

<b>Habitat assessment</b>	<b>H17</b>	<b>Date</b>	
<b>Target species</b>	<i>Helicteres macrothrix</i>	<b>Land unit</b>	<b>1b (mapped)</b>
<b>Coordinates</b>	-12.653501, 131.175777	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Eucalyptus miniata</i> and <i>Erythrophleum chlorostachys</i> open woodland.		
<b>Landform and surface soil</b>	Light red-brown sandy clay soils, with moderate surface gravel.		
<b>Other site notes</b>	Recently burnt.		



H17 - habitat



H17 - soils

<b>Habitat assessment</b>	<b>H18</b>	<b>Date</b>	
<b>Target species</b>	<i>Helicteres macrothrix</i>	<b>Land unit</b>	<b>2b2 (mapped)</b>
<b>Coordinates</b>	-12.652896, 131.169670	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Corymbia foelscheana</i> low open woodland.		
<b>Landform and surface soil</b>	Brown sandy clay soils, gravelly.		
<b>Other site notes</b>	Recently burnt.		



H18 - habitat



H18 - soils

<b>Habitat assessment</b>	<b>H19</b>	<b>Date</b>	
<b>Target species</b>	<i>Helicteres macrothrix</i>	<b>Land unit</b>	<b>1b (mapped)</b>
<b>Coordinates</b>	-12.651872, 131.165200	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Eucalyptus miniata</i> and <i>Eucalyptus tectifica</i> open woodland.		
<b>Landform and surface soil</b>	Light red-brown sandy clay soils, with high gravel/rock content.		
<b>Other site notes</b>	Recently burnt.		



H19 - habitat



H19 - soils

<b>Habitat assessment</b>	<b>H20</b>	<b>Date</b>	
<b>Target species</b>	<i>Helicteres macrothrix</i>	<b>Land unit</b>	<b>2a1 / 2b2 (mapped)</b>
<b>Coordinates</b>	-12.648810, 131.169708	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	Sparse <i>Corymbia</i> spp. open woodland.		
<b>Landform and surface soil</b>	Low lying drainage line. Light grey-brown sandy clay soils, with debil debils present.		
<b>Other site notes</b>	Recently burnt.		



H20 - habitat



H20 - soils

## APPENDIX G     *PTYCHOSPERMA MACARTHURII* SITE DATA

# DARWIN PALM

<b>Habitat assessment</b>	<b>P01</b>	<b>Date</b>	28 June 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>5b2</b> (mapped)
<b>Coordinates</b>	-12.758391, 131.136423	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Lophostemon grandiflora</i> , <i>Terminalia microcarpa</i> , <i>Acacia auriculiformis</i> and <i>Melaleuca dealbata</i> open forest. <i>Pandanus spiralis</i> and <i>Livistona benthamiana</i> open woodland over open ground with recruitment of upper spp.		
<b>Landform and surface soil</b>	Dark grey loamy clay soils, damp with water trickling throughout patch.		
<b>Other site notes</b>	Possible spring nearby, as trickling water was observed moving through patch towards creek.		



P01 - habitat



P01 - soils

<b>Habitat assessment</b>	<b>P02</b>	<b>Date</b>	13 July 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>1b / 4a</b> (mapped)
<b>Coordinates</b>	-12.633321, 131.149556	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	Open forest with <i>Alstonia actinophylla</i> , <i>Lophostemon lactifluus</i> and <i>Carallia brachiata</i> .		
<b>Landform and surface soil</b>	Dry creekbed between low hills and rises. Soils brown sandy clay loam.		
<b>Other site notes</b>	Weeds present along edges of patch.		



P02 - habitat



P02 - soils

<b>Habitat assessment</b>	<b>P03</b>	<b>Date</b>	12 July 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>6a1</b> (mapped)
<b>Coordinates</b>	-12.662093, 131.224985	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Terminalia microcarpa</i> , <i>Syzygium nervosum</i> , <i>Melaleuca dealbata</i> open forest. <i>Livistona benthamiana</i> , <i>Pandanus spiralis</i> open woodland over open ground with <i>Flagellaria indica</i> and recruitment of upper spp.		
<b>Landform and surface soil</b>	Gently sloping lowland plains. Dark grey sandy clay loam soils, some damp patches. Mostly dry.		
<b>Other site notes</b>	Widespread disturbance in land surrounding rainforest patch.		



P03 - habitat



P03 - soils

<b>Habitat assessment</b>	<b>P04</b>	<b>Date</b>	21 August 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>3b</b> (mapped)
<b>Coordinates</b>	-12.684916, 131.183796	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Lophostemon lactifluus</i> open forest with <i>Acacia auriculiformis</i> , <i>Alstonia actinophylla</i> , <i>Erythrophleum chlorostachys</i> , <i>Canarium australianum</i> , <i>Ficus virens</i> . Emergent/mid stratum with <i>Cupaniopsis anacardioides</i> , <i>Stychnos lucida</i> , <i>Milliusa brahei</i> , <i>Cyclophyllum shultzii</i> , <i>Maranthes corymbosa</i> . Vines observed include <i>Smilax australis</i> , <i>Opilia armentacea</i> , <i>Stephania japonica</i> .		
<b>Landform and surface soil</b>	Gently sloping plains. Grey-brown sandy clay soils.		
<b>Other site notes</b>	Snakeweed observed in higher densities where rainforest species present.		



P04 - habitat



P04 - soils

<b>Habitat assessment</b>	<b>P05</b>	<b>Date</b>	21 August 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>3b</b> (mapped)
<b>Coordinates</b>	-12.683182, 131.182161	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Lophostemon lactifluus</i> open forest with <i>Breynia cernua</i> , <i>Timonius timon</i> , <i>Alpitonia excelsa</i> , <i>Corymbia polycarpa</i> , Grassy understorey in parts with <i>Mnesithea</i> sp.		
<b>Landform and surface soil</b>	Gently sloping plains. Grey sandy clay loam soils.		
<b>Other site notes</b>	General habitat similar to P04.		



P05 - habitat



P05 - soils

<b>Habitat assessment</b>	<b>P06</b>	<b>Date</b>	22 August 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	<b>1c</b> (mapped)
<b>Coordinates</b>	-12.739819, 131.133182	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Lophostemon lactifluus</i> open forest, with <i>Carallia brachiata</i> , <i>Maranthes corymbosa</i> , <i>Erythrophleum chlorostachys</i> , <i>Opilia armentacea</i> .		
<b>Landform and surface soil</b>	Rocky creekline, minor gully between hills and rises. Dark grey loamy soils (dry).		
<b>Other site notes</b>	End of rainforest patch.		



P06 - habitat



P06 - soils

<b>Habitat assessment</b>	<b>P07</b>	<b>Date</b>	22 August 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	1c (mapped)
<b>Coordinates</b>	-12.740460, 131.134893	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	<i>Lophostemon lactifluus</i> woodland to open forest, with <i>Carallia brachiata</i> , <i>Maranthes corymbosa</i> , <i>Erythrophleum chlorostachys</i> , <i>Opilia armentacea</i> .		
<b>Landform and surface soil</b>	Rocky creekline, minor gully between hills and rises. Soils dark brown, loamy sand.		
<b>Other site notes</b>	Additional species: <i>Denhamia obscura</i> , <i>Acacia auriculiformis</i> , <i>Syzygium suborbiculare</i> , <i>Cupaniopsis anacardioides</i> , <i>Coelospermum reticulatum</i> .		



P07 - habitat



P07 - soils

<b>Habitat assessment</b>	<b>P08</b>	<b>Date</b>	22 August 2023
<b>Target species / habitat</b>	<i>Ptychosperma macarthurii</i> / Rainforest	<b>Land unit</b>	1c (mapped)
<b>Coordinates</b>	-12.741408, 131.136219	<b>CRS</b>	GDA 2020
<b>Vegetation structure</b>	Open forest		
<b>Landform and surface soil</b>	Rocky creekline, minor gully between hills and rises. Soils brown, sandy clay.		
<b>Other site notes</b>	Additional species observed: <i>Strychnos lucida</i> , <i>Litsea glutinosa</i> , <i>Smilax australis</i> , <i>Carpentaria acuminata</i> , <i>Litsea glutinosa</i> , <i>Terminalia microcarpa</i> , <i>Canarium austalianum</i> , <i>Sersalisea sericea</i> , <i>Antidesma</i> sp., <i>Livistona benthamiana</i> .		



P08 - habitat



P08 - soils

## APPENDIX H SPECIES DETECTED DURING CAMERA TRAPPING

Species name	Number of sites species detected at
<b>Mammals</b>	
Agile Wallaby ( <i>Notamacropus agilis</i> )	52
Antilopine Wallaroo ( <i>Osphranter antilopinus</i> )	20
Black-footed Tree-rat ( <i>Mesembriomys gouldii gouldii</i> )	1
*Cat ( <i>Felis catus</i> )	26
*Cattle ( <i>Bos taurus</i> )	3
Dingo ( <i>Canis familiaris dingo</i> )	10
*Dog ( <i>Canis familiaris</i> )	2
Grassland Melomys ( <i>Melomys burtoni</i> )	2
Northern Brown Bandicoot ( <i>Isodon macrourus</i> )	33
Northern Brushtail Possum ( <i>Trichosurus vulpecula arnhemensis</i> )	32
*Pig ( <i>Sus scrofa</i> )	20
Red-cheeked Dunnart <i>Sminthopsis virginiae</i> )	11
Sugar Glider ( <i>Petaurus breviceps</i> )	1
Water Rat ( <i>Hydromys chrysogater</i> )	1
Unidentified small rodent	15
<b>Monotremes</b>	
Short-beaked Echidna ( <i>Tachyglossus aculeatus</i> )	10
<b>Birds</b>	
Australian Boobook ( <i>Ninox boobook</i> )	2
Australian Owlet Nightjar <i>Aegotheles cristatus</i> )	3
Bar-shouldered Dove ( <i>Geopelia humeralis</i> )	3
Black-tailed Treecreeper ( <i>Climacteris melanurus</i> )	1
Blue-faced Honeyeater ( <i>Entomyzon cyanotis</i> )	2
Blue-winged Kookaburra ( <i>Dacelo leachii</i> )	5
Brown Quail ( <i>Coturnix ypsilophora</i> )	1
Bush Stone-curlew ( <i>Burhinus grallarius</i> )	30
Forest Kingfisher ( <i>Todiramphus macleayi</i> )	1
Leaden Flycatcher ( <i>Myiagra rubecula</i> )	1
Little Friarbird ( <i>Philemon citreogularis</i> )	3
Magpie-lark ( <i>Grallina cyanoleuca</i> )	5
Partridge Pigeon ( <i>Geophaps smithii</i> )	2
Peaceful Dove ( <i>Geopelia placida</i> )	10
Pied Butcherbird ( <i>Cracticus nigrogularis</i> )	2
Red-tailed Black-cockatoo (north-western) ( <i>Calyptorhynchus banksii</i> )	1

Species name	Number of sites species detected at
Silver-crowned Friarbird ( <i>Philemon argenticeps</i> )	3
Straw-necked Ibis ( <i>Threskiornis spinicollis</i> )	3
Tawny Frogmouth ( <i>Podargus strigoides</i> )	7
Willie Wagtail ( <i>Rhipidura leucophrys</i> )	1
Yellow-throated Miner ( <i>Manorina flavigula lutea</i> )	2
<b>Reptiles</b>	
Northern Blue-tongued Skink ( <i>Tiliqua scincoides intermedia</i> )	3
Agile Snake-eyed Skink ( <i>Cryptoblepharus zoticus</i> )	2
Brown Tree Snake ( <i>Boiga irregularis</i> )	1
Diporiphora sp.	3
Frilled Lizard ( <i>Chlamydosaurus kingii</i> )	5
Sand Goanna ( <i>Varanus gouldii</i> )	1
Spotted Tree Monitor ( <i>Varanus scalaris</i> )	17
<b>Amphibians</b>	
*Cane Toad ( <i>Rhinella marina</i> )	11
Green Tree Frog ( <i>Litoria caerulea</i> )	5
Marbled Frog ( <i>Limnodynastes convexiusculus</i> )	1

Rows highlighted yellow denote listed threatened species and blue denote near threatened species. \* = Introduced











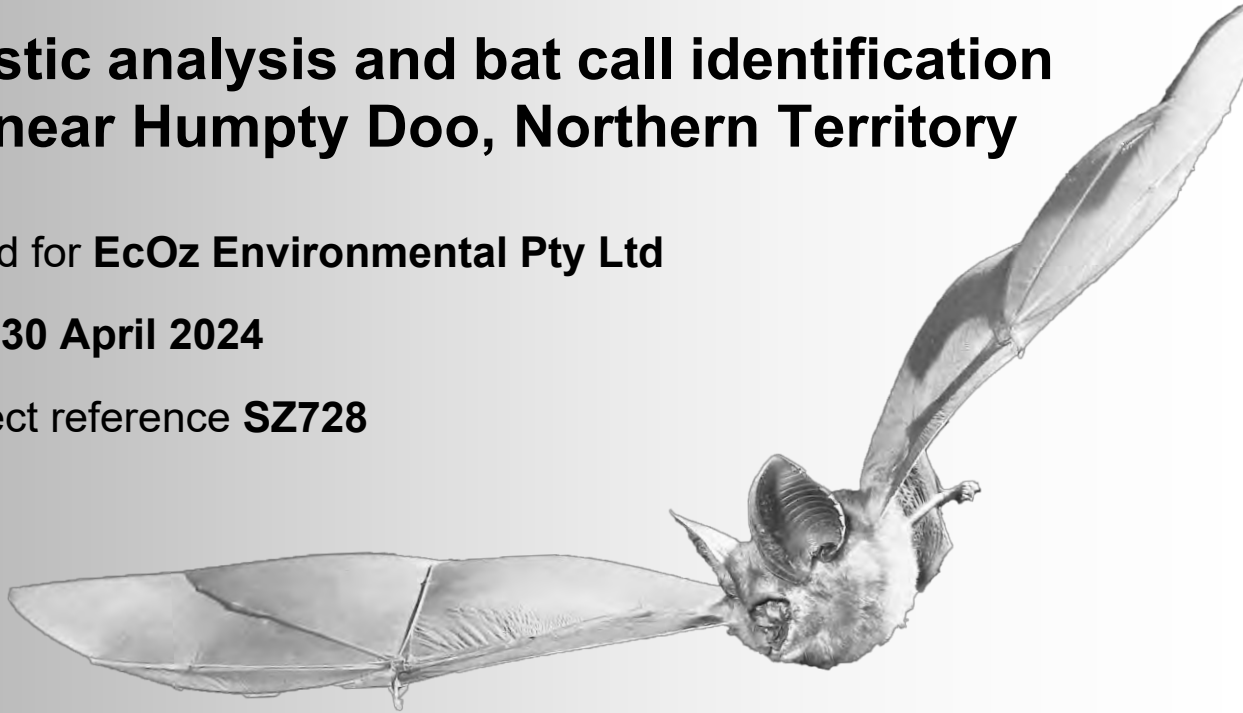
# APPENDIX J      ACOUSTIC ANALYSIS AND BAT CALL IDENTIFICATION REPORT

# Acoustic analysis and bat call identification from near Humpty Doo, Northern Territory

Prepared for **EcOz Environmental Pty Ltd**

Version **30 April 2024**

SZ project reference **SZ728**



Prepared by **Dr Kyle Armstrong and Yuki Konishi**

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This report should be included as an appendix in any larger submission to Government, and cited as:

Specialised Zoological (2024). Acoustic analysis and bat call identification from near Humpty Doo, Northern Territory. Unpublished report by Specialised Zoological for EcOz Environmental Pty Ltd, 30 April 2024, project reference SZ728.

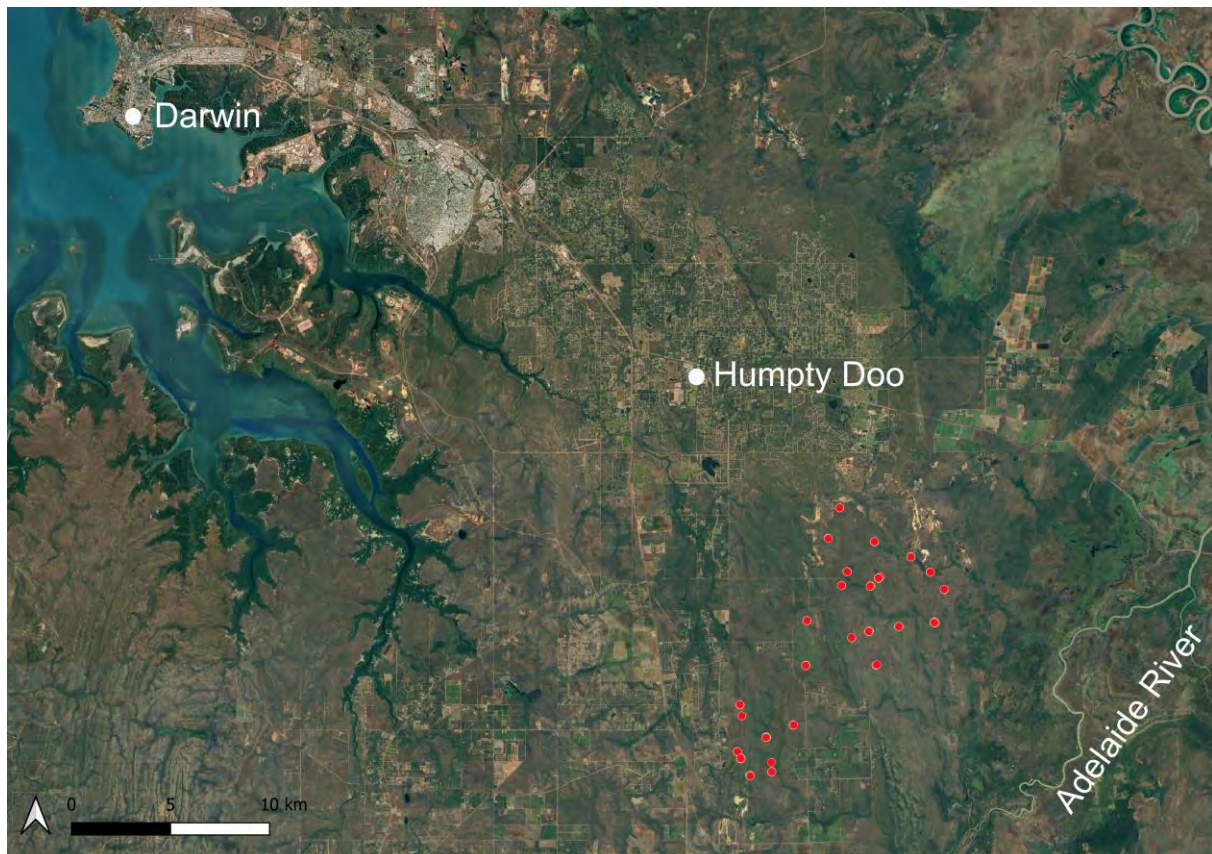
## Summary

Bat identifications from acoustic recordings are provided from a project area south-east of Humpty Doo, on the west side of the Adelaide River, in the Northern Territory. The identification of bat species from full spectrum WAV-format recordings of their echolocation calls was based on measurements of characteristic frequency, observation of pulse shape, and the pattern of harmonics.

The dataset comprised 258 recording nights from 26 sampling sites between the dates of 26 June 2023 and 28 November 2023. Each recorded WAV sound file contained metadata with recording date, time and geographic coordinates. Mapping these allowed a tabulation of the position of recording sites at different times (**Figure 1**).

At least 14 species of bat were identified as being present (**Tables 1 and 2**). Representative echolocation calls for each identification are illustrated (**Figure 2**), as recommended by the Australasian Bat Society (ABS 2006). Alternative possibilities are given for some call types where the identification was ambiguous.

Particular attention was given to the detection of the Threatened-listed bare-rumped sheath-tailed bat *Saccolaimus saccolaimus* using the resources and criteria in Armstrong et al. (2021a). Evidence of this species was detected at five of 26 sampling sites, from 1 – 2 call sequences in each case (**Figures 3 – 5**). Further details for all identifications are available should verification be required.



**Figure 1.** Distribution of sampling sites where bat detector recordings were made.

## Methods

The data provided were recorded in full spectrum WAV format with Titley Scientific Anabat Swift bat detectors (sampling rate 500 kHz, set to turn on automatically at sunset and off at sunrise).

A multi-step acoustic analysis procedure developed to process large full spectrum echolocation recording datasets from insectivorous bats (Armstrong et al. 2021a,b) was applied to the recordings made on the survey. Firstly, the WAV files were scanned for bat echolocation calls using several parameter sets in the software SCAN'R version 1.8.3 (Binary Acoustic Technology), which also provides measurements (SCAN'R parameters) from each putative bat pulse. The outputs were then used to determine if putative bat pulses measured in SCAN'R could be identified to species. This was done using a custom [R] language application that performed three tasks:

1. undertook a Discriminant Function Analysis on training data from representative calls in northern Australia and from Armstrong et al. (2021a);
2. from the measurements of each putative bat pulse from SCAN'R, calculated values for the first two Discriminant Functions that could separate the echolocation call types derived from the analysis of training data, and plotted these resulting coordinates over ellipses representing one standard deviation of the variation for the defined call types; and
3. facilitated an inspection in a spectrogram of multiple examples of each call type for each recording night by opening the original WAV files containing pulses of interest in Adobe Audition version 23.1.

Species were identified based on information in Milne (2002), Churchill (2008), Armstrong et al. (2021a) and the author's own unpublished material. Nomenclature follows Jackson and Groves (2015). Distribution information for all bat species considered here was checked against the BatMap resource hosted by the Australasian Bat Society, Inc (<https://www.ausbats.org.au/batmap.html>) (Milne et al. 2023).

## Comments on some identifications

Most species were identified unambiguously, but some call types have more than one possibility for their source. Calls with a characteristic frequency between c. 35–40 kHz could have been derived from the hoary wattled bat *Chalinolobus nigrogriseus*, little broad-nosed bat *Scotorepens greyii* or the northern broad-nosed bat *S. sanborni*. Likewise, the calls of the forest pipistrelle *Pipistrellus adamsi* and northern pipistrelle *P. westralis* were difficult to separate reliably in most cases.

The identification of *S. saccolaimus* was based on information and resources in a recent publication that help to distinguish it from other low frequency emitting bat species based on six criteria describing aspects of echolocation pulses and sequences (Armstrong et al. 2021a). In addition to these, the duration of pulses was a key character, with an attribution to *S. saccolaimus* given if the value was consistently over 12 milliseconds in a sequence; otherwise the sequence was attributed to the Arnhem sheath-tailed bat *Taphozous troughtoni*. The common sheath-tailed bat *T. georgianus* appeared to be absent from this study area.

## Limitations

The identifications presented in this report have been made within the following context:

1. The identifications made herein were based on the ultrasonic acoustic data recorded and provided by a 'third party' (the client named on the front of this report).
2. The scope of this report extended to providing information on the identification of bat species in bulk ultrasonic recordings. Further comment on these species and the possible impacts of a planned project on bat species were not part of the scope.
3. In the case of the present report, the recording equipment was not set up and supplied by Specialised Zoological. The equipment was operated by the third party during the survey.
4. Other than the general location of the study area, Specialised Zoological has not been provided with detailed information of the survey area, has not made a visit to observe the habitats available for bats, nor have we visited the specific project areas on a previous occasion.
5. Specialised Zoological has had no input into the overall design and timing of this bat survey, recording site placement, nor the degree of recording site replication.
6. While Specialised Zoological has made identifications to the best of our ability given the available materials, and reserves the right to re-examine the data and revise any identification following a query, it is the client's and / or proponent's responsibility to provide supporting evidence for any identification, which might require follow-up trapping effort or non-invasive methods such as video recordings. Specialised Zoological bears no liability for any follow-up work that may be required to support an identification based initially on the analysis of acoustic recordings undertaken and reported on here.
7. There are a variety of factors that affect the 'detectability' of each bat species, given the frequency, power and shape characteristics of their calls. Further information on the analysis and the various factors that can impinge on the reliability of identifications can be provided upon request.
8. The analysis of ultrasonic recordings is one of several methods that can be used to survey for bats, and comprehensive surveys typically employ more than one method. If an identification in the present report is ambiguous or in question, a trapping programme could help to resolve the presence of the possibilities in the project area.
9. The bare-rumped sheath-tailed bat *Saccolaimus saccolaimus* can be identified from its echolocation call characteristics and distinguished from other low-frequency-emitting (LFE) bat species across most of its range in northern Australia, except where this coincides with the distribution of the Papuan sheath-tailed bat *S. mixtus* on Cape York Peninsula (Armstrong et al. 2021a). Both DEWHA (2010) and Armstrong et al. (2021a) give further advice on how to survey for and detect the presence of *S. saccolaimus*.
10. The most reliable way of detecting the ghost bat *Macroderma gigas* with bat detectors is to place the equipment with the microphone facing into a potential cave roosting site. The echolocation calls of this species are of low amplitude, and therefore most detectable when a ghost bat flies close to the bat detector as it exits the underground structure. If there is uncertainty about whether ghost bats are present in a cave, then video recordings can be a useful addition to the survey. The detection of ghost bats with bat detectors away from cave entrances is less reliable, unless an approach based on an acoustic lure is used (Ruykys et al. 2023; Hanrahan et al. 2023).
11. This version of the document supersedes any previous version. Previous drafts are not authorised by us for submission to the regulator or the public domain.

## References

- ABS (2006). Recommendations of the Australasian Bat Society Inc for reporting standards for insectivorous bat surveys using bat detectors. *The Australasian Bat Society Newsletter* 27: 6–9. [ISSN 1448-5877]
- Armstrong K.N., Broken-Brow J., Hoyer G., Ford G., Thomas M. and Corben C. (2021a). Effective detection and identification of sheath-tailed bats of Australian forests and woodlands. *Australian Journal of Zoology* 68:346–363. <https://doi.org/10.1071/ZO20044>
- Armstrong K.N., Clarke S., Linke A., Scanlon A., Roetman P., Hitch, A.T. and Donnellan S.C. (2021b). Citizen science implements the first intensive acoustics-based survey of insectivorous bat species across the Murray-Darling Basin of South Australia. *Australian Journal of Zoology* 68: 364–381. <https://doi.org/10.1071/ZO20051>
- Churchill, S.K. (2008). *Australian bats*. 2<sup>nd</sup> ed. Allen and Unwin, Crows Nest, NSW.
- DEWHA (2010). Survey guidelines for Australia's threatened bats. Guidelines for detecting bats listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999. Department of the Environment, Water, Heritage and the Arts, Canberra.
- Hanrahan, N., Turbill C., Armstrong K.N., Dalziell A.H. and Welbergen J.A. (2023). Calling up ghosts: acoustic playback of social vocalisations reveals complex communication in a cryptic bat and provides a promising tool for monitoring disturbance-sensitive species. *Mammal Research*. <https://doi.org/10.1007/s13364-023-00727-w>
- Jackson, S.M. and Groves, C.P. (2015). *Taxonomy of Australian mammals*. CSIRO Publishing, Victoria.
- Milne, D.J. (2002). *Key to the bat calls of the Top End of the Northern Territory*. Parks and Wildlife Commission of the Northern Territory, Technical Report No. 71.
- Milne D.J., Reardon T.B. and Ford G. (2023) BatMap – authoritative distribution maps for Australian bats. *Australian Mammalogy*. 45: 350–355. <https://doi.org/10.1071/AM23005>
- Ruykys, L., Hanrahan, N. and Stokeld, D. (2023). Novel acoustic lure methodology facilitates detection of the cryptic ghost bat at a landscape scale. *Wildlife Research* 51. <https://doi.org/10.1071/WR22189>

**Table 1.** Species identified in the present survey from all sites combined.

<b>RHINONYCTERIDAE</b>	
Orange diamond-faced bat	<i>Rhinonycteris aurantia</i>
<b>EMBALLONURIDAE</b>	
Yellow-bellied sheath-tailed bat	<i>Saccolaimus flaviventris</i>
Bare-rumped sheath-tailed bat	<i>Saccolaimus saccolaimus</i>
Arnhem sheath-tailed bat	<i>Taphozous kapalgensis</i>
<b>VESPERTILIONIDAE</b>	
Large-footed Myotis	<i>Myotis macropus</i>
Arnhem long-eared bat	<i>Nyctophilus arnhemensis</i>
Pygmy long-eared bat	<i>Nyctophilus walkeri</i>
Northern cave bat	<i>Vespadelus caurinus</i>
<b>Ambiguous identifications</b>	
Hoary wattled bat / <b>and/or</b> Little broad-nosed bat / <b>and/or</b> Northern broad-nosed bat	<i>Chalinolobus nigrogriseus</i> / <b>and/or</b> <i>Scotorepens greyii</i> / <b>and/or</b> <i>Scotorepens sanborni</i>
Forest pipistrelle / <b>and/or</b> Northern pipistrelle	<i>Pipistrellus adamsi</i> / <b>and/or</b> <i>Pipistrellus westralis</i>
<b>MINIOPTERIDAE</b>	
Northern bent-winged bat	<i>Miniopterus orianae orianae</i>
<b>MOLOSSIDAE</b>	
Greater northern free-tailed bat	<i>Chaerephon jobensis</i>
Northern coastal free-tailed bat	<i>Ozimops cobourgianus</i>
Northern free-tailed bat	<i>Ozimops lumsdenae</i>

**Table 2.** Species identifications, with the degree of confidence indicated by a code (see *Table 1* for full species names; blue highlight aids inspection).

Site	Serial	Card	Latitude	Longitude	First night	Last night	Nights	<i>C. jobensis</i>	<i>C. nigrogriseus</i> / <i>S. greyii</i> / <i>S. sanborni</i>	<i>M. macropus</i>	<i>M. orianae</i>	<i>N. arnhemensis</i>	<i>N. walkeri</i>	<i>O. cobourgianus</i>	<i>O. lumsdeae</i>	<i>P. adamsi</i> / <i>P. westralis</i>	<i>R. aurantia</i>	<i>S. flaviventris</i>	<i>S. saccolaimus</i>	<i>T. kapalngensis</i>	<i>V. caurinus</i>
A	697259	4	-12.730672	131.123718	26/06/2023	3/07/2023	8	X	NC	X	X	X	X	X	.	NC	.	X	X	X	.
B	697265	2	-12.752529	131.122498	27/06/2023	13/07/2023	17	X	NC	.	X	X	X	.	.	NC	X	X	.	X	.
C	697264	3	-12.763564	131.128448	28/06/2023	13/07/2023	16	X	NC	.	X	X	X	.	.	NC	.	X	.	X	.
D	697261	8	-12.745894	131.135971	30/06/2023	10/07/2023	11	X	NC	.	X	X	X	.	.	NC	.	X	.	X	.
E	697266	5	-12.757493	131.13829	3/07/2023	3/07/2023	1	X	NC	X	.	.	X	.	.	NC	.	X	.	.	.
F	697262	54	-12.69155	131.154846	6/09/2023	10/09/2023	5	X	NC	.	X	X	X	.	.	NC	.	X	.	X	.
G	697261	9	-12.712339	131.186966	8/09/2023	10/09/2023	3	X	NC	.	X	.	.	X	.	NC	X	X	.	X	.
H	697258	97	-12.69663	131.183624	12/09/2023	1/10/2023	20	X	NC	.	X	X	X	X	.	NC	X	X	.	X	.
I	697260	42	-12.675271	131.170959	14/09/2023	18/09/2023	5	X	NC	X	X	.	.	.	.	NC	X	X	.	X	.
J	697260	84	-12.675604	131.184311	2/10/2023	9/10/2023	8	X	NC	X	X	X	X	X	X	NC	.	X	.	X	.
K	697261	79	-12.699551	131.175644	2/10/2023	7/10/2023	6	X	NC	.	X	X	X	.	.	NC	.	X	X	X	.
L	697262	24	-12.712478	131.154251	2/10/2023	10/10/2023	9	X	NC	X	X	X	X	X	.	NC	.	X	.	X	.
M	697258	65	-12.694311	131.197556	3/10/2023	11/10/2023	9	X	NC	.	X	X	X	.	.	NC	X	X	.	X	.
N	697261	96	-12.63915	131.170166	19/10/2023	28/10/2023	10	X	NC	X	X	X	X	X	X	NC	.	X	.	X	.
O	697258	20	-12.653322	131.164795	20/10/2023	24/10/2023	5	X	NC	.	X	.	.	X	.	NC	.	X	.	X	.
P	697260	23	-12.671922	131.188141	23/10/2023	14/11/2023	23	X	NC	.	X	X	X	X	X	NC	.	X	.	X	.
Q	697266	77	-12.654946	131.186279	23/10/2023	14/11/2023	23	X	NC	X	X	X	.	X	X	NC	.	X	.	X	.
R	697262	105	-12.692519	131.21405	24/10/2023	12/11/2023	20	X	NC	X	X	X	.	X	.	NC	X	X	.	X	.
S	697258	59	-12.668839	131.173569	15/11/2023	20/11/2023	6	X	NC	.	X	X	X	X	X	NC	.	X	X	X	.
T	697261	7	-12.669041	131.212051	16/11/2023	28/11/2023	13	X	NC	.	X	X	X	X	.	NC	.	X	.	X	.
U	697266	18	-12.661826	131.203217	16/11/2023	22/11/2023	7	X	NC	.	X	X	X	X	.	NC	.	X	.	.	.
V	711396	76	-12.677142	131.218643	16/11/2023	18/11/2023	3	X	NC	.	X	X	X	X	.	NC	.	X	.	X	.

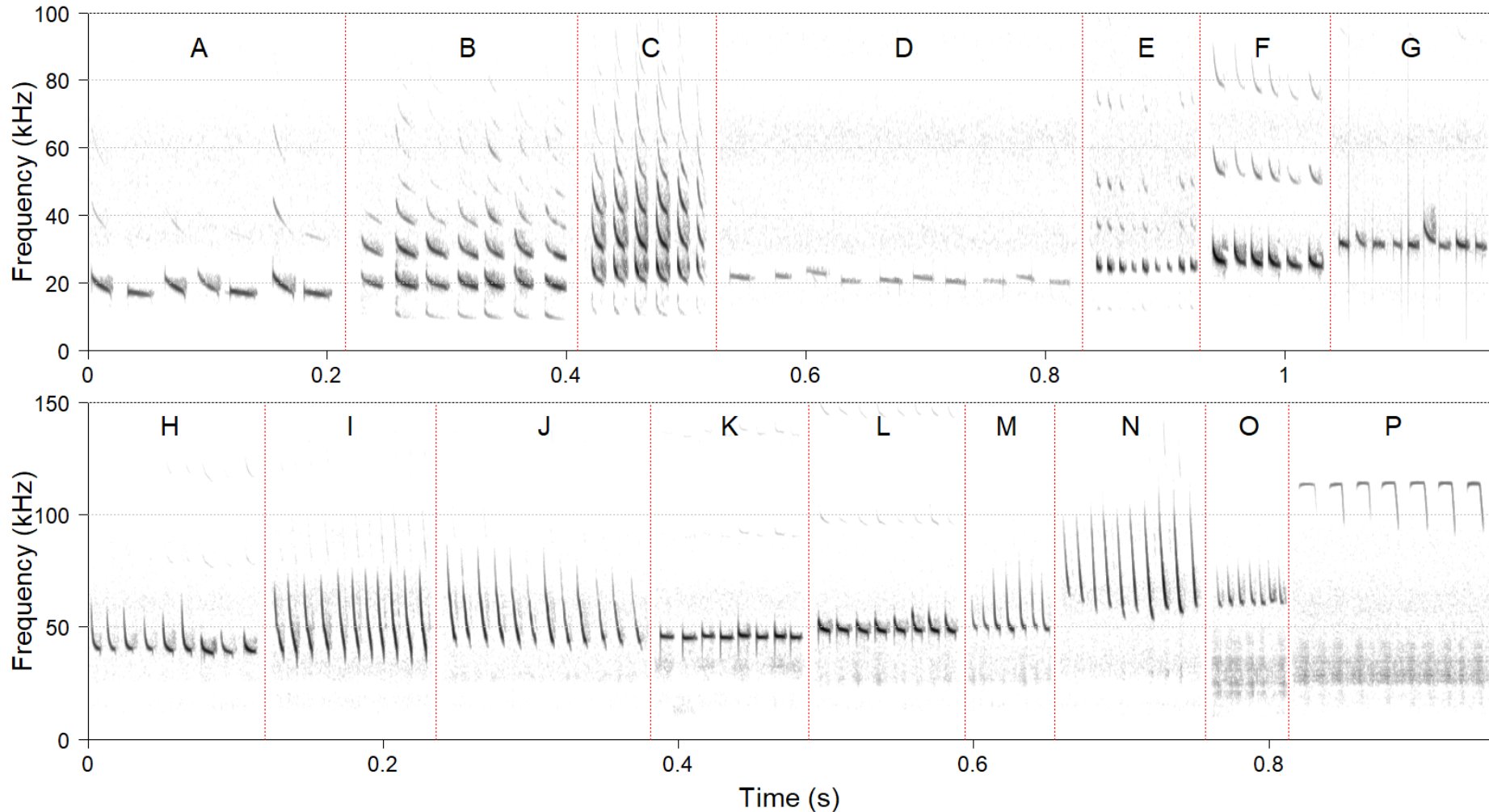
Site	Serial	Card	Latitude	Longitude	First night	Last night	Nights	C. jobensis	C. nigrogriseus / S. greyii / S. sanborni	M. macropus	M. orianae	N. arnhemensis	N. walkeri	O. cobourgianus	O. lumsdeae	P. adamsi / P. westralis	R. aurantia	S. flaviventris	S. saccolaimus	T. kapalgensis	V. caurinus
W	697262	63	-12.735844	131.124619	21/11/2023	24/11/2023	4	X	NC	.	X	.	X	.	.	NC	.	X	.	.	X
X	711366	35	-12.761819	131.138474	21/11/2023	29/11/2023	9	X	NC	.	X	X	X	X	.	NC	.	X	X	X	.
Y	711382	37	-12.740012	131.148529	21/11/2023	29/11/2023	9	X	NC	.	X	X	X	X	.	NC	.	X	.	X	.
Z	711387	93	-12.755656	131.124023	21/11/2023	28/11/2023	8	X	NC	.	X	X	X	X	.	NC	.	X	NC	X	.

**Definition of confidence level codes**

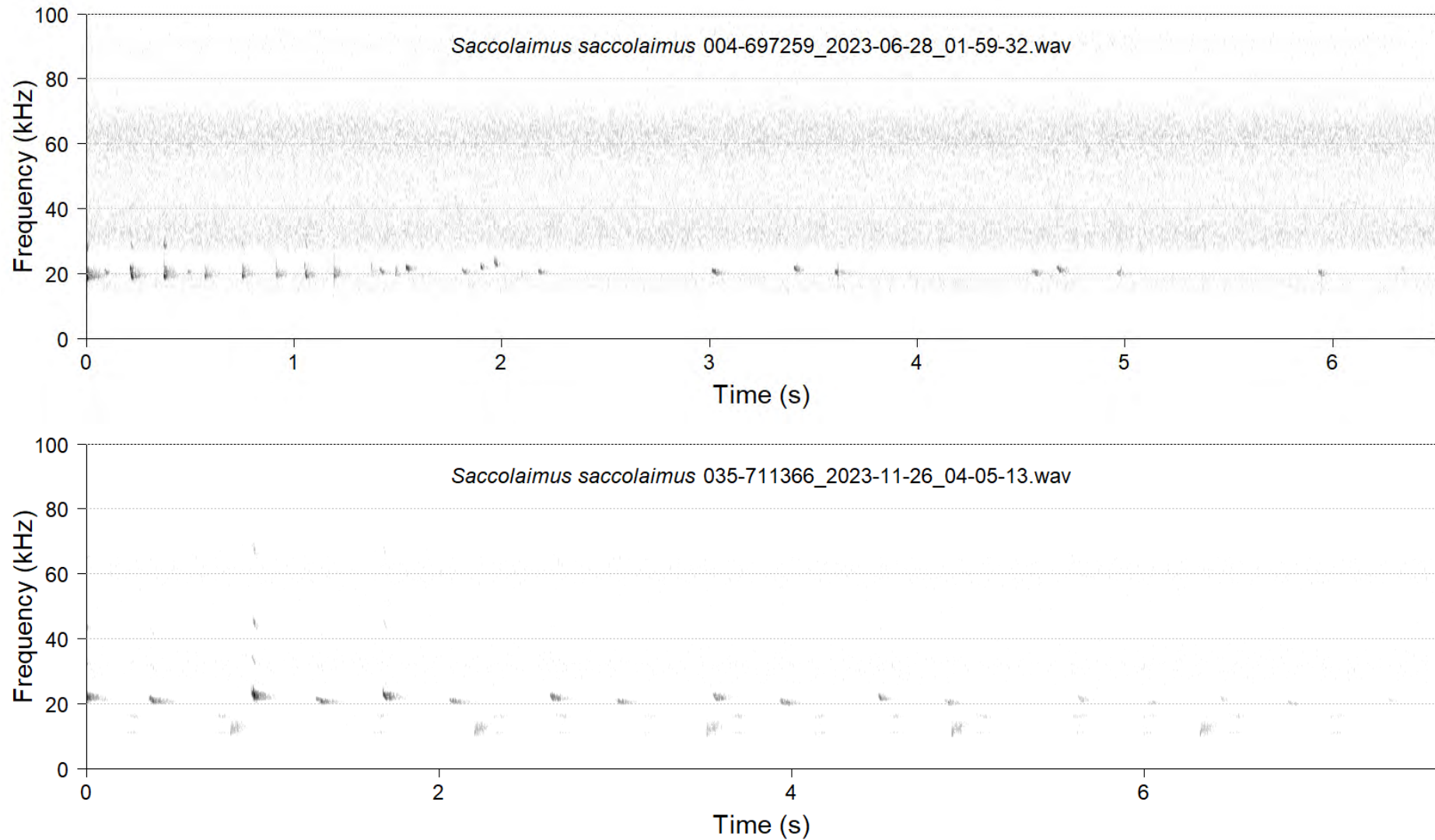
. Not detected.

**X** Unambiguous identification of the species at the site based on measured call characteristics and comparison with available reference material. Greater confidence in this ID would come only after capture and supported by morphological measurements or a DNA sequence.

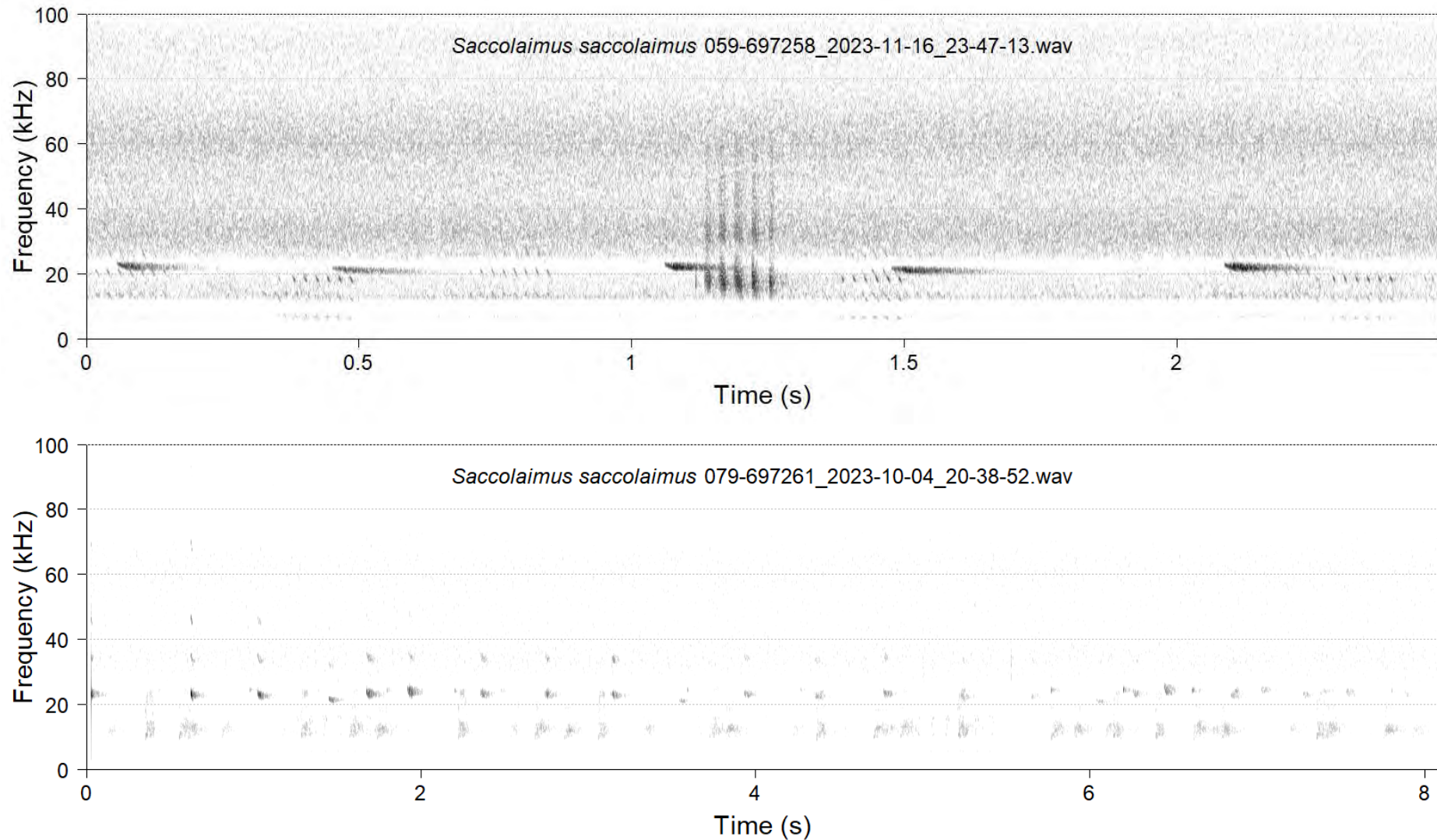
**NC Needs Confirmation.** Either call quality was poor, or the species cannot be distinguished reliably from another that makes similar calls. Alternative identifications are indicated in the *Comments on identifications* section of this report. If this is a species of conservation significance, further survey work might be required to confirm the record.



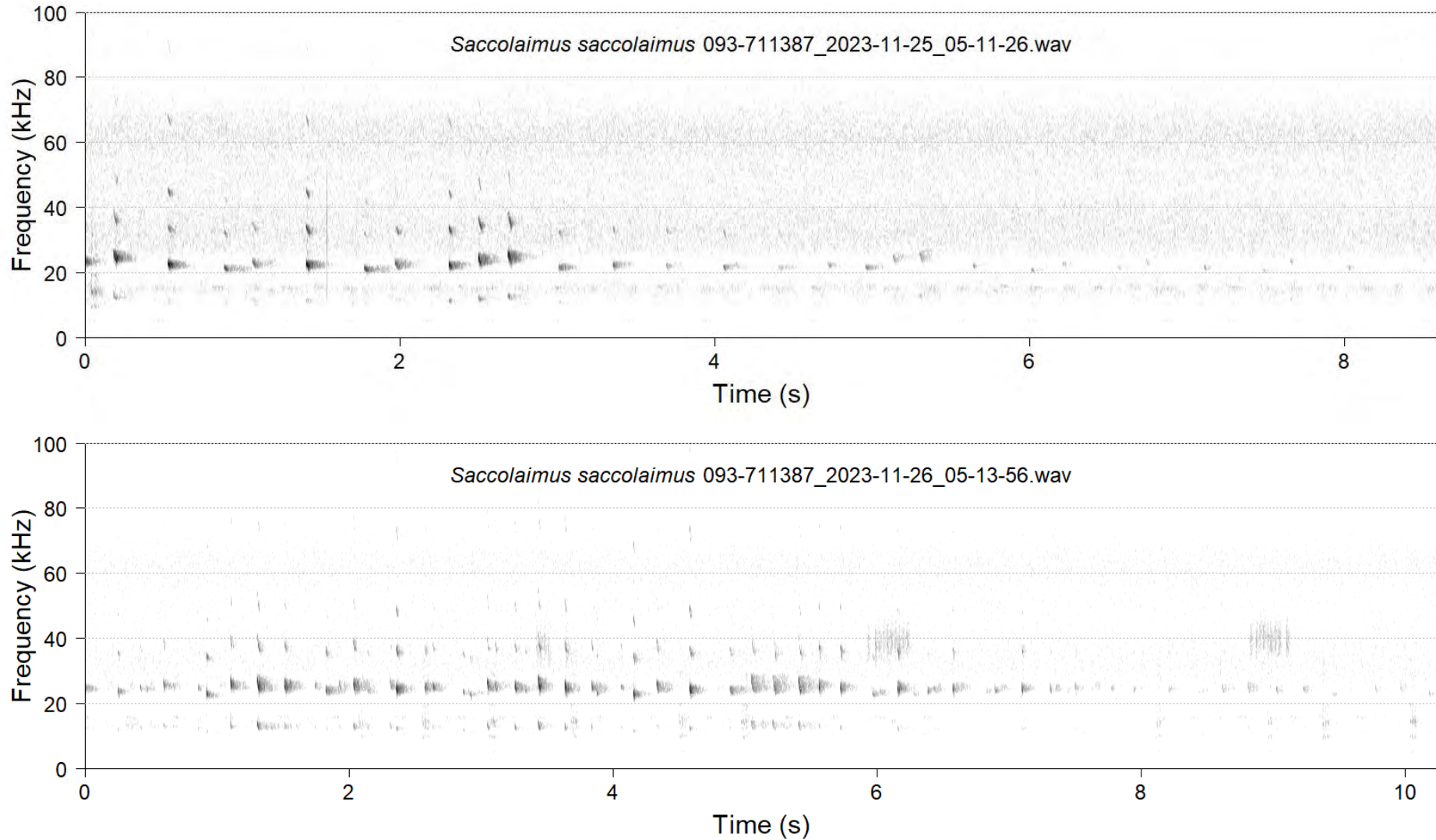
**Figure 2.** Representative echolocation call sequence portions of the species identified (**A:** *Chaerephon jobensis*; **B,C:** *Saccolaimus flaviventris*; **D:** *Saccolaimus saccolaimus*; **E:** *Taphozous kapalgensis*; **F:** *Ozimops lumsdenae*; **G:** *Ozimops cobourgianus*; **H:** *Chalinolobus nigrogriseus* / *Scotorepens greyii* / *Scotorepens sanborni*; **I:** *Myotis macropus*; **J:** *Nyctophilus arnhemensis*; **K:** *Pipistrellus adamsi*?; **L:** *Pipistrellus westralis*; **M:** *Miniopterus orianae orianae*; **N:** *Nyctophilus walkeri*; **O:** *Vespadelus caurinus*; **P:** *Rhinonictis aurantia*; time between pulses is compressed).



**Figure 3.** Representative echolocation call sequence portions attributed to the bare-rumped sheath-tailed bat.



**Figure 4.** Representative echolocation call sequence portions attributed to the bare-rumped sheath-tailed bat.



**Figure 5.** Representative echolocation call sequence portions attributed to the bare-rumped sheath-tailed bat.

## APPENDIX K    ASSESSING PRESENCE OF *UPEROLEIA DAVIESAE* USING EDNA

# Assessing presence of *Uperoleia daviesae* using eDNA.

Thursday, 29 June 2023

Project number: ED\_2341CR1

Prepared for: EcOz

Report prepared by: Dr Rachael Impey & Josh Griffiths

Lab analyst: Dr Rachael Impey

Assay(s): Amphibian (12S) and *Uperoleia daviesae* targeted species

Filter used: EnviroDNA PES 1.2 µM filter

## Highlights

- Water samples were collected from 35 sites, with two replicates per site.
- 16S genomic data was provided for *U. daviesae* and potential off-target species to develop and verify a targeted species assay for *U. daviesae*.
- All 70 eDNA samples were screened in triplicate for *U. daviesae* using qPCR.
- *U. daviesae* DNA was detected in 15 samples.
- Of the samples in which *U. daviesae* eDNA was detected:
  - o 1/3 qPCR assays were positive for 5 water samples;
  - o 2/3 qPCR assays were positive for 1 water samples;
  - o 3/3 qPCR assays were positive for 9 water samples.
- Amphibian (12S) metabarcoding was undertaken on 6 samples.
- Amphibians were detected at 4 of these samples (amphibian DNA in the other 2 samples was below threshold levels), detecting a total of 4 genera.
- None of the amphibian results could be resolved to species level due to a lack of species reference sequences in the 12S mitochondrial region.
- Contamination was not detected in laboratory controls.

## Methods

### Sampling

From 2023-04-13 to 2023-04-20, 70 water samples were collected from 35 sites by EcOz. At each site, 2 replicate samples were collected by passing up to 1200 mL of water (mean = 766 mL) through an EnviroDNA PES 1.2  $\mu\text{m}$  filter. Filtration was undertaken on-site to reduce DNA degradation during transport of water samples (Yamanaka *et al.* 2016). Following filtration, a preservative was added to the filters to minimise DNA degradation during transport.

### Analysis

#### DNA Extraction

DNA was extracted from filters using a commercially available DNA extraction kit (Qiagen DNeasy PowerSoil kit) that minimises compounds in environmental samples that can inhibit PCR reactions.

#### Targeted Species Assay Development

A targeted qPCR assay was developed for *U. daviesae*. 16S genomic sequences for *U. daviesae* and potential off targets including *Uperoleia lithomoda* and *Uperoleia inundata* (now referred to as *U. crassa*) were provided by EcOz (through University of WA). Forward, reverse and reporter primers were designed with a minimum of 5, 3 and 4 primer mismatches respectively between *U. daviesae* and the off targets provided. The selected primer sequence was also tested *in silico* against other available amphibian 16S sequences likely to occur in the region. Although reference sequences for co-occurring species were available, the level of genetic differentiation between *U. daviesae* and other *Uperoleia* species was large enough to provide high confidence of primer specificity. A synthetic gene block of the *U. daviesae* 16S region was designed and ordered as a positive control. The limit of detection and quantification for the designed assay was calculated to be 5 copies/ $\mu\text{L}$ , indicating at these concentrations we could reliably detect and quantify the input DNA.

#### Targeted Species Detection

Real-time quantitative Polymerase Chain Reaction (qPCR) assays were used to amplify the target DNA, using a species-specific probe targeting a small region of the mitochondrial DNA of the target species (*U. daviesae*). Assays were performed in triplicate on each sample. Positive and negative controls were included for all assays.

#### Amphibian Metabarcoding

Library construction involved two rounds of PCR, whereby the first round employed gene-specific primers to amplify the target region and the second round incorporated sequencing adapters and unique barcodes for each sample-amplicon combination included in the library. Negative controls were included during library construction. Negative controls consisted of the extraction negative as well as PCR negatives, in which nuclease-free water was used in place of DNA during both rounds of PCR. Sequencing was carried out on an Illumina sequencing platform.

Following quality control filtering to remove primer sequences, truncated reads, and low-frequency reads, DNA sequences were clustered into Operational Taxonomic Units (OTUs) based on sequence similarity. Taxonomic assignment was performed with VSEARCH software (Rognes *et al.* 2016), whereby each OTU cluster was assigned a species identity using a threshold of 95% by comparing against a reference sequence database. Where a species could not be assigned (*i.e.*, reference database was deficient and/or taxa were poorly characterised), taxonomic assignments were manually vetted by first obtaining a list of possible species through BLASTN searches against the public repository Genbank ([www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)), followed by elimination of species based on their

geographic distributions, using information from the Atlas of Living Australia and other relevant data sources. In cases where an OTU could not be adequately resolved to a single species (e.g., due to shared haplotypes), either a list of multiple species is included, or the OTU is assigned to the lowest taxonomic rank without further classification.

## Results

### Data spreadsheet

The results of the eDNA analysis are summarised in the attached spreadsheet (EnviroDNA\_ED\_2341CR1\_qPCR\_Amphibian\_Report.xlsx). Target species analysis showed 8 sites had positive detections for *U. daviesae* (>3/6 detections over the two replicates), with 1 additional site returning an equivocal detection (Figure 1).

Two or three positive qPCRs (out of 3 assays undertaken for each sample) strongly suggests that a sample is positive for the presence of the target species. Samples with 1 positive qPCR indicates lower levels of target DNA. This can signal that the target species is present in low abundance or occupies a site transiently. Alternatively, low levels of target DNA may arise from sample contamination through sampling or laboratory screening processes (minimised through strict protocols and negative controls), facilitated movement of DNA between waterbodies (e.g., water birds, recreational anglers, water transfers, predator scats), or eDNA dispersal from other sites (e.g., flow, floods). If greater confidence is required, further sampling is recommended at equivocal sites to confirm the presence of the target species.

Amphibian metabarcoding returned 4 genera of frogs among the 4 successful samples. The species was unable to be determined for any of these samples due to poor 12S reference sequence availability for frog species in the region, including *U. daviesae*. The table of results indicates likely species with known distribution in the area.

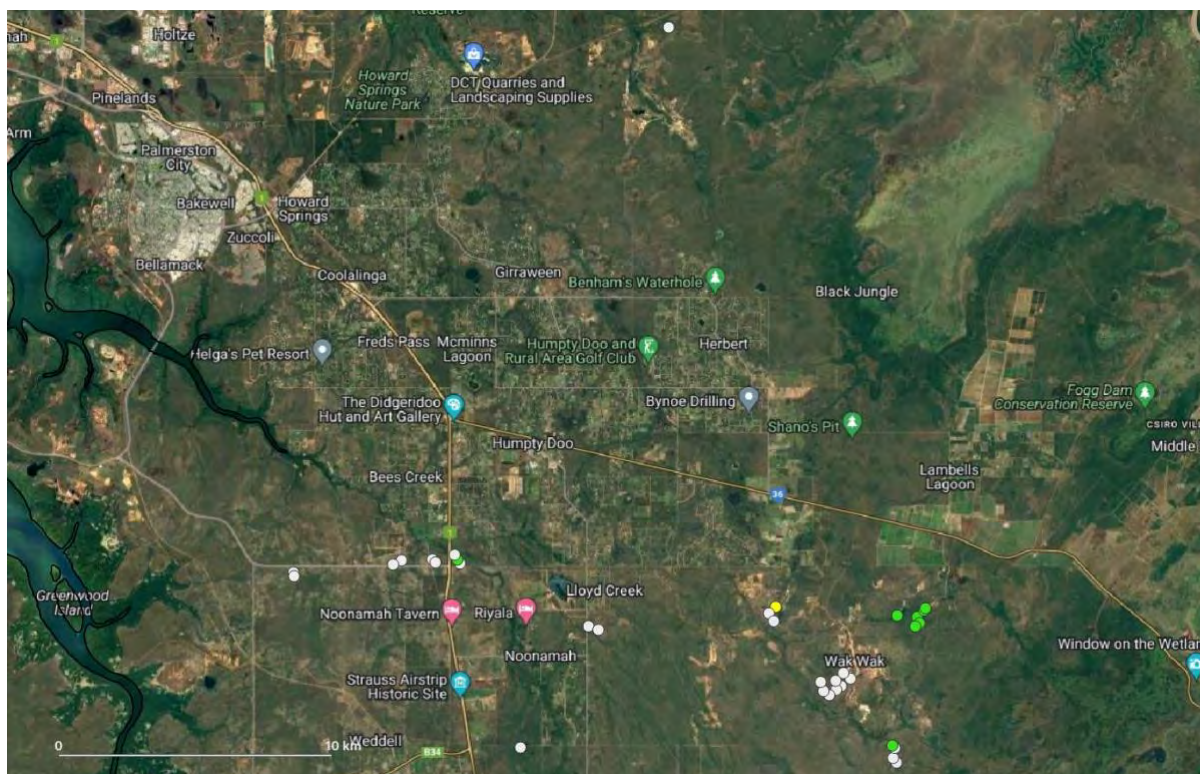


Figure 1. Site level results of eDNA analysis for *Uperoleia daviesae* (green = positive; yellow = equivocal; grey = negative).

## Quality Control

Negative controls were included at all stages (DNA extraction, n = 3 negatives; qPCR, n = 3 negatives) so that contamination from laboratory processes could be identified if present. No contamination was detected.

## References

Rognes T, Flouri T, Nichols B, Quince C, Mahé F. VSEARCH: a versatile open source tool for metagenomics. *PeerJ*. 2016 Oct 18;4:e2584. doi: 10.7717/peerj.2584. PMID: 27781170; PMCID: PMC5075697.

Yamanaka H., Motozawa H., Tsuji S., Miyazawa R. C., Takahara T. & Minamoto T. (2016) On-site filtration of water samples for environmental DNA analysis to avoid DNA degradation during transportation. *Ecol. Res.* 31 , 963–967.



### Disclaimer

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## APPENDIX L CAMERA SURVEY SITE HABITAT DATA

### Cameras – D1



<b>Site:</b> D1_CT.01		<b>Waypoint:</b> CT.01-03		<b>Coordinates:</b> 12.757955, 131.135379	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> <1%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland adjacent to watercourse. Fine grey silty clay soil. Riparian area unburnt					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		Possible Mission Grass and Gamba Grass – burnt, unable to identify clearly			
<b>Feral animals</b>		No evidence or presence observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	10-12	10	20	
	<i>Corymbia bella</i>	10	5		
	<i>Erythrophleum chlorostachys</i>	10	5		
Mid	<i>Livistona humilis</i>	3	10	30	
	<i>Cycas armstrongii</i>	2	5		
	<i>Terminalia ferdinandiana</i>	6	5		
	<i>Pandanus spiralis</i>	4	2		
Ground	Very recent fire Juv. Upper species		5	5	
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	5		2	None observed	
					



<b>Site:</b> D1_CT.04		<b>Waypoint:</b> CT.04-01		<b>Coordinates:</b> 12.763967, 131.135793	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low/Mid Open Woodland with some rocky outcrops and stony areas. Brown loamy clay soil with light gravel 10-15mm					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	15-17	20	35	
	<i>Erythrophleum chlorostachys</i>	12-15	10		
	<i>Eucalyptus tetradonta</i>	10-15	<5		
<b>Mid</b>	<i>Livistona humilis</i>	1-5	40	80	
	<i>Cycas armstrongii</i>	2-3	30		
	<i>Terminalia ferdinandiana</i>	2-6	10		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Livistona humilis</i>			<i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		4	1	
No photographs taken					



<b>Site:</b> D1_CT.06		<b>Waypoint:</b> CT.06-03		<b>Coordinates:</b> 12.729127, 131.127832	
<b>Date:</b> 03/08/2024		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 5-7%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland along drainage line between rocky rises. 5-30cm rocks with gravel					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	12-17	20	60	
	<i>Eucalyptus miniata</i>	12-15	15		
	<i>Erythrophleum chlorostachys</i>	10	10		
	<i>Corymbia polycarpa</i>	10	10		
<b>Mid</b>	<i>Livistona humilis</i>	1-4	10	40	
	<i>Cycas armstrongii</i>	2-4	10		
	<i>Terminalia ferdinandiana</i>	6	5		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		6	2	
No photographs taken					

<b>Site:</b> D1_CT.07		<b>Waypoint:</b> CT.07-02		<b>Coordinates:</b> 12.748288, 131.143432	
<b>Date:</b> 03/08/2024		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland adjacent to riparian area. Silty brown-grey clay soil. Pandanus present along border of burnt area, stand of <i>Petalostigma pubescens</i>					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	12-15	25	60	
	<i>Corymbia polycarpa</i>	10	25		
	<i>Lophostemon lactifluus</i>	10-12	5		
	<i>Erythrophleum chlorostachys</i>	10	5		
Mid	<i>Cycas armstrongii</i>	2-4	20	40	
	<i>Terminalia ferdinandiana</i>	5	5		
	<i>Livistona humilis</i>	3	5		
	<i>Pandanus spiralis</i>	3	5		
Ground	<i>Heteropogon</i> spp.		30	50	
	Annual Speargrass ( <i>Sorghum</i> spp.)		20		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	>5		5	2	
					

<b>Site:</b> D1_CT.08		<b>Waypoint:</b> CT.08-01		<b>Coordinates:</b> 12.730806, 131.122066	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland very gravelly light grey-brown clays soils, gravel to 30mm. Some laterite outcrops nearby. Termite mounds and Calytrix present.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	12-15	15	45	
	<i>Eucalyptus miniata</i>	10-15	15		
	<i>Erythrophleum chlorostachys</i>	10-15	10		
	<i>Corymbia polycarpa</i>	10-13	<5		
<b>Mid</b>	<i>Livistona humilis</i>	1-2	15	35	
	<i>Cycas armstrongii</i>	1-4	10		
	<i>Terminalia ferdinandiana</i>	5	<5		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		5	3	
No photographs taken					

<b>Site:</b> D1CT.10		<b>Waypoint:</b> CT.10-01		<b>Coordinates:</b> 12.745390, 131.126391	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland with rocky outcrops close to the top of ridgeline. Sandy clay soil with gravel to 20mm, rocks/stones to 100-150mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	12-17	20	50	
	<i>Erythrophleum chlorostachys</i>	10-12	15		
	<i>Corymbia bella</i>	12-15	10		
	<i>Eucalyptus miniata</i>	10-12	5		
<b>Mid</b>	<i>Livistona humilis</i>	2-6	20	45	
	<i>Cycas armstrongii</i>	2-3	10		
	<i>Terminalia ferdinandiana</i>	4-6	10		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	6		4	1	
					

<b>Site:</b> D1CT.11		<b>Waypoint:</b> CT.11-03		<b>Coordinates:</b> 12.741344, 131.12464	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Tall Open Woodland, sandy clay soil with gravel to 30 mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-17	20	40	
	<i>Eucalyptus tetradonta</i>	12-17	15		
	<i>Erythrophleum chlorostachys</i>	10-12	5		
<b>Mid</b>	<i>Cycas armstrongii</i>	2-3	30	55	
	<i>Livistona humilis</i>	3	15		
	<i>Terminalia ferdinandiana</i>	5	<5		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		6	2	
					

<b>Site:</b> D1_CT.12		<b>Waypoint:</b> CT.12-02		<b>Coordinates:</b> 12.752847, 131.135887	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland over fine sandy clay soil with light gravel to 10mm. Some termite mounds.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-15	20	50	
	<i>Erythrophleum chlorostachys</i>	10-12	10		
	<i>Corymbia polycarpa</i>	10-15	15		
	<i>Eucalyptus tetradonta</i>	10-12	5		
<b>Mid</b>	<i>Livistona humilis</i>	2-3	40	70	
	<i>Cycas armstrongii</i>	1-3	20		
	<i>Terminalia ferdinandiana</i>	3	5		
<b>Ground</b>	Very recent fire Clumping perennial – likely <i>Heteropogon triticeus</i>			10	
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Livistona humilis</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		4	2 +3x very large	
					

<b>Site:</b> D1_CT.13		<b>Waypoint:</b> CT.13-02		<b>Coordinates:</b> 12.575449, 131.121805	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland with dense grass understory over sandy clay with gravel to 20mm, adjacent to gully/seasonal watercourse. Some rocky areas					
<b>Disturbance</b>					
<b>Time since Fire</b>		3-5 yrs			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetrodonta</i>	12-17	15	30	
	<i>Eucalyptus miniata</i>	12-15	10		
	<i>Erythrophleum chlorostachys</i>	10-12	5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	2-8	15	35	
	<i>Livistona humilis</i>	1-4	5-10		
	<i>Cycas armstrongii</i>	1-4	<5		
<b>Ground</b>	<i>Heteropogon triticeus</i>		40	100	
	<i>Heteropogon contortus</i>		40		
	<i>Sorghum</i> spp.		20		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Terminalia ferdinandiana</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>10		7	5	
No photographs taken					

<b>Site:</b> D1_CT.15		<b>Waypoint:</b> CT.15-01		<b>Coordinates:</b> 12.728369, 131.134341	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1-2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland on top of rocky ridge. Some termite mounds present.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	12-15	25	45	
	<i>Eucalyptus tetradonta</i>	12-15	10		
	<i>Erythrophleum chlorostachys</i>	10	10		
Mid	<i>Livistona humilis</i>	2-4	20	35	
	<i>Cycas armstrongii</i>	3	5-10		
	<i>Terminalia ferdinandiana</i>	3-5	5		
Ground	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	>5		5	3	
No photographs taken					

<b>Site:</b> D1_CT.16		<b>Waypoint:</b> CT.16-01		<b>Coordinates:</b> 12.745925, 131.135427	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 4%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland over stoney ground at base of rocky rise. Dark brown sandy clay with gravel to 20mm, with rocks to 150mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-15	30	55	
	<i>Corymbia polycarpa</i>	12-15	15		
	<i>Erythrophleum chlorostachys</i>	8-10	10		
<b>Mid</b>	<i>Livistona humilis</i>	1-6	40	70	
	<i>Terminalia ferdinandiana</i>	2-8	20		
	<i>Cycas armstrongii</i>	1-4	10		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Terminalia ferdinandiana</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		7	5	
No photographs taken					

<b>Site:</b> D1_CT.18		<b>Waypoint:</b> CT.18-03		<b>Coordinates:</b> 12.749297, 131.130673	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 2%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland over rocky terrain at base of stony rise/ridgeline.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	10-12	10	30	
	<i>Erythrophleum chlorostachys</i>	10	10		
	<i>Corymbia polycarpa</i>	10	10		
<b>Mid</b>	<i>Livistona humilis</i>	1-5	40	85	
	<i>Cycas armstrongii</i>	1-5	30		
	<i>Terminalia ferdinandiana</i>	4-8	10		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>	<b>10-20cm</b>	<b>&gt;20cm</b>		
	6	4	1		
No photographs taken					



<b>Site:</b> D1_CT.19		<b>Waypoint:</b> CT.19-02		<b>Coordinates:</b> 12.753111, 131.125187	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 3%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> High Open Woodland over rocky slope with rocky outcrops. Sandy clay soils with gravel to 30mm. 100m to top of ridgeline.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetrodonta</i>	15-17	20	40	
	<i>Eucalyptus miniata</i>	12-15	10		
	<i>Erythrophleum chlorostachys</i>	12	10		
<b>Mid</b>	<i>Livistona humilis</i>	2-4	35	55	
	<i>Terminalia ferdinandiana</i>	3-6	10		
	<i>Cycas armstrongii</i>	2	3		
	<i>Corymbia polycarpa</i>	2-6	1		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	5		6		0
No photographs taken					



<b>Site:</b> D1_CT.22		<b>Waypoint:</b> CT.22-01		<b>Coordinates:</b> 12.734402, 131.125805	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 5%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland over stony slope. Sandy clay soil with gravel to 50mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		<i>Andropogon gayanus</i> (Gamba Grass)			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	12-17	15	25	
	<i>Erythrophleum chlorostachys</i>	8-12	10		
<b>Mid</b>	<i>Cycas armstrongii</i>	4-6	15	35	
	<i>Terminalia ferdinandiana</i>	2-3	10		
	<i>Livistona humilis</i>	2-4	5		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		6	4	
No photographs taken					



<b>Site:</b> D1_CT.24		<b>Waypoint:</b> CT.24-03		<b>Coordinates:</b> 12.730806, 131.122066	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> -15% E / flat / -30% W	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open woodland on seasonal drainage line between stony rises. Sandy silty clay soils with rocks between 200-400mm. Nearby rocky outcrops.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		<i>Andropogon gayanus</i> (Gamba Grass) - 20% - burnt. High in adjacent unburnt area.			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	15-17	20	40	
	<i>Eucalyptus miniata</i>	12-15	15		
	<i>Erythrophleum chlorostachys</i>	12	5		
	<i>Corymbia polycarpa</i>	10-12	5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	6-8	15	35	
	<i>Livistona humilis</i>	2-4	10		
	<i>Cycas armstrongii</i>	1-3	10		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		6	1	
No photographs taken					



<b>Site:</b> D1_CT.25		<b>Waypoint:</b> CT.25-01		<b>Coordinates:</b> 12.748031, 131.120296	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> <1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland over sandy clay with gravel to 15mm. Many termite mounds present.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetradonta</i>	10-12	10	20	
	<i>Eucalyptus miniata</i>	10	5		
	<i>Corymbia polycarpa</i>	8-10	<5		
<b>Mid</b>	<i>Livistona humilis</i>	3	15	35	
	<i>Cycas armstrongii</i>	2-3	10		
	<i>Terminalia ferdinandiana</i>	6	<5		
<b>Ground</b>	Very recent fire				
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		3	1	
No photographs taken					

<b>Site:</b> D1_CT.26		<b>Waypoint:</b> CT.26-02		<b>Coordinates:</b> 12.736732, 131.121759	
<b>Date:</b> 02/08/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> <1%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland with adjacent Calytrix stand. Sandy clay soil with gravel to 30mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		3 weeks			
<b>Weeds</b>		None observed – Very recent fire			
<b>Feral animals</b>		No evidence or presence observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetrodonta</i>	10-12	10	45	
	<i>Eucalyptus miniata</i>	10	5		
	<i>Corymbia polycarpa</i>	10	5		
	<i>Corymbia bella</i>	10-12	<5		
Mid	<i>Livistona humilis</i>	3	10	30	
	<i>Erythrophleum chlorostachys</i>	7	5		
	<i>Calytrix exstipulata</i>	2	5		
	<i>Cycas armstrongii</i>	1-4	5		
Ground	Very recent fire				
Flowering Plants			Fruiting Plants		
<i>Calytrix exstipulata</i>			None observed		
Tree hollow presence	<10cm	10-20cm	>20cm		
	3	None observed	None observed		
No photographs taken					



<b>Site:</b> D1_CT.101		<b>Waypoint:</b> CT.101-01		<b>Coordinates:</b> 12.728692, 131.138715	
<b>Date:</b> 26/10/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 1%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> High Woodland, large trees with high percentage canopy cover and leaf litter cover. Soft light grey sandy soil with high organic matter content, some clay. 50m from base of rocky ridge and 150m from permanent creek line/riparian zone. Massive <i>Alstonia actinophylla</i> 25m high, 30m canopy, 150cm DBH.					
<b>Disturbance</b>					
<b>Time since Fire</b>		<12 mths			
<b>Weeds</b>		<i>Hyptis suaveolens</i> - 20%			
<b>Feral animals</b>		No evidence or presence observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetrodonta</i>	16-22	35	90	
	<i>Erythrophleum chlorostachys</i>	14-20	20		
	<i>Eucalyptus miniata</i>	12-15	5		
	<i>Corymbia polysciada</i>	12-15	5		
	<i>Alstonia actinophylla</i> (single tree)	25	25		
Mid	<i>Livistona humilis</i>	1-6	20	60	
	<i>Terminalia ferdinandiana</i>	2-12	10-15		
	<i>Planchonia careya</i>	2-7	5-10		
	<i>Petalostigma pubescens</i>	1-4	5-10		
	<i>Syzygium eucalyptoides</i> var. <i>bleeseri</i>	4-6	5		
Ground	<i>Heteropogon</i> spp.		5	10	
	<i>Syzygium eucalyptoides</i> var. <i>bleeseri</i>		<5		
	<i>Buchanania obovata</i>		<5		
Flowering Plants			Fruiting Plants		
<i>Corymbia polysciada</i> <i>Livistona humilis</i> <i>Terminalia ferdinandiana</i>			<i>Livistona humilis</i> <i>Eucalyptus tetrodonta</i> <i>Corymbia polysciada</i> <i>Petalostigma pubescens</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	>5		5	2	
					



<b>Site:</b> D1_CT.102		<b>Waypoint:</b> CT.102-02		<b>Coordinates:</b> 12.736132, 131.139704	
<b>Date:</b> 26/10/2023		<b>Surveyor/s:</b> NA		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland at base of rocky rise. Light brown sandy clay soil with gravel to 20mm. Termite mounds present. 40% leaf litter cover. Diverse midstory					
<b>Disturbance</b>					
<b>Time since Fire</b>		<12 mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		No evidence or presence observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-20	25	50	
	<i>Erythrophleum chlorostachys</i>	10-12	15		
	<i>Eucalyptus tetrodonta</i>	12-20	10		
<b>Mid</b>	<i>Livistona humilis</i>	1-4	15	40	
	<i>Terminalia carpentariae</i>	1-5	5-10		
	<i>Xanthostemon paradoxus</i>	2-7	5		
	<i>Brachychiton megaphyllus</i>	1-3	5		
	<i>Cycas armstrongii</i>	1-2	<5		
	<i>Terminalia ferdinandiana</i>	2-6	<5		
<b>Ground</b>	<i>Heteropogon</i> spp.		5	15	
	<i>Erythrophleum chlorostachys</i>		<5		
	<i>Buchanania obovata</i>		<5		
	<i>Terminalia carpentariae</i>		<5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Livistona humilis</i> <i>Brachychiton megaphyllus</i>			<i>Livistona humilis</i> <i>Brachychiton megaphyllus</i> <i>Eucalyptus miniata</i> <i>Corymbia polysciada</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		4	2	
					



<b>Site:</b> D1_CT.103		<b>Waypoint:</b> CT.103-02		<b>Coordinates:</b> 12.743507, 131.149772	
<b>Date:</b> 26/10/2023		<b>Surveyor/s:</b> SM & RH		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Eucalypt Woodland adjacent to drainage area with lateritic soil.					
<b>Disturbance</b>					
<b>Time since Fire</b>		<12 mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig tracks and diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-15	15	25	
	<i>Eucalyptus tectifica</i>	8-15	5		
	<i>Erythrophleum chlorostachys</i>	8-13	5		
<b>Mid</b>	<i>Livistona humilis</i>	1-4	5	15	
	<i>Cycas armstrongii</i>	1-4	5		
	<i>Buchanania obovata</i>	2-5	<5		
<b>Ground</b>	Juv upper and mid species		10	10	
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			<i>Planchonia careya</i> <i>Cycas armstrongii</i> <i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	3		1	None observed	
					



<b>Site:</b> D1_CT.104		<b>Waypoint:</b> CT.104-03		<b>Coordinates:</b> 12.743507, 131.149772	
<b>Date:</b> 03/08/2023		<b>Surveyor/s:</b> SM & RH		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland adjacent to dry watercourse bordering narrow riparian zone.					
<b>Disturbance</b>					
<b>Time since Fire</b>		<12 mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig tracks and diggings near watercourse			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-15	10	20	
	<i>Erythrophleum chlorostachys</i>	8-12	5		
	<i>Corymbia polysciada</i>	8-14	5		
<b>Mid</b>	<i>Cycas armstrongii</i>	1-3	15	35	
	Juv. upper species	1-4	10		
	<i>Buchanania obovata</i>	1-2	>5		
<b>Ground</b>	<i>Chrysopogon fallax</i>		5	20	
	<i>Xanthostemon paradoxus</i>		5		
	<i>Cycas armstrongii</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Lophostemon lactifluus</i>			<i>Cycas armstrongii</i> <i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		5	3	
					



## Cameras – D2



<b>Site:</b> D2_CT.01		<b>Waypoint:</b> CT.01-01		<b>Coordinates:</b> 12.713985, 131.150952	
<b>Date:</b> 07/09/2023		<b>Surveyor/s:</b> IA, RR		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland with lots of Eucalypt saplings, gravelly sandy clay.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetrodonta</i>	12-15	15	30	
	<i>Eucalyptus miniata</i>	12-15	12		
	<i>Corymbia bleeseri</i>	12	3		
Mid	<i>Livistona humilis</i>	1-2	10	20	
	<i>Cycas armstrongii</i>	1-2	7		
	<i>Brachychiton megaphyllus</i>	1-3	3		
Ground	<i>Eucalyptus miniata</i>		15	35	
	<i>Eucalyptus tetrodonta</i>		5		
	<i>Heteropogon triticeus</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	2		2	-	
					



<b>Site:</b> D2_CT.02		<b>Waypoint:</b> CT.02-01		<b>Coordinates:</b> 12.690249, 131.154775	
<b>Date:</b> 06/09/2023		<b>Surveyor/s:</b> NA, AL		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low-Mid open woodland. Light grey sandy clay soils with high gravel content					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetrodonta</i>	10-12	15	20	
	<i>Corymbia polysciada</i>	8-10	<5		
Mid	<i>Erythrophleum chlorostachys</i>	6-8	5	20	
	<i>Xanthostemon paradoxus</i>	2-6	5		
	<i>Grevillea decurrens</i>	1-3	<2		
	<i>Cycas armstrongii</i>	1-4	<5		
Ground	<i>Petalostigma quadriloculare</i>		20	40	
	<i>Eucalyptus tetrodonta</i>		10		
	<i>Eriachne ciliata</i>		5		
	<i>Heteropogon triticeus</i>		5		
Flowering Plants			Fruiting Plants		
None observed			<i>Petalostigma quadriloculare</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	2		5	1	
					



<b>Site:</b> D2_CT.03		<b>Waypoint:</b> CT.03-01		<b>Coordinates:</b> 12.703974, 131.152912	
<b>Date:</b> 06/09/2023		<b>Surveyor/s:</b> IA, RR		<b>Slope and aspect:</b> 2%, East	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland over dense grass understorey.					
<b>Disturbance</b>					
<b>Time since Fire</b>		1-2 yrs			
<b>Weeds</b>		<i>Andropogon gayanus</i>			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	10	3	<10	
	<i>Erythrophleum chlorostachys</i>	8	3		
	<i>Planchonia careya</i>	6	<3		
Mid	<i>Buchanania obovata</i>	2	3	<10	
	<i>Livistona humilis</i>	1-2	2		
	<i>Grevillea pteridifolia</i>	2	1		
Ground	<i>Sorghum intrans</i>		95	100	
	<i>Heteropogon triticeus</i>		4		
	<i>Buchanania obovata</i>		1		
Flowering Plants			Fruiting Plants		
None observed			<i>Erythrophleum chlorostachys</i> <i>Buchanania obovata</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	3		-	-	
					



<b>Site:</b> D2_CT.04		<b>Waypoint:</b> CT.04-02		<b>Coordinates:</b> 12.715637, 131.167353	
<b>Date:</b> 07/09/2023		<b>Surveyor/s:</b> NA, AL		<b>Slope and aspect:</b> 2%, West	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Woodland adjacent creek line in drainage system. Brown-grey sandy clay soils with Debil Debil mounds					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		<i>Stachytarpheta</i> spp. <15%			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Lophostemon lactifluus</i>	8-12	30	45	
	<i>Corymbia polycarpa</i>	10-12	10		
	<i>Corymbia bella</i>	10-12	<5		
Mid	<i>Planchonia careya</i>	4-6	10	40	
	<i>Pandanus spiralis</i>	1-4	5		
	<i>Lophostemon lactifluus</i>	2-6	5		
Ground	<i>Germania grandiflora</i>		30	40	
	<i>Eriachne</i> spp.		5		
Flowering Plants			Fruiting Plants		
<i>Melaleuca dealbata</i>			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	>5		4	1	
					



<b>Site:</b> D2_CT.05		<b>Waypoint:</b> CT.05-01		<b>Coordinates:</b> 12.694335, 131.150159	
<b>Date:</b> 06/09/2023		<b>Surveyor/s:</b> IA, RR, NA, AL		<b>Slope and aspect:</b> 2%, NE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open Eucalypt woodland on rises, rocky outcropping, sandy clay loam, high gravel content to 30mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	10-14	5	15	
	<i>Erythrophleum chlorostachys</i>	6-10	<5		
	<i>Eucalyptus tectifica</i>	10-12	<5		
<b>Mid</b>	<i>Xanthostemon paradoxus</i>	2-6	15	25	
	<i>Eucalyptus tectifica</i>	2-4	<5		
	<i>Cycas armstrongii</i>	1-3	5		
<b>Ground</b>	<i>Heteropogon triticeus</i>		10	45	
	<i>Eucalyptus tetradonta</i>		5		
	<i>Xanthostemon paradoxus</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Cochlospermum fraseri</i>			<i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	1		2	-	
					



<b>Site:</b> D2_CT.06		<b>Waypoint:</b> CT.06-01		<b>Coordinates:</b> 12.704265, 131.162522	
<b>Date:</b> 07/09/2023		<b>Surveyor/s:</b> NA, AL		<b>Slope and aspect:</b> 1%, SW	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Woodland over drainage systems. Light grey-brown sandy clay soils, Debil Debil mounds present					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
<b>Upper</b>	<i>Lophostemon lactiflorus</i>	6-10	30	45	
	<i>Corymbia polycarpa</i>	10-12	10		
	<i>Erythrophleum chlorostachys</i>	8-12	5		
<b>Mid</b>	<i>Planchonia careya</i>	5-8	5	<10	
	<i>Terminalia ferdinandiana</i>	3-4	<1		
<b>Ground</b>	<i>Imperata cylindrocarpa</i>		15	30	
	<i>Chrysopogon sp.</i>		10		
	<i>Lophostemon lactiflorus</i>		5		
Flowering Plants			Fruiting Plants		
None observed			None observed		
Tree hollow presence	<10cm	10-20cm	>20cm		
	1	2	1		
					



<b>Site:</b> D2_CT.07		<b>Waypoint:</b> CT.07-01		<b>Coordinates:</b> 12.718862, 131.158459	
<b>Date:</b> 08/09/2023		<b>Surveyor/s:</b> IA, RR		<b>Slope and aspect:</b> 2%, SE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland, recently burnt, many tall trees with large DBH.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		<i>Andropogon gayanus</i> 100m away			
<b>Feral animals</b>		Unidentified animal tracks			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetrodonta</i>	12-14	10	20	
	<i>Eucalyptus miniata</i>	12-14	<10		
	<i>Buchanania obovata</i>	3-5	1		
Mid	<i>Planchonia careya</i>	3-5	1	<5	
	<i>Brachychiton megaphyllus</i>	2-3	1		
	<i>Livistona humilis</i>	1-2	1		
Ground	<i>Eucalyptus tetrodonta</i>		15	35	
	<i>Eucalyptus miniata</i>		15		
	<i>Sorghum intrans</i>		<5		
Flowering Plants			Fruiting Plants		
<i>Brachychiton megaphyllus</i>			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	2		2	-	
					



<b>Site:</b> D2_CT.08		<b>Waypoint:</b> CT.08-03		<b>Coordinates:</b> 12.691779, 131.187379	
<b>Date:</b> 13/09/2023		<b>Surveyor/s:</b> NA, HG		<b>Slope and aspect:</b> 2%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland adjacent drainage area. Dark grey/brown sandy clay with gravel to 30mm, some rocky protrusions					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	6-12	5	<10	
	<i>Terminalia grandiflora</i>	8-10	<5		
	<i>Melaleuca nervosa</i>	6-10	<5		
<b>Mid</b>	<i>Planchonia careya</i>	2-5	5	15	
	<i>Grevillea pteridifolia</i>	6-8	5		
	<i>Pandanus spiralis</i>	2-5	5		
<b>Ground</b>	<i>Heteropogon triticeus</i>		15	25	
	<i>Xanthostemon sp.</i>		5		
	<i>Sorghum intrans</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Planchonia careya</i>			<i>Planchonia careya</i> <i>Brachychiton megaphyllus</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		1	-	
					



<b>Site:</b> D2_CT.09		<b>Waypoint:</b> CT.09-01		<b>Coordinates:</b> 12.697281, 131.174920	
<b>Date:</b> 11/09/2023		<b>Surveyor/s:</b> IA, AL		<b>Slope and aspect:</b> 2%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low-Mid open eucalyptus woodland, low slopes east of ridgeline					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetrodonta</i>	10-12	10	20	
	<i>Eucalyptus miniata</i>	10-12	5		
	<i>Erythrophleum chlorostachys</i>	6-10	5		
	<i>Corymbia bleeseri</i>	12	1		
<b>Mid</b>	<i>Buchanania obovata</i>	1-3	<1	5	
	<i>Terminalia ferdinandiana</i>	1-3	<1		
	<i>Livistona humilis</i>	1-3	<1		
	Juv. <i>Eucalyptus</i> spp.	1-5	<1		
<b>Ground</b>	<i>Heteropogon triticeus</i>		10	35	
	<i>Sorghum intrans</i>		10		
	Juv. upper and mid spp.		10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
Brachychiton <i>megaphyllus</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	1		2	-	
					



<b>Site:</b> D2_CT.10		<b>Waypoint:</b> CT.10-02		<b>Coordinates:</b> 12., 131.	
<b>Date:</b> 07/09/2023		<b>Surveyor/s:</b> NA, HG		<b>Slope and aspect:</b> <1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open Woodland over dark grey sandy clay soil with gravel to 50mm. Termite mounds present.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Corymbia bleeseri</i>	10-15	10	20	
	<i>Eucalyptus miniata</i>	12-15	10		
	<i>Erythrophleum chlorostachys</i>	8-10	<5		
Mid	<i>Livistona humilis</i>	2-3	<5	<5	
	<i>Terminalia carpentariae</i>	3	<1		
Ground	<i>Heteropogon triticeus</i>		10	15	
	<i>Eucalyptus miniata</i>		<5		
	<i>Corymbia bleeseri</i>		<5		
Flowering Plants			Fruiting Plants		
None observed			<i>Petalostigma quadriloculare</i> <i>Cochlospermum fraseri</i> - 50m away		
Tree hollow presence	<10cm		10-20cm	>20cm	
	-		2	-	
					



<b>Site:</b> D2_CT.11		<b>Waypoint:</b> CT.11-01		<b>Coordinates:</b> 12.712369, 131.187192	
<b>Date:</b> 08/09/2023		<b>Surveyor/s:</b> NA, RR		<b>Slope and aspect:</b> <1%, W	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland adjacent drainage area, grey-brown sandy clay soil.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	12-15	15	30	
	<i>Erythrophleum chlorostachys</i>	12-15	12		
	<i>Corymbia bleeseri</i>	12	3		
Mid	<i>Livistona humilis</i>	2-6	10	15	
	<i>Corymbia bleeseri</i>	2-6	<5		
	<i>Terminalia platyphylla</i>	1-3	1		
Ground	<i>Eucalyptus miniata</i>		15	30	
	<i>Erythrophleum chlorostachys</i>		15		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			<i>Cycas armstrongii</i> <i>Livistona humilis</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	2		4	2	
					



<b>Site:</b> D2_CT.12		<b>Waypoint:</b> CT.12-02		<b>Coordinates:</b> 12.706979, 131.175997	
<b>Date:</b> 08/09/2023		<b>Surveyor/s:</b> IA, AL		<b>Slope and aspect:</b> 1%, NE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland, lower slopes east of ridgeline. Hollow logs on ground.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings from wet season			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Corymbia polysciada</i>	10-12	5	20	
	<i>Erythrophleum chlorostachys</i>	8-10	10		
	<i>Terminalia grandiflora</i>	8-12	<5		
Mid	<i>Planchonia careya</i>	3-5	5	20	
	<i>Petalostigma pubescens</i>	2-5	5		
	<i>Syzygium eucalyptoides</i> ssp. <i>bleeseri</i>	1-5	5		
	<i>Buchanania obovata</i>	1-5	5		
Ground	<i>Syzygium eucalyptoides</i> ssp. <i>bleeseri</i>		15	30	
	<i>Xanthostemon paradoxus</i>		10		
	<i>Pandanus spiralis</i>		<1		
	<i>Sorghum intrans</i>		<1		
Flowering Plants			Fruiting Plants		
<i>Planchonia careya</i> <i>Corymbia polysciada</i>			<i>Planchonia careya</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	2		3	-	
					

<b>Site:</b> D2_CT.13		<b>Waypoint:</b> CT.13-02		<b>Coordinates:</b> 12., 131.	
<b>Date:</b> 13/09/2023		<b>Surveyor/s:</b> NA, HG		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid Open Woodland. Very sandy silty clay soil, light grey/red colour. Light gravel content to 10mm					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		<i>Hyptis suaveolens</i> - 20%			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	12-15	10	20	
	<i>Corymbia polycarpa</i>	12-15	5		
	<i>Terminalia grandiflora</i>	6-8	5		
<b>Mid</b>	<i>Cochlospermum fraseri</i>	2-6	5	<15	
	<i>Planchonia careya</i>	2-4	5		
	<i>Cycas armstrongii</i>	1-2	<5		
<b>Ground</b>	<i>Terminalia grandiflora</i>		20	50	
	<i>Heteropogon triticeus</i>		10		
	<i>Hyptis suaveolens</i>		20		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Cochlospermum fraseri</i> <i>Cycas armstrongii</i> <i>Planchonia careya</i>			<i>Cochlospermum fraseri</i> <i>Cycas armstrongii</i> <i>Planchonia careya</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		2	-	
					



<b>Site:</b> D2_CT.14		<b>Waypoint:</b> CT.14-01		<b>Coordinates:</b> 12.696658, 131.138589	
<b>Date:</b> 12/09/2023		<b>Surveyor/s:</b> NA, IA		<b>Slope and aspect:</b> 1%, NE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland, sandy clay soil					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		<i>Hyptis suaveolens</i>			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Corymbia foelscheana</i>	4-8	3	10	
	<i>Erythrophleum chlorostachys</i>	8	3		
	<i>Corymbia polysciada</i>	7-10	3		
Mid	<i>Planchonia careya</i>	3-6	2	<10	
	<i>Brachychiton megaphyllus</i>	3-6	3		
	<i>Buchanania obovata</i>	2-3	2		
Ground	<i>Sorghum intrans</i>		10	20	
	<i>Buchanania obovata</i>		5		
	<i>Corymbia foelscheana</i>		5		
Flowering Plants			Fruiting Plants		
<i>Brachychiton megaphyllus</i>			<i>Planchonia careya</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	3		-	-	
					



<b>Site:</b> D2_CT.15		<b>Waypoint:</b> CT.15-01		<b>Coordinates:</b> 12., 131.	
<b>Date:</b> 13/09/2023		<b>Surveyor/s:</b> IA, AL		<b>Slope and aspect:</b> 1%, SW	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low-Mid open eucalypt woodland					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tetradonta</i>	10-12	10	15	
	<i>Corymbia bleeseri</i>	12	<5		
Mid	<i>Erythrophleum chlorostachys</i>	6-8	5	15	
	<i>Terminalia ferdinandiana</i>	5-8	5		
	<i>Xanthostemon paradoxus</i>	3-6	<1		
	<i>Acacia lamprocarpa</i>	2-4	<1		
Ground	<i>Syzygium eucalyptoides</i> ssp. <i>bleeseri</i>		20	30	
	<i>Xanthostemon paradoxus</i>		5		
	<i>Petalostigma quadriloculare</i>		1		
Flowering Plants			Fruiting Plants		
None observed			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	1		-	-	
					

<b>Site:</b> D2_CT.16		<b>Waypoint:</b> CT.16-02		<b>Coordinates:</b> 12.720527, 131.180151	
<b>Date:</b> 11/09/2023		<b>Surveyor/s:</b> IA, AL		<b>Slope and aspect:</b> 2%, SW	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low-Mid open woodland on mid slope					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	10-12	5	15	
	<i>Corymbia polysciada</i>	10-12	5		
	<i>Erythrophleum chlorostachys</i>	8-12	<5		
<b>Mid</b>	<i>Corymbia foelscheana</i>	4-8	10	15	
	<i>Livistona humilis</i>	1-4	<5		
	<i>Terminalia ferdinandiana</i>	1-3	<5		
<b>Ground</b>	<i>Heteropogon triticeus</i>		15	30	
	<i>Chrysopogon sp.</i>		10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Corymbia polysciada</i>			<i>Planchonia careya</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	3		1	-	
					



<b>Site:</b> D2_CT.17		<b>Waypoint:</b> CT.17-03		<b>Coordinates:</b> 12.698046, 131.191202	
<b>Date:</b> 12/09/2023		<b>Surveyor/s:</b> NA, IA		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland with lots of Eucalypt saplings, gravelly sandy clay.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Corymbia polycarpa</i>	10-12	3	10	
	<i>Erythrophleum chlorostachys</i>	10-12	3		
	<i>Terminalia grandiflora</i>	6-14	2		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	2-4	3	<10	
	<i>Livistona humilis</i>	1-3	4		
	<i>Pandanus spiralis</i>	1-2	1		
<b>Ground</b>	<i>Petalostigma quadriloculare</i>		<5	15	
	<i>Eremophila obovata</i>		<5		
	<i>Planchonia careya</i>		<5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Terminalia ferdinandiana</i>			<i>Terminalia ferdinandiana</i> <i>Cochlospermum fraseri</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	2		1		-
					



<b>Site:</b> D2_CT.18		<b>Waypoint:</b> CT.18-03		<b>Coordinates:</b> 12.692114, 131.19425	
<b>Date:</b> 11/09/2023		<b>Surveyor/s:</b> AL, HG		<b>Slope and aspect:</b> 1%, N	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland / tall shrubland in drainage system with watercourse to north of sites. Debil Debil mounds present. Light grey sandy clay soil.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Melaleuca nervosa</i>	6-10	10	20	
	<i>Corymbia polysciada</i>	10	5		
	<i>Grevillea pteridifolia</i>	6-8	<5		
<b>Mid</b>	<i>Pandanus spiralis</i>	1-4	5	<10	
	<i>Planchonia careya</i>	4-5	2		
	<i>Buchanania obovata</i>	4	1		
<b>Ground</b>	<i>Germania grandiflora</i>		25	40	
	<i>Chrysopogon sp.</i>		10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Planchonia careya</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>	<b>10-20cm</b>	<b>&gt;20cm</b>		
	-	-	-		
No photographs taken					

<b>Site:</b> D2_CT.19		<b>Waypoint:</b> CT.19-01		<b>Coordinates:</b> 12.714418, 131.194706	
<b>Date:</b> 11/09/2023		<b>Surveyor/s:</b> NA, HG		<b>Slope and aspect:</b> 2%, N	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland adjacent drainage area. Sandy clay soil with high gravel content to 30mm. Termite mounds present					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	10-12	10	15	
	<i>Erythrophleum chlorostachys</i>	8-10	5		
	<i>Corymbia bleeseri</i>	10	<5		
Mid	<i>Eucalyptus miniata</i>	2-6	<5	10	
	<i>Livistona humilis</i>	1-3	<5		
	<i>Terminalia platyphylla</i>	3-5	<5		
Ground	<i>Heteropogon trisetus</i>		15	35	
	<i>Erythrophleum chlorostachys</i>		10		
	<i>Petalostigma quadriloculare</i>		10		
Flowering Plants			Fruiting Plants		
<i>Planchonia careya</i>			<i>Cycas armstrongii</i> <i>Livistona humilis</i> <i>Petalostigma quadriloculare</i> <i>Terminalia platyphylla</i>		
Tree hollow presence	<10cm		10-20cm	>20cm	
	3		1	-	
					



<b>Site:</b> D2_CT.20		<b>Waypoint:</b> CT.20-02		<b>Coordinates:</b> 12.675464, 131.171251	
<b>Date:</b> 14/09/2023		<b>Surveyor/s:</b> NA, AL		<b>Slope and aspect:</b> 2%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland, brown-grey sandy clay soils. Termite mounds present					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-12	10	25	
	<i>Xanthostemon paradoxus</i>	8-10	5		
	<i>Erythrophleum chlorostachys</i>	6-8	5		
	<i>Canarium australasicum</i>	8-10	5		
<b>Mid</b>	<i>Planchonia careya</i>	1-5	5	10	
	<i>Bridelia tormentosa</i>	1-3	1		
	<i>Ficus aculeata</i>	4	1		
	<i>Persoonia falcata</i>	1-2	<1		
<b>Ground</b>	<i>Sorghum sp.</i>		35	55	
	<i>Heteropogon trisetus</i>		10		
	<i>Buchanania obovata</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Brachychiton megaphyllus</i> <i>Terminalia grandiflora</i> <i>Canarium australasicum</i>			<i>Planchonia careya</i> <i>Brachychiton diversifolius</i> <i>Ficus aculeata</i> <i>Glochidium sp</i> <i>Cycas armstrongii</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	-		3		-
					



### Cameras – D3



<b>Site:</b> D3_CT.01		<b>Waypoint:</b> CT.01-01		<b>Coordinates:</b> 12.633686, 131.164039	
<b>Date:</b> 19/10/2023		<b>Surveyor/s:</b> NA, NL, RH, IA		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland over sparse/open midstory and open grassland					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tetrodonta</i>	8-10	20	50	
	<i>Erythrophleum chlorostachys</i>	8-10	15		
	<i>Eucalyptus miniata</i>	8-15	15		
<b>Mid</b>	<i>Planchonia careya</i>	5-7	5	20	
	<i>Xanthostemon paradoxus</i>	5-7	5		
	<i>Livistona humilis</i>	1-3	5		
<b>Ground</b>	<i>Eucalyptus</i> spp. sapling		10	20	
	<i>Sorghum</i> spp.		3		
	<i>Mnesithea rottboellioides</i>		3		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Xanthostemon paradoxus</i> <i>Planchonia careya</i> <i>Livistona humilis</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	-		3	-	
					



<b>Site:</b> D3_CT.02		<b>Waypoint:</b> CT.02-01		<b>Coordinates:</b> 12.641032, 131.171442	
<b>Date:</b> 19/10/2023		<b>Surveyor/s:</b> NA, RH		<b>Slope and aspect:</b> 1%, N	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland with drainage and seasonal creek line 50m away. Brown/grey sandy clay soil with light gravel 10 - 15 mm.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-15	25	30	
	<i>Erythrophleum chlorostachys</i>	8-12	5		
<b>Mid</b>	<i>Planchonia careya</i>	2-6	10	20	
	<i>Terminalia ferdinandiana</i>	3-7	5		
	<i>Cycas armstrongii</i>	1-3	5		
<b>Ground</b>	<i>Heteropogon spp.</i>		10	20	
	<i>Chrysopogon spp.</i>		3		
	<i>Sorghum spp.</i>		3		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Planchonia careya</i>			<i>None observed</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	>5		3	1	
					



<b>Site:</b> D3_CT.03		<b>Waypoint:</b> CT.03-03		<b>Coordinates:</b> 12.648819, 131.168329	
<b>Date:</b> 20/10/2023		<b>Surveyor/s:</b> NA, RH		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid Open Woodland over brown/grey gravelly clay soil with gravel to 15mm. Termite mounds present					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-15	30	45	
	<i>Erythrophleum chlorostachys</i>	10-12	10		
	<i>Corymbia polycarpa</i>	10	<5		
<b>Mid</b>	<i>Cycas armstrongii</i>	1-4	10	20	
	<i>Livistona humilis</i>	1-5	5-10		
	<i>Terminalia ferdinandiana</i>	6-7	<5		
<b>Ground</b>	<i>Xanthostemon paradoxus</i>		30	65	
	<i>Acacia hemignosta</i>		20		
	<i>Heteropogon spp.</i>		10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Corymbia polysciada</i>			<i>Cycas armstrongii</i> <i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	2		1		-
No photographs taken					



<b>Site:</b> D3_CT.04		<b>Waypoint:</b> CT.04-02		<b>Coordinates:</b> 12.647814, 131.185072	
<b>Date:</b> 19/10/2023		<b>Surveyor/s:</b> NL, IA		<b>Slope and aspect:</b> 2%, N	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland over sparse/open midstory and open grassland. Many large <i>Pandanus spiralis</i> nearby.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Lophostemon lactifluus</i>	8-10	5	15	
	<i>Melaleuca leucadendra</i>	8-10	5		
	<i>Eucalyptus alba</i>	8-10	5		
<b>Mid</b>	<i>Pandanus spiralis</i>	1-3	3	5	
	<i>Grevillea pteridifolia.</i>	3-4	1		
	<i>Planchonia careya</i>	2-4	1		
<b>Ground</b>	<i>Lophostemon lactifluus</i>		5	15	
	<i>Eucalyptus</i> spp. sapling		5		
	<i>Sorghum</i> spp.		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Xanthostemon paradoxus</i> <i>Planchonia careya</i> <i>Livistona humilis</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		-	-	
					



<b>Site:</b> D3_CT.05		<b>Waypoint:</b> CT.05-01		<b>Coordinates:</b> 12.655054, 131.166272	
<b>Date:</b> 20/10/2023		<b>Surveyor/s:</b> NA, RH		<b>Slope and aspect:</b> 1%, SE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland between stony rise and drainage area. Red/brown/grey gravelly sandy clay soil.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	12-15	20	45	
	<i>Eucalyptus miniata</i>	10-12	10		
	<i>Terminalia ferdinandiana</i>	8-10	10		
<b>Mid</b>	<i>Xanthostemon paradoxus</i>	6-12	20	35	
	<i>Planchonia careya</i>	2-6	10		
	<i>Cycas armstrongii</i>	1-2	<5		
<b>Ground</b>	<i>Heteropogon spp.</i>		20	40	
	<i>Buchanania obovata</i>		5		
	<i>Erythrophleum chlorostachys</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Terminalia ferdinandiana</i> <i>Cycas armstrongii</i> <i>Syzygium eucalyptoides spp. bleeseri</i>			<i>Livistona Humilis</i> <i>Xanthostemon paradoxus</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	1		2	1	
					



<b>Site:</b> D3_CT.06		<b>Waypoint:</b> CT.06-01		<b>Coordinates:</b> 12.652054, 131.178710	
<b>Date:</b> 19/10/2023		<b>Surveyor/s:</b> NL, IA		<b>Slope and aspect:</b> 1%, NE	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland over open shrubland with midstory and ground story					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	9-11	10	20	
	<i>Eucalyptus miniata</i>	11-12	5		
	<i>Eucalyptus tetradonta</i>	10-12	5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	6-9	10	30	
	<i>Planchonia careya</i>	6-7	5		
	<i>Xanthostemon paradoxus</i>	3-8	5		
<b>Ground</b>	<i>Erythrophleum chlorostachys</i>		5	20	
	<i>Buchanania obovata</i>		5		
	<i>Sorghum spp.</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	1		-	-	
					

<b>Site:</b> D3_CT.07		<b>Waypoint:</b> CT.07-01		<b>Coordinates:</b> 12.645737, 131.185017	
<b>Date:</b> 23/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland over sandy clay soil with gravel to 10mm. High leaf litter coverage					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus tectifica</i>	12-15	30	50	
	<i>Corymbia polycarpa</i>	10-12	10		
	<i>Terminalia ferdinandiana</i>	8-12	5		
Mid	<i>Planchonia careya</i>	2-7	15	30	
	<i>Cycas armstrongii</i>	1-4	10		
	<i>Terminalia grandiflora</i>	1-3	5		
Ground	<i>Terminalia grandiflora</i>		5	30	
	<i>Chrysopogon spp.</i>		10		
	<i>Heteropogon contortus</i>		10		
Flowering Plants			Fruiting Plants		
<i>Xanthostemon paradoxus</i> <i>Planchonia careya</i> <i>Livistona humilis</i>			None observed		
Tree hollow presence	<10cm		10-20cm	>20cm	
	4		3	1	
					

<b>Site:</b> D3_CT.08		<b>Waypoint:</b> CT.08-03		<b>Coordinates:</b> 12.633686, 131.164039	
<b>Date:</b> 20/10/2023		<b>Surveyor/s:</b> NL, IA		<b>Slope and aspect:</b> <1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Mid open woodland over sparse/open midstory and open grassland					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	7-10	10	20	
	<i>Corymbia polycarpa</i>	7-12	5		
	<i>Corymbia confertiflora</i>	8-10	5		
<b>Mid</b>	<i>Petalostigma quadriloculare</i>	1-5	5	15	
	<i>Planchonia careya</i>	4-7	5		
	<i>Ehretia saligna</i>	2-7	2		
<b>Ground</b>	<i>Eucalyptus</i> spp.		6	15	
	<i>Heteropogon tricetus</i>		4		
	<i>Erythrophleum chlorostachys</i>		3		
Flowering Plants			Fruiting Plants		
None observed			<i>Livistona humilis</i>		
Tree hollow presence	<10cm		10-20cm		>20cm
	2		1		-
					



<b>Site:</b> D3_CT.09		<b>Waypoint:</b> CT.09-02		<b>Coordinates:</b> 12.670059, 131.172691	
<b>Date:</b> 20/10/2023		<b>Surveyor/s:</b> NL, IA		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Open woodland over sparse midstory and groundcover. Low lying area to the south.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	10-15	25	30	
	<i>Erythrophleum chlorostachys</i>	8-12	5		
<b>Mid</b>	<i>Cycas armstrongii</i>	1-4	2	5	
	<i>Livistona humilis</i>	1-5	2		
	<i>Buchanania obovata</i>	1-3	1		
<b>Ground</b>	<i>Eucalyptus miniata</i>		6	20	
	<i>Erythrophleum chlorostachys</i>		6		
	<i>Buchanania obovata</i>		4		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Xanthostemon paradoxus</i> <i>Planchonia careya</i> <i>Livistona humilis</i>			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	8		-	-	
					

<b>Site:</b> D3_CT.10		<b>Waypoint:</b> CT.10-02		<b>Coordinates:</b> 12.663815, 131.180633	
<b>Date:</b> 23/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> <1%, S	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland over sandy clay soil with gravel to 10mm					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Erythrophleum chlorostachys</i>	10-12	10	25	
	<i>Eucalyptus miniata</i>	6-12	5		
	<i>Xanthostemon paradoxus</i>	6-10	5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	3-8	10	20	
	<i>Planchonia careya</i>	2-6	5		
	<i>Cycas armstrongii</i>	1-3	<5		
<b>Ground</b>	<i>Hibbertia juncea</i>		15	50	
	<i>Eucalyptus miniata</i>		10		
	<i>Xanthostemon paradoxus</i>		5		
	<i>Heteropogon contortus</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Terminalia ferdinandiana</i>			<i>Cycas armstrongii</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		-	-	
					



<b>Site:</b> D3_CT.11		<b>Waypoint:</b> CT.11-03		<b>Coordinates:</b> 12.668150, 131.184401	
<b>Date:</b> 29/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 1%, W	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland over grey sandy clay soil with coffee rock gravel to 15mm. Adjacent to flood plain and Melaleuca swamp. Magnetic termite mounds present.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		None observed			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-14	25	45	
	<i>Erythrophleum chlorostachys</i>	6-12	10		
	<i>Corymbia polysciada</i>	6-7	<5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	2-6	10	20	
	<i>Cycas armstrongii</i>	1-3	5		
	<i>Xanthostemon paradoxus</i>	3-7	<5		
<b>Ground</b>	<i>Syzygium eucalyptoides</i> ssp. <i>bleeseri</i>		15	60	
	<i>Eucalyptus miniata</i>		10		
	<i>Petalostigma quadriloculare</i>		10		
	<i>Sorghum</i> spp.		10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Petalostigma quadriloculare</i> <i>Terminalia ferdinandiana</i>			<i>Cycas armstrongii</i> <i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	-		3	-	
					

<b>Site:</b> D3_CT.12		<b>Waypoint:</b> CT.12-03		<b>Coordinates:</b> 12.620534, 131.195700	
<b>Date:</b> 23/10/2023		<b>Surveyor/s:</b> RH, SM		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Open <i>E. miniata</i> woodland slightly up slope with coffee rock out cropping					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	8-10	5	15	
	<i>Terminalia ferdinandiana</i>	8-10	5		
	<i>Erythrophleum chlorostachys</i>	8-10	5		
<b>Mid</b>	<i>Planchonia careya</i>	3-5	5	10	
	<i>Xanthostemon paradoxus</i>	3-5	5		
	<i>Cycas armstrongii</i>	3-5	<5		
<b>Ground</b>	<i>Planchonia careya</i>		<5	10	
	<i>Eucalyptus miniata</i>		<5		
	<i>Heteropogon triticeus</i>		<5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Cycas armstrongii</i>			<i>Petalostigma quadriloculare</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	2		-		-
No photographs taken					



<b>Site:</b> D3_CT.13		<b>Waypoint:</b> CT.13-03		<b>Coordinates:</b> 12.661053, 131.202335	
<b>Date:</b> 25/10/2023		<b>Surveyor/s:</b> SM, RH		<b>Slope and aspect:</b> 2%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Open tectifica woodland along slope of rocky rises adjacent to dry watercourse.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tectifica</i>	8-14	10	30	
	<i>Eucalyptus miniata</i>	8-12	10		
	<i>Erythrophleum chlorostachys</i>	8-10	10		
<b>Mid</b>	<i>Cycas armstrongii</i>	1-4	10	35	
	<i>Terminalia ferdinandiana</i>	1-5	10		
	<i>Planchonia careya</i>	1-5	5		
<b>Ground</b>	<i>Eucalyptus</i> spp. sapling		10	35	
	<i>Cycas armstrongii</i>		<10		
	<i>Planchonia careya</i>		<10		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Cycas armstrongii</i> <i>Grevillea decurrens</i>			<i>Cycas armstrongii</i> <i>Grevillea decurrens</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	-		-		-
No photographs taken					

<b>Site:</b> D3_CT.14		<b>Waypoint:</b> CT.14-02		<b>Coordinates:</b> 12.663850, 131.217502	
<b>Date:</b> 25/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 1%, W	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med open woodland between 2 rocky rises. Light brown sandy clay soil with organic matter and gravel to 20mm. Lots of small flowering plants, termite mounds and cycads.					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	12-15	30	50	
	<i>Corymbia polysciada</i>	8-12	10		
	<i>Erythrophleum chlorostachys</i>	8-10	<5		
<b>Mid</b>	<i>Cycas armstrongii</i>	1-3	35	50	
	<i>Terminalia ferdinandiana</i>	4-7	10		
	<i>Buchanania obovata</i>	2-5	<5		
	<i>Terminalia carpentariae</i>	2-6	<5		
<b>Ground</b>	<i>Planchonia careya</i>		10	35	
	<i>Eucalyptus miniata</i>		<10		
	<i>Erythrophleum chlorostachys</i>		<5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Cycas armstrongii</i> <i>Terminalia ferdinandiana</i> <i>Petalostigma quadriloculare</i>			<i>Petalostigma quadriloculare</i> <i>Cycas armstrongii</i> <i>Eucalyptus miniata</i> <i>Corymbia polysciada</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	2		1		1
					



<b>Site:</b> D3_CT.15		<b>Waypoint:</b> CT.15-01		<b>Coordinates:</b> 12.669000, 131.212131	
<b>Date:</b> 25/11/2023		<b>Surveyor/s:</b> RH, SM		<b>Slope and aspect:</b> 2%, S	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Area between water course + rocky rises. Open woodland with sparse mid & lower story					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus miniata</i>	6-10	15	30	
	<i>Lophostemon lactifluus</i>	6-10	10		
	<i>Erythrophleum chlorostachys</i>	6-10	5		
<b>Mid</b>	<i>Pandanus spiralis</i>	5-7	5	20	
	<i>Terminalia ferdinandiana</i>	5-7	5		
	Juv. upper spp.	1-3	5		
<b>Ground</b>	Juv. mid and upper spp.		10	25	
	<i>Chrysopogon latifolius</i>		5		
	<i>Pandanus spiralis</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			None observed		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>		<b>&gt;20cm</b>
	2		2		-
No photographs taken					

<b>Site:</b> D3_CT.16		<b>Waypoint:</b> CT.16-03		<b>Coordinates:</b> 12.678296, 131.218288	
<b>Date:</b> 25/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 2%, N	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med open woodland over dark grey sandy clay soil, adjacent to Sandsheet Heath <50m. Gravel to 15mm, decent leaf litter cover. Juvenile pandanus					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Eucalyptus tectifica</i>	10-16	25	40	
	<i>Erythrophleum chlorostachys</i>	8-10	5		
	<i>Corymbia polysciada</i>	8-12	5		
	<i>Corymbia bella</i>	13	5		
	<i>Terminalia grandiflora</i>	13	<5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	6-8	<10	30	
	<i>Planchonia careya</i>	2-6	<10		
	<i>Cycas armstrongii</i>	2-4	5		
<b>Ground</b>	<i>Heteropogon spp.</i>		10	35	
	<i>Chrysopogon sp.</i>		5		
	<i>Buchanania obovata</i>		5		
	<i>Eucalyptus tectifica</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Corymbia bella</i> <i>Eucalyptus tectifica</i> <i>Terminalia ferdinandiana</i> <i>Cycas armstrongii</i>			<i>Cycas armstrongii</i> <i>Livistona humilis</i> <i>Buchanania obovata</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		1	-	
					

<b>Site:</b> D3_CT.17		<b>Waypoint:</b> CT.17-03		<b>Coordinates:</b> 12.678955, 131.21346	
<b>Date:</b> 24/10/2023		<b>Surveyor/s:</b> RH, SM		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland with sparse mid and understory over lateritic soils					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Corymbia bleeseri</i>	4-8	10	25	
	<i>Erythrophleum chlorostachys</i>	4-8	<10		
	<i>Eucalyptus miniata</i>	4-8	5		
<b>Mid</b>	<i>Eucalyptus spp.</i>	1-4	5	20	
	<i>Planchonia careya</i>	1-4	5		
	<i>Terminalia ferdinandiana</i>	2-5	5		
<b>Ground</b>	<i>Juv mid and upper spp.</i>		<10	20	
	<i>Eriachne ciliata</i>		<10		
	<i>Sorghum intrans</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
None observed			<i>Cycas armstrongii</i> <i>Grevillea decurrens</i> <i>Livistona humilis</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	2		-	-	
No photographs taken					

<b>Site:</b> D3_CT.18		<b>Waypoint:</b> CT.18-01		<b>Coordinates:</b> 12.687404, 131.220657	
<b>Date:</b> 24/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 1%, E	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Med Open Woodland adjacent to rocky rise. Very nice sandy clay loam with organic matter					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Eucalyptus miniata</i>	12-17	40	45	
	<i>Erythrophleum chlorostachys</i>	10-12	5		
	<i>Corymbia polysciada</i>	8	<5		
Mid	<i>Terminalia ferdinandiana</i>	1-7	15	30	
	<i>Buchanania obovata</i>	1-2	5		
	<i>Livistona humilis</i>	1-3	5		
	<i>Terminalia platyphylla</i>	1-5	<5		
	<i>Cycas armstrongii</i>	4	1		
Ground	<i>Eucalyptus miniata</i>		10	35	
	<i>Erythrophleum chlorostachys</i>		5		
	<i>Syzygium eucalyptoides</i> spp. <i>bleeseri</i>		5		
	<i>Planchonia careya</i>		5		
Flowering Plants			Fruiting Plants		
<i>Livistona humilis</i> <i>Corymbia polysciada</i> <i>Eucalyptus miniata</i>			<i>Livistona humilis</i> <i>Corymbia polysciada</i> <i>Eucalyptus miniata</i>		
Tree hollow presence	<10cm	10-20cm	>20cm		
	>5	4	3		
					

<b>Site:</b> D3_CT.19		<b>Waypoint:</b> CT.19-02		<b>Coordinates:</b> 12.693560, 131.21432	
<b>Date:</b> 24/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 1%, SW	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low open woodland on top of rock ridgeline with rocky outcropping. Stony ground 50-400mm, very gravelly					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Horse tracks			
Strata	Dominant species	Height range (m)	Cover (%)	Total Cover %	
Upper	<i>Erythrophleum chlorostachys</i>	4-6	5	10	
	<i>Eucalyptus tectifica</i>	4-6	<5		
	<i>Planchonia careya</i>	4-6	<5		
Mid	<i>Terminalia ferdinandiana</i>	2-3	5	10	
	<i>Buchanania obovata</i>	1-3	<5		
	<i>Planchonia careya</i>	1-3	<5		
Ground	Juv upper and mid spp.		10	20	
	<i>Eriachne ciliata</i>		5		
	<i>Sorghum spp.</i>		5		
Flowering Plants			Fruiting Plants		
<i>Terminalia ferdinandiana</i>			<i>Buchanania obovata</i> <i>Cochlospermum fraseri</i>		
Tree hollow presence	<10cm	10-20cm	>20cm		
	-	-	-		
No photographs taken					

<b>Site:</b> D3_CT.20		<b>Waypoint:</b> CT.20-01		<b>Coordinates:</b> 12.699895, 131.218235	
<b>Date:</b> 24/10/2023		<b>Surveyor/s:</b> NA, NV		<b>Slope and aspect:</b> 2%, W	
<b>Structure:</b> Open Woodland		<b>Land Unit:</b> 2b2		<b>Landform:</b> Rises - Sideslopes	
<b>Description:</b> Low Open Woodland on top of rock ridgeline with rocky outcropping. Stony ground 50-400mm, very gravelly					
<b>Disturbance</b>					
<b>Time since Fire</b>		< 6mths			
<b>Weeds</b>		None observed			
<b>Feral animals</b>		Pig diggings			
<b>Strata</b>	<b>Dominant species</b>	<b>Height range (m)</b>	<b>Cover (%)</b>	<b>Total Cover %</b>	
<b>Upper</b>	<i>Corymbia polysciada</i>	8-12	20	35	
	<i>Eucalyptus tectifica</i>	8-14	01		
	<i>Corymbia polycarpa</i>	8-12	5		
	<i>Erythrophleum chlorostachys</i>	6-10	5		
<b>Mid</b>	<i>Terminalia ferdinandiana</i>	2-10	15	25	
	<i>Terminalia carpentariae</i>	2-6	5		
	<i>Cochlospermum fraseri</i>	2-6	5		
	<i>Grevillea decurrens</i>	1-4	<5		
<b>Ground</b>	<i>Heteropogon trisetus</i>		10	25	
	<i>Corymbia polysciada</i>		5		
	<i>Eucalyptus tectifica</i>		5		
	<i>Eriachne ciliata</i>		5		
<b>Flowering Plants</b>			<b>Fruiting Plants</b>		
<i>Corymbia polysciada</i>			<i>Corymbia polysciada</i> <i>Petalostigma quadriloculare</i>		
<b>Tree hollow presence</b>	<b>&lt;10cm</b>		<b>10-20cm</b>	<b>&gt;20cm</b>	
	3		3	1	
					

## APPENDIX M ACOUSTIC SURVEY SITE HABITAT DATA

**Bats**

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %		
D1-01	Bat.01	12.730691	131.123664	14/07/2023	Med open woodland, gravel 10-50mm, termite mounds present, Heavily burnt	Med open woodland	1	4 wks	None observed	None observed	<i>Eucalyptus miniata</i>	15	15	25-30	<i>Livistona humilis</i>	2-4	25	45	Clumping perennial - very recent fire		1		
										<i>Eucalyptus tetrodonta</i>	15	10			<i>Cycas armstrongii</i>	2-4	15						
										<i>Corymbia bella</i>	12-15	2			<i>Terminalia ferdinandiana</i>	3-6	5						
D1-01	Bat.04	12.745882	131.135812	14/07/2023	Low open woodland at base of rocky rise	Low Open Woodland	2	4 wks	None observed	None observed	<i>Eucalyptus miniata</i>	12-15	15	30	<i>Livistona humilis</i>	2-7	40	65	Clumping perennial - very recent fire		1		
										<i>Corymbia bella</i>	10-15	10			<i>Terminalia ferdinandiana</i>	6-8	15						
										<i>Erythophelum chlorostachys</i>	10-12	10-5			<i>Cycas armstrongii</i>	2-6	10						
D1-01	Bat.06	12.752444	131.122542	14/07/2023	Med open woodland, gravel 10-20mm. Termite mounds present, Heavily burnt	Mid Open woodland		4 wks	None observed	None observed	<i>Eucalyptus tetrodonta</i>	15	15	35	<i>Cycas armstrongii</i>	2-4	10	30	Clumping perennial - very recent fire		1		
										<i>Eucalyptus miniata</i>	<10-17	10			<i>Livistona humilis</i>	2-3	10						
										<i>Erythophelum chlorostachys</i>	12	2-5			<i>Terminalia ferdinandiana</i>	1-6	5						
										<i>Corymbia foelscheana</i>	14	2-5											
D1-01	Bat.07	12.757856	131.138274	14/07/2023	Heavily burnt open woodland	Open woodland	1-2 - S	4 wks		<i>Andropogon gayanus</i>	<i>Corymbia polycarpa</i>	10	10	15	<i>Livistona humilis</i>	1-3	10	25	Clumping perennial - very recent fire		1		
										<i>Erythophelum chlorostachys</i>	8-10	5			<i>Cycas armstrongii</i>	2-5	5						
										<i>Melaleuca nervosa</i>	5	1			<i>Pandanus spiralis</i>	2-3	5						
															<i>Terminalia ferdinandiana</i>	7	5						
D1-01	Bat.08	12.763577	131.12848	14/07/2023	Med/Tall open Woodland along boundary of rocky rise and drainage area. Silty clay soil in drainage, Rocks to 200mm on side of rise. Heavily burnt	Tall Open woodland	20-30 (sides of gully)	4 wks	None observed	None observed	<i>Eucalyptus miniata</i>	12-17	15	40	<i>Livistona humilis</i>	2-4			Clumping perennial - very recent fire		1		
										<i>Corymbia bella</i>	12-15	10-15			<i>Terminalia ferdinandiana</i>	2-6							
										<i>Eucalyptus tetrodonta</i>	15-20	10			<i>Cycas armstrongii</i>	2-4							
D1-02	Bat - 2.1	12.755641	131.124044	21/11/2023	Tall open woodland W/L along edge of road way and open grass verge. Dark brown sandy clay soil with gravel 10mm + organic material. Unburnt on other side of road	Tall Open Woodland	1 W	<12 months	Pig diggings	None observed	<i>Eucalyptus tetrodonta</i>	12 - 20	20	40	<i>Livistona humilis</i>	2 - 6	15	60	<i>Heteropogon spp.</i>	15	65		
										<i>Erythophelum chlorostachys</i>	8 - 14	10			<i>Planchonia careya</i>	2 - 6	10			<i>Petalostigma quadriloculare</i>		<5	
										<i>Eucalyptus miniata</i>	8 - 12	5			<i>Terminalia ferdinandiana</i>	2 - 6	20			<i>Cochlospermum fraseri</i>		10	
D1-02	Bat - 2.2	12.735852	131.124550	21/11/2023	Sparse open shrubland adjacent to <i>miniata</i> woodland with some canopy cover. Rocky/gravelly ground and termite mounds present	Open shrubland	1 W	<12 months	None observed	None observed	<i>Eucalyptus tetrodonta</i>	10 - 16	10	15	<i>Livistona humilis</i>	1 - 3	10	25	<i>Sorghum spp.</i>	15	40		
										<i>Erythophelum chlorostachys</i>	8 - 12	<5			<i>Planchonia careya</i>	2 - 6	10			<i>Heteropogon trisetus</i>		5	
										<i>Corymbia bleeseri</i>	8	<1			<i>Buchanania obovata</i>	2 - 4	5			<i>Petalostigma quadriloculare</i>		5	
D1-02	Bat 2.3	12.761888	131.138477	21/11/2023	Low open woodland on the edge of sandsheet habitat. Big termite mounds present. Silty sandy soil with very light gravel 10mm.	Open Woodland	0	< 12 months	None observed	None observed	<i>Erythophelum chlorostachys</i>	6 - 10	5	20	<i>Buchanania obovata</i>	2 - 5	5	30	<i>Heteropogon spp.</i>	<10	25		
										<i>Corymbia polysciada</i>	8 - 14	>5			<i>Livistona humilis</i>	1 - 4	10			<i>Crysopogon spp.</i>		<10	
										<i>Syzygium eucalyptoides ssp. bleeseri</i>	6 - 8	<2			<i>Grevillea pteridifolia</i>	2 - 7	>5			<i>Syzygium eucalyptoides ssp. Bleeseri</i>		1	
															<i>Petalostigma pubescens</i>	1 - 3	>5			<i>Melaleuca nervosa</i>		1	
															<i>Terminalia grandiflora</i>	2 - 7	>5						
															<i>Eucalyptus miniata</i>	1 - 6	10			<i>Heteropogon trisetus</i>		5	
D1-02	Bat - 2.4	12.740059	131.148494	21/11/2023	Low open woodland/ sparse shrubland.	Open Woodland	1 N	< 12 months	None observed	None observed	<i>Erythophelum chlorostachys</i>	8 - 12	<5	10	<i>Livistona humilis</i>	1 - 3	5		<i>Eucalyptus miniata</i>	15			
										<i>Corymbia polysciada</i>	12	1			<i>Planchonia careya</i>	1 - 6	<5						

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %	
D2-01	Bat.01	12.69154	131.154857	6/09/2023	Low/mid open woodland over light grey sandy clay soil with moderate gravel content. Drainage line to SW	Open Woodland	<3 SW	<6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	10-12	10	15	<i>Erythrophelum chlorostachys</i>	5-8	5	15	<i>Petalostigma quadriculare</i>	10	20	
											<i>Eucalyptus polysiada</i>	10-12	5		<i>Buchanania obovata</i>	1-4	<5		<i>Eriachne ciliata</i>	5		
															<i>Cycas armstrongii</i>	1-2	<5		<i>Heteropogon tricetus</i>	<5		
															<i>Planchonia careya</i>	2-4	<1					
D2-01	Bat.02	12.712269	131.186983	8/09/2023	Low open woodland over sandy clay soil with gravel 5-30mm	Open Woodland	<1	< 6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	1-12	15	20	<i>Livistona humilis</i>	1-3	<5	5	<i>Heteropogon contortus</i>	5	40	
											<i>Corymbia polysiada</i>	10	5		<i>Terminalia ferdinandiana</i>	2-4	1		<i>Erythrophleum chlorostachys</i>	5		
															<i>Xanthostemon paradoxus</i>	3	1					
D2-01	Bat.03	12.714647	131.195422	8/09/2023	Drainage area on edge of woodland. Light grey fine sandy clay with no gravel. DebilDebils present	Open Woodland	0	< 6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	8-10	10	15	<i>Verticordia cunninghamii</i>	2-4	10	15	<i>Heteropogon tricetus</i>	20	50	
											<i>Erythrophleum chlorostachys</i>	8	<5		<i>Pandanus spiralis</i>	6	1		<i>Melaleuca nervosa</i>	10		
											<i>Eucalyptus tectifera</i>	12	5		<i>Melaleuca nervosa</i>	4	1		<i>Verticordia cunninghamii</i>	5		
															<i>Xanthostemon paradoxus</i>	4	3		<i>Erriachne spp.</i>	15		
D2-01	Bat.04	12.696658	131.138589	12/09/2023	Mid open woodland, sandy clay soil	Mid Open Woodland	<2 - NE	< 6 mths	Pig diggings	Hyptis suaveolens	<i>Corymbia foelscheana</i>	4-8	3	<10	<i>Planchonia careya</i>	3-6	2	7	<i>Buchanania obovata</i>	5	20	
											<i>Erythrophleum chlorostachys</i>	8	3		<i>Brachychiton megaphyllus</i>	3-6	3		<i>Eucalyptus foelscheana</i>	5		
											<i>Corymbia polysiada</i>	7-10	3		<i>Buchanania obovata</i>	2-3	2		<i>Sorghum intrans</i>	10		
D2-01	Bat.05	12.675252	131.170973	14/09/2023	Mid Open woodland along firebreak. Light grey sandy clay soil	Mid Open Woodland	<2 E	< 6 mths	Pig diggings, Buffalo scat	None observed	<i>Eucalyptus miniata</i>	10-12	<3	10	<i>Terminalia grandifolia</i>	2-8	5	15	<i>Annual sorgum spp.</i>	15	30	
											<i>Corymbia bella</i>	10-12	<2		<i>Xanthostemon paradoxus</i>	4-6	5		<i>Heteropogon tricetus</i>	5		
											<i>Erythrophleum chlorostachys</i>	8-10	5		<i>Pandanus spiralis</i>	1-4	<5		<i>Chrysopogon sp.</i>	5		
															<i>Persoonia falcata</i>	2-6	<1					
D2-02	Bat.06	12.712482	131.154151	2/10/2023	Low open woodland on gravelly stony rise, adjacent to drainage line. Rocky outcrops within 50m,	Low Open Woodland	10 E	< 6 mths	None observed	None observed	<i>Corymbia foelscheana</i>	6-8	<5	10	<i>Cochlospermum fraseri</i>	4-6	<5	<10	<i>Heteropogon tricetus</i>	10	30	
											<i>Corymbia polycarpa</i>	8-12	<5		<i>Buchanania obovata</i>	2-4			<5	<i>Clumping annual grasses</i>		<10
											<i>Corymbia polysiada</i>	10-12	<5		<i>Corymbia polycarpa</i>	2-5				<i>Corymbia polycarpa</i>		10
D2-02	Bat.07	12.675678	131.18313	2/10/2023	Low open woodland over sandy clay soil with gravel to 15mm, adjacent to creekline	Low Open Woodland	2 W	< 6 mths	Pig diggings	None observed	<i>Erythrophleum chlorostachys</i>	10-12	10	25	<i>Terminalia ferdinandiana</i>	4-6	5-10	30	<i>Heteropogon tricetus</i>	10	<30	
											<i>Corymbia polysiada</i>	10	>5		<i>Planchonia careya</i>	4-6	10		<i>Corymbia polysiada</i>	5		
											<i>Brachychiton diversifolius</i>	10	<5		<i>Cycas armstrongii</i>	1-3	10		<i>Xanthostemon paradoxus</i>	5		
D2-02	Bat.08	12.723055	131.180641	2/10/2023	Low Open Woodland over brown/grey sandy clay soil with gravel to 20mm. Rocky outcropping between drainage and stony rise	Low Open Woodland	2 SW	< 6 mths	Pig diggings	None observed	<i>Corymbia bella</i>	12	5	20	<i>Planchonia careya</i>	4-6	5	25	<i>Heteropogon tricetus</i>	20	55	
											<i>Lophostemon lactifluus</i>	10	5		<i>Livistona humilis</i>	1-2	5		<i>Sorghum spp.</i>	20		
											<i>Corymbia polysiada</i>	6-8	5		<i>Corymbia polysiada</i>	2-6	5		<i>Melaleuca nervosa</i>	5		
D2-02	Bat.09	12.699632	131.175683	2/10/2023	Mid open woodland over grey sandy clay with gravel to 15mm adjacent to stony ridge/rise	Mid Open Woodland	<1	< 6 mths	None observed	None observed	<i>Eucalyptus tetradonta</i>	12-15	15	35	<i>Livistona humilis</i>	1-2	<15	25	<i>Heteropogon spp.</i>	20	45	
											<i>Corymbia polysiada</i>	8-12	10		<i>Terminalia ferdinandiana</i>	3-8	10		<i>Sorghum spp.</i>	15		
											<i>Erythrophleum chlorostachys</i>	6-10	<10		<i>Planchonia careya</i>	2-5	<5		<i>Cryspogon spp</i>	10		
																			<i>Petalostigma quadriculare</i>	<5		
D2-02	Bat.10	12.694315	131.197573	2/10/2023	Low open woodland over light grey sandy clay	Low Open Woodland	1 N	< 6 mths	Pig diggings , cattle tracks	None observed	<i>Corymbia foelscheana</i>	8-12	10	30	<i>Planchonia careya</i>	2-6	5	10	<i>Heteropogon tricetus</i>	25	50	
											<i>Corymbia polycarpa</i>	10	2		<i>Buchanania obovata</i>	2-5	<5		<i>Cryspogon spp</i>	<5		

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %	
											<i>Syzygium eucalyptoides</i> ssp. <i>bleeseri</i>	6-8	5-10		<i>Erythrina vespertillio</i>	2-6	<5		<i>Corymbia foelschiana</i>	<5		
											<i>Corymbia bella</i>	8-10	5									
D3-01	Bat - 01	12.653212	131.16471	20/10/2023	Tall open woodland on side of rise/knoll over rocky red/brown clay soil. Large termite mounds, cycads and <i>B. obovata</i> saplings present. SWARM OF 10-20 MICROBATS SIGHTED, ROOST TREE IDENTIFIED AND ACOUSTIC RECORDERS PLACED ON NEIGHBORING TREES	Tall Open Woodland	15 E	< 6 mths	None observed	None observed	<i>Eucalyptus miniata</i>	12-20	25	45	<i>Planchonia careya</i>	3-7	5	45	<i>Heteropogon</i> spp.	15	40	
										<i>Erythrophelum chlorostachys</i>	10-15	10			<i>Corymbia foelschiana</i>	2-7	<5			<i>Erythrophelum chlorostachys</i>		10
										<i>Eucalyptus tetradonta</i>	15-20	5-10			<i>Cycas armstrongii</i>	1-2	1			<i>Eucalyptus miniata</i>		10
D3-01	Bat - 02	12.692457	131.214069	16/11/2023	Open sandy flat with coffee rock, sparse shrubland/ heath.	Open heath shrubland		< 6 mths	Pig diggings	<i>Mesosphaerum suaveolens</i>	<i>Erythrophelum chlorostachys</i>		5	<10	<i>Planchonia careya</i>	1 - 6	>5	>10	<i>Heteropogon tricetus</i>	<5	15	
										<i>Terminalia ferdinandiana</i>	2 - 8	<5			<i>Buchanania obovata</i>	1 - 6	<5			Annual <i>Sorghum</i> spp.		10
										<i>Terminalia grandiflora</i>	7	1			<i>Xanthostemon paradoxus</i>	2 - 5	1					5
D3-01	Bat - 05	12.654988	131.1862260	23/10/2023	Low open woodland over cracking grey gravelly clay adjacent to drainage, track <50m	Low Open Woodland	<1	< 6 mths	Pig diggings	None observed	<i>Eucalyptus tectifera</i>	10-15	5	10	<i>Planchonia careya</i>	2-8	10	20	<i>Buchanania obovata</i>	10	35	
										<i>Terminalia ferdinandiana</i>	6-12	<5			<i>Buchanania obovata</i>	2-8	5-10			<i>Heteropogon tricetus</i>		10
										<i>Terminalia grandifolia</i>	8-12	<5			<i>Cycas armstrongii</i>	1-3	5			<i>Syzygium eucalyptoides</i> ssp. <i>Bleeseri</i>		5
										<i>Corymbia polysciada</i>	10-14	<5			<i>Melaleuca nervosa</i>	5	1			<i>Planchonia careya</i>		<5
D3-01	Bat - 06	12.639104	131.170116	19/10/2023	Low sparse open woodland over light grey clay soil with lots of rocks to 300mm. Multiple rocky outcrops nearby	Low Open Woodland	2 SW	< 6 mths	Pig diggings	None observed	<i>Eucalyptus tectifera</i>	8-12	<5	10	<i>Planchonia careya</i>	2-7	5-10	15	<i>Heteropogon</i> spp.	5-10	15-20	
										<i>Corymbia foelschiana</i>	8-10	<5			<i>Pandanus spiralis</i>	1-3	<5			<i>Cryspogon</i> spp.		5-10
										<i>Corymbia ptychocarpa</i>	10-12	<5			<i>Cycas armstrongii</i>	1	1			<i>Sorghum</i> spp.		<5
D3-01	Bat - 08	12.671972	131.188109	23/10/2023	Lower drainage area adjacent to dry to paperbark swamp	Open Woodland	<3	< 6 mths	Pig diggings	None observed	<i>Eucalyptus tectifera</i>		10	20	<i>Terminalia ferdinandiana</i>	3 - 5		>10	Mid species (saplings)			
										<i>Lophostemon lactifluus</i>		10			<i>Xanthostemon paradoxus</i>	3 - 5				<i>Heteropogon</i> spp.		
										<i>Erythrophelum chlorostachys</i>					<i>Planchonia careya</i>	3 - 5						
D3-02	Bat - 03	12.677111	131.212611	25/10/2023	Med open woodland over dark grey sandy clay soil, adjacent to Sandsheet Heath <50m. Gravel to 15mm, decent leaf litter cover. Juvenile pandanus	Mid Open Woodland	2 N	< 6 mths	Pig diggings	None observed	<i>Eucalyptus tectifera</i>	10-16	25	40	<i>Terminalia ferdinandiana</i>	6-8	5-10	30	<i>Heteropogon</i> spp.	10	35	
										<i>Erythrophelum chlorostachys</i>	8-10	5			<i>Planchonia careya</i>	2-6	5-10			<i>Cryspogon</i> spp.		5
										<i>Corymbia polysciada</i>	8-12	5			<i>Cycas armstrongii</i>	2-4	5			<i>Buchanania obovata</i>		5
										<i>Corymbia bella</i>	13	5								<i>Eucalyptus tectifera</i>		5
										<i>Terminalia grandiflora</i>	13	<5										
D3-02	Bat - 04	12.661893	131.203139	16/11/2023	Sand sheet heath area in between creekline and rocky rise/outcrop. Near CT13. Low shrubland	Open heath shrubland	< 1 S	< 12 months	Pig diggings	<i>Mesosphaerum suaveolens</i> 20%	<i>Melaleuca nervosa</i>	6 -10	10	20	<i>Terminalia grandifolia</i>	2 - 8	5	20	Annual <i>Sorghum</i> spp.	20		
										<i>Eucalyptus tectifera</i>	8 - 14	5			<i>Planchonia careya</i>	1 -4	5			<i>Melaleuca nervosa</i>		<5
										<i>Erythrophelum chlorostachys</i>	8 - 12	5			<i>Verticordia cunninghamii</i>	1	<5			<i>Syzygium eucalyptoides</i> ssp. <i>Bleeseri</i>		<5
D3-02	Bat - 07	12.668845	131.173607	15/11/2023	Mid open woodland W/L over very sandy soil with organic content + gravel	Mid Open woodland	2 N	1-2 years	Pig diggings	None observed	<i>Eucalyptus miniata</i>	12 - 14	30	40	<i>Cycas armstrongii</i>	1 -2	< 5	10	<i>Heteropogon tricetus</i>	15	40	
										<i>Erythrophelum chlorostachys</i>	10 - 14	< 5			<i>Buchanania obovata</i>	1 - 3	< 5			<i>Eucalyptus miniata</i>		< 5

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %
					10mm. Sparse midstory adjacent to floodplain + melaleuca swamp/ magnetic termites						<i>Corymbia polysciada</i>	10 - 14	< 5		<i>Livistona humilis</i>	1 - 2	1		Annual <i>Sorghum spp.</i>	10	
D3-02	Bat - 09	12.669058	131.21212	25/11/2023	Area between water course + rocky rises. Open woodland with sparse mid & lower story	Open Woodland	2	< 6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	6 - 10	20		<i>Pandanus spiralis</i>	1.5 - 3	>5		Upper and Mid level species (saplings)		
											<i>Lophostemon lactifluus</i>	6 - 10	20		<i>Terminalia ferdinandiana</i>	1.5 - 3	>5		<i>Pandanus spiralis</i>		
											<i>Erythrophleum chlorostachys</i>	6 - 10	20		Upperstory saplings	1.5 - 3	>5				

### Owls

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %
D1-01	Owl.01	12.724848	131.134044	14/07/2023	Heavily burnt mid/tall open woodland in gully with rocky outcrops, gravel to 50mm	open woodland	10-12	4 wks	None observed	None observed	<i>Eucalyptus miniata</i>	15-17		50	<i>Livistona humilis</i>	1.5-6		20	Clumping perennial - very recent fire		1
											<i>Eucalyptus tetrodonta</i>	15-17			<i>Cycas armstrongii</i>	1.5-6					
											<i>Erythrophleum chlorostachys</i>	15-17			<i>Terminalia ferdinandiana</i>	1.5-6					
D1-01	Owl.04	12.746053	131.134323	14/07/2023	Med open woodland over over slopes of rocky ridge/rise. Rocky outcrops and gravel	Med open woodland	3-4	4 wks	None observed	None observed	<i>Eucalyptus miniata</i>	15-17	10	20	<i>Livistona humilis</i>	2-6	30	35	Clumping perennial - very recent fire		1
											<i>Eucalyptus tetrodonta</i>	15	5		<i>Cycas armstrongii</i>		1				
											<i>Erythrophleum chlorostachys</i>	12	5		<i>Terminalia ferdinandiana</i>		3				
D1-01	Owl.06	12.748068	131.144994	14/07/2023	Riparian/Low Open woodland next to drainage/watercourse. Water flowing	Low Open Woodland	2	4 wks	Pig diggings	None observed	<i>Eucalyptus miniata</i>	10	5-10	25	<i>Cycas armstrongii</i>	2-4	5	20	Clumping perennial - very recent fire		1
											<i>Melaleuca leucadendra</i>	10	5		<i>Pandanus spiralis</i>	2-6	10				
											<i>Lophostemon lactifluus</i>	10-12	5-10		<i>Livistona humilis</i>	3	2-5				
D1-01	Owl.05	12.750212	131.127388	14/07/2023	Mid/Tall open woodland over rocky ground near top of rocky ridge with rocky outcrops. Rocks 200-400mm. Termite mounds present. Numerous hollow bearing habitat trees felled during fire event	Mid Open woodland	3 W	4 wks	None observed	None observed	<i>Eucalyptus tetrodonta</i>	12-15	15	35	<i>Livistona humilis</i>	1-5	20	35	Clumping perennial - very recent fire		1
											<i>Corymbia bella</i>	12	10		<i>Cycas armstrongii</i>	1-3	10				
											<i>Erythrophleum chlorostachys</i>	12	10		<i>Terminalia ferdinandiana</i>	2-6	5				
D1-01	Owl.08	12.761638	131.127717	14/07/2023	Mid/Tall open woodland in rocky gully with slopes up to 30 %. Heavily burnt	Mid Open woodland	30 W	4 wks	None observed	None observed	<i>Eucalyptus tetrodonta</i>	15-17	15	40	<i>Livistona humilis</i>	2-3	5	<10	Clumping perennial - very recent fire		1
											<i>Eucalyptus miniata</i>	15-17	10		<i>Cycas armstrongii</i>	1-2	1				
											<i>Corymbia bella</i>	15	10								
											<i>Alstonia actinophylla</i>	15	5								
D1-01	Owl.07	12.759.39	131.13718	14/07/2023	Riparian area with Pandanus and Melaleuca, recently burnt	Woodland / Riparian	1	4 wks	Pig diggings	None observed	<i>Eucalyptus tetrodonta</i>		30	40	<i>Pandanus spiralis</i>	2-6	10	20	Clumping perennial - very recent fire		50
											<i>Melaleuca leucadendra</i>	12	5		<i>Livistona humilis</i>	2-7	<5				
											<i>Corymbia foelscheana</i>	12	2								
D1-02	Owl - 2.1	12.761153	131.127683	21/11/2023	Tall Open woodland in a gully between two rocky rises. Dark brown sandy loam soil with gravel and organic material.	Tall Open Woodland	10 W	<12 months	Pig diggings	None observed	<i>Eucalyptus miniata</i>	12 - 18	30	55	<i>Terminalia ferdinandiana</i>	2 - 10	15		<i>Heteropogon trisetus</i>	20	
											<i>Eucalyptus tetrodonta</i>	10 - 16	15		<i>Buchanania obovata</i>	2 - 6	5		<i>Heteropogon contortus</i>	30	
											<i>Corymbia polysciada</i>	8 - 12	10		<i>Livistona humilis</i>	1 - 4	15		<i>Cochlospermum fraseri</i>	5	
																			<i>Eucalyptus spp. (saplings)</i>		
D1-02	Owl - 2.2	12.725182	131.132696	21/11/2023	Head of dense rocky gully. Mid Euc	Mid Open woodland	2 W (top)	<12 months	None observed	None observed	<i>Eucalyptus tetrodonta</i>	8 - 20	15	35	<i>Xanthostemon paradoxus</i>		25		<i>Petalostigma quadriloculare</i>	5	

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %
					woodland W/L. Very rocky brown/red sandy clay soil with gravel 20 mm.		of gully)				<i>Eucalyptus miniata</i>	8 - 12	10		<i>Terminalia ferdinandiana</i>		10		Annual <i>Sorghum spp.</i>	5	
											<i>Erythrophleum chlorostachys</i>	6 - 12	5		<i>Livistona humilis</i>		10		<i>Heteropogon trisetus</i>		
															<i>Cycas armstrongii</i>		<5				
															<i>Planchonia careya</i>		<5				
D1-02	Owl - 2.3	12.743294	131.143732	21/11/2023	Mid open woodland adjacent to a creek/drainage. Riparian areas, <i>Eucalyptus alba</i> , <i>pandanus spiralis</i> & <i>melaeuca species</i> . Sandy clay soil with organic material.	Mid Open woodland	1 N	< 12 months	Pig in creek	None observed	<i>Erythrophleum chlorostachys</i>	8 - 16	20	65	<i>Planchonia careya</i>		10	50	<i>Heteropogon contortus</i>	10	
											<i>Eucalyptus miniata</i>	8 - 16	20		<i>Terminalia ferdinandiana</i>		10		Annual <i>Sorghum spp.</i>	20	
											<i>Eucalyptus alba</i>	1 - 14	5		<i>Cycas armstrongii</i>		5		<i>Xanthostemon paradoxus</i>	15	50
											<i>Corymbia polysciada</i>	12	<5		<i>Livistona humilis</i>	1 - 4	5				
											<i>Lophostemon lactifluus</i>	8 - 12	10		<i>Pandanus spiralis</i>	1 - 4	<5				
															<i>Terminalia carpenteria</i>	2	<5				
D1-02	Owl - 2.4	12.740990	131.125884	21/11/2023	Mid open woodland over rocky sandy clay soil with heavy gravel	Mid Open woodland	1 W	<12 months	None observed	None observed	<i>Eucalyptus miniata</i>	12 - 16	30	55	<i>Livistona humilis</i>	1 - 6	20	35	Annual <i>Sorghum spp.</i>	10	
											<i>Eucalyptus tetrodonta</i>	12 - 18	20		<i>Cycas armstrongii</i>	1 - 5	10		<i>Petalostigma spp.</i>	<5	
											<i>Erythrophleum chlorostachys</i>	8 - 10	5		<i>Planchonia careya</i>	1 - 5	1				
															<i>Buchanania obovata</i>	1 - 5	1				
D2-01	Owl.01	12.715686	131.167335	7/09/2023	Woodland adjacent creekline in drainage system. Brown-grey sandy clay soils with Debil Debils	Woodland	<2 W	< 6 mths	Pig diggings	<i>Stachytarpheta spp.</i>	<i>Lophostemon lactifluus</i>	8-12	30	45	<i>Planchonia careya</i>	4-6	10	40	<i>Germainia grandiflora</i>	30	40
											<i>Corymbia polycarpa</i>	10-12	10		<i>Pandanus spiralis</i>	1-4	5		<i>Eriachne spp.</i>	5	
											<i>Corymbia bella</i>	10-12	<5		<i>Lophostemon lactifluus</i>	2-6	5				
D2-01	Owl.02	12.712369	131.187192	8/09/2023	Mid open woodland adjacent drainage area	Open Woodland	<1 W	< 6 mths	None observed	None observed	<i>Eucalyptus miniata</i>	12-15	10	20	<i>Livistona humilis</i>	2-6	10	15	<i>Eucalyptus miniata</i>	15	30
											<i>Erythrophleum chlorostachys</i>	12-15	5		<i>Corymbia bleeseri</i>	1-3	<5		<i>Erythrophleum chlorostachys</i>	15	
											<i>Corymbia bleeseri</i>	12-15	5		<i>Terminalia platyphyla</i>	1-3	1				
D2-01	Owl.03	12.696658	131.138589	12/09/2023	Mid open woodland, sandy clay soil	Mid Open Woodland	<2 NE	< 6 mths	Pig diggings	<i>Hyptis suaveolens</i>	<i>Corymbia foelscheana</i>	4-8	3	<10	<i>Planchonia careya</i>	3-6	2	7	<i>Buchanania obovata</i>	5	20
											<i>Erythrophleum chlorostachys</i>	8	3		<i>Brachychiton megaphyllus</i>	3-6	3		<i>Eucalyptus foelscheana</i>	5	
											<i>Corymbia polysciada</i>	7-10	3		<i>Buchanania obovata</i>	2-3	2		<i>Sorghum intrans</i>	10	
D2-02	Owl.04	12.69857	131.1615.1	2/10/2023	Mid open woodland over brown/grey sandy clay soil with gravel to 25mm. Termite mounds present	Mid Open Woodland	1-3 W	< 6 mths	None observed	None observed	<i>Eucalyptus miniata</i>	12-15	40	65	<i>Eucalyptus miniata</i>	2-8	10	45	<i>Heteropogon trisetus</i>	15	45
											<i>Corymbia bleeseri</i>	12-17	15		<i>Terminalia ferdinandiana</i>	3-7	5		<i>Eucalyptus miniata</i>	30	
											<i>Erythrophleum chlorostachys</i>	10-12	10		<i>Livistona humilis</i>	1-3	10				
D2-02	Owl.05	12.723055	131.180641	2/10/2023	Low Open Woodland over brown/grey sandy clay soil with gravel to 20mm. Rocky outcropping between drainage and stony rise	Low Open Woodland	2 SW	< 6 mths	Pig diggings	None observed	<i>Corymbia bella</i>	12	5	20	<i>Planchonia careya</i>	4-6	5	25	<i>Heteropogon trisetus</i>	20	55
											<i>Lophostemon lactifluus</i>	10	5		<i>Livistona humilis</i>	1-2	5		<i>Sorghum spp.</i>	20	
											<i>Corymbia polysciada</i>	6-8	5		<i>Corymbia polysciada</i>	2-6	5		<i>Melaleuca nervosa</i>	5	
D2-02	Owl.06	12.680136	131.172961	2/10/2023	Med open woodland over light grey/brown sandy clay soil with gravel to 20mm	Mid Open Woodland		< 6 mths	None observed	<i>Hyptis suaveolens</i> - low	<i>Eucalyptus miniata</i>	10-15	10	20	<i>Planchonia careya</i>	2-6	15	30	<i>Eucalyptus miniata</i>	10-15	30
											<i>Erythrophleum chlorostachys</i>	6-10	5		<i>Terminalia ferdinandiana</i>	2-7	10		<i>Heteropogon trisetus</i>	10	
											<i>Corymbia polysciada</i>	6-8	1		<i>Cycas armstrongii</i>	1-3	<5		<i>Sorghum spp.</i>	5	
															<i>Buchanania obovata</i>	1-3	<5		<i>Persoonia falcata</i>	1	
D3-01	Owl - 04	12.653165	131.16472	20/10/2023	Tall open woodland on side of rise/knoll over rocky red/brown clay soil. Large	Tall Open Woodland	15 E	< 6 mths	None observed	None observed	<i>Eucalyptus miniata</i>	12-20	25	45	<i>Planchonia careya</i>	3-7	5	45	<i>Heteropogon spp.</i>	15	40
											<i>Erythrophleum chlorostachys</i>	10-15	10		<i>Corymbia foelscheana</i>	2-7	<5		<i>Erythrophleum chlorostachys</i>	10	

Deployment	Site Name	Lat	Long	Date	Overall Description	Structure	Slope %	Time since fire	Feral Herbivores	Weeds species	Upper Species	Upper Height (m)	%	Total Upper Cover %	Mid Species	Mid Height (m)	%	Total Mid Cover %	Ground Species	%	Total Ground Cover %	
					termite mounds, cycads and <i>B. obovata</i> saplings present.						<i>Eucalyptus tetrodonta</i>	15-20	5-10		<i>Cycas armstrongii</i>	1-2	1		<i>Eucalyptus miniata</i>	10		
D3-01	Owl - 06	13.633757	131.165458	19/10/2023	Mid Open woodland over brown/orange sandy clay soil with moderate gravel to 15mm. Termite mounds present.	Mid Open woodland	2 N	< 6 mths	Old pig diggings	None observed	<i>Eucalyptus miniata</i>	12-15	10-15	<35	<i>Terminalia ferdinandiana</i>	6-8	10	35	Upper story saplings	15	35	
										<i>Erythrophleum chlorostachys</i>	8-12	5	<i>Cycas armstrongii</i>		1-3	<5			<i>Heteropogon spp.</i>	5		
										<i>Eucalyptus tetrodonta</i>	10-12	10	<i>Planchonia careya</i>		2-3	<5			<i>Crypsopogon spp.</i>	5		
D3-01	Owl - 05	12.654776	131.1850660	23/10/2023	Med Open Woodland over snady clay soil with gravel to 10mm. High leaf litter coverage	Mid Open Woodland	< 1	< 6 mths	Pig diggings (old)	None observed	<i>Eucalyptus tectifca</i>	12-15	30	50	<i>Planchonia careya</i>	2-7	15	30	<i>Terminalia grandifolia</i>			
										<i>Corymbia polycarpa</i>	10-12	10	<i>Cycas armstrongii</i>		1-4	10			<i>Chrysopogon spp.</i>			
										<i>Terminalia ferdinandiana</i>	8-12	5	<i>Terminalia grandiflora</i>		1-3	5			<i>Heteropogon contortis</i>			
D3-02	Owl- 01	12.669.93	131.212063	25/11/2023	Area between water course + rocky rises. Open woodland with sparse mid & lower story	Open Woodland	2	< 6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	6 - 10	20		<i>Pandanus spiralis</i>	1.5 - 3	>5		<i>Pandanus spirilis</i>			
										<i>Lophostemon lactifluus</i>	6 - 10	20	<i>Terminalia ferdinandiana</i>		1.5 - 3	>5			Juvenile mid and upper species			
										<i>Erythrophleum chlorostachys</i>	6 - 10	20	<i>Eucalyptus miniata</i>		1.5 - 3	>5						
D3-02	Owl - 02	12.699002	131.1217277	16/11/2023	Mid open woodland next to creekline (30 m) at base of rocky rise. High diversity. Lots of rocks. Light brown sandy clay soil with gravel - 20mm. Some vines	Mid Open woodland	5 W	< 12 months	None observed	None observed	<i>Erythrophleum chlorostachys</i>	7 -12	20	40	<i>Cycas armstrongii</i>	1 -5	10	30	<i>Erythrophleum chlorostachys</i>	10	10	
										<i>Corymbia polysciada</i>	7 - 15	10	<i>Planchonia careya</i>		1 - 6	<5			Annual <i>Sorghum spp.</i>			
										<i>Eucalyptus tectifca</i>	6 - 12	5	<i>Terminalia ferdinandiana</i>		2 - 7	5						
										<i>Brachychiton diversifolius</i>			<i>Xanthostemon paradoxus</i>		2 - 8	5						
										<i>Canarium australianum</i>												
D3-02	Owl - 03	12.670241	131.172583	20/09/2023	Open woodland over sparse midstory and groundcover. Lowlying area to the south.	Open Woodland	< 1	< 6 mths	Pig diggings	None observed	<i>Eucalyptus miniata</i>	10 - 15	25	30	<i>Cycas armstrongii</i>	1 - 4	2	5	<i>Eucalyptus miniata</i>	6	20	
										<i>Erythrophleum chlorostachys</i>	8 - 12	5	<i>Livistona humilis</i>		1 - 5	2			<i>Erythrophleum chlorostachys</i>	6		
													<i>Buchanania obovata</i>		1 - 3	1			<i>Buchanania obovata</i>	4		



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