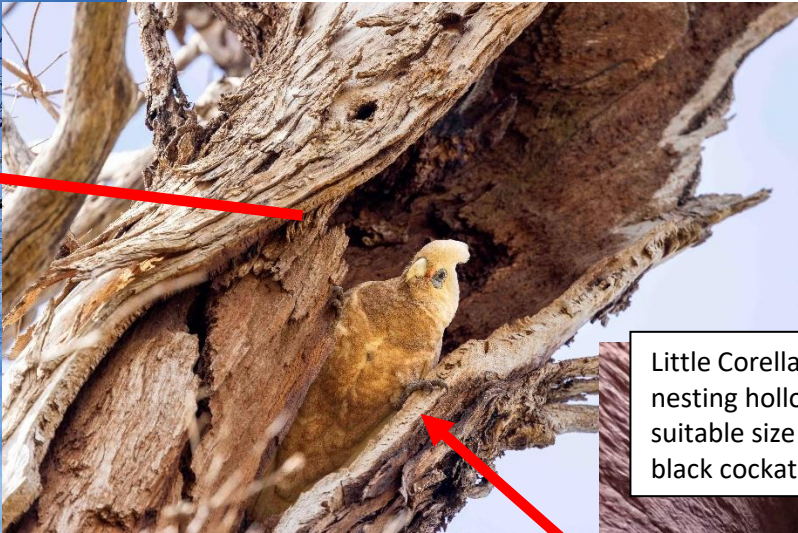
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
460	Jarrah	1210	32.211357	115.81604	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Middle hollow suitable size black cockatoo hollow, suspect all join together.

Tree # 459

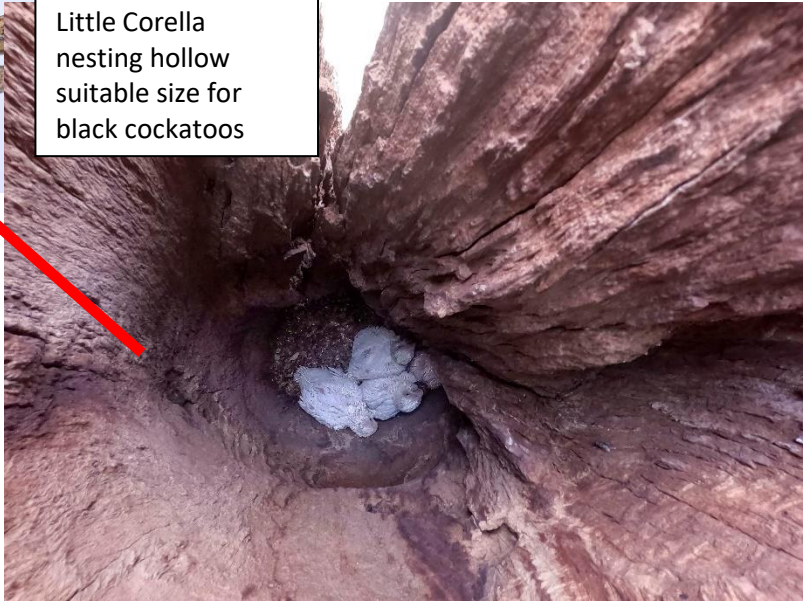


No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
459	Tuart	1230	32.211406	115.813232	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Upper hollow Suitable size for black cockatoos, small amount of duck down

Tree # 281

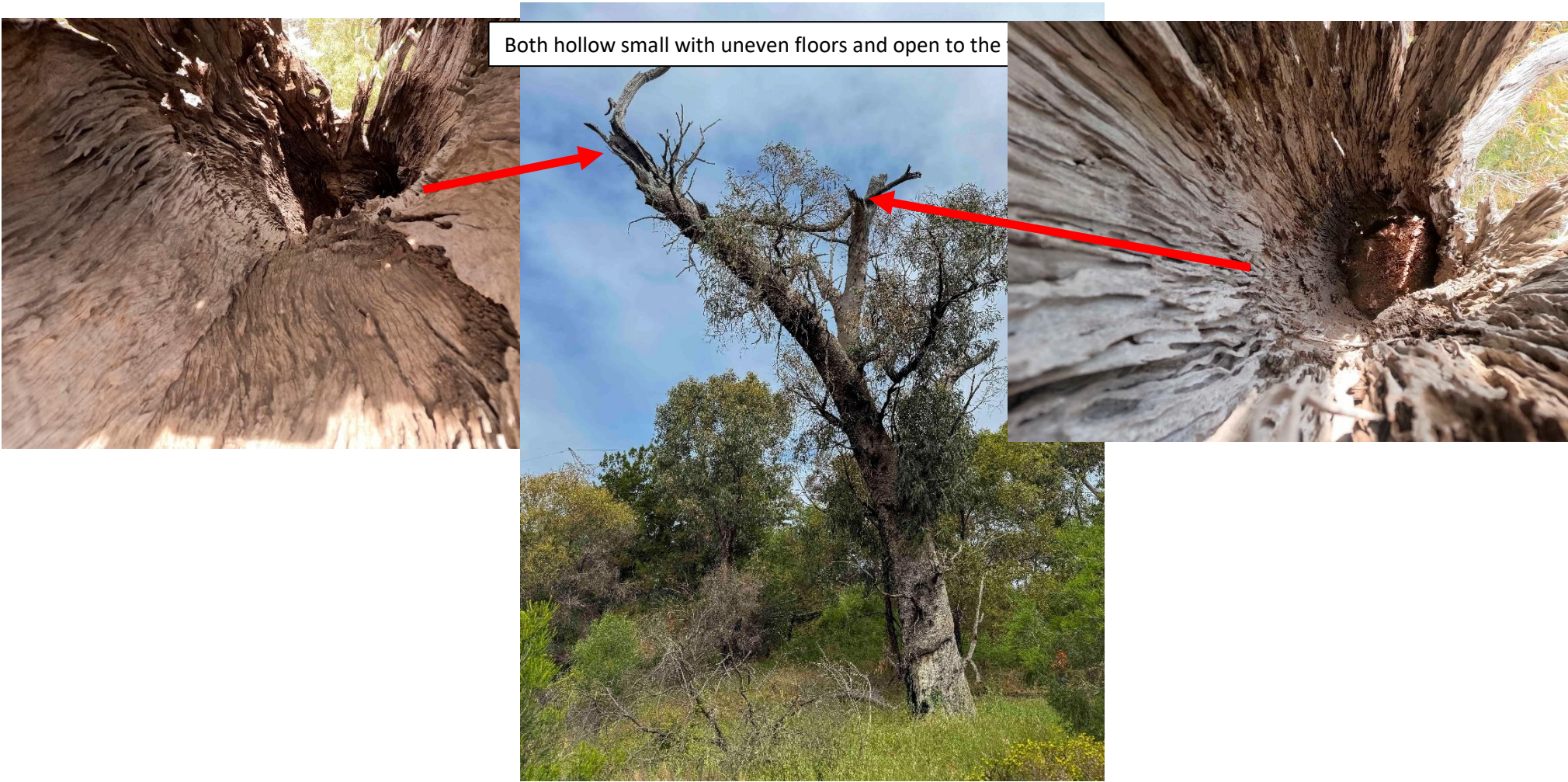


Little Corella
nesting hollow
suitable size for
black cockatoos



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
281	Tuart	1160	32.211232	115.81277	2	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	YES	Little Corella flushed from upper hollow. Brooding four nestlings, Suitable black cockatoo hollow

Tree # 183



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
183	Tuart	970	- 32.211409	115.812522	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Both hollow small with uneven floors and open to the floor

Tree # 184



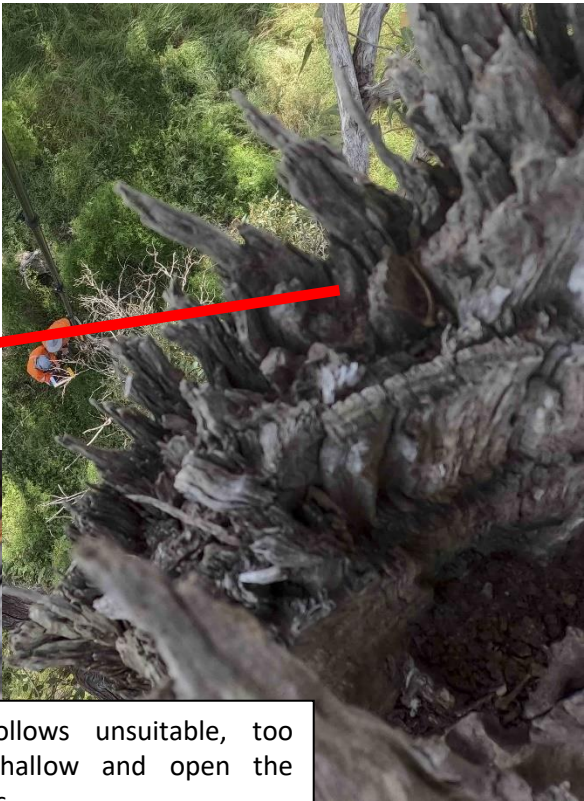
Fresh chipping by
Cockatoos



Not suitable full of
shards

No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
184	Tuart	1420	- 32.210965	115.808299	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Suitable nesting tree. Confirmed with camera.	NO	No suitable black cockatoo hollows. Hollow full of wood shards

Tree # 461



Both hollows unsuitable, too small, shallow and open the elements

No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
461	Tuart	1280	32.211066	115.807828	2	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Second hollow suitable. Hollow could not be assessed - bees. Checked with camera.	NO	No suitable black cockatoo hollows. Both hollows unsuitable, too small, shallow and open the elements. Bees in lower hollow.

Tree # 269



Small hollow,
uneven floor



Duck eggs, hollow of
a suitable size for
black cockatoos

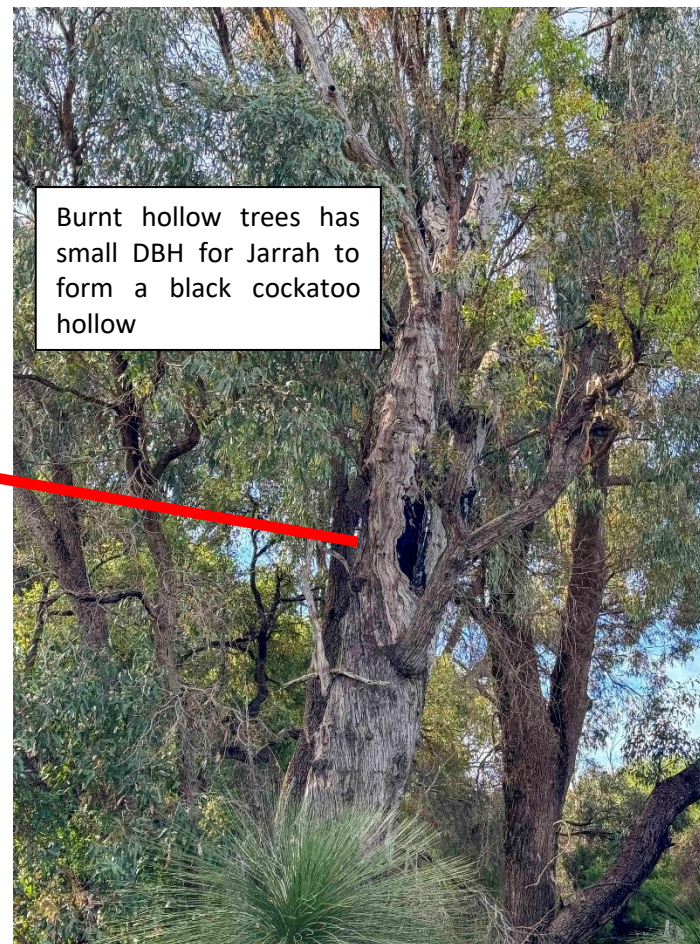
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
269	Euc	960	32.21116	115.806322	1	3 Suitable DBH Tree with a suitable hollow with no signs of use (confirmed). Suitable nesting tree. Confirmed with camera.	NO	Duck eggs and down. One suitable black cockatoo hollow only.

Tree # 222



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
222	Jarrah	830	32.210662	115.80611	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree.	NO	No suitable black cockatoo hollows.

Tree # 188



Burnt hollow trees has small DBH for Jarrah to form a black cockatoo hollow

No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
188	Jarrah	710	-	115.806566	1	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees.	Unlikely	No access to area. From the size (DBH of 710) of the tree and hollow entries(burnt) viewed by 500m lens camera it is unlikely to have suitable black cockatoo hollows.

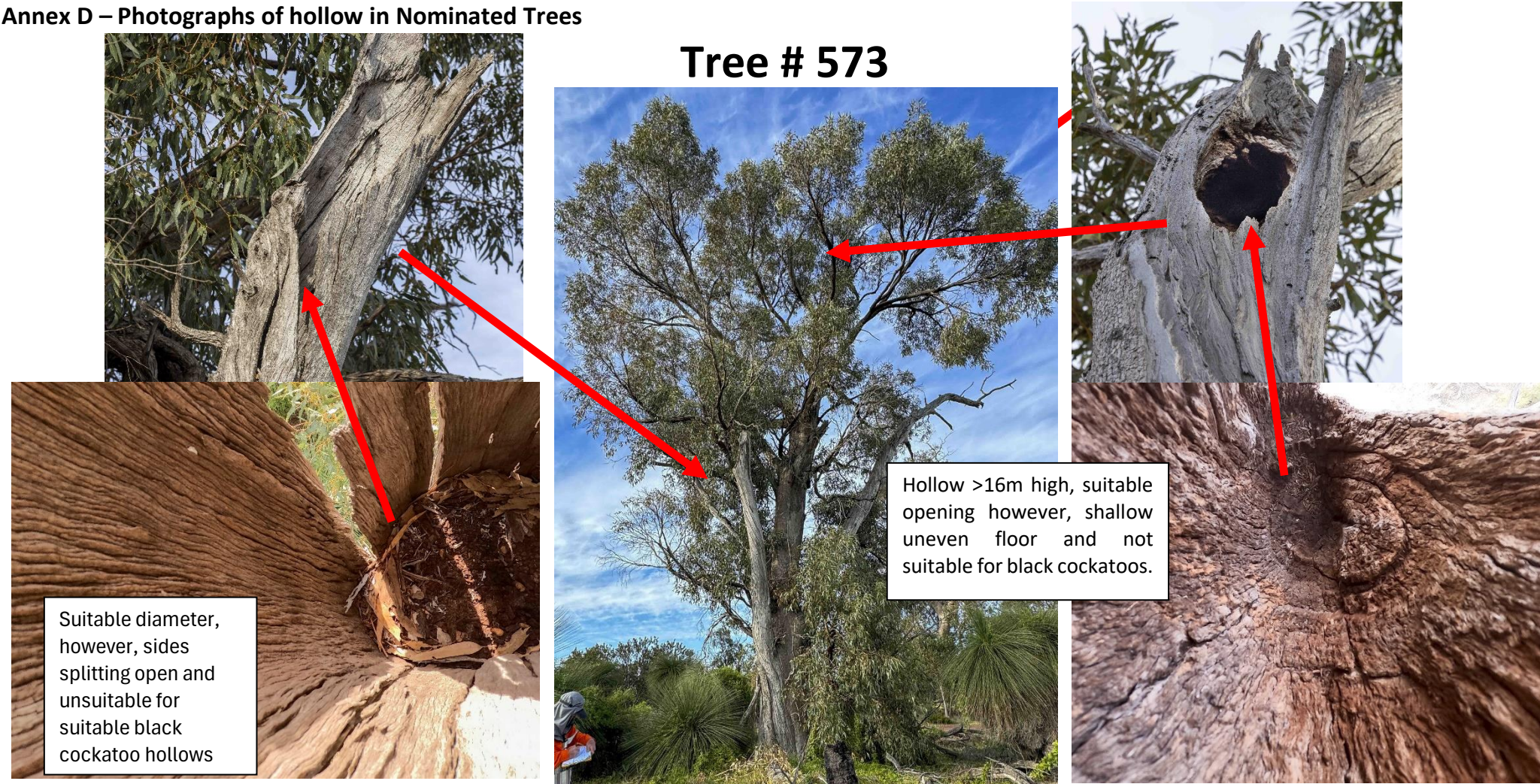
Tree # 596



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
596	Tuart	1450	32.208764	115.798986	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 184. Too small for entry.	NO	No suitable black cockatoo hollows. All hollows very small

Annex D – Photographs of hollow in Nominated Trees

Tree # 573



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
573	Tuart	1150	32.207868	115.796791	3	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree. Tree ID 191. One of three hollows looked suitable.	NO	Largest hollow suitable diameter, however, sides splitting open and unsuitable for suitable black cockatoo hollows. Upper hollow large entry with chewing however very shallow and unsuitable.

Tree # 574



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
574	Tuart	1150	- 32.208589	115.796259	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 190. Too small for entry.	NO	No suitable black cockatoo hollows all too small.

Tree # 551

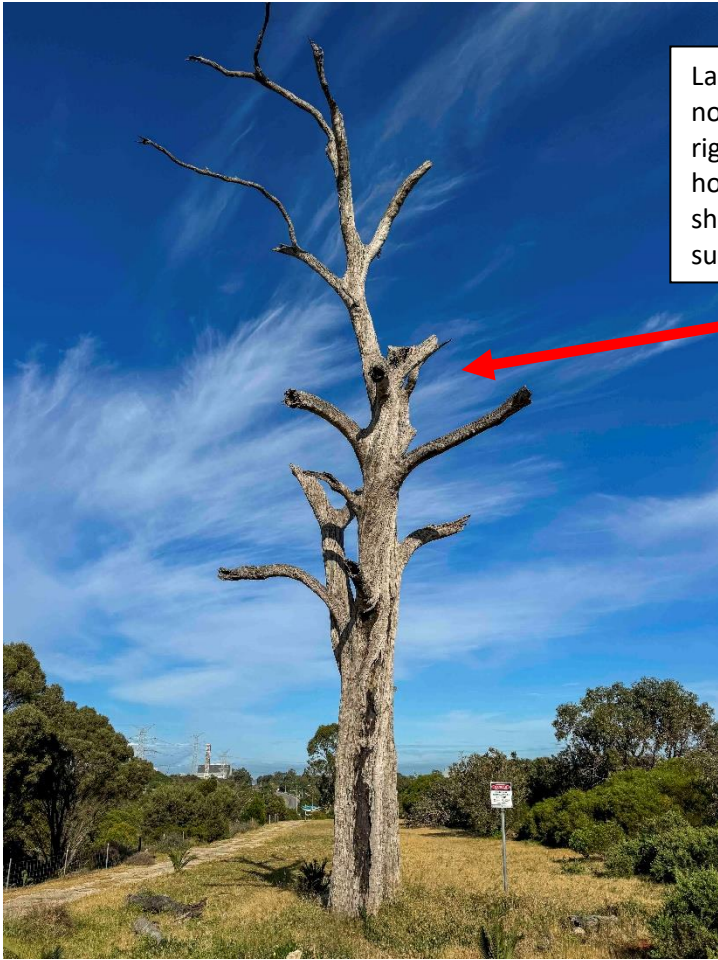


No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
551	Tuart	940	-	115.795018	1	5 Suitable DBH Tree with a potential suitable hollow with no signs of use (not confirmed). Potential nesting tree. Tree ID 186	NO	No suitable black cockatoo hollows. All hollows very small. Possum hollow is small and narrow at base and unsuitable for black cockatoos Bees in lower hollow.

Tree # 285



Small, shallow, unsuitable hollows



Largest hollow on northside is the right size diameter however very shallow and not suitable.

No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
285	Euc	1210	32.208484	115.794699	3	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 179. Stag	NO	Very large dead stag. No suitable black cockatoo hollows Largest hollow on northside is the right size diameter however very shallow and not suitable. All other hollows very small, shallow and uneven floor.

Tree # 265



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
265	Jarrah	1480	-	115.790682	2	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 161. Confirmed with camera.	NO	Large dead stag. No suitable black cockatoo hollows. All hollows small, shallow and burnt out.

Tree # 155



Very small
unsuitable hollow

No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
155	Jarrah	600	32.207811	115.790166	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 160. Confirmed with camera.	NO	Large dead stag. Very small unsuitable black cockatoo hollows. Quenda on path near tree.

Tree # 223



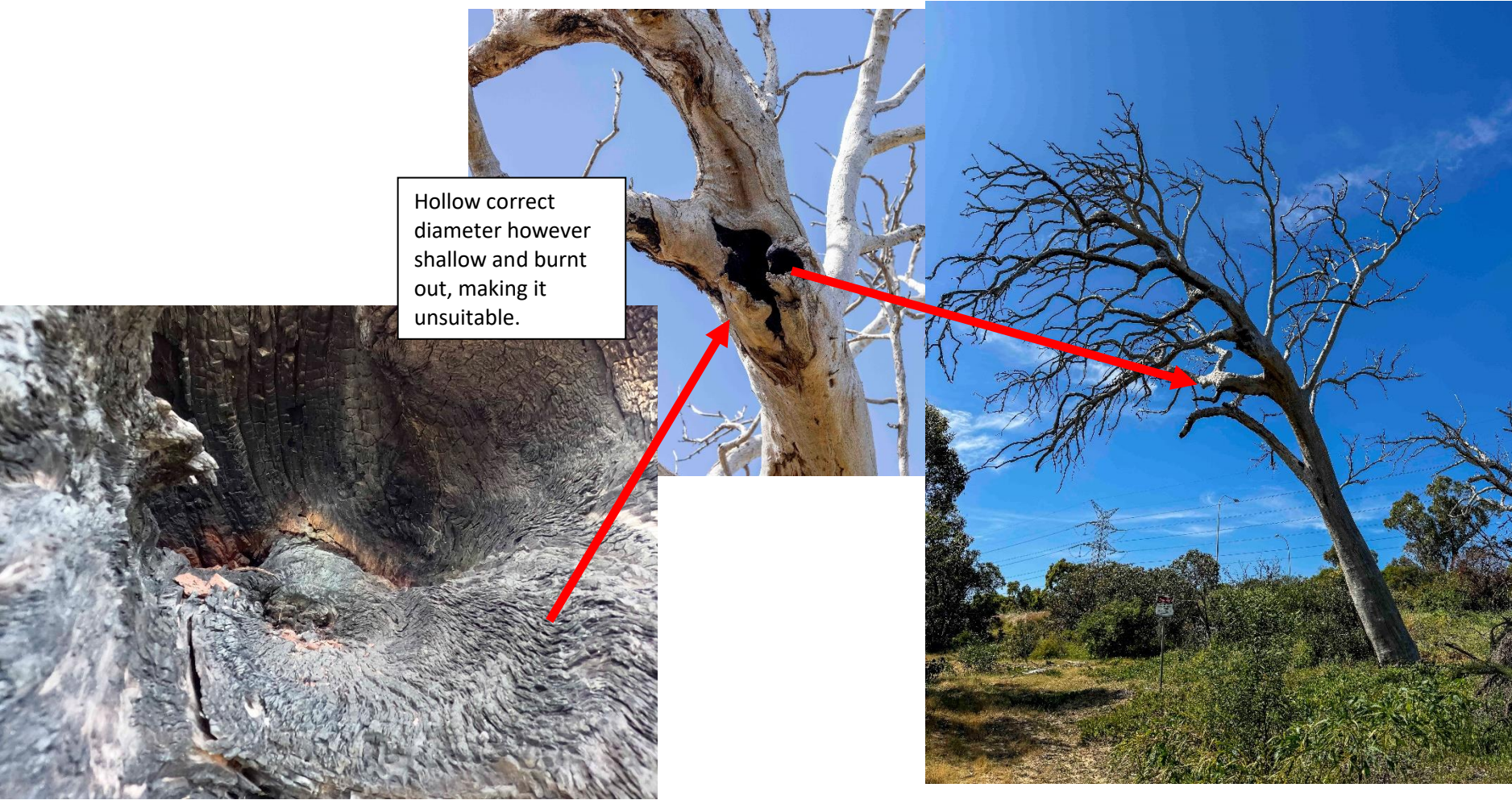
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
223	Jarra	830	32.20767	115.788935	3	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 163. Confirmed with camera.	NO	No suitable black cockatoo hollows. Very small and shallow unsuitable hollow.

Tree # 271



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey	
271	Jarrah	1030	-	32.207481	115.78863	3	4 Suitable DBH Tree with a marginally unsuitable hollow with no signs of use (confirmed) Hollows could not be assessed - bees. Tree ID 117.	NO	No suitable black cockatoo hollows. All hollows very small.

Tree # 238



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
238	Jarrah	930	32.20833	115.788147	1	6 Suitable DBH Tree with unsuitable hollows (confirmed). Potential nesting tree. Tree ID 162. Confirmed with camera.	NO	One large entry hollow, however floor not even, burnt and unsuitable for black cockatoos.

Tree # 29



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
29	Tuart	112	32.205161	115.783845	0	6 Suitable DBH Tree with unsuitable hollows (confirmed). Hollow is present but small, too small for black cockatoo use.	NO	No suitable black cockatoo hollows detected.

Tree # ALO1

Female Forest Redtail flushed from upper hollow, no signs of chipping, hollow uneven, hollow burnt, not a suitable hollow. Believe she was only prospecting.



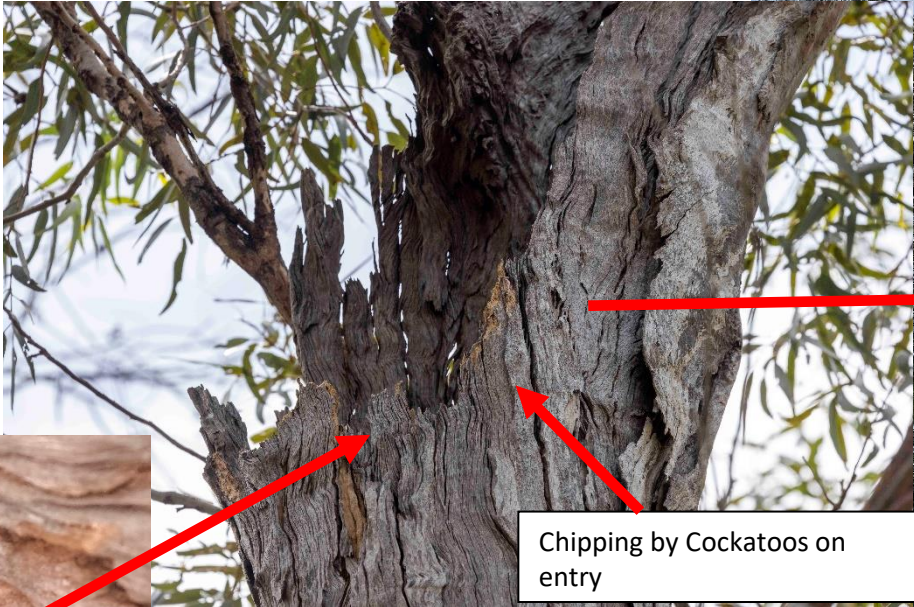
No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
AL01	Jarrah	N/A	32.211872	115.825051	1	New tree no information provided	NO	Female Forest Redtail flushed from upper hollow, no signs of chipping, hollow uneven, hollow burnt, not a suitable hollow. Believe she was only prospecting.

Tree # ALO2

Suti



Suitable size hollows for black cockatoos



Chipping by Cockatoos on entry



No	Tree	DBH mm	Latitude	Longitude	No Hollows	Previous Survey details	Suitable	ABCS Survey
AL02	Tuart	1001	32.211345	115.813448	1	N/A	YES	Chipping on entry most like Corella or Galah. One suitable black cockatoo hollow.