Our Ref: 3349AA_Rev1

24 January 2020

Jonathan Lampp
Farm Manager
Lawson Grains Pty Ltd
PO Box 248
Wongan Hills WA 6603
Via Email: stleonards@lawsongrains.com

Dear Jonathan

St Leonards Black Cockatoo Breeding Habitat Survey

1 Introduction

Lawson Grains Pty Ltd (Lawson Grains) commissioned 360 Environmental Pty Ltd (360 Environmental) to undertake a black cockatoo breeding habitat survey within Lots 3505 and 3641 on Deposited Plan 205677, Bindi Bindi (Figure 1). The survey was requested by the Department of Water and Environmental Regulation (DWER) in order to assess Lawson Grains' application for an Area Permit (CPS 8332/1) under section 51E(1) of the *Environmental Protection Act 1986* (EP Act). The permit application is for the proposed clearing of 345 pre-determined native trees within a 4 hectare (ha) to improve farming efficiency.

The scope of works consists of the following:

- Complete a field assessment of all black cockatoo breeding habitat trees (foraging habitat is not required according to DWER)
- Deliver a brief letter report outlining major findings
- Provide geospatial data (IBSA format) to be forwarded to DWER

2 Methods

The black cockatoo breeding habitat survey was undertaken 16 – 17 January 2020 and was conducted in accordance with the *EPBC Act referral guidelines for three threatened black cockatoo species* (Department of Sustainability Environment Water Population and

Communities, 2012) and the *Technical Guidance: Terrestrial Fauna Surveys* (Environmental Protection Authority, 2016).

The pre-determined native trees were measured and inspected. Native trees that met the following criteria were recorded as potential breeding trees:

- Diameter at breast height (DBH) greater than 500 mm (or 300 mm for Wandoo and Salmon Gum) regardless of the presence or absence of hollows, where breast height is approximately 1.3 m
- Observed to contain hollows, which were recorded and categorised as follows:
    - Hollows > 120 mm diameter – hollows estimated to have an opening diameter greater than 120 mm, and are therefore sufficiently sized for black cockatoos to enter (Saunders, Mawson and Dawson, 2014)
    - Hollows < 120 mm diameter – hollows estimated to have an opening diameter less than 120 mm and are therefore too small for black cockatoos to enter (Saunders, Mawson and Dawson, 2014)

Trees with swellings or forking/branching at breast height were measured just above or below breast height to ensure the most accurate representation of DBH. When trees had multiple trunks or branches at breast height, the largest trunk or branch was measured.

All hollow observations were made from ground level therefore internal characteristics of hollows, such as hollow depth, were not assessed. Hollows that were not suitable for black cockatoos (i.e. downwards facing hollows), if observed, were recorded and the characteristics that rendered them unsuitable were noted.

Data was recorded using the mobile data collection app Fulcrum.

3 Results

The black cockatoo breeding habitat survey identified that 112 of the 345 pre-determined native trees met the criteria for potential breeding trees. The potential breeding trees comprised 54 York Gums, 53 Salmon Gums, and five stags (dead trees). Of the 112 potential breeding trees, 44 were found to contain hollows with an estimated opening diameter > 120 mm and therefore have the potential to be used for breeding by black cockatoos. A further 32 trees were found to contain hollows with an estimated diameter < 120 mm and are therefore not suitable for breeding by black cockatoos in their current state.

Black cockatoo breeding habitat is shown in Figure 1 and the raw data collected during the survey is presented in Attachment 1.

No direct evidence of black cockatoo breeding was observed during the survey.

4 Discussion

The application area occurs within the modelled breeding range of the Carnaby's Cockatoo (*Calyptorhynchus latirostris*) (Department of Sustainability Environment Water Population and Communities, 2012; Department of the Environment and Energy, 2017). According to the Preliminary Assessment Report by the Department of Water and Environmental Regulation (2019), the application area is mapped within the buffer of a confirmed Carnaby's Cockatoo breeding site. The Department of Biodiversity, Conservation and Attractions (DBCA) uses 12 km buffers for Carnaby's confirmed breeding sites, therefore it is inferred that Carnaby's breeding has occurred within 12 km of the application area. No evidence of black cockatoo breeding was observed during the survey, however Carnaby's Cockatoos return to the same area to breed each year (Saunders, 1990), therefore an existing breeding site in close proximity to the application area increases the likelihood that Carnaby's Cockatoos may use breeding habitat within the application area in future. The disturbance of potential breeding trees may contribute to a limitation on the recovery of Carnaby's Cockatoos by both the removal of trees that are currently suitable for breeding and the removal of trees of a sufficient size to be potentially suitable for breeding in the future.

We trust this meets your requirements at this time. Should you have any questions or require further action please do not hesitate to contact Scott Walker or the undersigned on (08) 9388 8360. We look forward to hearing from you.

For and on behalf of 360 Environmental Pty Ltd

Evan Webb – Ecologist

Enc:
Figure 1: Survey Area and Black Cockatoo Breeding Habitat
Attachment 1: Raw Data

5 Limitations

This report is produced strictly in accordance with the scope of services set out in the contract or otherwise agreed in accordance with the contract. 360 Environmental makes no representations or warranties in relation to the nature and quality of soil and water other than the visual observation and analytical data in this report.

In the preparation of this report, 360 Environmental has relied upon documents, information, data and analyses ("client's information") provided by the client and other individuals and entities. In most cases where client's information has been relied upon, such reliance has been indicated in this report. Unless expressly set out in this report, 360 Environmental has not verified that the client's information is accurate, exhaustive or current and the validity and accuracy of any aspect of the report including, or based upon, any part of the client's information is contingent upon the accuracy, exhaustiveness and currency of the client's information. 360 Environmental shall not be liable to the client or any other person in connection with any invalid or inaccurate aspect of this report where that invalidity or inaccuracy arose because the client's information was not accurate, exhaustive and current or arose because of any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to 360 Environmental.

Aspects of this report, including the opinions, conclusions and recommendations it contains, are based on the results of the investigation, sampling and testing set out in the contract and otherwise in accordance with normal practices and standards. The investigation, sampling and testing are designed to produce results that represent a reasonable interpretation of the general conditions of the site that is the subject of this report. However, due to the characteristics of the site, including natural variations in site conditions, the results of the investigation, sampling and testing may not accurately represent the actual state of the whole site at all points.

It is important to recognise that site conditions, including the extent and concentration of contaminants, can change with time. This is particularly relevant if this report, including the data, opinions, conclusions and recommendations it contains, are to be used a considerable time after it was prepared. In these circumstances, further investigation of the site may be necessary.

6 References

Department of Sustainability Environment Water Population and Communities (2012) *EPBC Act Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo, Baudin's cockatoo and Forest red-tailed black cockatoo*. Canberra, Australia. Available at: www.environment.gov.au.

Department of the Environment and Energy (2017) *Draft revised referral guideline for three threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo, Forest Red-tailed Black Cockatoo*. Canberra, Australia.

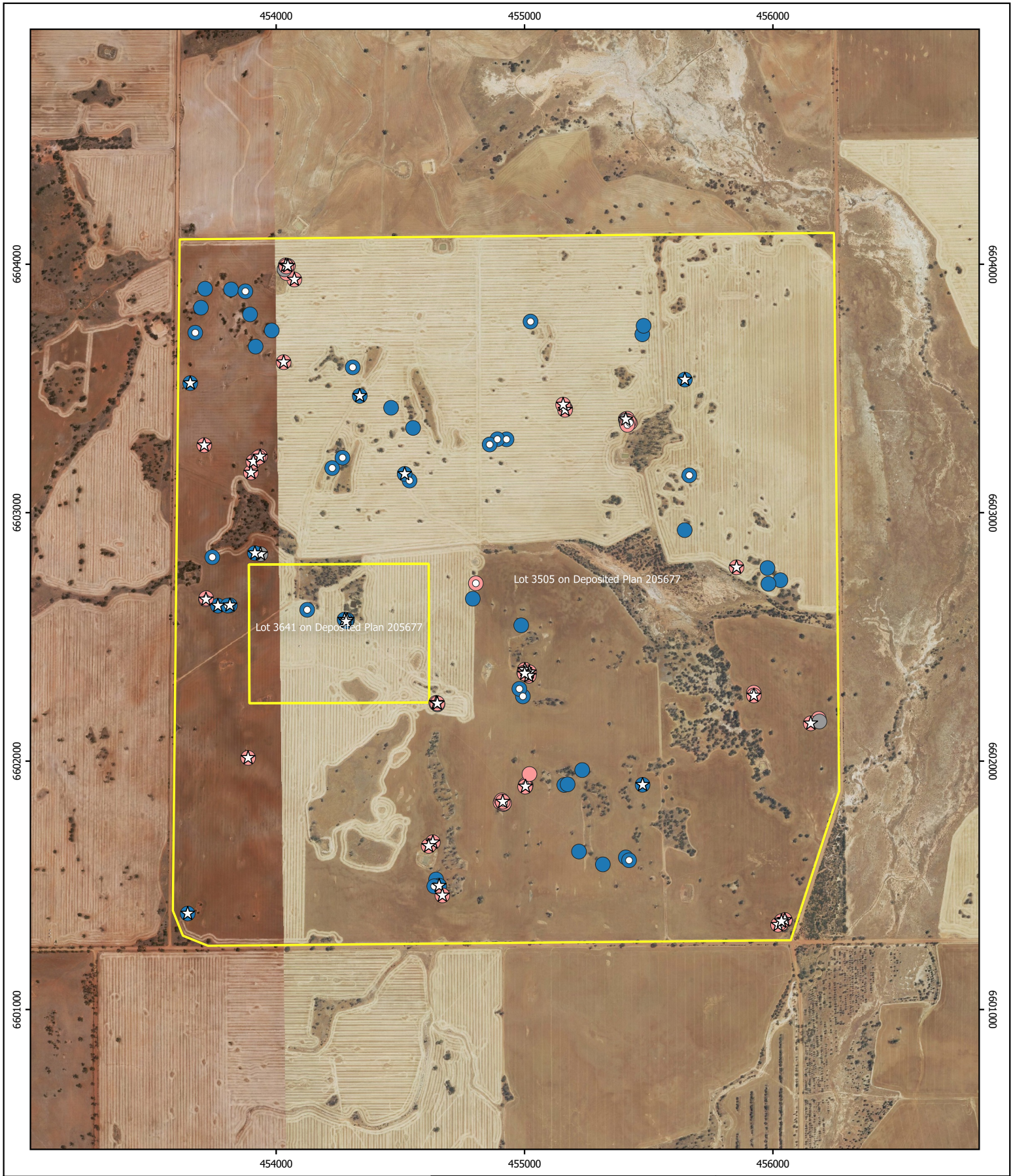
Department of Water and Environmental Regulation (2019) *CPS 8332/1 Area Permit Preliminary Assessment Report*. Perth, Australia.

Environmental Protection Authority (2016) *Technical Guidance: Terrestrial Fauna Surveys*. Perth, Australia. Available at: http://www.epa.wa.gov.au/policies-guidance/technical-guidance-terrestrial-fauna-surveys.

Saunders, D. A. (1990) 'Problems of Survival in an Extensively Cultivated Landscape: the Case of Carnaby's Cockatoo Calyptorhynchus funereus latirostris', *Biological Conservation*, 54(3), pp. 277–290. doi: 10.1016/0006-3207(90)90057-V.

Saunders, D. A., Mawson, P. R. and Dawson, R. (2014) 'Use of tree hollows by Carnaby's Cockatoo and the fate of large hollow-bearing trees at Coomallo Creek, Western Australia 1969-2013', *Biological Conservation*. doi: 10.1016/j.biocon.2014.07.002.

Figures



Legend

- Lot Boundaries
- Salmon Gum - Eucalyptus salmonophloia (DBH > 300 mm or containing hollows)
- York Gum - Eucalyptus loxophleba (DBH > 500 mm or containing hollows)
- Stag
- ☆ Tree contains hollow > 120 mm
- ○ Tree contains hollow < 120 mm

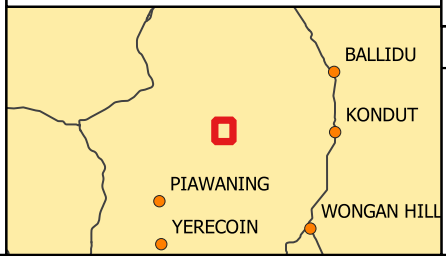
0 100 200 300 400 500 m

Scale 1:20000 @ A4

NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS

N

LOCALITY MAP



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PROJECT ID	DATE
3349	22-01-2020

HORIZONAL DATUM AND PROJECTION
GDA94 MGA Zone 50

CREATED	CHECKED	APPROVED	REVISION
EW	EW	EW	0

Lawson Grains Pty Ltd
St Leonards
Black Cockatoo Breeding Habitat Survey

Figure 1

Survey Area and Black Cockatoo Breeding Habitat

Attachments

Attachment 1
Raw Data

Latitude	Longitude	Taxa	DBH (mm)	Estimated height (m)	# of hollows	# of hollows >120mm	Comments	Tree photo ID	Hollow >120mm photo IDs
-30.71153927	116.53967299	Salmon gum (*Eucalyptus salmonophloia*)	1337	22	1			c8b9b326-211d-4320-aa3d-4bf8ecd48774	
-30.70246607	116.51661596	Salmon gum (*Eucalyptus salmonophloia*)	1210	22	10	3	One hollow occupied by Barn Owl	7c4e1422-417f-4a61-acd0-f4b3105a8086	41d3fbae-df68-4993-b75e-02c1be119f89 b54c3692-6c22-4f2f-883c-5e28532ffaca f69fb781-a9d7-4502-a922-41307f361cc0 86b16327-1b13-4252-ae28-f43d1f972140
-30.70288286	116.51896206	Salmon gum (*Eucalyptus salmonophloia*)	1050	22	3	2		615b9296-42eb-41b2-8b05-bcc15b19c10e	8b67deed-04f7-478b-bfdc-a2ccb1cc3ad7 ec26dcdb-fd86-4036-86fc-814bf5bb16d3
-30.71885199	116.52654592	Salmon gum (*Eucalyptus salmonophloia*)	955	22	10	6	More than 10 hollows, lots of Galahs	4833534d-52a6-4bb1-84f5-9c9a7bf92011	4c19f3be-69f2-4c36-b252-a5d1bd0c3d6b 4bdccffe-cbae-46d1-b696-cb09a239776c 31346ea3-2afb-42f1-9739-f98371ac87e7 ad454941-b93d-4f1c-b1a5-34602e05628d 72a77727-f1d3-43e5-90a3-8a70e28167f3 81cdf9a9-fdf9-41e8-8370-402a3efb
-30.71705168	116.52597796	Salmon gum (*Eucalyptus salmonophloia*)	923	21	6	3		05e73b75-1d21-436a-82f3-c9cabf3ed230	bf551d8b-0856-4315-8768-5966abd3139b a874ef5f-6d87-4df0-af71-1e4f752e518f ebd294a4-da52-4f95-bd81-f49017b4bef6
-30.69946387	116.51996881	Salmon gum (*Eucalyptus salmonophloia*)	923	22	4	4		bc0f993e-dbfe-4fe0-8031-0f25220a2c6e	6f674de8-ed43-4607-a211-acf77e1266fb d84c80d0-a5f9-4283-b56a-586b31473100 f71a337f-07bc-440d-a818-8949ef78110b 8fc4f169-d777-4d2c-9f68-cdfba020d783
-30.70104613	116.53170892	Salmon gum (*Eucalyptus salmonophloia*)	891	20	4	2		e3554ad9-b5c6-4a88-b47c-3c737e98e15d	acafe9f7-4c7c-4fa0-bde5-b3be46249185 e80576a9-23dc-48d0-b45d-5a0ad3988ff3
-30.70346612	116.51857406	Salmon gum (*Eucalyptus salmonophloia*)	875	20	7	3		bfae6a61-57cf-4480-9656-02dd59fd8e10	7d450ea4-121c-4418-87b9-f33d2a2e9c2c 38a171b7-d828-4a4b-9091-9697eb9823f0 115f645b-98ea-4717-aabd-051137fbd194
-30.70331600	116.52199144	York Gum (*Eucalyptus loxophleba*)	875	16	1			e4994b9b-704a-4704-a00e-e341af29b1ff	
-30.71979607	116.54094142	Salmon gum (*Eucalyptus salmonophloia*)	859	22	3	1		8bc4f460-5a0e-4608-9764-528ad8bf9951	9becb831-94d5-4c52-97d1-b0af7429fdd4
-30.70187091	116.52539710	York Gum (*Eucalyptus loxophleba*)	859	15				9346c431-e02e-422f-848e-ce7b5125a6fa	
-30.71728062	116.53229683	York Gum (*Eucalyptus loxophleba*)	859	16				40b6c375-277d-42fe-be76-3b462da06865	
-30.70698241	116.53897058	Salmon gum (*Eucalyptus salmonophloia*)	828	18	1	1	12 Galahs and 3 Ringnecks in tree	9efc6a36-6c8a-4cc2-89b5-466f730cd4f3	
-30.70758729	116.54030984	York Gum (*Eucalyptus loxophleba*)	828	14				8ae15bc3-3d34-4ccf-945b-0f91af531e94	
-30.69596762	116.52016394	Salmon gum (*Eucalyptus salmonophloia*)	796	20	1	1		dc5dc394-5ab5-4457-b1ec-25cb35773886	7f3a0619-67a9-4b75-b5e2-83afa9c260ce
-30.71445823	116.53022985	Salmon gum (*Eucalyptus salmonophloia*)	796	22				f081e0e3-bc62-43b7-a5a0-bffadd7fae4a	
-30.70806501	116.51666030	Salmon gum (*Eucalyptus salmonophloia*)	764	22	5	3		df1b59b4-ee2b-4218-acbe-a39da8b9adf6	557f5124-5e7b-4074-8b63-d0c42c08cadf 3e7d1872-e57a-4af0-a2fd-c09b60c4f096 b3db198e-0724-4680-86e5-0d8171c2ca85
-30.69646302	116.52043384	Salmon gum (*Eucalyptus salmonophloia*)	764	21	1	1		12c8cd18-eadd-4ef1-93b9-66cb2a93c49a	432cc2dc-d565-4465-867c-44ce8add39f3
-30.71692110	116.52615599	Salmon gum (*Eucalyptus salmonophloia*)	764	21	5	2		30e6118a-790b-47b8-9562-50f2fdd0d2ed	5b15f5de-074d-4418-b61e-56ead388bd9a 01b129da-691d-487f-9f8e-64619078ba1f
-30.69688418	116.51837264	York Gum (*Eucalyptus loxophleba*)	764	17	2			33a1e4cd-50dc-484f-9052-105eacc9f543	
-30.70113586	116.52447643	York Gum (*Eucalyptus loxophleba*)	764	17				3d3e1b1b-cbe5-428a-b46d-e74aff5e3917	
-30.70123598	116.53178846	Salmon gum (*Eucalyptus salmonophloia*)	716	20	1	1	Large amount of scat at base of tree	e64aaa3b-be11-40d7-84f7-b397465ea967	bde52c02-f98c-4338-9601-5dfafa07ff3e 8ea277eb-4414-4e33-b780-c9d5d8cc50f2
-30.71163988	116.53967667	Salmon gum (*Eucalyptus salmonophloia*)	700	22	2	1		c2873d6b-491b-4c9e-8524-676f323e58bc	d48d2b9c-2d85-4d76-acae-4702f123b564
-30.70642748	116.51896323	Stag	700	10	5	1		dbace403-bd46-42b4-adcb-8022b6227dc2	5760c51d-f08c-407a-b4dd-69bdbd11a403
-30.70829485	116.51756949	York Gum (*Eucalyptus loxophleba*)	700	16	1			be929e8d-5f62-4dd9-ac70-152b73d64d92	
-30.70229877	116.52932452	York Gum (*Eucalyptus loxophleba*)	700	15	1			4f1f9ab1-66b7-4ec8-b5e4-726dbadacf7f	
-30.70378174	116.52523935	York Gum (*Eucalyptus loxophleba*)	700	16	4			5306d3c5-b0de-4dbe-ba1e-3950998200ac	
-30.70562362	116.53679715	York Gum (*Eucalyptus loxophleba*)	700	12			Forked at breast height, measured just below	62ca1730-d7e0-4a7c-b119-aac89ae5b541	
-30.70883112	116.52259008	York Gum (*Eucalyptus loxophleba*)	700	17	2	1		2d83dc4d-3ccf-417b-8ed9-be70099d070f	c2fcc9f6-5f9e-487f-9370-891c227328f1
-30.70653334	116.51693489	York Gum (*Eucalyptus loxophleba*)	694	17	2			1775e522-dd4f-4667-9cc0-ac9dad52a837	
-30.71067313	116.53005282	Salmon gum (*Eucalyptus salmonophloia*)	684	23	3	2		e4e6511c-15a2-4369-bac6-86f46b0353c0	16ae3674-56c5-4beb-ba37-f18f8f297335 5294bbf6-c373-44c2-83f1-834e1a4d15b8
-30.70158958	116.53433908	Salmon gum (*Eucalyptus salmonophloia*)	681	18	1	1		9b44a84b-6b80-4624-ab9f-f7e2cf95ce42	d3dce51e-07dd-4f37-9c34-15d30bbdcf90
-30.70294132	116.52242487	York Gum (*Eucalyptus loxophleba*)	656	16	1			efcf3e64-dcc0-47b7-8ed0-f74ff1dc69e7	
-30.69622679	116.52011306	Salmon gum (*Eucalyptus salmonophloia*)	653	21				85d6a2e6-9577-4d22-be3b-15d77b486a90	
-30.71076156	116.53023865	Salmon gum (*Eucalyptus salmonophloia*)	653	23	3	1		3b7b077a-49ea-4b17-93a1-84eccec11ed2	
-30.71996859	116.54065467	Salmon gum (*Eucalyptus salmonophloia*)	653	20	3	1		5c44bc25-f1cd-4393-b95f-24562a7e5672	3a12267b-43e9-4357-ae03-0f37c9f1d237
-30.71545823	116.52909963	Salmon gum (*Eucalyptus salmonophloia*)	653	22	2	1		56102a70-4fb5-47a7-8857-c186de15f5be	448da59d-a0a3-43b3-a154-997c525d3612
-30.71136373	116.52981956	York Gum (*Eucalyptus loxophleba*)	653	17	2			87ee58b8-9967-436b-972d-1720b94789b5	

Latitude	Longitude	Taxa	DBH (mm)	Estimated height (m)	# of hollows	# of hollows >120mm	Comments	Tree photo ID	Hollow >120mm photo IDs
-30.69594725	116.52007274	Salmon gum (*Eucalyptus salmonophloia*)	637	22	4	3		407014c4-a59a-4ae9-bc22-67a19b2b0116	e6731b6f-a4e7-4e08-8525-abaeec3881ea 644ed255-e8b8-4f78-afa1-ac3d1a252306 d526f3ae-bbb1-4cdc-8df4-596380d3ece9
-30.70306932	116.51867582	Salmon gum (*Eucalyptus salmonophloia*)	637	18	3	2		49a90119-f224-413d-a414-24930d53462f	3dd466d3-83d6-47b1-ab55-46dc26930f91 45d1cfd4-1fc9-4f01-98a8-c1fad768fd27
-30.71083586	116.53013296	Salmon gum (*Eucalyptus salmonophloia*)	637	21	2			e4f2adba-d15d-40f3-8a79-614a30ae16f2	
-30.71187865	116.52636856	Salmon gum (*Eucalyptus salmonophloia*)	637	18	1	1		35cbf81a-35fc-424f-ae87-27c370bcfff4	8b39edd7-2c47-4624-a688-ef0f50ab70e8
-30.70229458	116.52894013	York Gum (*Eucalyptus loxophleba*)	637	14	2			efa2411d-d942-4fe1-82e6-72ebe3813ac9	
-30.70353979	116.52503575	York Gum (*Eucalyptus loxophleba*)	637	16	10	6		df2d3532-5d5e-4a03-bb3b-326f0db322e3	37348200-e00a-45cd-a7fa-a313b2ce8d8a 89410bcb-e239-4eeb-aadf-184df2227f9b 428a4342-c757-4abb-8579-536d4caa1523 e815a08c-0e1c-4fa5-9953-7ea4052ebc8e bc96dd0d-313e-4b58-b39c-2c688606a640 a2112c0e-d2ef-4b90-9b4d-d2a98609
-30.70015677	116.53682959	York Gum (*Eucalyptus loxophleba*)	637	12	2	1	Occupied by Galahs	3728a801-8b58-4947-a942-a23d6110852b	39344f02-4844-47fa-9437-3ff877d1748c 4d8e8f34-50ab-47eb-994f-9c56cd69dc4a
-30.69850612	116.53505045	York Gum (*Eucalyptus loxophleba*)	637	13			Forked at breast height, measured just below	e7cd4dba-9330-4a0f-916d-a62bbeb8e456	
-30.71432248	116.53244611	York Gum (*Eucalyptus loxophleba*)	637	17				fa4364f2-ee05-4e51-89b9-4f24edbb57d0	
-30.71760451	116.53440177	York Gum (*Eucalyptus loxophleba*)	637	18	1			eeb04ee7-2331-43e5-a714-ad51945a43b8	
-30.71827132	116.52628683	York Gum (*Eucalyptus loxophleba*)	637	18				7e233b73-010d-40e7-8a55-9196b86dbfbe	
-30.70639291	116.51872451	York Gum (*Eucalyptus loxophleba*)	637	18	3	1		021e4226-a43f-4d42-af9a-10dcca2d1958	c300bbec-103d-4430-aa62-efe67890d293
-30.71984148	116.54079683	Salmon gum (*Eucalyptus salmonophloia*)	621	22	2	1		4ff7d7dc-07c7-4dad-87e4-0dac5402d471	89b02e64-b179-4652-a9a7-0f0cd4c3384c
-30.70882014	116.52248254	York Gum (*Eucalyptus loxophleba*)	621	17	3	1		b5b08a94-6f66-4b5d-aa22-aab8b4fab7a8	53815149-5b5f-4e93-8729-1020a7803d02
-30.71249535	116.54239945	Salmon gum (*Eucalyptus salmonophloia*)	605	18				d5c6864c-5698-4f42-9667-2444df526381	
-30.70752308	116.52800848	Salmon gum (*Eucalyptus salmonophloia*)	605	19	4			b85b0a95-86f6-49c5-9664-39ed6e96e863	
-30.71993383	116.54078334	Salmon gum (*Eucalyptus salmonophloia*)	605	20	1			aebe6adb-dfb4-4df7-8855-f64d5c4f5695	
-30.70829550	116.51716087	York Gum (*Eucalyptus loxophleba*)	605	16	1	1		36777b89-0b2b-4890-b54c-51f48f935cdd	65a9b51b-669e-4937-82e4-367f7d07610e
-30.70020996	116.51603971	York Gum (*Eucalyptus loxophleba*)	605	15	4	1		82f76eeb-57d6-46f6-aa2f-a1f796c92d97	9c556ced-ee5e-4d57-8d24-5db82ee9f64a
-30.71486010	116.53169249	York Gum (*Eucalyptus loxophleba*)	605	16				70da9d0c-b48e-4f18-b4ca-5575b39390a8	
-30.69966048	116.52287062	York Gum (*Eucalyptus loxophleba*)	605	13	1			24004daa-1142-454b-aec9-17f076fd765f	
-30.71185778	116.52632246	Salmon gum (*Eucalyptus salmonophloia*)	589	20	3	1		5828b4a8-040c-46a4-a69c-f0b5e28d18b8	c2a6d344-7869-41af-ad53-90f7b897696e
-30.70828366	116.51766689	York Gum (*Eucalyptus loxophleba*)	589	16	2	1		75ea3a02-6f35-467f-8bfc-a59751adf530	8dab38d3-6416-4c0d-a274-683eb7d17985
-30.70808329	116.52787831	York Gum (*Eucalyptus loxophleba*)	589	16				2070cb6c-77e9-4142-86b4-a9046d48a133	
-30.71483856	116.53183188	York Gum (*Eucalyptus loxophleba*)	589	14				1db9cf2b-3e97-4c2f-a346-f4802b2424e6	
-30.71750124	116.53426364	York Gum (*Eucalyptus loxophleba*)	589	19				1de3f09a-24f0-48b9-b684-155534a6a7bd	
-30.71851850	116.52620696	York Gum (*Eucalyptus loxophleba*)	589	18	1			891e18b9-3c38-469d-9193-1cab33b38a21	
-30.71947226	116.51583586	York Gum (*Eucalyptus loxophleba*)	589	17	2	1		63106d40-8072-45fc-8079-12f25196dddb	4e5952d1-4c2b-4eae-a781-c3b24796bd57
-30.71077388	116.53002952	Salmon gum (*Eucalyptus salmonophloia*)	573	20	3			159ea8e4-f390-4bed-bf3a-39af327140f6	
-30.69609188	116.52002178	Stag	573	20				3d7f404a-bed8-4e52-9871-dfeb87fb56ce	
-30.71259317	116.54242795	Stag	573	17				eddc3b18-4cb1-4eb7-b837-c76631b8369b	
-30.71191372	116.52637225	Stag	573	16	2			86bef6ec-8efe-4ac7-afc8-ecedc96998fb	
-30.69747206	116.51650172	York Gum (*Eucalyptus loxophleba*)	573	15				bea98c86-f513-4cbc-9bd1-bf532559b3cb	
-30.69678465	116.51667925	York Gum (*Eucalyptus loxophleba*)	573	16				58092a7b-934a-4cda-828e-07f18a1bc2aa	
-30.70363472	116.53700092	York Gum (*Eucalyptus loxophleba*)	573	15	1			1044eb7d-b3e4-485a-9191-fa9289d02a62	
-30.71775065	116.53329905	York Gum (*Eucalyptus loxophleba*)	573	18				4020cfee-0b53-4a9c-8290-19fd85b2025a	
-30.70069736	116.52316290	York Gum (*Eucalyptus loxophleba*)	573	16	2	2		843b1aba-ef29-4472-9143-e6bfbe9d2955	634d6ce6-12f2-4f37-81aa-1f67b6a9ab9c 7ca80f67-198b-40dc-a20d-61dcb7ff4163
-30.70845981	116.52091429	York Gum (*Eucalyptus loxophleba*)	573	16	1			f9a178c4-1155-44d4-a087-4625b9e32817	
-30.70168760	116.53445986	Salmon gum (*Eucalyptus salmonophloia*)	560	17	1			ad1c4c22-2633-41c7-94cf-923a14f9f63a	
-30.69830984	116.51947360	York Gum (*Eucalyptus loxophleba*)	557	14				b9a57dfe-b584-48f5-a96c-ba683621343a	
-30.71163512	116.52996599	York Gum (*Eucalyptus loxophleba*)	557	16	2			32ced61d-7e59-460e-b1e3-4d9158a4a527	
-30.69681197	116.51777057	York Gum (*Eucalyptus loxophleba*)	541	17				37c9943a-4db4-46f5-8f75-cc9dc71af99f	
-30.69837903	116.51625764	York Gum (*Eucalyptus loxophleba*)	541	15	2			c79cb8de-6018-44a7-9f66-b96555089199	
-30.70248455	116.52861415	York Gum (*Eucalyptus loxophleba*)	541	16	1			a693e764-c20c-47fa-8e71-f4dd43f91d48	
-30.71491697	116.53004386	Salmon gum (*Eucalyptus salmonophloia*)	525	22				1fc58b9f-3aa1-4eaf-aab1-9b3c9f7602c2	
-30.69889228	116.51879333	York Gum (*Eucalyptus loxophleba*)	525	15				117c05e4-6aeb-4d5e-8cc0-dcee3c420654	
-30.70179384	116.53440638	Salmon gum (*Eucalyptus salmonophloia*)	522	16	2			ab01c71d-0dde-4f42-b1d7-95364bb550d8	
-30.71088854	116.53021686	Salmon gum (*Eucalyptus salmonophloia*)	509	20	3	1		73833cba-f460-4149-82b0-9fc99d1f6cec	a874756b-84b2-4581-95e8-5b7772bf55c0
-30.70802554	116.51666961	Salmon gum (*Eucalyptus salmonophloia*)	509	8	2		Tree nearly dead	15872b01-eb7b-4f89-b920-aa817722acfb	
-30.69772149	116.51856492	York Gum (*Eucalyptus loxophleba*)	509	14				ddf6f63a-8160-4e8b-9a98-a77e0249cc69	

Latitude	Longitude	Taxa	DBH (mm)	Estimated height (m)	# of hollows	# of hollows >120mm	Comments	Tree photo ID	Hollow >120mm photo IDs
-30.69802639	116.53035332	York Gum (*Eucalyptus loxophleba*)	509	14	4		DBH estimated due to rocks piled at base	81390687-6936-44e8-9867-72c18986908e	
-30.70701241	116.54027053	York Gum (*Eucalyptus loxophleba*)	509	14				d48eb22e-7514-489b-80c8-be83b99882bf	
-30.70905617	116.52990773	York Gum (*Eucalyptus loxophleba*)	509	16				045095e3-c27b-449a-8de5-b2c01e1c22bd	
-30.69819784	116.53510585	York Gum (*Eucalyptus loxophleba*)	509	11				b4a764ed-78a7-4c00-ab36-509fd2d76afa	
-30.70745653	116.54081292	York Gum (*Eucalyptus loxophleba*)	509	14				a311185c-8f32-4570-9541-a54968c2f3ee	
-30.71485276	116.53006624	Salmon gum (*Eucalyptus salmonophloia*)	493	20	1			6153a380-abce-46d5-a86a-f8fe021aac05	
-30.71080665	116.53004587	Salmon gum (*Eucalyptus salmonophloia*)	477	22	2	1		76a2e709-962b-4fa5-a051-f32f44c61c39	f10f0d56-44aa-4413-bfea-0671e7041158
-30.71490630	116.53005827	Salmon gum (*Eucalyptus salmonophloia*)	477	20	3	1	Four trunks	d6149493-a587-4f41-9d8f-a9c718e87113	3e41f5f2-d250-407e-a1de-870fd4e1bc32
-30.71541304	116.52906016	Salmon gum (*Eucalyptus salmonophloia*)	477	19				37e82921-b1ad-4eb7-8083-25a7b4a87f17	
-30.71382707	116.51840340	Salmon gum (*Eucalyptus salmonophloia*)	477	18	2	1		cd4eb598-df45-4cfd-9765-4ed1e2978893	62a2564a-5831-44e4-ba5e-d8d773ce3eb2
-30.70163702	116.53436682	Stag	477	16	2			c579ed0d-9def-49b4-8624-8b96e08788d1	
-30.71265830	116.54206350	Salmon gum (*Eucalyptus salmonophloia*)	446	18	5	3		ca987d36-a9bf-4005-b8a1-8ad0e96ae5b7	2ddd5d10-5eb2-4fda-8383-568ec51cfff3 9336e2a1-d776-4f70-821a-03816e04f79a 63fad559-7461-4a0a-9671-193b4caaff27
-30.71486566	116.53498281	York Gum (*Eucalyptus loxophleba*)	446	15	1	1	DBH below 500 mm but contains large hollow	5685d8aa-7cdd-44cf-8269-e0dbfd0e612f	45930459-a88d-420a-813e-b42348b5619d
-30.71849919	116.52641349	York Gum (*Eucalyptus loxophleba*)	446	16	1	1	Tree mostly dead. DBH below 500 mm but contains large hollow	a57d167d-73b7-476a-82a5-1012a8660c1e	7c218552-e6a5-48b1-85a7-2be434bc25b1
-30.71551284	116.52915554	Salmon gum (*Eucalyptus salmonophloia*)	414	19	1			93c1328c-995b-430c-bf31-dc899268ba8e	
-30.70889109	116.52254825	York Gum (*Eucalyptus loxophleba*)	414	17	4	2	DBH below 500 mm but contains large hollows	a7083b37-7c1f-42a4-8900-595390731a2a	52e90719-acae-4ab8-86a8-affdd50db6cd 72423df5-bb97-4d0d-95d4-300a73b7f1e4
-30.70291949	116.51889458	Salmon gum (*Eucalyptus salmonophloia*)	382	18				89557e2d-c109-44b4-a720-f02b8597f570	
-30.70157046	116.53439901	Salmon gum (*Eucalyptus salmonophloia*)	376	12				49125e78-1934-472a-86dd-5e52c6d9b385	
-30.70171794	116.53450982	Salmon gum (*Eucalyptus salmonophloia*)	372	17	1			52ebadc4-7994-4e2a-926b-ede8b3688c22	
-30.69598879	116.52009730	Salmon gum (*Eucalyptus salmonophloia*)	366	18	1			39f3687f-7e60-47d1-8d05-b8616f8c3899	
-30.71554188	116.52913341	Salmon gum (*Eucalyptus salmonophloia*)	350	18				2d1b6522-e995-40b3-afe9-93a652721b56	
-30.71548224	116.52901003	Salmon gum (*Eucalyptus salmonophloia*)	334	18				c5365577-79b2-401f-8462-5bd56f2981ee	
-30.70174129	116.53438275	Salmon gum (*Eucalyptus salmonophloia*)	328	14				b95614a3-b2be-4c15-be9e-30b06459e3de	
-30.70119462	116.53179483	Salmon gum (*Eucalyptus salmonophloia*)	306	18				eba29818-65cf-4a35-9bac-aebb15da4e69	