Mesa Gap Corridors
Reconnaissance Vegetation and Flora, and Basic Fauna Survey
March 2023

Prepared for
BHP Western Australia Iron Ore



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			Name	**Signature**
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Abbreviations

Abbreviation	Definition
ALA	Atlas of Living Australia
Astron	Astron Environmental Services
BAM Act	*Biosecurity and Agriculture Management Act 2007*
BC Act	*Biodiversity Conservation Act 2016*
BHP WAIO	BHP Western Australian Iron Ore
DBCA	Department of Biodiversity, Conservation and Attractions
EN	Endangered
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ESA	Environmentally Sensitive Area
GIS	Geographical information system
GPS	Global positioning system
IBRA	Interim Biogeographic Regionalisation for Australia
MI	Migratory
MNES	Matters of National Environmental Significance
N/A	Not applicable
OS	Other Specially Protected
P	Priority
PEC	Priority ecological community
PMST	Protected Matters Search Tool
SM2	Song Meter 2
SM4	Song Meter 4
SM4BAT+ detector	Song Meter 4 acoustic recording device
T	Threatened
TEC	Threatened ecological community
VU	Vulnerable
WA Herbarium	Western Australian Herbarium
WoNS	Weed of National Significance

Executive Summary

Astron Environmental Services was commissioned to undertake a reconnaissance vegetation and flora survey and a basic fauna survey, to verify existing ecological values within three corridors in the Mesa Gap area at Jimblebar. The combined area of the three corridors is 325.8 hectares.

Survey of the three corridors occurred over one field visit in March 2023, using methods consistent with BHP Western Australian Iron Ore procedures and Environmental Protection Authority guidance.

Vegetation mapping had been previously conducted in most of the survey area; mapping was updated in a number of areas to better reflect the observed current vegetation composition, patterns and extent. The vegetation within the survey area was primarily characterised by mixed species *Acacia* shrublands over mixed species hummock and tussock grasslands and was considered typical of vegetation on comparable landforms in the broader region. An estimated 13% of the survey area has been previously disturbed or cleared, and approximately half of the vegetation was considered to be in 'very good' condition.

No Commonwealth or State-listed significant ecological communities are currently known to occur within, or within close proximity (15 km) of, the survey area. None of the vegetation recorded during the current survey was considered analogous with any currently listed significant ecological community, nor was any considered to be of local significance due to being restricted in distribution or necessary as a refuge.

A total of 166 confirmed vascular flora taxa, comprising 87 genera and representing 33 families, were recorded within the survey area. The families most represented in the survey area were Fabaceae (legumes), Poaceae (grasses) and Malvaceae (mallows). The general suite of flora species recorded largely aligns with what has been previously recorded in the surrounding area and is considered typical of what may be expected on similar landforms outside of the survey area.

One State-listed priority flora species was recorded within the survey area: *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3. An estimated 2,401 individuals were recorded from gully and hillslope habitats within the eastern corridor. This species has been previously recorded within the survey area by a survey undertaken in 2014. One species of interest, confirmed by the Western Australian Herbarium as *Hibiscus* aff. *campanulatus,* was also recorded. This species may represent a range extension of the priority one species *Hibiscus campanulatus* or could potentially represent an undescribed taxon, however further taxonomic work is needed to confirm this.

Four introduced flora species, **Aerva Javanica, *Bidens bipinnata, *Cenchrus ciliaris* and **Vachellia farnesiana*, were recorded within the survey area. None of these species represent a declared pest plant or a Weed of National Significance.

Eight broad fauna habitat types were recorded in the survey area: Hillcrest/Hillslope, Sand Plain, Stony Plain, Mulga Woodland, Drainage Area/Floodplain, Minor Drainage Line, Gorge/Gully and Breakaway/Cliff. Disturbances consisted mostly of adjacent pit and mining activity, roads/tracks, cattle grazing, and weed invasion. Habitats within the survey area are not restricted at a local or sub-regional scale. Breakaway/Cliff (0.9% of the survey area) and Gorge/Gully (1.7% of the survey area) habitats within the survey area would be considered of higher importance due to providing potential refuge for fauna species, including critical habitat for the MNES species northern quoll (*Dasyurus hallucatus*) (EN; EN) if present within the survey area. In addition, it also represents supporting habitat for several other MNES species, including the ghost bat (*Macroderma gigas*) (VU; VU), Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) (VU; VU) and Pilbara olive python (*Liasis olivaceus barroni*) (VU; VU). A small

portion of the Hillcrest/ Hillslope foraging habitat for the ghost bat is considered critical habitat as it occurs within 12 km of a Category 2 (diurnal roost with ongoing use) cave. Supporting habitats for six MNES species likely or possibly occurring, grey falcon (*Falco hypoleucos*) (VU;VU), southern whiteface (*Aphelocephala leucopsis castaneiventris*) (VU), ghost bat, northern quoll, Pilbara leaf-nosed bat and Pilbara olive python were considered present within the survey area.

Forty-three fauna species were recorded during the survey, including four reptile species, 34 bird species and five mammal species (including two introduced species). The number of species recorded during the survey is likely to be lower than the number of species expected to be present due to the nature of the survey conducted (basic fauna survey only with opportunistic fauna records), the cryptic nature of some species and the timing of the survey. However, this is not considered a limitation of the survey due to the numerous previous surveys conducted in the area.

No species of significance were recorded in the survey area as part of the current survey. One species of significance, the western pebble-mound mouse (*Pseudomys chapmani*) (P4) has been previously recorded within the survey area. Of the 42 significant vertebrate species identified in the desktop assessment, eight species were considered to have a high likelihood of occurrence – western pebble-mound mouse, *Anilios ganei* (P1), fork-tailed swift (*Apus pacificus*) (MI; MI), grey falcon, peregrine falcon (*Falco peregrinus*) (OS), southern whiteface (*Aphelocephala leucopsis castaneiventris*) (VU), brush-tailed mulgara (*Dasycercus blythi*) (P4) and ghost bat. An additional four species were considered a moderate likelihood of occurrence - Pilbara olive python, *Lerista macropisthopus remota* (P2), Pilbara leaf-nosed bat and northern quoll.

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1 Introduction

1.1 Project Background

Astron Environmental Services (Astron) was engaged by BHP Western Australian Iron Ore (BHP WAIO) to undertake a reconnaissance vegetation and flora survey and a basic fauna survey, covering three corridors in the Mesa Gap area at Jimblebar (herein referred to as the survey area). The survey area is located approximately 31 km east of Newman and collectively covers an area of 325.8 ha (Figure 1).

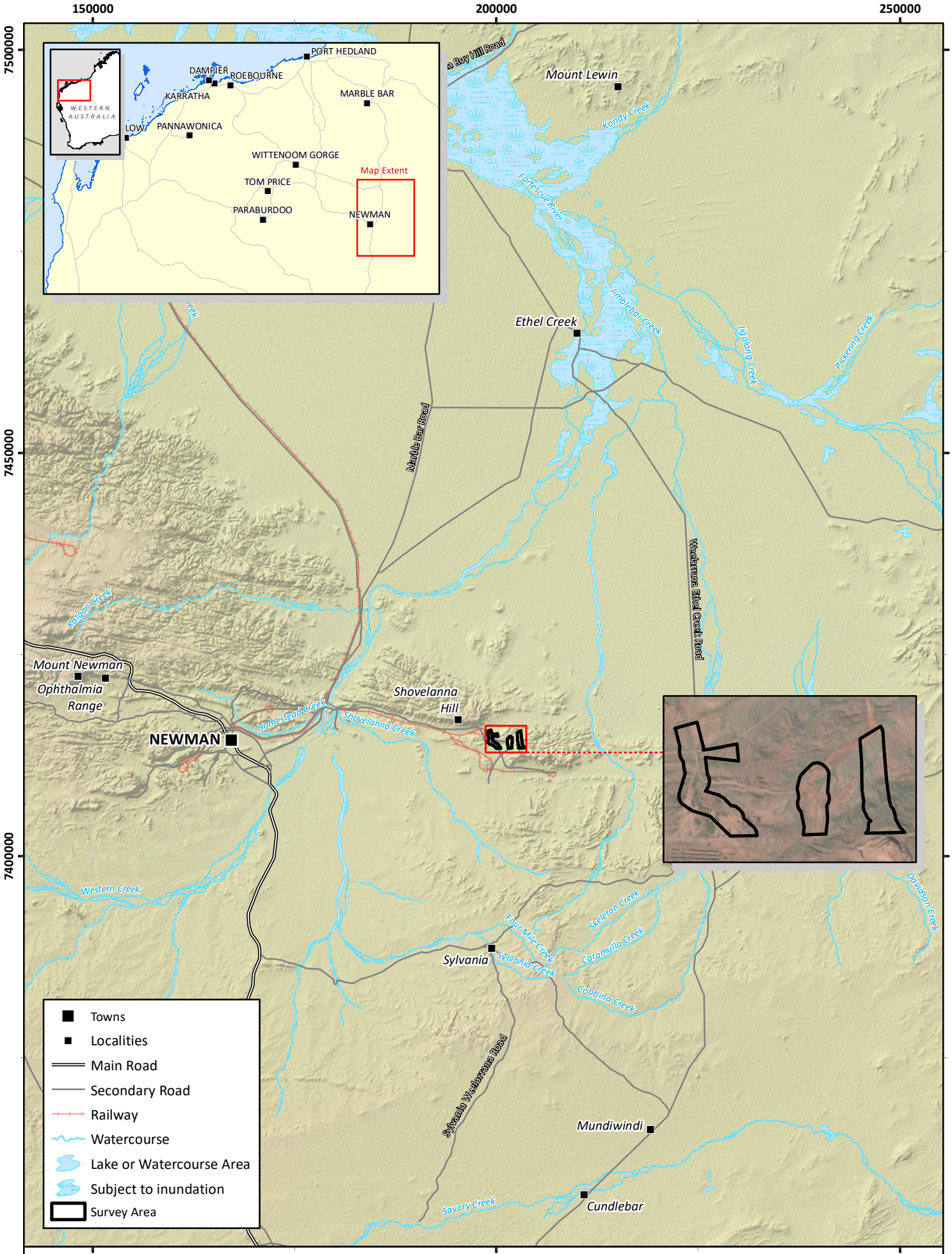
The survey area, and its immediate surrounds, have been comprehensively surveyed in the past and, as such, the current vegetation, flora and fauna assessment primarily sought to verify existing ecological values, providing updates and additional information where necessary.

1.2 Scope and Objectives

The objective of the survey was to provide an assessment of vegetation, flora and fauna values within the survey area, through a desktop assessment and field survey, to support future environmental approvals for the Mesa Gap area.

The scope of works included:

- a desktop assessment, including database searches and literature review of available contextual and project related resources
- a reconnaissance vegetation and flora assessment, including:
    - undertaking vegetation mapping for previously unmapped portions of the survey area and ground-truthing, verification and refinement of existing vegetation mapping (Onshore Environmental 2014a) using relevés and mapping notes
    - mapping of vegetation condition within the survey area
    - targeted searches for the presence of significant flora species and communities
    - opportunistically recording the presence of introduced flora species
    - generation of a representative vascular flora species list for the survey area
- a basic fauna survey, including:
    - conducting habitat assessments and mapping of the fauna habitats within the survey area
    - undertaking low intensity fauna sampling, including targeted surveys for significant fauna species, to characterise the fauna species and assemblages within the survey area
    - opportunistically recording the presence of fauna species through visual identification, species-specific vocal calls and secondary signs (e.g. tracks, feathers, nests, scats, burrows)
    - generation of a terrestrial fauna species list for the survey area.



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Figure 1: Survey area location

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Author: N. Cadd	Date: 24-04-2023
Drawn: C. Dyde	Figure Ref: 2400-10-22-BIDR-1RevA_230424_Fig1_Locn

Datum: GDA 1994 - Projection: MGA Zone 50

0 5 10 15 20 25 30 Km

N

2 Environmental Context

2.1 Climate

The climate of the Pilbara region of Western Australia is classified as arid tropical with two distinct seasons: a hot, wet summer (October – April) and a mild, dry winter (May – September). Rainfall is spatially and temporally variable and is influenced by tropical and monsoonal drivers as well as frontal systems (Sudmeyer 2016).

Based on long-term climatic data from the nearest Bureau of Meteorology weather station at Newman Aero (Station 007176), approximately 34 km south-west of the survey area, the mean annual rainfall since 1971 is 316.9 mm (Figure 2). The mean maximum daily temperatures since 1996 range between 23.0°C and 39.3°C, and exceed 30°C for much of the year (Bureau of Meteorology 2023) (Figure 2).

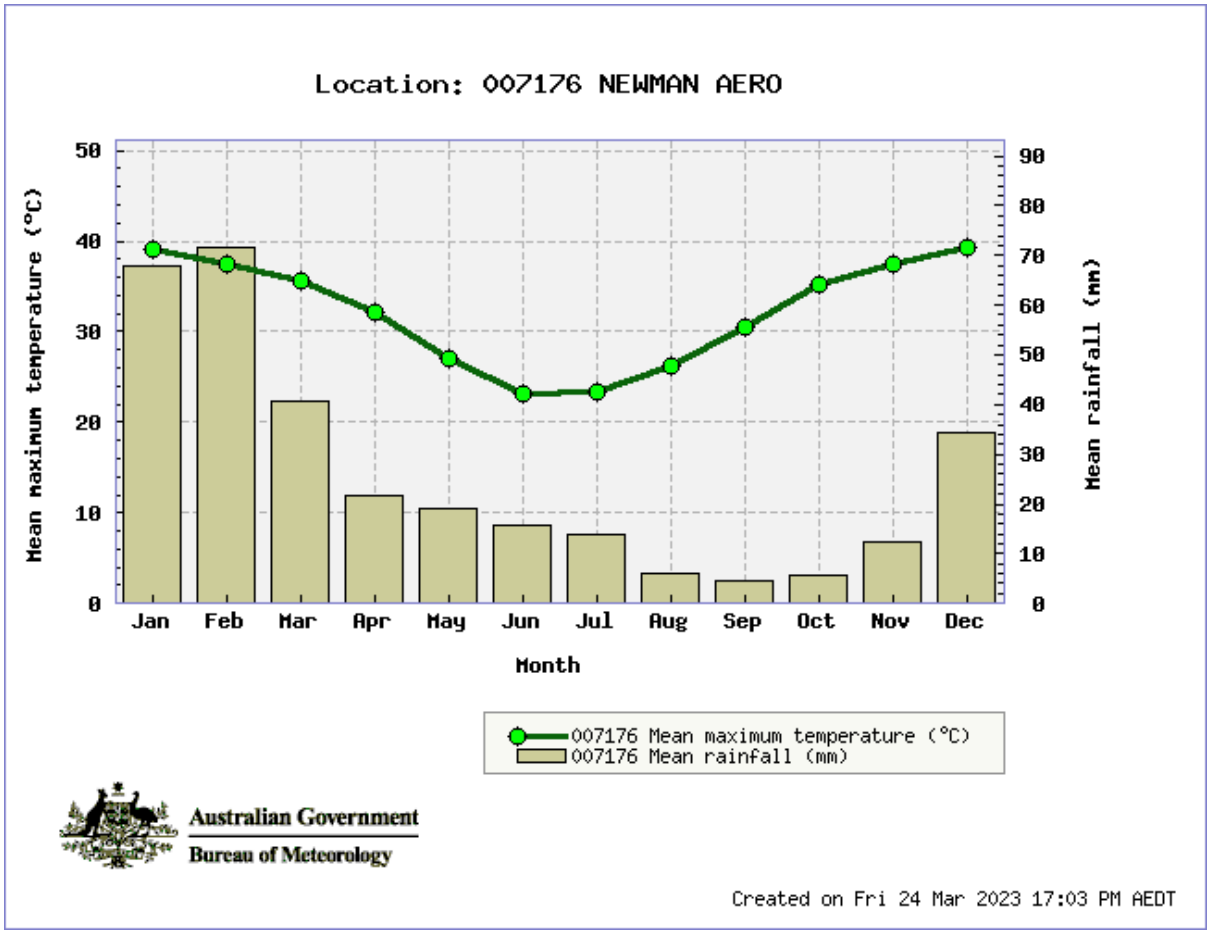


Figure 2: Climate data for Newman Aero Station (Station 007176). Mean annual rainfall data has been calculated from 1971 – 2023 and mean maximum temperature has been calculated from 1996 – 2023 (Bureau of Meteorology 2023).

2.2 Geology and Soils

The survey area occurs at the eastern extent of the Hamersley Basin, which overlies the older Archaean Pilbara Craton. The Hamersley Basin comprises mafic and felsic volcanics, shale, siltstone, sandstone and conglomerate, as well as dolomite and banded iron formation (van Vreeswyk et al. 2004). The sequence is extensively deformed, with rocks being folded and faulted (van Vreeswyk et al. 2004). The survey area occurs across both the Fortescue and the Hamersley stratigraphic groups of the Hamersley Basin (Geoscience Australia 2008).

The surface geology of the survey area is comprised of four units (Geoscience Australia 2008), with the Jeerinah Formation being the dominant geological unit across the survey area (Table 1). Geological mapping of the survey area is presented in Figure A.1 (Appendix A).

Table 1: Geological units of the survey area (Geoscience Australia 2008).

Geological name	Label	Area within survey area (ha) (%)
Jeerinah Formation: Shale, sandstone, siltstone, mudstone, dolomite, local microbanded chert, jaspilite, conglomerate; fine-grained massive rhyolite; mafic tuff with local accretionary lapilli and agglomerate; thin basalt/dolerite and andesitic basalt flows.	Awfj	198.0 (60.8%)
Boolgeeda Iron Formation: Fine-grained, finely laminated, dark grey-brown to black flaggy iron-formation, minor chert, jaspilite, shale.	Lchb	50.1 (15.4%)
Brockman Iron Formation: Banded iron-formation, chert, mudstone and siltstone.	Lchk	42.5 (13.0%)
Colluvium 38491: colluvium, sheetwash, talus; gravel piedmonts and aprons over and around bedrock; clay-silt-sand with sheet and nodular kankar; alluvial and aeolian sand-silt-gravel in depressions and broad valleys in Canning Basin; local calcrete, reworked laterite.	Qrc	35.3 (10.8%)

Two soil landscape zones are mapped for the survey area: soil landscape zone 285 – Hamersley Plateaux in the Fortescue Province and soil landscape zone 290 – Bulloo Plains and Hills in the Ashburton Province (Tille 2006) (Table 2). The Hamersley Plateaux soil unit dominates the survey area, covering approximately 260 ha, or 80% (Table 2).

Table 2: Soil landscape units of the survey area.

Soil Landscape Zone	Zone	Area within survey area (ha) (%)
Hamersley Plateaux: Hills and dissected plateaux (with some stony plains and hardpan wash plains) on sedimentary and volcanic rocks of the Hamersley Basin with stony soils, red shallow loams and some red/brown non-cracking clays and red loamy earths.	285	260.3 (79.9%)
Bulloo Plains and Hills: Hardpan wash plains, stony plains, hills and ranges on sandstone and shale of the north-eastern Capricorn Orogen with red shallow loams (often with hardpans). Red loamy earths, stony soils and red deep sands.	290	65.5 (20.1%)

2.3 Surface Water and Hydrology

The survey area occurs within the 'Fortescue River Upper' catchment. No Wetlands of International Importance (i.e. Ramsar wetlands) or Nationally Important Wetlands occur within, or in the vicinity of, the survey area (Department of the Environment and Energy 2017a, 2017b). The nearest Nationally Important Wetland is Fortescue Marshes, located approximately 75 km north-northwest of the survey area.

No major rivers occur in or adjacent to the survey area. Jimblebar Creek is approximately 9 km to the east of the survey area at its nearest point. One unnamed ephemeral creek intersects the survey area in the west.

2.4 Biological Environment

2.4.1 Interim Biogeographic Regionalisation of Australia

The Interim Biogeographic Regionalisation for Australia (IBRA version 7) divides the Australian continent into 89 bioregions and 419 subregions. The survey area occurs in the Pilbara bioregion, of which 5% to 10% is represented in the national reserve system (Department of Agriculture, Water and the Environment 2021). Within the Pilbara bioregion, the survey area lies within the Hamersley subregion (Department of the Environment and Energy 2012), which is described as:

- Hamersley PIL3 – dissected bold plateaux and ranges of flat lying, moderately folded sandstone and quartzite with vegetation described as Mulga low woodland over tussock grasses occurring on fine textured soils in valley floors, with scattered Snappy gum (*Eucalyptus leucophloia*) over *Triodia brizoides* on skeletal soils of the ranges (Kendrick 2001).

2.4.2 Land Systems

Land systems of the Western Australian rangelands have been mapped and described by the Department of Agriculture and Food (now the Agriculture and Food Sector of the Department of Primary Industries and Regional Development Western Australia) outlining the distributions and providing comprehensive descriptions of biophysical resources, including soil and vegetation condition (van Vreeswyk et al. 2004). A total of 102 land systems occur in the Pilbara bioregion (covering 181,723 km^2), of which four occur in the survey area (Table 3). The Boolgeeda land system is the most widespread within the survey area, accounting for approximately 38% (Table 3). The distribution of these land systems within the survey area is shown in Figure A.2 (Appendix A).

Table 3: Distribution of land systems within the survey area and Pilbara bioregion (Department of Primary Industries and Regional Development 2021).

Land system	Total area within survey area (ha) (%)	Total area within Pilbara bioregion (ha)	Proportion of land system within survey area (%)
Boolgeeda - stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands and mulga shrublands.	122.7 (37.7%)	962,141	<1.0
McKay System - hills, ridges, plateaux remnants and breakaways of meta sedimentary and sedimentary rocks supporting hard spinifex grasslands with acacias and occasional eucalypts.	70.0 (21.5%)	426,124	<1.0
Newman - rugged jaspilite plateaux, ridges and mountains with hard spinifex.	67.5 (20.7%)	1,996,418	<1.0
Jamindie - stony hardpan plains and rises supporting groved mulga shrublands, occasionally with spinifex understorey.	65.6 (20.1%)	192,160	<1.0

2.4.3 Pre-European Vegetation

Pre-European vegetation was mapped across the Pilbara region at a scale of 1:1,000,000 (Beard 1975). The survey area is located in the Hamersley Plateau physiographic unit (Figure A.3, Appendix A) and is described by Beard (1975) as:

Hamersley Plateau: a compact unit defined by the outcropping of jaspilite and dolomite, with some shale, siltstone and volcanics. Vegetation is described as:

- ranges – tree steppe of *Eucalyptus brevifolia* (likely to represent *E. leucophloia*) over *Triodia wiseana* hummock grasslands
- valley plains – mulga (*Acacia aneura* complex) low woodlands, or tussock grasslands on cracking clay soils
- basalt hills – mosaic of mulga low woodland and *Acacia pyrifolia* and *Triodia* species shrub steppe.

Two pre-European vegetation units, 216 and 82 (Shepherd et al. 2002), are associated with the survey area (Table 4 and Figure A.3, Appendix A). Vegetation unit 216 accounts for slightly more of the survey area than 82, covering approximately 181 ha (Table 4).

Table 4: Extent of pre-European vegetation in the survey area (Department of Primary Industries and Regional Development 2019a, Government of Western Australia 2019).

Vegetation association (Shepherd et al. 2002)	Mapping unit (Beard 1975)	Description	Extent in survey area (ha) (%)	Current extent in Pilbara bioregion (ha)*	Pre-European extent (ha)	Proportion of pre-European extent remaining (%)	Pre-European extent with formal protection (%)
216	a1Li	Mulga *Acacia aneura* and associated species.	180.9 (55.5%)	26,372.6	26,669.9	98.9	No data available
82	e16Lr t3Hi	Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.	144.9 (44.5%)	2,550,888.1	2,563,583.2	99.5	10.26

*current as of March 2019. No updates to data have occurred after this time.

2.4.4 State and Commonwealth Conservation Categories and Management

Commonwealth and State regulatory authorities maintain databases of the locations and conservation status of significant flora, fauna and ecological communities in Western Australia.

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legal framework to protect and manage Matters of National Environmental Significance (MNES) including listed flora, fauna and ecological communities. These listed flora, fauna and ecological communities are allocated a conservation category, which are outlined in Tables B.1 and B.2 (Appendix B).

Ecological communities may be subject to processes that threaten to destroy or significantly modify it across much of its range. These communities are identified as threatened ecological communities (TECs) and are listed at both Commonwealth level under the EPBC Act and State level under the *Biodiversity Conservation Act 2016* (BC Act) (Table B.3, Appendix B). The Department of Biodiversity, Conservation and Attractions (DBCA) maintains a list of priority ecological communities (PECs), which

may also be under threat and are assigned one of four priority rankings according to the criteria outlined in Table B.4 (Appendix B).

In addition to these protections, Environmentally Sensitive Areas (ESAs) are declared by the Minister for Environment under Section 51B of the *Environmental Protection Act 1986* to prevent incremental degradation of important environmental values such as threatened flora, TECs or significant wetlands.

Under Western Australian legislation, all native flora and fauna is protected, and it is an offence to 'take' protected flora or fauna. The BC Act also provides for native flora to be gazetted as threatened (T) or extinct and native fauna species to be specially protected when they are considered rare, threatened with extinction, or have a high conservation value. Under the BC Act threatened species may be listed as one of three categories: critically endangered, endangered or vulnerable (VU) (Table B.5, Appendix B). In addition, due to the diversity of Western Australia's flora and fauna, many species are known from only a few collections or locations but have not been adequately surveyed. Such flora and fauna may be threatened but cannot be considered for declaration as threatened flora or fauna until adequate surveys have been undertaken. These flora and fauna species are included on supplementary conservation lists managed by DBCA respectively referred to as the *Priority Flora List* and *Priority Fauna List.* (Table B.6, Appendix B).

Significant weed species are identified at both the State and Commonwealth level. The Australian Weeds Strategy (Natural Resource Management Ministerial Council 2006) identifies Weeds of National Significance (WoNS) which have the potential to impact primary industry and/or environmental and social values. The management of weeds in Western Australia is primarily regulated through the *Biosecurity and Agriculture Management Act 2007* (BAM Act), with some provision under the BC Act. Species listed under this act are allocated one of three Declared pest categories which define the required level of management (Department of Primary Industries and Regional Development 2019b). Declared pest categories and listed weed species' priority ratings are presented in Table B.7 (Appendix B).

2.5 Land Use, Tenure and Conservation Reserves

The survey area is located within the Shire of East Pilbara on unallocated crown land that has been temporarily allocated to BHP WAIO for the purpose of mining (Department of Mines, Industry Regulation and Safety 2023). The Sylvania pastoral station also intersects the survey area, covering approximately 127 ha (Department of Primary Industries and Regional Development 2023a).

2.6 Environmentally Sensitive Areas

No ESAs occur within, or near, the survey area. The nearest ESAs to the survey area are the Ethel Gorge aquifer stygobiont community (TEC) and the Fortescue Marshes Ramsar site (PEC priority 1), respectively located approximately 16 km west and 75 km north north-west of the survey area (Department of Biodiversity, Conservation and Attractions 2017, 2023a).

3 Methods

3.1 Desktop Assessment

3.1.1 Database Searches

Commonwealth and State database searches were conducted to identify listed significant ecological communities, flora species and fauna within, or near, the survey area. Results were interpreted to provide context to the potential values within and surrounding the survey area. Database search details are summarised in Table 5, with results presented in Appendix C. The Western Australian Organisms List (Department of Primary Industries and Regional Development 2023b) and the WoNS list (Australian Weeds Committee 2012) were consulted to identify weeds of National and State significance.

Table 5: Database searches requested.

Database name	Date search results received	Search focus	Search area
Protected Matters Search Tool (Department of Climate Change, Energy, the Environment and Water 2023a)	25/01/2023	Matters of National Environmental Significance (MNES) - flora and fauna	50 km radius from an approximate survey area centre point, defined by the coordinates: -23.35671, 120.08262
Threatened and Priority Ecological Communities database (Department of Biodiversity, Conservation and Attractions 2023a)	01/02/2023	Listed threatened and priority ecological communities (TECs and PECs)	50 km radius surrounding the survey area boundary
Threatened and Priority Flora Database (Department of Biodiversity, Conservation and Attractions 2023b)	31/01/2023	Listed threatened and priority flora	50 km radius surrounding survey area boundary
Western Australian Herbarium (WA Herbarium) Database (Department of Biodiversity, Conservation and Attractions 2023c)			
Threatened and Priority Fauna Database (Department of Biodiversity, Conservation and Attractions 2023d)	01/02/2023	Threatened, specially protected and priority fauna	50 km radius surrounding the survey area boundary
NatureMap (Department of Biodiversity, Conservation and Attractions 2023e)	01/03/2023	Flora and terrestrial fauna of significance	50 km radius from an approximate survey area centre point, defined by the coordinates: -23.35671, 120.08262

Database name	Date search results received	Search focus	Search area
Dandjoo (Department of Biodiversity, Conservation and Attractions 2023f)	01/03/2023	Terrestrial fauna	50 km radius from an approximate survey area centre point, defined by the coordinates: -23.35671, 120.08262
Atlas of Living Australia (ALA) (Atlas of Living Australia 2023)	16/03/2023	All flora and fauna records, including significant species	50 km radius from an approximate survey area centre point, defined by the coordinates: -23.35671, 120.08262
Birdlife Australia Birdata (Birdlife Australia 2023)	01/03/2023	All bird species records, including significant species	50 km radius from an approximate survey area boundary
BHP Western Australian Iron Ore (BHP WAIO) Significant Flora and Fauna Databases - customised search (BHP WAIO 2023a, 2023b)	09/01/2023	Threatened and priority flora and fauna	50 km radius surrounding survey area boundary

3.1.2 Literature Review

3.1.2.1 Flora and Vegetation

Numerous vegetation and flora surveys have been undertaken within and surrounding the survey area. The following relevant reports were reviewed to provide regional context and compare vegetation and flora values:

- Onshore Environmental (2019), Jimblebar North Reconnaissance Flora and Vegetation Survey, unpublished report for BHP Western Australia Iron Ore
- Onshore Environmental (2014b), Tenement E52/2238 Level 1 Flora and Vegetation and, Level 1 Vertebrate Fauna Survey, unpublished report for BHP Billiton Iron Ore Pty Ltd
- Onshore Environmental (2014c), Orebody 31 Level 2 Flora and Vegetation Survey, unpublished report for BHP Billiton Iron Ore Pty Ltd
- Onshore Environmental (2014d), Orebody 31 Targeted Significant Flora Survey , unpublished report for BHP Billiton Iron Ore Pty Ltd
- Syrinx Environmental (2012), Wheelarra Hill North Level 2 Flora and Vegetation Assessment, unpublished report for BHP Billiton Iron Ore Pty Ltd
- ENV Australia (2010), RGP6 Jimblebar Hub (Water Pipeline) Flora and Vegetation Assessment, unpublished report for BHP Billiton Iron Ore Pty Ltd
- ENV Australia (2009a), Ammonium Nitrate Storage Facility Flora and Vegetation Assessment, unpublished report for BHP Billiton Iron Ore Pty Ltd
- ENV Australia (2009b), Construction Water Supply Pipeline and Ammonium Nitrate Storage Facility Flora and Vegetation Assessment, unpublished report for BHP Billiton Iron Ore Pty Ltd

- GHD (2008), Report for Mesa Gap Biological Survey, unpublished report for BHP Billiton Iron Ore Pty Ltd
- ENV Australia (2007), Orebody 18 Flora and Vegetation Assessment Phase 2, unpublished report for BHP Billiton Iron Ore Pty Ltd.

The survey areas for Onshore Environmental (2014b, 2014d), Syrinx Environmental (2012), ENV Australia (2007, 2010, 2009a, 2009b) and GHD (2008) overlap portions of the current survey area.

3.1.2.2 Fauna

Numerous fauna surveys have been undertaken within close proximity of, or overlapping, the survey area. The following relevant reports were reviewed to provide regional context and compare vegetation and flora values:

- Biologic (2022) North Jimblebar: Targeted Northern Quoll Assessment
- GHD Pty Ltd (2021a) East Jimblebar and Caramulla Targeted Greater Bilby Survey
- GHD Pty Ltd (2021b) Jimblebar Targeted Ghost Bat Survey
- Biologic (2020) Jimblebar Greenhouse Gas Abatement Study: Basic Vertebrate Fauna Survey
- Onshore Environmental (2014b)Tenement E52/2238 Level 1 Flora and Vegetation Level 1 Vertebrate Fauna Survey
- Biologic (2013) OB 17 and 18 Vertebrate Fauna Habitats
- ENV Australia Pty Ltd (2012) Wheelarra Hill North Fauna Assessment
- ENV Australia Pty Ltd (2009b) Construction Water Supply Pipeline and Ammonium Nitrate Storage Facility Fauna Assessment
- GHD Pty Ltd (2008) Report for Mesa Gap Biological Survey
- ENV Australia Pty Ltd (2007) Orebody 18 Fauna Assessment
- Ecologia Environment (2004) Satellite Orebodies Orebody 18 Flora and Fauna Review
- Ecologia Environment (1995) Orebody 18 Biological Assessments Survey.

BHP WAIO also provided consolidated habitat mapping completed in 2017 which covers the majority of the survey area (BHP 2017) and spatial data for significant fauna species located within 50 km of the survey area (BHP WAIO 2023b).

3.1.3 Likelihood of Occurrence

3.1.3.1 Vegetation and Flora

The 43 PECs listed by DBCA for the Pilbara region (Department of Biodiversity, Conservation and Attractions 2022a) were reviewed to determine if any were analogous with ecological communities previously recorded in the survey area, or were characterised by landforms or habitat considered to have potential to occur, based on interpretation of aerial imagery and the results of the literature review.

Preferred habitat information for each significant flora species returned from the database searches was compiled, using publicly available information from FloraBase (Western Australian Herbarium 2023) and WA Herbarium voucher information (obtained using Level 5 access on FloraBase). The

distance to nearest records was obtained using geographical information system (GIS) software to calculate distance from the survey area using the location coordinates provided with database results. Aerial imagery was interpreted to identify potential habitat types within and surrounding the survey area. The significant flora species returned from the database searches were then categorised according to the criteria in Table 6 for potential occurrence within the survey area.

Table 6: Pre-survey criteria used to assess the likely presence of significant flora in the survey area.

Likelihood of occurrence	Pre-survey
Previously Recorded	Taxa previously recorded within the survey area
Likely	Taxa previously recorded within 10 km of the survey area and suitable habitat appears to be present in the survey area
Potential	Taxa previously recorded within 10 km to 20 km of the survey area and/or suitable habitat appears to be present in the survey area
Unlikely	No known occurrence within 20 km of the survey area and/or no suitable habitat appears to be present in the survey area

Following the field survey, all significant flora species identified during the desktop assessment, yet not recorded during the current survey, were again assessed to determine their likelihood of occurrence within the survey area. Post-field survey likelihood of occurrence was primarily based on validating the presence (and thorough inspection) of suitable habitats within the survey area, combined with life form, habit and flowering information (i.e. visibility) for each flora species.

3.1.3.2 Fauna

Significant fauna species returned from database searches were categorised pre- and post-survey according to the criteria in Table 7 for likelihood of occurrence within the survey area. All information was tabulated with categories of likelihood based on the interpretation of Astron environmental scientists experienced with Pilbara fauna and habitats.

Table 7: Criteria used pre- and post-survey to assess the likely presence of conservation significant fauna in the survey area.

Likelihood of occurrence	Pre-survey (BHP Billiton Iron Ore 2022)	Post-survey
Recorded	Individuals or signs of individuals recorded in the survey area during previous surveys.	Species or evidence of species recorded during survey.
High	Suitable habitat is, or has the potential to be present within the survey area. OR Species is cryptic and suitable habitat is present but may not have been previously recorded. OR Species has been recorded within 20 km of the survey area.	Core or preferred habitats present in the survey area which are abundant and/or high quality condition. OR Species is known to be cryptic and may not have been detected despite adequate survey effort and suitable habitat present within the survey area. OR Species or evidence of species recorded within the survey area however doubt remains over the taxonomic identification, validity of record.
Moderate	Suitable habitat for the species is, or has the potential to be, present but is in poor condition, limited in extent or isolated and discontinuous.	Core or highly suitable habitats present in the survey area, however non-cryptic species that was not detected despite adequate survey effort. OR Core or preferred habitats present in the survey area are mainly in poor or modified condition.
Low	Suitable habitat is not present within the survey area. OR Species has not been previously recorded within 20 km of survey area despite adequate survey effort. OR Survey area is not within the species' known distribution and/or the species is considered locally extinct.	Species has not been recorded in the survey area despite adequate survey effort. OR Species dependent on specific habitats that do not occur in the survey area. OR Species considered locally extinct.

3.2 Field Survey

Assessment of the survey area was conducted over one field visit, from 7 to 10 March 2023, by Astron Senior Environmental Scientist Lucy Dadour and Environmental Scientist Jean Dorrington. Lucy Dadour has more than 10 years of experience in conducting flora, vegetation and fauna surveys throughout Western Australia, with a particular focus in the Pilbara region. Jean Dorrington has four years of experience in undertaking flora and vegetation surveys within the Pilbara region.

Field survey methods were formulated in accordance with the requirements outlined in the Scope of Works document (dated 14 October 2022) and the following regulatory and BHP WAIO internal guidance documents:

- Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (Environmental Protection Authority 2016a)
- Environmental Factor Guideline – Flora and Vegetation (Environmental Protection Authority 2016b)
- Vegetation and Flora Survey Procedure: 0124627 Version 3 (BHP WAIO 2017)
- Environmental Factor Guideline: Terrestrial Fauna (Environmental Protection Authority 2016c)
- Environmental Protection Authority's Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (Environmental Protection Authority 2020)
- Guidance for Vertebrate Fauna Surveys in the Pilbara : SPR-IEN-EMS-012 (BHP Billiton Iron Ore 2022).

Vegetation has been described and mapped, where appropriate, in accordance with existing association descriptions presented in the Consolidation of Regional Vegetation Mapping: BHP Billion Iron Ore Pilbara Tenure Onshore report (Onshore Environmental 2014a).

3.2.1 Weather

Daily weather observations recorded at the Newman Aero weather station (Bureau of Meteorology station 007176) were used to describe local rainfall and temperatures preceding the field survey (Figure 3). A total of 281.4 mm of rainfall was recorded at Newman Aero weather station in the 12 months preceding the field survey; 33.6 mm below the long-term (1971-2023) annual average of 315 mm (Bureau of Meteorology 2023). Additionally, in the three months prior to the survey, seasonal conditions were dry with below average rainfall of 100.6 mm recorded (in comparison to the long-term average of 173.6 mm for the same period) (Bureau of Meteorology 2023). In March 2023, a rain bearing depression brought 118.4 mm of rain to Newman (Bureau of Meteorology 2023), however the majority of this rainfall (116.8 mm) was received after the completion of the field survey. The mean maximum temperature for the month preceding the survey (February 2023) was 39.9°C; higher than the long term average (1996-2023) of 37.4°C. Maximum temperatures in the three months preceding the field survey ranged between 38.7°C and 39.9°C (Bureau of Meteorology 2023) (Figure 3). The mean maximum temperature for the survey period (7 to 10 March) was 39.2°C (Bureau of Meteorology 2023). Overall, seasonal conditions prior to the field survey were dry and hot and, as such, field survey timing was not considered optimal. Annual and rainfall dependant flora species are considered to be under-represented due to the below-average rainfall and high temperatures.

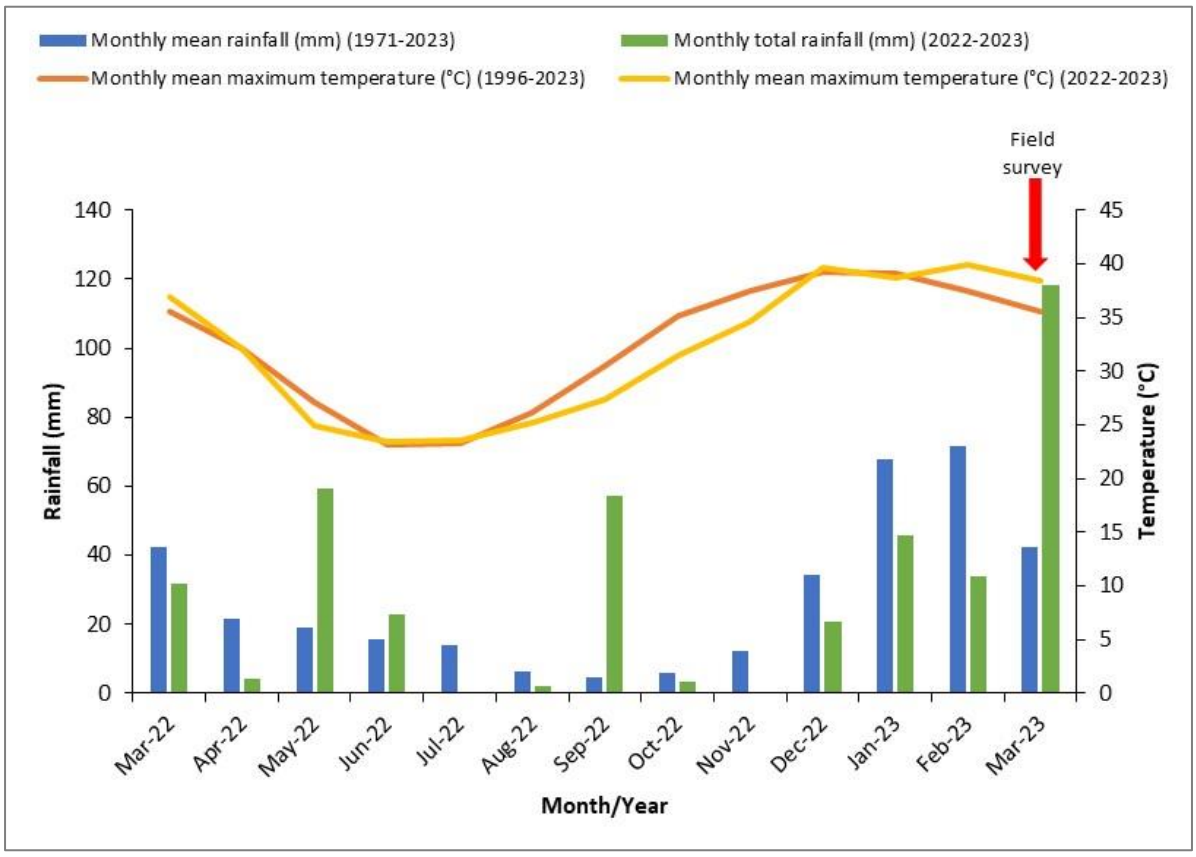


Figure 3: Long-term monthly mean rainfall (mm) (1971 to 2023) and monthly total recorded rainfall (mm) (2022 to 2023), and long-term monthly mean maximum temperatures (°C) (1996 to 2023) and monthly mean maximum temperatures (°C) (2022 to 2023) at Newman Aero weather station (007176) (Bureau of Meteorology 2023). Red arrow indicates survey timing.

3.2.2 Flora and Vegetation Survey

Information acquired during the desktop assessment assisted in the design of the field survey. Pre-survey planning involved the examination of satellite imagery to identify potentially different landforms, habitats, and vegetation types. It also involved a review of the vegetation and flora assessments previously completed within the vicinity of the survey area to provide context.

A total of 27 relevés were sampled within the survey area. The following information was collected at each:

- **Location** – one set of coordinates measured using a handheld global positioning system (GPS) unit (MGA50, GDA94).
- **Recorder and date** –personnel involved in the field survey and the survey date.
- **Species** – representative vascular plant species present.
- **Foliar cover** – the percentage cover was estimated for each flora species.
- **Vegetation description** – vegetation was described according to levels III and V of the National Vegetation Information System (Department of the Environment and Energy 2018) and classified according to the Aplin (1979) modification of the vegetation classification system of Specht (1970) (Appendix D).
- **Vegetation condition** – assessed according to the vegetation condition classification adapted from Trudgen (1988), as outlined in BHP WAIO (2017) and Environmental Protection Authority (EPA) (2016a) (Appendix D).
- **Habitat** – a broad description of the surrounding landscape based on landform, topography and soil.
- **Soil** – including colour and texture.
- **Geology** – rock type and abundance.
- **Disturbances** – records of any obvious disturbances such as fire, tracks, weeds or grazing.
- **Photographs** – a representative photograph was taken of each relevé.

Mapping notes were used to mark changes in vegetation throughout the survey area. The details collected at each mapping note location included coordinate, photograph, landform, vegetation description and vegetation condition.

3.2.2.1 Vegetation Descriptions and Mapping

Vegetation within the survey area was described according to Aplin's (1979) modification of the vegetation classification system of Specht (1970), and the National Vegetation Information System, at Levels III (Broad Floristic Formation) and V (Association). To allow for comparisons and to maintain consistency with previously described vegetation types within and surrounding the survey area, the vegetation types recorded within the survey area have been aligned, where appropriate, with existing consolidated vegetation descriptions as defined in Onshore Environmental (2014a). Where alignment with existing vegetation descriptions was not suitable, new vegetation descriptions (and codes) were developed according to guidelines detailed in the Vegetation and Flora Survey Procedure (BHP WAIO 2017). Where practical, vegetation mapping boundaries were reconciled with the previous vegetation mapping within and surrounding the survey area (Onshore Environmental 2014a).

3.2.2.2 Vegetation Condition Mapping

Vegetation condition was mapped according to vegetation unit boundaries throughout the survey area, using a combination of relevé data, opportunistic observations and the mean condition rating for each vegetation unit. Vegetation condition was rated at each survey site using the six point adapted Trudgen (1988) scale, as outlined in EPA (2016a) and BHP WAIO (2017), and then applied to the whole vegetation unit polygon in which it was mapped. A mean condition rating was calculated for each vegetation unit using the data collected from survey sites and this was applied to any polygons not already attributed with a rating.

3.2.2.3 Targeted Flora Survey

Targeted traverses were conducted opportunistically within the survey area to search for the presence of significant flora. Search effort was focused in habitats with the greatest likelihood of supporting significant flora, as well as validating the presence of previously recorded significant flora in the survey area. Where significant flora species were observed, the immediate vicinity was searched, the population mapped and relevant information (such as habitat information, population size and photographs) collected.

Locations of introduced flora, with a focus on WoNS or declared pests, were opportunistically recorded while traversing the survey area.

3.2.3 Vertebrate Fauna Survey

In the context of a Basic fauna survey, the EPA (2020) guidance statement advises field observers to describe the fauna habitats of the survey area, which give a comprehensive list of fauna that can reasonably be expected to occur. Therefore, the aim of the fauna component of the survey included descriptions of fauna habitats in the survey area and a compilation of fauna species recorded opportunistically as the survey area was traversed.

3.2.3.1 Habitat Assessments

Twenty-four fauna habitat assessments (Figure E.1, Appendix E) were conducted and detailed the following:

- **Location** – coordinates measured using a Garmin GLO GPS (MGA50, GDA94) unit at each site.
- **Recorder and date** – personnel involved in undertaking the fauna habitat assessment and the survey date.
- **Habitat/landform** – position in the landscape - major fauna habitat types were described based on the landform and vegetation.
- **Vegetation type** – a broad description of vegetation type and structure.
- **Soils** – a brief description of soil type.
- **Microhabitat** – presence of specific microhabitat features (e.g. leaf litter, logs, burrows, rocky outcrops, rock crevices, hollows, permanent or semi-permanent water).
- **Condition** – habitat condition was assessed based on the presence of anthropogenic (human-induced) disturbances, and using the condition ratings suggested by Thompson and Thompson .

- **Disturbance** – any disturbance such as clearing, fire, weeds, flooding, vehicular, machinery, tracks or grazing.
- **Photographs** – a representative photograph was taken at each habitat assessment site.

The information derived from the fauna habitat assessments was used to delineate fauna habitats throughout the survey area.

3.2.3.2 Motion Sensitive Cameras

Motion sensitive cameras (Browning Dark Ops Pro SD BTC-6PXD) were set at two locations for two nights, with a combined trapping effort of four camera trap nights. The cameras were placed in breakaway habitat to target significant mammal species. Cameras were baited with a scent lure. Camera locations are shown in Figure E.1 and detailed in Table E.1 (Appendix E).

3.2.3.3 Acoustic Bat Surveys

Acoustic ultrahigh frequency equipment was used to record the presence of bats, in particular the Pilbara leaf-nosed bat (*Rhinonicteris aurantia*) (VU; VU) and ghost bat (*Macroderma gigas*) (VU; VU). Song Meter 4 (SM4) acoustic recording devices (SM4BAT+ detectors) were set in one location in the eastern survey area polygon targeting potential foraging sites. The SM4BAT+ detector was set for two nights. The location is depicted in Figure E.1 and detailed in Table E.1 (Appendix E). The bat echolocation data collected in the field was analysed by Robert Bullen (Bat Call WA) for presence of all bat species.

3.2.3.4 Cave Assessments

Any potential roost caves identified within the survey area were assessed for the suitability to provide roosting for the ghost bat and Pilbara leaf-nosed bat using the following information:

- cave characteristics including position of the cave in the landscape, angle of cave floor, orientation of cave opening, exposure of cave and type of cave entrance
- cave dimensions including overhang depth, cave entrance height and width, cave depth, number of chambers and their dimension (height and width)
- humidity and temperature inside the cave
- bat species present within the cave, including the presence of scats and feeding debris.

3.2.3.5 Avifauna Surveys

Avifauna surveys were conducted for 20 minutes at each fauna habitat assessment site as well as one other site (Figure E.1, Appendix E), where all species were recorded through visual identification and/or from calls. In addition, bird species were recorded opportunistically as the survey area was traversed.

3.2.3.6 Targeted and Opportunistic Sightings

Targeted searches for evidence of those significant fauna species considered likely to occur were undertaken.

At all times while surveying, all records pertaining to species not previously recorded during the survey, rare species, significant fauna or other fauna of interest were documented. These records

include those from primary (i.e. direct observation of species) or secondary (e.g. burrows, diggings and scats) evidence. Efforts were made to target likely microhabitats by turning rocks, logs and anthropogenic debris where present.

3.3 Taxonomy and Nomenclature

3.3.1 Flora

Plant specimens that were unable to be identified in the field were identified in Perth by Astron botanists. Two specimens, potentially representing a significant flora species, were submitted to the WA Herbarium for confirmation. The assigned nomenclature within this report is consistent with the current listing of scientific names recognised by the WA Herbarium. Where specimens had inadequate descriptive material to allow confident identification, they were assigned a 'sp.' (species) epithet, indicating that identification could not be confirmed beyond genus level.

3.3.2 Fauna

Nomenclature and sequence for the fauna species listed within this report is as per Western Australian Museum's *Checklist of the Vertebrates of Western Australia* (Western Australian Museum 2022). For species identified in the desktop assessment where there is doubt to their true taxonomy (through subsequent name changes or taxonomic reviews) every effort was made to determine the current scientific name for each taxon. In addition, some taxon names may be followed by 'sp.', meaning that the species name was not given in the data source, or the identification is in doubt. Invertebrate and fish species were not included in the desktop assessment as they are outside of the scope of this survey.

3.4 Limitations

Following completion of the desktop assessment and field surveys, a review of any limitations that may have affected a complete assessment of the survey area was conducted. The limitations listed in Table 8 are based on those suggested as considerations in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (Environmental Protection Authority 2016a) and Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (Environmental Protection Authority 2020).

Table 8: Statement of limitations.

Potential limitation	Degree of limitation (None/minor/ requires consideration)	Statement regarding potential limitations
i) Availability of contextual information at a regional and local scale.	None	Broad-scale contextual information is available from Beard (1975), van Vreeswyk et al. (2004), Tille (2006) and Kendrick (2001). At a local scale, the vegetation and flora of the survey area and surrounds is well documented. Numerous vegetation and flora surveys have been undertaken within 50 km of the survey area; the most relevant of these being reviewed to provide local context. Twelve previous fauna surveys have been undertaken within or near of the survey area and were reviewed as part of the desktop assessment. The entire survey area has been previously mapped for fauna habitats (BHP 2017). Database searches undertaken within 50 km of the survey area also provided contextual information for vegetation, flora and fauna.
ii) Competency/experience of the team carrying out the survey, including experience in the bioregion surveyed.	None	Both field team members have considerable experience in conducting vegetation and flora surveys in the Pilbara, with Lucy Dadour and Jean Dorrington having >10 years and four years of experience respectively. The identification of flora specimens collected in the field was overseen by Astron botanist Kathya Tippur, who has >10 years of experience in identifying Western Australian flora. Specimens of one taxon were submitted to the WA Herbarium for confirmation. The fauna component of the survey was conducted by Lucy Dadour, who as an ecologist has >10 years of experience in undertaking fauna surveys throughout Western Australia, including the Pilbara region.
iii) Proportion of flora/fauna recorded and/or collected, any identification issues.	Minor	The survey techniques and intensity were considered adequate; 27 detailed relevés were surveyed which were supported by 12 mapping notes and hand-written vegetation summaries on field maps. Below-average rainfall was recorded for the 12 months and three months preceding the field survey and, as such, seasonal conditions were not considered optimal. They were however adequate for delineation and characterisation of vegetation associations and for identification of most of the flora species which were present. A total of 173 species were recorded with six of these unable to be identified to species level due to a lack of diagnostic material. Due to the dry conditions preceding the field survey, annual and rainfall dependant species are considered to be under-represented. The Basic fauna survey focused on mapping fauna habitats; as such, only a small proportion of the expected fauna assemblage was recorded. This was not considered a limitation for the fauna survey.

Potential limitation	Degree of limitation (None/minor/ requires consideration)	Statement regarding potential limitations
iv) Was the appropriate area fully surveyed (effort and extent).	None	The survey area was considered adequately surveyed to compile a representative list of species (including significant and introduced flora and fauna species), as well as describe and map vegetation at a level appropriate for management decisions. Completeness is not considered a limiting factor for the flora or fauna survey components.
v) Access restrictions within the survey area.	None	The survey area was able to be accessed via vehicle and on foot; as such, access was not considered a limiting factor for either the flora or fauna components of the survey.
vi) Survey timing, rainfall, season of survey.	Minor	The vegetation and flora field survey was undertaken within the recommended optimal timing for a primary (post-wet) botanical survey (Environmental Protection Authority 2016a), however seasonal conditions preceding the survey were considered to be poor, with below-average rainfall recorded in the three months prior to the field survey (100.0 mm compared to the long-term average of 173.6 mm for the same period (Bureau of Meteorology 2023)). As a result, fewer ephemeral taxa were recorded than would be expected in better seasonal conditions. The Basic fauna survey focused on mapping fauna habitats; as such, timing is not considered a limiting factor.
vii) Disturbance that may have affected the results of survey such as fire, flood or clearing.	None	Approximately half of the survey area was in 'very good' (53.2%) condition. An estimated 13% of the survey area had been previously disturbed or cleared as a result of mining operations. The disturbance was not considered a limiting factor.

4 Results

4.1 Desktop Assessment

4.1.1 Vegetation and Flora

No Commonwealth or State-listed TECs related to vegetation have been previously recorded within, or within 50 km of, the survey area (Department of Biodiversity, Conservation and Attractions 2023a, Department of Climate Change, Energy, the Environment and Water 2023a). The State listed '*Ethel Gorge aquifer stygobiont community'* TEC, which relates to the stygofauna of the Ethel Gorge alluvium calcrete aquifer, is known to occur approximately 16 km west of the survey area. One mapped occurrence of the State-listed P3 PEC '*Vegetation of sand dunes of the Hamersley Range/Fortescue Valley*' (previously '*Fortescue Valley Sand Dunes'*) occurs approximately 48 km north-west of the survey area. No TECs or PECs have been identified during any of the previous surveys which were reviewed during the desktop assessment (Table 9) (ENV Australia 2007, 2009a, 2009b, 2010, GHD Pty Ltd 2008, Onshore Environmental 2019, 2014b, 2014c, 2014d, Syrinx Environmental 2012).

Database search results indicate that no species listed as threatened, at either Commonwealth or State level, have been recorded within 50 km of the survey area (BHP WAIO 2023a, Department of Biodiversity, Conservation and Attractions 2023b, 2023c, 2023e, Department of Climate Change, Energy, the Environment and Water 2023a). A total of 27 State-listed significant flora species have been identified within a 50 km radius of the survey area (BHP WAIO 2023a, Department of Biodiversity, Conservation and Attractions 2023b, 2023c, 2023e). This includes four P1, three P2, 16 P3 and four P4 species. Pre-survey assessment of the 27 taxa for likelihood of occurrence indicated that one species, *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3, has been previously recorded within the survey area and *Aristida jerichoensis* var. *subspinulifera* P3 has been previously recorded within 300 m of the survey area (BHP WAIO 2023a, Department of Biodiversity, Conservation and Attractions 2023c, 2023e). A further 13 species were considered to possibly occur in the survey area due to the potential presence of suitable habitat and proximity of known locations to the survey area; 10 of these were considered 'likely' to occur while three were considered to have 'potential' to occur. Thirteen taxa were considered 'unlikely' to occur in the survey area based on a likely absence of suitable habitat.

According to the literature review conducted, three of the State-listed significant flora species (*Eremophila capricornica* P1, *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3 and *Rhagodia* sp. Hamersley (M. Trudgen 17794) P3) listed in the database search results were also recorded from previous surveys conducted with 10 km of the survey area (Table 9) (ENV Australia 2007, 2009a, 2009b, 2010, GHD Pty Ltd 2008, Onshore Environmental 2019, 2014b, 2014c, 2014d, Syrinx Environmental 2012). One of these species, *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3, was recorded within the current survey area by Onshore Environmental (2014d).

Pre-survey likelihood of occurrence assessment results, including distance to survey area and the preferred habitat of previously recorded significant species, are presented in Table F.1 (Appendix F). The locations of significant flora previously recorded within the survey area are presented in Figure G.1 (Appendix G).

Five currently recognised introduced flora (weed) species were identified by the previous surveys reviewed as part of the literature review (ENV Australia 2007, 2009a, 2009b, 2010, GHD Pty Ltd 2008, Onshore Environmental 2019, 2014b, 2014c, 2014d, Syrinx Environmental 2012): **Rumex vesicaria* (previously **Acetosa vesicaria*), **Bidens bipinnata*, **Cenchrus ciliaris*, **Cenchrus setiger* and **Malvastrum americanum*. **Cenchrus ciliaris* was the most frequently recorded species.

Portulaca oleracea, which was previously acknowledged as a common weed species throughout the Pilbara, was also recorded during three of the previous surveys (ENV Australia Pty Ltd 2009a, 2009b, Syrinx Environmental 2012). This species has since been determined to be native in part of its range, and naturalised elsewhere (Western Australian Herbarium 2023).

Table 9: Summary of relevant vegetation and flora surveys in the vicinity of the survey area.

Survey parameter	Onshore Environmental (2019) Jimblebar North Reconnaissance Flora and Vegetation Survey	Onshore Environmental (2014c) Orebody 31 Level 2 Flora and Vegetation Survey	Onshore Environmental (2014b) Tenement E52/2238 Level 1 Flora and Vegetation Level 1 Vertebrate Fauna Survey	Onshore Environmental (2014d) Orebody 31 Targeted Significant Flora Survey	Syrinx (2012) Wheelarra Hill North Level 2 Flora and Vegetation Assessment	ENV Australia (2010) RGP6 Jimblebar Hub (Water Pipeline) Flora and Vegetation Assessment	ENV Australia (2009b) Construction Water Supply Pipeline & Ammonium Nitrate Storage Facility Flora & Vegetation Assessment	ENV Australia (2009a) Ammonium Nitrate Storage Facility Flora and Vegetation Assessment	GHD (2008) Report for Mesa Gap Biological Survey	ENV Australia (2007) Orebody 18 Flora and Vegetation Assessment Phase II
Survey area size (ha)	1,680	3,335.85	Not stated	6,435	4,972	192	280	86.8	2,773.73	1,500
Level of survey (as defined at the time of the survey)	Reconnaissance Survey	Level 2 Flora & Vegetation (Second Phase only)	Level 1 Flora & Vegetation	Targeted Flora Survey	Level 2 Flora & Vegetation (Two Phase)	Level 2 Flora & Vegetation (Single Season)	Level 2 Flora & Vegetation (Two Phase)	Level 2 Flora & Vegetation (Single Season)	Level 1 Flora & Vegetation	Level 1 Flora & Vegetation
Survey timing	September 2018	October 2013	July 2014	April 2014	May and October 2011	November 2009	September and November 2009	September 2009	September and October 2007	July - August 2006
Seasonal conditions	Poor	Excellent	Average	Excellent	Excellent (1st Phase) Average (2nd Phase)	Poor	Poor to Average	Average	Not stated	Excellent
Survey effort (quadrats/relevés)	174 relevés	45 quadrats 146 relevés	Transects (500 m grid)	Targeted traverses	83 quadrats 19 relevés	16 quadrats 7 relevés	23 quadrats 8 relevés	7 quadrats 1 relevé	40 quadrats	71 quadrats and relevés
Survey limitations	Seasonal limitations	No limitations	Not stated	No limitations	Seasonal limitations Fire % of taxa identified	Seasonal limitations	Seasonal limitations	% of taxa identified	Seasonal limitations	No limitations
Total vegetation units mapped	34	35	18	N/A	25	2	19	8	8	26
Threatened and Priority Ecological Communities (TECs and PECs) recorded	0	0	0	N/A	0	0	0	0	0	0
Total taxa recorded	Not stated	280	Not stated	N/A	436	166	213	123	133	276
Total significant flora species recorded (currently listed)	2	1	0	2	0	0	0	0	0	0
Eremophila capricornica P1	X									
Rhagodia sp. Hamersley (M. Trudgen 17794) P3	X	X		X						
Triodia sp. Mt Ella (M.E. Trudgen 12739) P3				X						

4.1.2 Fauna

The database searches and literature review results indicate that 399 vertebrate fauna species have been previously recorded within 50 km of the survey area, including nine amphibian species, 128 reptile species, 211 bird species and 51 mammal species (including 10 introduced mammal species) (Tables H.1-H.4, Appendix H). Of these, 32 species are listed as MNES (specifically those listed as Threatened and Migratory species) that are occurring, or potentially occurring, within the survey area. These 32 MNES species comprise of two reptile species, 25 bird species and five mammal species (Table H.2, Appendix H). A further two species, comprised of one reptile and one bird are listed under the BC Act. An additional seven species, comprised of three reptile species and four mammal species, are Priority listed species (Table H.2, Appendix H).

Of the 42 significant listed species, 22 species were considered pre-survey to have a high likelihood of occurrence within the survey area, one of which was recorded previously within the survey area, western pebble-mound mouse (*Pseudomys chapmani*) (P4). Five species were considered to have a moderate likelihood and 15 were considered to have a low likelihood (Table H.2, Appendix H). This is based on their respective ecology, habitats considered likely to be present, and any previous records from historic survey and database records (Atlas of Living Australia 2023, Birdlife Australia 2023, Department of Biodiversity, Conservation and Attractions 2023d, 2023d, 2023e). Refer to Section 3.1.3, Table 7 for further detail on the criteria used to define the likelihood of significant species occurrence within the survey area.

Previous surveys undertaken for BHP WAIO in the vicinity of the survey area recorded six significant vertebrate fauna species (Table 10): ghost bat, Pilbara olive python (*Liasis olivaceus barroni*) (VU; VU), *Anilios ganei* (P1), western pebble-mound mouse and common sandpiper (*Actitus hypoleucos*) (MI; MI). *Cyclodomorphus branchialis* (VU) has been previously recorded from one record in 1995 (Ecologia Environment 1995). However, this taxon has been under taxonomic review, and it is likely to represent *Cyclodomorphus melanops* that is not listed as significant.

Table 10: Summary of literature review results from fauna surveys conducted within the vicinity of the survey area.

Author (year)	Survey area; size (ha)	Survey level	Survey timing	Survey effort	Conservation significant vertebrate fauna recorded
Biologic (2022)	North Jimblebar 13,932 ha	Targeted northern quoll survey	February and June 2022	15 habitat assessments, 52.2 hours of targeted searches and 5,390 camera trap nights across five camera trap transects	None recorded
GHD Pty Ltd (2021a)	East Jimblebar and Caramulla 8,839 ha	Targeted bilby survey	September 2020	Forty-seven Bilby plots covering approximately 94 ha. Habitat assessments at each bilby plot was conducted	None recorded
GHD Pty Ltd (2021b)	Jimblebar Size not stated	Targeted ghost bat survey	May 2020	Habitat and roost assessments, in-situ time lapse infrared video camera surveys and Song Meter 4 (SM4) echolocation recorders	Ghost bat (*Macroderma gigas*) Pilbara olive python (*Liasis olivaceus barroni*) (scats)
Biologic (2020)	Jimblebar 2,438 ha	Basic fauna survey	May 2020	Habitat mapping, targeted transects through all major habitat types, deployment of Song Meter 2 (SM2) echolocation recorders, acoustic recorders for night parrot, motion sensitive cameras and opportunistic fauna records documented	None recorded
Onshore (2014b)	Orebody 18 and Wheelara Hill Size not stated	Basic fauna survey	July 2014	Targeted transects through all major habitat types, deployment of SM2 echolocation recorders and motion sensitive cameras. Habitat assessments were completed, and all opportunistic fauna records documented	None recorded
Biologic (2013)	Orebody 17/18 Size not stated	Desktop assessment	N/A	Desktop assessment reviewing vertebrate fauna habitat assessments and mapping and assessing the potential of occurrence of priority and threatened species within the defined survey boundary	N/A
ENV Australia (2012)	Wheelarra Hill North 49,720 ha	Duel phase detailed fauna survey	April 2011 Octber 2011	Systematic fauna trapping including pitfall, elliot, funnel and cage traps. Avifauna census, nocturnal spotlighting, Anabat acoustic recorder deployment, habitat assessments and targeted searches for signs of fauna	Western pebble-mound mouse (*Pseudomys chapmani*)
ENV Australia (2009b)	Wheelarra Hill 244 ha	Desktop fauna assessment, field habitat mapping and targeted western pebble-mound mouse survey	September 2009 Novemeber 2009	Desktop review identifying terrestrial vertebrate fauna likely to ooccur in the survey area. On ground habitat assessments and targeted searches of western pebble-mound mouse	Western pebble-mound mouse (*Pseudomys chapmani*)
GHD (2008)	Mesa Gap 2,773 ha	Basic fauna survey incondjuction with a flora survey	September – October 2007	Visual and aural surveys for fauna species, including searches for signs of fauna (tracks, scats, bones, diggings and feeding signs), and habitat assessments	Western pebble-mound mouse (*Pseudomys chapmani*)
ENV Australia (2007)	Orebody 18 Size not stated	Single season detailed survey, considered a follow up/'second phase' to Ecologia 1995	September 2006	Systematic trapping using pitfall, funnel, pot, cage and elliot traps. Echolocation recorders for bats, nocturnal spotlighting and both systematic and non-systemitic searches for primary and secorndary evidence of fauna	*Anilios ganei* Common sandpiper (*Actitus hypoleucos*)
Ecologia Environment (2004)	Orebody 18 Size not stated	Desktop review of fauna and fauna habitats within the broader survey area	Fauna component was desktop only	Desktop review of exisiting literature to assess fauna habitats and conservation status and likelihood of occurance	N/A
Ecologia Environment (1995)	Orebody 18 Size not stated	Single season detailed survey	August 1995	Systematic fauna samplig including 359 pitfall trap nights and 840 elliot trap nights. Systematic searches, spotlighting, avifauna censues and non-systematic searches for secondary evidence was undertaken. Mist netting was used for bat surveys	*Cyclodomorphus branchialis*

4.2 Flora and Vegetation Survey

4.2.1 Vegetation

In accordance with the consolidated vegetation classifications developed by Onshore Environmental (2014a) and the BHP WAIO Vegetation and Flora Survey Procedure (2017), eight broad floristic formations and 21 vegetation associations were recorded within the survey area. The majority of vegetation associations (seven) were associated with the slopes of low stony hills. Five vegetation associations were associated with stony plains, while two vegetation associations occurred in each of the floodplain, medium drainage and minor drainage habitats. Gorge/gully, gilgai plains and sand plain habitats were represented by one vegetation association each. Areas of vegetation which had been previously cleared and were now naturally regenerating were mapped as 'previously disturbed', while areas in which vegetation has been completely removed and maintained for roads, tracks and infrastructure have been mapped as 'cleared'.

Although most of the survey area has been previously vegetation mapped, the mapped vegetation associations often did not adequately reflect the vegetation observed by the botanists during the current survey. In addition, considerable disturbance has occurred in the survey area since the earlier surveys. As such, considerable changes to both mapping boundaries and the assigned vegetation associations were considered necessary to better represent the current vegetation patterns.

Vegetation descriptions, the total area of each within the survey area and representative photographs are presented in Table 11. Broad floristic formation and vegetation association mapping is provided in Figures I.1 and I.2 (Appendix I) and site data recorded from each relevé and mapping note is presented in Appendix J.

Table 11: Vegetation associations recorded in the survey area.

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
Broad floristic formation: *Acacia* Low Woodland					
FP AaAprAci RheAa CcChfArin Low Woodland of *Acacia aptaneura, Acacia pruinocarpa* and *Acacia catenulata* subsp. *occidentalis* over Open Shrubland of *Eremophila forrestii* subsp. *forrestii, Dodonaea petiolaris* and *Sida ectogama* over Open Tussock Grassland of *Aristida contorta, Digitaria ammophila* and *Aristida inaequiglumis* on red orange clay loam on floodplains.	1a	MGR10 MGR14 MGMJ01 MGMJ04	Good – Very Good	24.7 (7.6)	 **Plate 1: Vegetation representing FP AaaprAci RheAa CcChfArin.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
FP ApAaApr AsyErffPto CcAriArc Low Woodland of *Acacia paraneura, Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Acacia synchronicia, Eremophila forrestii* subsp. *forrestii* and *Ptilotus obovatus* over Open Tussock Grassland of **Cenchrus ciliaris, Aristida inaequiglumis* and *Aristida contorta* on red brown loam on floodplains.	1b	MGR07 MGML02	Good – Very Good	13.4 (4.1)	 **Plate 2: Vegetation representing FP ApAaApr AsyErffPto CcAriArc.**
Broad floristic formation: *Acacia* Shrubland					
ME EvAci AmApyp Low Open Woodland of *Eucalyptus victrix* and *Acacia citrinoviridis* over High Open Shrubland of *Acacia monticola* and *Acacia pyrifolia* var. *pyrifolia* on brown loamy sand on medium drainage lines.	2a	MGR05	Very Good	5.9 (1.8)	 **Plate 3: Vegetation representing ME EvAci AmApyp.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
MI AmoAanPl ChEl TtAin Shrubland of *Acacia monticola, Acacia ancistrocarpa* and *Petalostylis labicheoides* with Scattered Low Trees of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over Open Tussock Grassland of *Themeda triandra* and *Aristida inaequilatera* on red loamy sand on minor drainage lines.	2b	MGR22	Good – Very Good	5.1 (1.6)	 **Plate 4: Vegetation representing MI AmoAanPl ChEl TtAin.**
Broad floristic formation: *Acacia* Open Shrubland					

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
HS AteAprSegg TbrTp Scattered Shrubs of *Acacia tetragonophylla, Acacia pruinocarpa* and *Senna glutinosa* subsp. glu*tinosa* x *stricta* over Scattered Tussock Grasses of *Triodia brizoides* and *Triodia pungens* on stony hillslopes.	3a	MGMJ02 MGMJ03	Very Good	0.6 (0.2)	 **Plate 5: Vegetation representing HS AteAprSegg TbrTp.**
SP AaAp ArcAri TbTp High Open Shrubland of *Acacia aptaneura* and *Acacia paraneura* over Scattered Tussock Grasses of *Aristida contorta* and *Aristida inaequiglumis* and Scattered Hummock Grasses of *Triodia basedowii* and *Triodia pungens* on red clay loam on flats and stony plains.	3b	MGR09	Poor – Very Good	17.7 (5.4)	 **Plate 6: Vegetation representing SP AaAp ArcAri TbTp.**
Broad floristic formation: *Triodia* Hummock Grassland					

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
HS TbrTw AiAprHc EfrEpl Hummock Grassland of *Triodia brizoides* and *Triodia wiseana* with High Open Shrubland of *Acacia inaequilatera, Acacia pruinocarpa* and *Hakea chordophylla* over Open Shrubland of *Eremophila fraseri* and *Eremophila platycalyx* subsp. *pardalota* on red loamy sand on lower hill slopes and footslopes.	4a	MGR11 MGR23 MGMJ10 MGMJ11	Good – Very Good	14.0 (4.3)	 Plate 7: Vegetation representing HS TbrTw AiAprHc EfrEpl.
HS TbrTw El AbPoSgg Hummock Grassland of *Triodia brizoides* and *Triodia wiseana* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* over Scattered Low Shrubs of *Acacia bivenosa, Ptilotus obovatus* and *Senna glutinosa* subsp. *glutinosa* on brown silty loam on hill slopes.	4b	MGR15 MGR16 MGR20 MGMJ12	Good – Very Good	42.5 (13.0)	 Plate 8: Vegetation representing HS TbrTw El AbPoSgg.

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
HS TsTwTp EllCh AhiAaa Hummock Grassland of *Triodia vanleeuwenii* (previously *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835), *Triodia wiseana* and *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over Low Open Shrubland of *Acacia hilliana* and *Acacia adoxa* var. *adoxa* on red brown sandy loam on hill slopes.	4c	MGR02 MGR03	Good – Very Good	41.9 (12.9)	 **Plate 9: Vegetation representing HS TsTwTp EllCh AhiAaa.**
SP TbTp HallAanAi Ch Hummock Grassland of *Triodia basedowii* and *Triodia pungens* with High Open Shrubland of *Hakea loreus* subsp. *loreus (previously Hakea lorea subsp. lorea), Acacia ancistrocarpa* and *Acacia inaequilatera* and Scattered Low Trees of *Corymbia hamersleyana* on red brown loamy sand on stony plains.	4d	MGR17	Poor - Good	17.2 (5.3)	 **Plate 10: Vegetation representing SP TbTp HallAanAi Ch.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
SP TpTb Eg PlAbAan Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Open Mallee of *Eucalyptus gamophylla* and Shrubland of *Petalostylis labicheoides, Acacia bivenosa* and *Acacia ancistrocarpa* on red brown loamy sand on stony plains and footslopes.	4e	MGR18	Very Good	1.0 (0.3)	 **Plate 11: Vegetation representing SP TpTb Eg PlAbAan.**
SP TpTwTs ErfrSegpSeao Hummock Grassland of *Triodia pungens, Triodia wiseana* and *Triodia vanleeuwenii* (previously *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Open Shrubland of *Eremophila fraseri, Senna glutinosa* subsp. *pruinosa* and *Senna artemisioides* subsp. *oligophylla* on red brown loamy sand on stony plains and hill slopes.	4f	MGR04	Poor – Very Good	13.6 (4.2)	 **Plate 12: Vegetation representing SP TpTwTs ErfrSegpSeao.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
SA Tbr AmAancGrw Hummock Grassland of *Triodia brizoides* with Open Shrubland of *Acacia monticola, Acacia ancistrocarpa* and *Grevillea wickhamii* on sandy plains.	4g	MGR06	Very Good	30.6 (9.4)	 **Plate 13: Vegetation representing SA Tbr AmAancGrw.**
Broad floristic formation: *Triodia* Open Hummock Grassland					
GU Tp CfFibAcao DopAh Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia ferriticola, Ficus brachypoda* and *Acacia catenulata* subsp. *occidentalis* over High Open Shrubland of *Dodonaea pachyneura* and *Acacia hamersleyensis* on red sandy clay loam in gullies and on breakaways.	5a	MGR19 MGML01	Very Good – Excellent	3.6 (1.1)	 **Plate 14: Vegetation representing GG Tp CfFibAcao DopAh.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
HS Tbr Hc Efrs Very Open Hummock Grassland of *Triodia brizoides* with Scattered Tall Shrubs of *Hakea chordophylla* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* on stony hillslopes.	5b	MGR21 MGMJ08 MGML03	Poor – Very Good	27.7 (8.5)	 Plate 15: Vegetation representing HS Tbr Hc Efrs.
HS Tp AaApr ErfrAmarSegl Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Eremophila fraseri, Acacia marramamba* and *Senna glutinosa* subsp. x *luerssenii* on red brown loam on hillslopes.	5c	MGR13 MGR26	Poor - Good	7.1 (2.2)	 Plate 16: Vegetation representing HS Tp AaApr ErfrAmarSegl.

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
HS TpTb EllAaAcao SesSeglErcu Open Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia, Acacia aptaneura* and *Acacia catenulata* subsp. occidentalis over Open Shrubland of *Senna stricta, Senna glutinosa* subsp. x *luerssenii* and *Eremophila cuneifolia* on orange sandy loam on hill slopes.	5d	MGR08	Very Good	1.1 (0.3)	 **Plate 17: Vegetation representing HS TpTb EllAaAcao SesSeglErcu.**
SP Tl AancApa ApAprCh Open Hummock Grassland of *Triodia lanigera* with Open Shrubland of *Acacia ancistrocarpa* and *Acacia pachyacra* and Scattered Low Trees of *Acacia paraneura, Acacia pruinocarpa* and *Corymbia hamersleyana* on red sandy loam on stony plains.	5e	MGMJ13	Very Good	0.4 (0.1)	 **Plate 18: Vegetation representing SP Tl AancApa ApAprCh.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
Broad floristic formation: *Eragrostis* Tussock Grassland					
GP ExeEbCf AsyAteVf NdTc Tussock Grassland of *Eragrostis xerophila, Eriachne benthamii* and *Chrysopogon fallax* with Open Shrubland of *Acacia synchronicia, Acacia tetragonophylla* and **Vachellia farnesiana* over Very Open Herbs of *Neptunia dimorphantha* and *Tephrosia clementii* on red light clay on gilgai plains.	6a	MGR12	Very Good	1.5 (0.5)	No photograph available.
Broad floristic formation: *Eulalia* Tussock Grassland					
MI EuaPamuAri Aanc ColpHisc Tussock Grassland of *Eulalia aurea, Paraneurachne muelleri* and *Aristida inaequiglumis* with High Shrubland of *Acacia ancistrocarpa* over Low Scattered Shrubs of *Corchorus lasiocarpus* subsp. *parvus* and *Hibiscus sturtii* var. *platychlamys* in a minor drainage line.	7a	MGR01	Good – Very Good	4.5 (1.4)	 **Plate 19: Vegetation representing MI EuaPamuAri Aanc ColpHisc.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
Broad floristic formation: *Themeda* Open Tussock Grassland					
ME TtAinCa ChEl AmoPlAlu Open Tussock Grassland of *Themeda triandra, Aristida inaequiglumis* and *Cymbopogon ambiguus* with Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over Open Shrubland of *Acacia monticola, Petalostylis labicheoides* and *Androcalva luteiflora* on red brown alluvium on minor and medium drainage lines.	8a	MGR24 MGMJ07	Poor - Good	9.3 (2.9)	 **Plate 20: Vegetation representing ME TtAinCa ChEl AmoPlAlu.**

Vegetation unit code and description	Associated map code	Site(s)	Vegetation condition	Total area (ha) (proportion of survey area (%))	Representative photograph
Previously Disturbed					
Previously disturbed vegetation currently regenerating naturally but not yet representative of the surrounding undisturbed vegetation.	9a	MGMJ06	Poor	4.3 (1.3)	 **Plate 21: Vegetation representing Previously Disturbed vegetation.**
Cleared					
Areas completely cleared of vegetation, including roads, tracks and infrastructure.	N/A	N/A	Completely Degraded	38.1 (11.7)	N/A

4.2.1.1 *Significant Vegetation*

The assessment of significant vegetation was considered using the EPA Environmental Factor Guideline for Flora and Vegetation (Environmental Protection Authority 2016b). None of the vegetation associations recorded within the survey area are considered to be analogous with any Commonwealth or State listed TECs, or State-listed PECs. Likewise, none of the vegetation associations recorded are considered to be restricted in distribution or provide a role as refuge, nor are any representative of groundwater dependent ecosystems.

Three vegetation associations provided habitat for the significant flora species, *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3, recorded in the survey area: GU Tp CfFibAcao DopAh (3.6 ha), HS TsTwTp EllCh AhiAaa (41.9 ha) and ME EvAci AmApyp (5.9 ha), and therefore may be of local significance.

4.2.1.2 *Vegetation Condition*

Vegetation in the survey area ranged from 'completely degraded' to 'excellent' (Trudgen 1988) condition (Table 12 and Figure K.1; Appendix K), with just over half (approximately 53%) of vegetation in 'very good' condition. Vegetation considered to be in 'very good' condition displayed minor signs of disturbance and was primarily associated with the western and eastern survey polygons (Figure K.1, Appendix K). Disturbances in these areas were predominately attributed to the scattered presence of weed species, low level grazing from cattle and occasional items of rubbish. Vegetation of the hill slopes and gorge/gully habitats were generally of high quality, with little or no signs of disturbance, while the plains and drainage line habitats within the survey area typically displayed a greater occurrence of weed species, vehicle tracks and previous clearing.

A network of roads, access tracks, drill pads, laydown areas and other cleared areas associated with mining operations exists across the survey area, but were most prevalent within the central survey corridor. There were several areas that have been previously cleared and have various degrees of regeneration. Together these maintained and previously cleared areas account for 82.3 ha (approximately 25%) of the survey area (Table 12).

Table 12: Vegetation condition recorded for the survey area.

Vegetation condition	Total area within the survey area (ha)	Proportion of survey area (%)
Excellent	0.7	0.2
Very Good	173.5	53.2
Good	69.3	21.3
Poor	44.2	13.6
Completely Degraded	38.1	11.7
Total	**325.8**	**100**

4.2.2 Flora

A total of 167 confirmed vascular flora taxa, comprising 87 genera and representing 33 families, were recorded within the survey area. An additional six species were unable to be identified to species level, due to insufficient diagnostic material, and may represent additional taxa. One of the confirmed species, *Hibiscus* aff. *campanulatus,* has affinity with the known P1 species *Hibiscus campanulatus,* however does not entirely match any of the currently described taxa and further work is required to determine whether it is taxonomically distinct.

The dominant family was Fabaceae, with 42 species recorded, while *Acacia* was the most frequently recorded genus (Table 13). A complete vascular flora species list for the survey area, along with a matrix indicating species recorded within each broad floristic formation, is presented in Appendix L.

Table 13: Taxa most frequently recorded in the survey area.

Family	Number of species
Fabaceae	42
Poaceae	34
Malvaceae	21
Genus	**Number of species**
Acacia	20
Senna	8
Triodia	8

4.2.2.1 *Significant Flora*

No Commonwealth or State-listed threatened flora species were recorded in the survey area. One State-listed priority flora species, *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3, was recorded (Plate 22). This species was recorded from 16 locations within the eastern survey corridor, with an estimated abundance of 2,401 individuals (Figure G.1 and Table G.1, Appendix G). Within the survey area, *Triiodia* sp. Mt Ella (M.E. Trudgen 12739) P3 was primarily associated with gully and hillslope habitats, growing in dark reddish-brown sandy clay loams. It was recorded in three vegetation associations: GU Tp CfFibAcao DopAh (900 individuals), HS TsTwTp EllCh AhiAaa (1,500 individuals) and ME EvAci AmApyp (one individual). This species has been recorded by a previous survey in the same locality, with 34 locations recorded and in excess of 10,000 individuals estimated (Onshore Environmental 2014d).

There are currently 38 records of *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3 listed with the WA Herbarium, with the distribution predominantly occurring between Juna Downs Station in the west and Shovelanna Hill in the east (Western Australian Herbarium 2023). One disjunct specimen has also been recorded from within the Karlamilya National Park, located more than 200 km north-east of the main recorded distribution (Western Australian Herbarium 2023). A copy of the Threatened and Priority Flora Report form submitted to DBCA is included in Appendix G.

One informally named taxa, *Hibiscus* aff. *campanulatus* (Plate 23), was recorded within the survey area. Specimens of this taxa, confirmed by Mike Hislop (taxonomist at the WA Herbarium), indicate that this species is potentially taxonomically distinct from the P1 species *Hibiscus campanulatus*. However further work is needed to confirm this. Within the survey area, an estimated 417 individuals were recorded from 22 locations (Figure G.1 and Table G.1, Appendix G). It was recorded in three vegetation associations: GU Tp CfFibAcao DopAh (219 individuals), HS TsTwTp EllCh AhiAaa (181 individuals) and ME EvAci AmApyp (17 individuals).



Plate 22: *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3.



Plate 23: *Hibiscus* aff. *campanulatus*.

The records of *Corchorus elachocarpus* in the survey area are approximately 120 km south of the known distribution of this species. *Corchorus elachocarpus* was recorded from drainage lines and hillslopes in vegetation associations ME TtAinCa ChEl AmoPlAlu, ME EvAci AmApyp, HS TbrTw AiAprHc EfrEpl and HS Tp AaApr ErfrAmarSegl.

No other flora species recorded in the survey area are considered to be of local significance due to occurrence in a restricted or unique habitat, or relictual status.

4.2.2.2 Post-survey Likelihood of Occurrence of Significant Flora

Of the 24 significant flora taxa returned from database search results that were not recorded during the field survey, two are considered to have the potential to occur within the survey area post- survey: *Euphorbia inappendiculata* var. *inappendiculata* P2 and *Aristida jerichoensis* var. *subspinulifera* P3. Both species have been previously recorded within proximity of the survey area (approximately 4 km for the *E. inappendiculata* var. *inappendiculata* P2 and <0.5 km for the *Aristida jerichoensis* var. *subspinulifera* P3) and suitable habitat for both was present (notably the gilgai plain and floodplain habitats). While targeted traverses throughout these habitats did not identify either species, their presence is still considered possible. *Euphorbia inappendiculata* var. *inappendiculata* P2 is an annual species and may not be present or may be very difficult to detect initially after germination, depending on adequacy of rainfall. Individuals of *Euphorbia* were noted during the field survey however the majority were at a very juvenile life stage and could not be positively identified. *Aristida jerichoensis* var. *subspinulifera* P3 requires seeds to confidently identify it from other *Aristida* species, and therefore may not have been detectable if present during the survey. Some grass species, including *Aristida*, were not flowering at the time of the survey and species confirmation was therefore not possible.

4.2.2.3 Introduced Flora

Four introduced flora (weed) species, **Aerva javanica, *Bidens bipinnata, *Cenchrus ciliaris* and **Vachellia farnesiana*, were recorded within the survey area, with **Cenchrus ciliaris* having the highest estimated abundance (Table 14). None of the recorded weed species are listed as a WoNS (Australian Weeds Committee 2012) or a declared pest plant in Western Australia under the BAM Act (Department of Primary Industries and Regional Development 2019b).

Introduced flora locations are presented in Figure G.1 and Table G.2 (Appendix G).

Table 14: Introduced flora species recorded within the survey area.

Species	Number of records	Estimated abundance	Associated habitats
**Aerva javanica*	1	20	Stony plain
**Bidens bipinnata*	3	1,000	Floodplains and gorge
**Cenchrus ciliaris*	11	1,491	Hillslope, stony plain, floodplain and minor drainage line
**Vachellia farnesiana*	1	2	Floodplain/drainage area

4.3 Fauna Survey

4.3.1 Fauna Habitats

Based upon the landforms and vegetation units present, eight broad fauna habitats were recorded in the survey area and make up 286.6 ha (88%) of remnant vegetation. The habitats are described in Table 15, and mapping is presented in Figure M.1 (Appendix M). Areas of Cleared/ Disturbed habitat totalled 39.2 ha (12%) within the survey area and were in Disturbed to Highly Degraded condition. Major disturbances were recorded throughout most of the survey area due to the pit and active mining occurring adjacent to most sites. Other disturbances consisted mostly of roads/tracks, cattle grazing, and weed invasion.

Hillcrest/Hillslope was the most common fauna habitat type within the survey area. This habitat is widespread and common throughout the Pilbara region and although there are a few significant species that may utilise this habitat, they are unlikely to be restricted to it. Matters of National Environmental Significance species, such as the northern quoll (*Dasyurus hallucatus*) (EN; EN) may possibly traverse and forage within these habitats. Other conservation significant species such as the western pebble-mound mouse and *A. ganei* may also utilise this habitat. The soils are generally stony and compact, reducing the potential opportunities for burrowing species. Therefore, this habitat was considered of moderate value for fauna.

Sand Plain habitat was also well represented within the survey area and considered to be of moderate value to a wide spectrum of fauna species as this habitat typically exhibited a moderate diversity of microhabitats and is considered important for burrowing species, as well as the MNES species grey falcon (*Falco hypoleucos*) (VU; VU) for foraging purposes only.

Stony Plain habitat is widespread and common throughout the Pilbara region and although there are a few significant species that may utilise it, they are not restricted to this habitat type. Significant fauna likely to occur in this habitat type include the western pebble-mound mouse. This habitat generally had low vegetation complexity and microhabitat diversity and was of low value for fauna.

Mulga Woodland habitat is characterised by vegetation units dominated by Mulga (*Acacia aneura* group) on a stoney or clay mantle. The open to moderately dense woodlands consisted of an understorey composed of sparse tussock or hummock grasses. The woodlands provide nesting and shelter habitats for birds and reptiles, and the tussocks and hummocks provide habitat for small birds, reptiles, and mammals. One temporary ephemeral pool was noted within the survey area in this habitat type within a cracking clay section (Figure M.1., Appendix M). However, due to a low diversity of microhabitats present (generally the understorey and leaf litter were considered sparse), this habitat type was considered of moderate value to a wide spectrum of fauna species. The Mulga Woodland habitat in general may provide foraging opportunities for the southern whiteface

(*Aphelocephala leucopsis castaneiventris*) (VU), some limited foraging opportunities for ghost bats, and particularly the cracking clay sections associated with water for Pilbara leaf-nosed bats. This habitat is widespread and common in surrounding areas and throughout the Pilbara region.

Drainage Area/Floodplain habitat is of low to moderate value to a wide spectrum of fauna species. There was often grasslands and soft soils associated with this habitat type, creating microhabitats for some reptile and marsupial species, and potential supporting habitat for MNES species such as the grey falcon. This habitat type was represented well both in and out of the survey area.

Minor Drainage Line habitat is a commonly recorded habitat for the Pilbara region and considered to be of moderate value to a wide spectrum of fauna species. The Minor Drainage habitat typically exhibits a moderate diversity of microhabitats, with some tree hollows and woody debris (logs and leaf litter). The woody debris provides foraging and sheltering potential to ground dwelling reptiles and mammals. Ground dwelling fauna are likely to utilise the linear nature of this habitat to traverse between habitats.

Gorge/Gully habitat is one of the more restricted habitats in the survey area and only occurred in the east survey area polygon. Gorges are a common feature of the Pilbara; however, as they tend to be narrow, linear features, gorges represent a small proportion of the total land area. In addition, they can represent important denning, breeding and roosting habitat for several MNES species within the Pilbara region, including the Pilbara olive python, ghost bat, Pilbara leaf-nosed bat and northern quoll. The Gorge/Gully habitat within the survey area may provide denning and breeding habitat for the northern quoll if present and may also support the priority listed species *A. ganei* (P1). There was one temporary ephemeral pool present during the survey and a few additional locations where water could potentially pool after significant rain events (Plate 24). This habitat was considered of high value as it contains a complexity of microhabitats, was in Very Good condition despite being close to active mining disturbance and potentially provides refuge for fauna species, but was generally limited within the survey area (5.6 ha, 1.7%).

Breakaway/Cliff habitat is a common feature of the Pilbara but because they tend to be narrow, linear features, they represent a small proportion of the total land area. The Breakaway/Cliff habitat occurred only in the east survey area polygon and was often associated with the drop off areas of the Hillcrest/ Hillslope habitat. Breakaway/ Cliff habitat contained microhabitats such as crevices, overhangs and shallow caves that provide shelter opportunities for MNES species. The caves have the potential to be used as denning and breeding habitat for the northern quoll and supporting habitat for the Pilbara olive python if present within the survey area. Observed caves were open and shallow and considered unlikely to provide diurnal roosting opportunities for either the ghost bat or Pilbara leaf-nosed bat. The Breakaway/Cliff habitat provides important habitat values to several significant species including those MNES species above. Therefore, it was considered of high importance for fauna but was generally limited within the survey area (2.9 ha, <1%). Although only a small proportion occurred within the survey area, the Breakaway/ Cliff habitat continued outside the survey area and therefore was not considered isolated and would provide some connectivity.



Plate 24: Temporary ephemeral pool recorded within Gorge/ Gully habitat.

Table 15: Fauna habitats described for the survey area.

Fauna habitat	Broad habitat description	Vegetation description	Sampling locations	Habitat condition	Total area (ha) (proportion of survey area (%))	Significant fauna habitat suitability for species likely to occur	Representative photograph
Hillcrest/Hillslope	Low to moderate stony hills and slopes with dissected valleys and drainage on stony soils.	Open hummock grassland of *Triodia vanleeuwenii, T. wiseana* and *T. pungens*, with low open shrubland of *Acacia hilliana* and *Acacia adoxa* var. *adoxa* and scattered trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana*.	HA06, HA14, HA21	Very Good – High Quality	117.5 (36.1)	**MNES critical habitat** Ghost bat – within 12 km of Category 2 cave CJIM-01 **MNES supporting habitat** Ghost bat - foraging Grey falcon - foraging Pilbara leaf-nosed bat - foraging Northern quoll - foraging **Other priority species** Western pebble-mound mouse – denning and foraging Peregrine falcon – foraging	 **Plate 25: Hillcrest/Hillslope fauna habitat.**
Sand Plain	Broad flat low-lying plains with sandy soils.	Hummock grassland of *Triodia* spp. with open shrubland and scattered low trees of *Corymbia hamersleyana* and scattered tall open shrublands of *Acacia ancistrocarpa* and *Acacia inaequilatera.*	HA10, HA18, HA22	Disturbed – Good	47.3 (14.5)	**MNES supporting habitat** Ghost bat - foraging Grey falcon - foraging Pilbara leaf-nosed bat - foraging Northern quoll - foraging **Other priority species** Brush-tailed mulgara – denning and foraging *Lerista macropisthopus remota* Peregrine falcon – foraging	 **Plate 26: Sand Plain fauna habitat.**
Stony Plain	Broad flat low-lying plains to undulating plain on soft loamy soils.	Hummock grassland of *Triodia* spp. with mixed *Acacia*, *Hakea* and *Senna* spp. open shrubland.	HA13, HA17, HA23	Disturbed – Very Good	36.3 (11.2)	**MNES supporting habitat** Grey falcon - foraging Pilbara leaf-nosed bat - foraging Northern quoll - foraging **Other priority species** Western pebble-mound mouse– denning and foraging Peregrine falcon – foraging	 **Plate 27: Stony Plain fauna habitat.**

Fauna habitat	Broad habitat description	Vegetation description	Sampling locations	Habitat condition	Total area (ha) (proportion of survey area (%))	Significant fauna habitat suitability for species likely to occur	Representative photograph
Mulga Woodland	Stands of mulga groves on clay based stony plains.	Low open woodland of *Acacia aptaneura (A. catenulata, A. paraneura* and *A. pruinocarpa*) tall shrubland over scattered tussock grasses of *Aristida contorta* and *Aristida inaequiglumis* and hummock grasses of *Triodia basedowii* and *Triodia pungens*.	HA11, HA15, HA16	Disturbed – High Quality	34.1 (10.5)	**MNES supporting habitat** Ghost bat - foraging Pilbara leaf-nosed bat - foraging Grey falcon - foraging Southern whiteface – foraging **Other priority species** Brush-tailed mulgara – denning and foraging *Lerista macropisthopus remota* Peregrine falcon – foraging	 Plate 28: Mulga Woodland fauna habitat.
Drainage Area/Floodplain	Low in the landscape with clay base soils.	*Eucalyptus leucophloia* subsp. *leucophloia / Corymbia hamersleyana* scattered low trees (or low woodland of *Acacia aptaneura, Acacia pruinocarpa* and *Acacia catenulata* subsp. *Occidentalis*) over *Acacia monticola, Petalostylis labicheoides* and *Androcalva luteiflora* tall shrubs over *Themeda triandra, Aristida spp.* and *Cymbopogon ambiguus* tussock grasslands.	HA01, HA12, HA24	Disturbed – Very Good	30.0 (9.2)	**MNES supporting habitat** Ghost bat - foraging Grey falcon - foraging Pilbara leaf-nosed bat - foraging Northern quoll - foraging **Other priority species** Brush-tailed mulgara – denning and foraging Peregrine falcon – foraging	 Plate 29: Drainage Area/Floodplain fauna habitat.
Minor Drainage Line	Open drainage areas on stony soils.	Tussock grassland of *Eulalia aurea, Paraneurachne muelleri* and *Aristida inaequiglumis* with tall shrubland of *Acacia monticola, Petalostylis labicheoides* and *Androcalva luteiflora* over mixed scattered low shrubs and scattered low trees of *Corymbia hamersleyana or Eucalyptus victrix.*	HA03, HA19, HA20, BD01	Good – Very Good	13.8 (4.2)	**MNES supporting habitat** Ghost bat - foraging Grey falcon - foraging Pilbara leaf-nosed bat - foraging Northern quoll - foraging and dispersal Pilbara olive python - dispersal **Other priority species** *Anilios ganei* Peregrine falcon – foraging	 Plate 30: Minor Drainage Line fauna habitat.

Fauna habitat	Broad habitat description	Vegetation description	Sampling locations	Habitat condition	Total area (ha) (proportion of survey area (%))	Significant fauna habitat suitability for species likely to occur	Representative photograph
Gorge/Gully	Deep often rocky gorges, sometimes with ephemeral or semi-permanent pools.	Open hummock grassland of *Triodia* sp. Mt Ella (M.E. Trudgen 12739) and *Triodia pungens* with a low open woodland of *Corymbia ferriticola, Corymbia hamersleyana* and *Ficus brachypoda* over an open shrubland of *Acacia ancistrocarpa, Grevillea wickhamii* subsp. *hispidula* and *Santalum lanceolatum.*	HA04, HA05, HA07, Cam53	Very Good	5.6 (1.7)	**MNES critical habitat** Northern quoll - denning **MNES supporting habitat** Ghost bat - foraging Pilbara olive python - foraging and dispersal Pilbara leaf-nosed bat - foraging **Other priority species** *Anilios ganei* Peregrine falcon – foraging	 **Plate 31: Gorge/Gully fauna habitat.**
Breakaway/Cliff	Breakaway or ridge line, falling away to steep scree slope or drainage.	*E. leucophloia* subsp. *leucophloia* scattered low trees over *Acacia* spp. tall shrubs over *T. pungens* very open hummock grassland, sometimes with scattered tussock grasses.	HA02, HA08, HA09, Cam46	Good – Very Good	2.9 (0.9)	**MNES critical habitat** Northern quoll - denning **MNES supporting habitat** Pilbara olive python - foraging and dispersal Pilbara leaf-nosed bat - foraging **Other priority species** *Anilios ganei* Peregrine falcon – nesting and foraging	 **Plate 32: Breakaway/Cliff fauna habitat.**
Cleared/ Disturbed	Cleared areas.	Vegetation structure absent.	None	Disturbed – Highly Degraded	38.1 (11.7)	None	N/A

4.3.1.1 Significant Habitat Areas

None of the fauna habitats were considered to be synonymous with any TECs or PECs relating to terrestrial fauna listed in the Pilbara region (Department of Biodiversity, Conservation and Attractions 2022a). Section 4.3.2.1 details the habitat suitability of MNES species with high and moderate likelihoods of occurring in the survey area.

4.3.2 Vertebrate Fauna Species

Forty-three fauna species, comprising of four reptiles, 34 birds and five mammals (including two introduced) were recorded within the survey area (Table 16).

Table 16: Summary of terrestrial vertebrate fauna species recorded within the survey area.

Group	Number of species	Significant species	Introduced species
Amphibians	0	0	0
Reptiles	4	0	0
Birds	34	0	0
Mammals	5	0	2
Total	**43**	**0**	**2**

Two introduced vertebrate fauna species were recorded:

- Cattle (*Bos taurus*)
- European rabbit (*Oryctolagus cuniculus*).

4.3.2.1 Significant Fauna Recorded and Possibly Occurring in the Survey Area

No species of significance were recorded in the survey area as part of the current survey. One species of significance, the western pebble-mound mouse has been previously recorded within the survey area but was not recorded during the current survey (Department of Biodiversity, Conservation and Attractions 2022b).

Habitat suitability mapping is presented in Figures N.1 – N.5 (Appendix N) for the five MNES species rated as having a high or moderate likelihood. Criteria is based on Department of Climate Change, Energy, the Environment and Water (2023b) and BHP WAIO (2022) and is provided in Table D.8 (Appendix D).

High Likelihood of Occurrence

Of the 42 significant fauna species identified in the desktop assessment, eight species were considered to have high likelihood of occurrence (Table F.2, Appendix F).

Western Pebble-mound Mouse (*Pseudomys chapmani*) (P4)

The western pebble-mound mouse is endemic to the Pilbara and confined to the central and eastern Pilbara in Western Australia. They are found on stony hillsides with hummock grassland and shelter in complex burrow systems under a mound which they construct on the surface using pebbles collected in the vicinity (Menkhorst and Knight 2011).

One record from 2008 occurs within the survey area (Figure O.1, Appendix O) with an additional 186 records within 50 km of the survey area with dates ranging from 1899 to 2019 (Department of Biodiversity, Conservation and Attractions 2022b, BHP WAIO 2023b) and potential habitat is present within the Hillcrest/Hillslope and Stony Plain habitats, consisting of 153.9 ha (47%) of the survey area. However, no evidence of western pebble-mound mouse mounds was observed.

***Anilios ganei* (P1)**

Anilios ganei is often poorly collected in vertebrate fauna surveys but is known from the Hope Downs area. This species has been associated with moist gorges and gullies (Wilson and Swan 2010), but potentially occurs over a wide range of other stony habitats. Given its cryptic fossorial habit this species is rarely encountered. Little is known of this species' ecology but like most other blind snake, it is insectivorous, feeding on termites and their eggs, larvae and pupae of ants (Wilson and Swan 2010).

The desktop assessment showed that the closest *A. ganei* record occurs 3.9 km to the north-west of the survey area from 2006. There were nine records within 50 km of the survey area, of which six were within 20 km and records ranged from 2006 to 2014 (Department of Biodiversity, Conservation and Attractions 2022b, BHP WAIO 2023b). This species is likely to be present within suitable habitats, including the Gorge/Gully, Breakaway/Cliff, and Minor Drainage Line habitat types comprising 22.3 ha (7.8%) of the survey area. Therefore, this species is considered a high likelihood of occurring within the survey area.

Fork-tailed Swift (*Apus pacificus*) (MI; MI)

The fork-tailed swift is a Migratory listed bird and occurs in low to very high airspace, largely independent of terrestrial habitats and landforms. Two previous records were recorded within 5 km of the survey area in 2011 and 2014 (BHP WAIO 2023b). Given suitable habitat for this species is also present in the form of all habitats within the survey area, there is a high likelihood of occurrence for this species, however, it unlikely to be reliant on any habitats within.

Grey Falcon (*Falco hypoleucos*) (VU; VU)

The grey falcon is a raptor that usually nests in the tallest trees along watercourses, particularly in river red gum (*Eucalyptus camaldulensis*) and coolibah (*E. coolabah*), but also in telecommunication towers (Marchant and Higgins 1993, Schoenjahn 2013, Schoenjahn 2018). The species frequents timbered lowland plains, particularly *Acacia* shrublands that are crossed by tree-lined water courses (Garnett et al. 2011, Watson 2011, Janse et al. 2015, Ley and Tynan 2016, Schoenjahn 2018). The species has also been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter (Olsen and Olsen 1986, Schoenjahn 2018). Records of grey falcon are from ALA and the PMST search within 50 km of the survey area.

Due to the lack major drainage habitats with suitably sized eucalypts as potential nesting habitat, no critical habitat was identified for this species within the survey area (Threatened Species Scientific Committee 2020). It is unlikely that this species will nest in the survey area. However, the grey falcon will forage in treeless areas, as well as tussock grassland and open woodland. As such, the Hillcrest/Hillslope, Sand Plain, Stony Plain, Mulga Woodland, Drainage Area/Floodplain and Minor Drainage Line habitats, comprising 279.1 ha (86%) of the survey area is considered supporting habitat for the grey falcon.

The presence of supporting foraging habitat and the opportunistic observations of this species in its current known distribution (Threatened Species Scientific Committee 2020) makes this species is considered a high likelihood of occurrence (Figure N.1, Appendix N). The supporting habitats for the grey falcon are considered widespread throughout the Pilbara region, as such this species would not be solely reliant on the habitats within the survey area.

Peregrine Falcon (*Falco peregrinus*) (OS)

The peregrine falcon occurs throughout Australia and is present in most habitat types, apart from treeless and waterless desert and dense forests. This species is considered widespread throughout Australia, but uncommon. The peregrine falcon utilises the ledges, cliff faces and large hollows/broken spouts of trees for nesting. It also occasionally uses the abandoned nests of other birds of prey (Johnstone and Storr 1998). The closest record occurs within 12 km of the survey area from 2019 (BHP WAIO 2023b), with an additional eight records within 40 km of the survey area ranging from 1980 to 2011 (Department of Biodiversity, Conservation and Attractions 2022b).

The peregrine falcon will hunt in any habitat, as such the entire survey area is considered potential foraging habitat. The Breakaway/Cliff habitat (2.9ha, 0.9 %) may provide potential breeding habitat, however, no evidence of peregrine falcon nests was observed. This species is considered to have a high likelihood of occurrence considering the relatively recent observation within close proximity to the survey area and the potential breeding and foraging habitat present in the survey area. Foraging habitat outside the survey area is considered widespread and it is unlikely that the peregrine falcon is solely reliant of any habitats within the survey area.

Southern Whiteface (*Aphelocephala leucopsis castaneiventris*) (VU)

The southern whiteface (*Aphelocephala leucopsis*) occurs across most of mainland Australia south of the tropics, from the north-eastern edge of the Western Australian wheatbelt, east to the Great Dividing Range. Two subspecies are recognised: *A. l. leucopsis* (south-east) found throughout south-eastern and central Australia, and *A. l. castaneiventris*) (south-west) found in central and southern Western Australia. Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by *Acacia* or *Eucalyptus* species on ranges, foothills and lowlands, and plains (Higgins and Peter 2002). The species prefers *Acacia* woodlands, particularly those dominated by mulga and drought-resistant chenopod shrub species, including saltbush and bluebush (Higgins and Peter 2002). Southern whiteface forage almost exclusively on the ground, favouring habitat with low tree densities, an herbaceous understorey and without large amounts of litter cover. Birds mainly feed on insects, spiders, and seeds, largely gleaned from the bare ground or leaf litter (Higgins and Peter 2002). Birds build large bulky domed nest of grass, bark and roots, usually in a hollow or crevice, although sometimes in low bushes (Higgins and Peter 2002).

The survey area is at the northern-most edge of the modelled may occur distribution for the species (Department of Climate Change, Energy, the Environment and Water 2023a) and the closest record occurs within 8 km of the survey area in 2020, from BHP Vertebrate Observations dataset within the Dandjoo search (Department of Biodiversity, Conservation and Attractions 2023f). It is not considered that critical habitat for this species occurs within the survey area as the survey area is outside the known or likely habitat, however, supporting habitat, comprising Mulga Woodland (34.1 ha; 10.5% of survey area) is present within the survey area (Figure N.2, Appendix N). This species is considered to have a high likelihood of occurrence considering the relatively recent observation within close proximity to the survey area in similar habitat and that potential supporting habitat is present in the

survey area. Similar habitat outside the survey area is considered widespread and it is unlikely that the southern whiteface is solely reliant on any habitats within the survey area.

Brush-tailed Mulgara (*Dasycerus blythi*) (P4)

The brush-tailed mulgara is widespread in sandy regions of arid central Australia and Western Australia. The brush-tailed mulgara is common in a range of habitats, including tussock/hummock grasslands, sand ridges, and mulga shrublands on loamy sand (Menkhorst and Knight 2011). There have been 81 previous records within 50 km of the survey area, with 65 of these records within 10 km of the survey area ranging from 2013 to 2022 (Department of Biodiversity, Conservation and Attractions 2022b, BHP WAIO 2023b). Some suitable habitat is present within the survey area, including Drainage Area/Floodplain, Mulga Woodland and Sand Plain. Although no evidence of this species was recorded during the survey, this species is considered a high likelihood of occurrence given the previous records near to the survey area and suitable habitats being present.

Ghost Bat (*Macroderma gigas*) (VU; VU)

The ghost bat (*Macroderma gigas*) is found in a wide range of habitats but relies on caves for roosting. No suitable caves used by ghost bats were found in the survey area. There are 25 records of this species (ranging from 1899 to 2021) within 50 km of the survey area, with the closest record within 4 km recorded from 2020 (Department of Biodiversity, Conservation and Attractions 2022b, BHP WAIO 2023b).

Critical habitat for the ghost bat includes foraging habitat within a 12 km radius of Category 1 or 2 caves or Category 3 caves adjacent to category 2 caves as defined in Bat Call WA (2021a) and BHP WAIO (2022). A small portion (2.3 ha) of the east survey area polygon lies within 12 km of a Category 2 cave (diurnal roost with ongoing use, Cave CJIM-01 as per BHP database and Cave ID SC-01/Site ID JB-03 as per GHD Pty Ltd (2021b). The critical habitat within the survey area includes Hillcrest/Hillslope foraging habitat for the ghost bat (Figure N.2, Appendix N).

Ghost bats have relatively broad foraging habitat ranging across gully or gorge systems that open onto a plain or riparian line, tree-lined drainage lines, isolated trees on the outskirts of plains and productive plains of thin woodland over clumped tussock or *Triodia* hummock grass (Bat Call WA 2021a). Based on this, 246.2 ha (75%) within the survey area was identified as supporting habitat for the ghost bat, consisting of Hillcrest/ Hillslope, Sand Plain, Mulga Woodland, Drainage Area/Floodplain, Minor Drainage Line and Gorge/Gully habitats (Figure N.3, Appendix N). Although no ghost bat calls have been recorded within the survey area to date, this species is still considered to have a high likelihood of occurrence for foraging purposes only.

Moderate Likelihood of Occurrence

Four species not found in the survey area were considered to have a moderate likelihood of occurrence, including two reptile species and two mammal species (Table F.2, Appendix F).

Pilbara Olive Python (*Liasis olivaceus barroni*) (VU; VU)

The Pilbara olive python is restricted to ranges within the Pilbara region of north-western Western Australia, such as the Hamersley Range, and islands of the Dampier Archipelago. The Pilbara olive python prefers rocky outcrops, escarpments, and gorges, often near water holes (including man-made) that attract suitable sized prey species. Microhabitat preferences are under rock piles, on top of rocks or under spinifex (Department of Environment 2022). The desktop assessment showed that

the closest Pilbara olive python record occurs 5.5 km to the north-west of the survey area from 2015. There were 14 records within 50 km of the survey area, and 10 records of these were within 15 km, with dates ranging from 2013 to 2015 (Department of Biodiversity, Conservation and Attractions 2022b, BHP WAIO 2023b).

The Breakaway/Cliff and Gorge/Gully habitat was too broad and open to be considered critical habitat. Considerable rainfall had fallen prior to the survey (Figure 3) and the temporary ephemeral pool located in the Gorge/Gully habitat (Plate 4) would evaporate after a few weeks without rainfall and does not constitute critical habitat for this species.

However, 22.3 ha (6.9%) of the survey area was considered supporting habitat, consisting of Minor Drainage Line, Gorge/Gully and Breakaway/Cliff habitat (Figure N.4, Appendix N). This habitat provides foraging and dispersal opportunities for the Pilbara olive python but is not linked to known critical denning habitats and, as such, this species is considered a moderate likelihood of occurrence.

***Lerista macropisthopus remota* (P2)**

This species favours sandy to sandy loam soils which support *Acacia* shrubland or woodland. It inhabits loose soil under leaf litter at the base of shrubs (Wilson and Swan 2010). This species has been recorded from the NatureMap database within 50 km of the survey area (Department of Biodiversity, Conservation and Attractions 2023e). This species may be found in the Mulga Woodland and Sand Plain habitats, comprising 81.5 ha (25%) of the survey area, and which are well represented outside of the survey area.

Pilbara Leaf-nosed Bat (*Rhinonicteris aurantia*) (VU; VU)

The Pilbara leaf-nosed bat roosts in deep, warm, humid caves or rock cracks near water pools and forages in a range of habitats including along watercourses and over *Triodia* grasslands. There are 153 previous records within 50 km of the survey area, with the closest record within 35 km of the survey area from 2013 (Department of Biodiversity, Conservation and Attractions 2022b). No critical habitat was identified for this species within the survey area. The Pilbara leaf-nosed bat requires deep, humid, climatically stable caves for diurnal and maternal roost sites, which are typically associated with Gorge/Gully and Breakaway habitats. No suitable caves within the Gorge/Gully or Breakaway habitats of the survey area were identified.

The Pilbara leaf-nosed bat is known to forage across a wide variety of habitat typically along vegetated gullies and ridgelines, water courses and drainage lines and across plains and low hills with complex vegetation structure (Bat Call WA 2021b). As such, the entire survey area (287.7 ha; 88%), excluding Cleared/Disturbed areas, is considered to be supporting (foraging) habitat for the Pilbara leaf-nosed bat (Figure N.5, Appendix N). Due to the lack of critical habitat within the survey area and the closest record being 35 km from the survey area, but supporting habitat being present in the survey area, this species is considered to have a moderate likelihood of occurrence. The supporting habitat within the survey area is considered widespread throughout the Pilbara region and it is unlikely that the Pilbara leaf-nosed bat is solely reliant on the habitats within the survey area.

Northern Quoll (*Dasyurus hallucatus*) (EN; EN)

The northern quoll is common in a range of habitats within its distribution, including rocky habitats and watercourses. Within a 50 km search radius of the survey area only one scat has been previously recorded 2.4 km from the survey area in 2021 (BHP WAIO 2023b). The survey area has been recently surveyed for northern quoll with no evidence recorded and it was considered unlikely to occur at

anything other than very low densities and/or intermittently (Biologic 2022). Within the survey area, 8.5 ha (3%), consisting of Gorge/Gully and Breakaway/Cliff habitats, was considered critical habitat within the survey area, providing potential denning sites for the northern quoll if present. Another 245.0 ha (75%) of the survey area was considered supporting (foraging) habitat, consisting of Drainage Area/Floodplain, Minor Drainage Line, Sand Plain, Hillcrest/Hillslope and Stony Plain habitats (Figure N.6, Appendix N).

Due to both potential critical and supporting habitats being present in the survey area and the recent scat record, this species has a moderate likelihood of occurrence, although the survey area is highly unlikely to support an 'important population' of northern quoll as defined by the Department of the Environment (2016).

Low Likelihood of Occurrence

An additional 30 species, including 26 MNES species, were considered to have a low likelihood of occurrence due to a lack of historical records in the vicinity of the survey area and the lack of suitable habitats present in the survey area (Table F.2, Appendix F).

Eighteen species listed as Migratory (MI) under the EPBC and/or BC Act were all assessed as having a low likelihood of occurrence due to a lack of suitable habitat located in the survey area, including areas inundated with water for most of the year such as salt lakes, wetlands, swamps, mangroves and coastal country.

Of the terrestrial fauna MNES species returned from the PMST search, two species were considered to be vagrants, greater sand plover (*Charadrius leschenaultii*) (VU; VU) and curlew sandpiper (*Calidris ferruginea*) (CR; CR), and three species, Australian painted snipe (*Rostratula australis*) (EN; EN), red goshawk (*Erythrotriorchis radiatus*) (VU; VU) and princess parrot (*Polytelis alexandrae*) (VU; P4) were not considered to have suitable habitat present in the survey area. For an additional three species, bilby (*Macrotis lagotis*) (VU; VU), night parrot (*Pezoporus occidentalis*) (CR; CR) and great desert skink (*Liopholis kintorei*) (VU; VU), potential supporting habitat was present in the survey area, however, known distributions and previous and historical records suggest that they are unlikely to occur within the survey area.

5 Discussion

5.1 Vegetation and Flora

The survey area extends over low hills and plains, at the eastern extent of the Hamersley subregion. These hills and plains are dominated by shrublands of mixed *Acacia* species over mixed species hummock and tussock grasslands. The ephemeral drainage lines that traverse the survey area generally support a mixed shrub steppe over an understory characterised by tussock grasslands. Vegetation within the survey area is considered typical of vegetation on comparable landforms in the broader region, with similar broad floristic formations and vegetation associations being described for many of the previous surveys reviewed for this assessment (ENV Australia Pty Ltd 2009a, Syrinx Environmental 2012, Onshore Environmental 2014c).

The vegetation and flora assessment involved verification of the previous vegetation mapping across the survey area. In a number of instances, the past vegetation descriptions and mapping did not suitably reflect what was observed on-ground and was therefore updated where appropriate, to better reflect the vegetation composition, patterns and extent observed. Considerable clearing has also occurred in the survey area since it was previously surveyed, and previously disturbed and cleared areas now account for an estimated 42.4 ha (13%) of the survey area. These areas were most associated with the central corridor of the survey area, where there are several existing tracks and laydown areas. Despite much of the survey area occurring immediately adjacent to areas of frequent traffic, only low levels of disturbance were recorded within remnant vegetation, and approximately half of the survey area was considered to be in 'very good' condition.

No TECs or PECs were recorded within the survey area during the current survey, and none have been previously identified by the surveys which were reviewed during the desktop assessment (ENV Australia 2007, 2009a, 2009b, 2010, GHD Pty Ltd 2008, Onshore Environmental 2019, 2014b, 2014c, 2014d, Syrinx Environmental 2012). Three vegetation associations, GU Tp CfFibAcao DopAh, HS TsTwTp EllCh AhiAaa and ME EvAci AmApyp, provided habitat for the P3 significant flora species, *Triodia* sp. Mt Ella (M.E. Trudgen 12739), recorded during the survey and as such may have some local significance as habitat for priority flora. None of the vegetation associations recorded represent groundwater dependent ecosystems.

Given the reasonably dry seasonal conditions, it is considered that some taxa would likely be under-represented, particularly annual and ephemeral taxa. The general suite of flora species recorded, however, does largely align with what has been previously recorded in the surrounding area (ENV Australia 2007, 2009a, 2009b, 2010, GHD Pty Ltd 2008, Onshore Environmental 2019, 2014b, 2014c, 2014d, Syrinx Environmental 2012) and is therefore considered typical of what may be expected on similar landforms outside of the survey area. No Commonwealth or State-listed threatened flora species have been previously recorded within 50 km of the survey area (BHP WAIO 2023a, Department of Biodiversity, Conservation and Attractions 2023b, 2023c, 2023e, Department of Climate Change, Energy, the Environment and Water 2023a), and none were recorded within the survey area during the current field survey. Of the 27 priority flora species known to occur within 50 km of the survey area (BHP WAIO 2023a, Department of Biodiversity, Conservation and Attractions 2023b, 2023c, 2023e), one (*Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3) was recorded within the survey area during the current field survey. Occurrences of this species within, and immediately adjacent to, the survey area have been recorded previously by Onshore Environmental (2014d); the occurrences recorded during this survey verify and increase the distribution of this already known population. Apart from one disjunct occurrence of *Triodia* sp. Mt Ella (M.E. Trudgen 12739) P3 within the Karlamilya National Park, over 200 km to the north-east, the occurrences recorded by this survey and Onshore

Environmental (2014d) represent part of the currently known, eastern-most population of this species.

The records of *Hibiscus* aff. *campanulatus* in the survey area may be of significance. Further taxonomic work is required to determine whether this species is taxonomically distinct from the P1 species *Hibiscus campanulatus* and therefore represents a new species, or whether it is a significant range extension of *Hibiscus campanulatus* P1 which is only recognised from the Paraburdoo area, approximately 220 km to the west.

Due to the relatively dry seasonal conditions prior to the field survey, the close proximity of previous records and the presence of suitable habitat within the survey area, two of the 26 significant flora taxa returned from database search results that weren't recorded during the field survey, are considered to still have the potential to occur post-survey: *Euphorbia inappendiculata* var*. inappendiculata* P2 and *Aristida jerichoensis* var. *subspinulifera* P3. If present, however, neither of these species would be restricted to the survey area, as indicated by the voucher records listed with the WA Herbarium (Western Australian Herbarium 2023). *Euphorbia inappendiculata* var*. inappendiculata* P2 would be most likely to occur in the clay soils of vegetation unit GP ExeEbCf AsyAteVf NdTc and *Aristida jerichoensis* var. *subspinulifera* P3 would be most likely to occur on the alluvial plains described as vegetation unit SA Tbr AmAancGrw.

Weed diversity within the survey area was low, with four species recorded: **Aerva javanica, *Bidens bipinnata, *Cenchrus ciliaris and *Vachellia farnesiana*. Weed occurrences were greatest within, or in close proximity to, areas of previous disturbance, drainage lines and floodplains. All four species recorded are widespread and common throughout the Pilbara bioregion (Western Australian Herbarium 2023). None of them represent a declared pest plant or a WoNS.

5.2 Vertebrate Fauna

Eight fauna habitat types were recorded within the remnant vegetation in the survey area. None of the fauna habitats are restricted to the survey area and all habitats are typical of those found at both a local and regional level. Due to the proximity to an active mine site, the survey area is not considered an important ecological linkage, with all habitats well represented outside the survey area. However, the Breakaway/Cliff and Gorge/Gully habitats (2.6% of the survey area) within the survey area would be considered of higher importance due to providing potential refuge for fauna species, including critical habitat for the MNES species northern quoll if present within the survey area. In addition, it also represents supporting habitat for several MNES species, including the ghost bat, Pilbara leaf-nosed bat and Pilbara olive python.

Forty-three fauna species were recorded during the survey, comprising four reptile species, 34 bird species and five mammal species (including two introduced species). Of the introduced mammal species recorded within the survey area, the European rabbit (C3 Prohibited) is a declared pest under the BAM Act (Department of Agriculture and Food Western Australia 2007). The number of species recorded during the survey is likely to be lower than the number of species expected to be present due to the nature of the survey conducted (Basic fauna survey only based on opportunistic sightings), the cryptic nature of some species and the timing of the survey. This is not considered a limitation of the survey, however, due to the numerus previous surveys conducted in the area.

No species of significance were recorded in the survey area as part of the current survey. One species of significance, the western pebble-mound mouse (P4), has previously been recorded within the survey area (Department of Biodiversity, Conservation and Attractions 2022b). This species is likely to

occur within the Hillcrest/Hillslope and Stony Plain habitats of the survey area. However, these habitats are common and widespread within the local area and the wider Pilbara region.

Of the 42 significant vertebrate species identified in the desktop assessment, eight significant fauna species were considered to have high likelihood of occurrence (three MNES species and five other significant species), and four species had a moderate likelihood of occurrence (three MNES species and one other significant species). These species are discussed below.

The Priority-listed *A. ganei* (P1) is a cryptic species, and as such was not detected during the current survey. However, this species is likely to occur in Gorge/Gully, Breakaway/Cliff habitats and Minor Drainage Line habitats. The grey falcon and peregrine falcon are considered widespread throughout Australia, but uncommon and the fork-tailed swift is migratory and considered to occupy aerial habitats only. These species forage in a wide variety of habitats and although no evidence was recorded in the current survey, foraging habitat was recorded throughout the survey area. It is likely that all three species are transient visitors to all or part of the survey area, but are not solely reliant on any of the habitats within the survey area.

The southern whiteface has recently been listed as a MNES species (31 March 2023) and the survey area is at the northern edge of its distribution. However, it is considered likely to occur within the survey area, given the proximity of a recent record to the survey area and a small portion of potential supporting habitat within the survey area, comprising of Mulga Woodland (10.5% of the survey area). Similar habitat outside the survey area is considered widespread and it is unlikely that the southern whiteface is solely reliant on any habitats within the survey area.

The brush-tailed mulgara is common in a range of habitats with suitable habitat within the survey area including Drainage Area/Floodplain, Mulga Woodland and Sand Plain habitats. Although no evidence of the brush-tailed mulgara was recorded, given suitable habitat and previous recent records near to the survey area, it is considered likely to occur within the survey area. Suitable supporting habitat for the ghost bat (75% of the survey area) was also present within the survey area for foraging purposes. In addition, 2.3 ha of critical habitat in the form of foraging habitat (Hillcrest/ Hillslope habitat) within 12 km of a previously recorded Category 2 cave (GHD Pty Ltd 2021b) occurs within the survey area. However, no suitable roost sites were recorded within the survey area. Given the presence of critical and supporting habitat and numerous records in the vicinity of the survey area, the ghost bat is considered likely to occur, potentially relying on a small portion of the survey area for foraging in the vicinity of the Category 2 cave recorded outside the survey area.

The MNES species, northern quoll, Pilbara olive python and Pilbara leaf-nosed bat are common in a range of habitats within the Pilbara region. Critical habitat for the northern quoll and supporting habitats for all three species was mapped within the survey area. However, given the previous surveys conducted within the survey area recording no evidence of these species, the lack of potential roost sites for Pilbara leaf-nosed bats and the proximity of previous records, the northern quoll, Pilbara leaf-nosed bat and Pilbara olive python were considered to have a moderate likelihood of occurrence.

The Priority-listed species, *L. macropisthopus remota* (P2), was only recorded from the NatureMap database within 50 km of the survey area. However, Mulga Woodland and Sand Plain habitats likely to support this species are present in the survey area and given this species is only likely to be recorded through trapping, it was considered a moderate likelihood of occurrence.

A further 30 significant species (26 MNES) were considered a low likelihood of occurrence, including the great desert skink, red goshawk, night parrot, princess parrot, bilby, black-footed rock-wallaby and

a number of migratory-listed bird species due to lack of suitable habitats within the survey area and/or lack of records in the vicinity of the survey area.

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Appendix A: Geology, Land Systems and Pre-European Vegetation Mapping of the Survey Area

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196000 198000 200000 202000 204000 206000

7418000 7416000 7414000 7412000

Lchk Qrc Lchw Lchb Lfhw Awfj Achm

Survey Area

QUATERNARY

Qrc - colluvium 38491

PALEOPROTEROZOIC

Lchk - Brockman Iron Formation

Lfhw - Woongarra Rhyolite

Lchw - Weeli Wolli Formation

Lchb - Boolgeeda Iron Formation

ARCHEAN

Awfj - Jeerinah Formation

Achm - Marra Mamba Iron Formation

Ag - felsic intrusives 74292

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure A.1: Surface geology

Scale: 1:30,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 500 1,000 1,500 2,000 Metres

N

astron an ecocene company

Author: N. Cadd Drawn: C. Dyde Date: 24-04-2023 Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigA1_Geo

196000 198000 200000 202000 204000 206000

7418000 7416000 7414000 7412000

Newman System
Washplain System
Newman System
Boolgeeda System
Boolgeeda System
McKay System
Newman System
Jamindie System
Divide System
Newman System
Boolgeeda System

Survey Area

Land System

- Boolgeeda System
- Divide System
- Jamindie System
- McKay System
- Newman System
- Washplain System

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure A.2: Land systems

Scale: 1:30,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 500 1,000 1,500 2,000 Metres

N

astron
an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigA2_LS

196000
198000
200000
202000
204000
206000
7418000
7416000
7414000
7412000

Survey Area

Pre-European Vegetation Association

FORTESCUE VALLEY_216

FORTESCUE VALLEY_82

KUMARINA HILLS_29

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure A.3: Pre-European vegetation

Scale: 1:30,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 500 1,000 1,500 2,000 Metres

N

astron

an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigA3_PEV

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Appendix B: Conservation Categories for Flora, Fauna and Ecological Communities, and Categories for Introduced Flora

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Table B.1: Categories and definitions for threatened flora and fauna species listed under the *Environment Protection and Biodiversity Conservation Act 1999.*

Conservation category	Definition
Extinct	Taxa with no reasonable doubt that the last member of the species has died.
Extinct in the wild	Taxa known to survive only in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriated seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically endangered (CR)	Taxa facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
Endangered (E)	Taxa are not critically endangered; and are facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
Vulnerable (V)	Taxa are not critically endangered or endangered; and are facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Conservation dependent (CD)	Taxa are the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or the following subparagraphs are satisfied: i) the taxa is a species of fish; ii) the taxa is the focus of a management plan that provides management actions necessary to stop the decline of, and support the recovery of, the taxa so that its chances of long term survival in nature are maximised; iii) the management plan is in force under a law of the Commonwealth or of a State or Territory; iv) cessation of the management plan would adversely affect the conservation status of the taxa Fish includes all taxa of bony fish, sharks, rays, crustaceans, molluscs and other marine organisms, but does not include marine mammals/reptiles.
Migratory (Mi)	Taxa are considered migratory species; v) if they are native to Australia and are included in the appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals Appendices I and II); vi) all migratory species included in annexes established under the Japan-Australia Migratory Bird Agreement (JAMBA) and the China-Australia Migratory Bird Agreement (CAMBA); and vii) Are native, migratory species identified in a list established under, or an instrument made under, an international agreement approved by the Minister, such as the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

Note: CD and Mi are only related to conservation significant fauna.

Table B.2: Definitions and criteria for threatened ecological communities under the *Environment Protection and Biodiversity Conservation Act 1999.*

Categories of ecological communities	
Critically endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

Table B.3: Categories of threatened ecological communities (Department of Environment and Conservation 2013).

PD: Presumed Totally Destroyed
An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future. An ecological community will be listed as presumed totally destroyed if there are no recent records of the community being extant **and either** of the following applies (A or B): A) Records within the last 50 years have not been confirmed despite thorough searches of known or likely habitats **or** B) All occurrences recorded within the last 50 years have since been destroyed.
CR : Critically Endangered
An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated. An ecological community will be listed as **Critically Endangered** when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting **any one or more of** the following criteria (A, B or C): A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% **and either or both** of the following apply (i or ii): i) geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 10 years); ii) modification throughout its range is continuing such that in the immediate future (within approximately 10 years) the community is unlikely to be capable of being substantially rehabilitated. B) Current distribution is limited, **and one or more** of the following apply (i, ii or iii): i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 10 years); ii) there are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes; iii) there may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes. C) The ecological community exists only as highly modified occurrences that may be capable of being rehabilitated if such work begins in the immediate future (within approximately 10 years).

EN: Endangered
An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future. An ecological community will be listed as **Endangered** when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information by it meeting **any one or more** of the following criteria (A, B, or C): A) The geographic range, and/or total area occupied, and/or number of discrete occurrences have been reduced by at least 70% since European settlement **and either or both** of the following apply (i or ii): i) the estimated geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term future (within approximately 20 years); ii) modification throughout its range is continuing such that in the short term future (within approximately 20 years) the community is unlikely to be capable of being substantially restored or rehabilitated. B) Current distribution is limited, **and one or more** of the following apply (i, ii or iii): i) geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 20 years); ii) there are few occurrences, each of which is small and/or isolated and all or most occurrences are very vulnerable to known threatening processes; iii) there may be many occurrences but total area is small and all or most occurrences are small and/or isolated and very vulnerable to known threatening processes. C) The ecological community exists only as very modified occurrences that may be capable of being substantially restored or rehabilitated if such work begins in the short-term future (within approximately 20 years).
VU: Vulnerable
An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range. An ecological community will be listed as **Vulnerable** when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction or significant modification in the medium to long-term future. This will be determined on the basis of the best available information by it meeting **any one or more of** the following criteria (A, B or C): A) The ecological community exists largely as modified occurrences that are likely to be capable of being substantially restored or rehabilitated. B) The ecological community may already be modified and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations. C) The ecological community may be still widespread but is believed likely to move into a category of higher threat in the medium to long term future because of existing or impending threatening processes.

Possible Threatened Ecological Communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community Lists under Priorities 1, 2 and 3. Ecological communities that are adequately known and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5 (Table B.4).

Table B.4: Definitions and criteria for priority ecological communities (Department of Environment and Conservation 2013).

P1: Priority One – Poorly-known ecological communities
Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤ 100ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.
P2: Priority Two – Poorly-known ecological communities
Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.
P3: Priority Three – Poorly-known ecological communities
(i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or: (ii) communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or; (iii) communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes. Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.
P4: Priority Four
Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. (i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands. (ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. (iii) Ecological communities that have been removed from the list of threatened communities during the past five years.
P5: Priority Five – Conservation dependent ecological communities

P1: Priority One – Poorly-known ecological communities
Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Table B.5: Conservation codes for threatened Western Australian flora and fauna under the *Biodiversity Conservation Act 2016* (Department of Biodiversity, Conservation and Attractions 2019).

Conservation category	Conservation category	Definition
Critically endangered (CR)	Schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	Taxa "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines."
Endangered (EN)	Schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	Taxa "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines."
Vulnerable (VU)	Schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	Taxa "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines."
Extinct (EX)	Schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	Taxa for which "there is no reasonable doubt that the last member of the species has died."
Extinct in the wild (EW)	Listing in accordance with Ministerial Guidelines (Section 25 of the BC Act)	Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form". Currently there are no threatened flora species listed as EW. If listing of a species as EW occurs, then a schedule will be added to the applicable notice.
Migratory species (MI)	Listed as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	"Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth."
Species of special conservation interest (conservation dependent fauna) (CD)	Listed as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	"Species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened."
Other specially protected species (OS)	Listed as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.	"Fauna otherwise in need of special protection to ensure their conservation."

Note: MI, CD and OS are only related to significant fauna.

Taxa that have not yet been adequately surveyed to be listed under Schedule 1 or 2 are added to the Priority Flora and Priority Fauna Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as Threatened flora or fauna. Taxa that are adequately known, are rare but not threatened, or meet criteria for Near Threatened, or that have been recently removed from the threatened list for other than taxonomic reasons, are placed in Priority 4. These taxa require regular monitoring.

Table B.6: Priority species codes for Western Australian flora (Department of Biodiversity, Conservation and Attractions 2019).

P1: Priority One – Poorly known taxa
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
P2: Priority Two – Poorly known taxa
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
P3: Priority Three – Poorly known taxa
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
P4: Priority Four: Rare, near threatened and other taxa in need of monitoring
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

The management of introduced flora species in Western Australia is now regulated through the *Biosecurity and Agriculture Management Act 2007* (BAM Act). A list of declared pests, including 'pest' plants is provided under the BAM Act, which has been updated to incorporate a number of other Acts that are administered by Department of Agriculture and Food Western Australia (Department of Agriculture and Food Western Australia 2016). Declared pests can fall into two categories: one that relates to the prevention of introducing the species or eradicating it; and the other relates to managing the species and whether it can be kept (i.e. for scientific purposes, education or other purpose).

The threat and risk posed to site-specific biodiversity values, influences on rehabilitation success, primary production, infrastructure assets or human health will differ depending on the unique characteristics of each site and the associated land management practice or operation. Therefore, site or project specific weed assessments and priorities should be reviewed for each project.

As per introduced flora species, the BAM Act seeks to establish a modern biosecurity regulatory scheme to prevent serious animal pests from entering the State and becoming established, and to minimise the spread and impact of any that are already present within the State. Declared animal pests fall into three categories as Gazetted under the *Biosecurity and Agriculture Management Regulations 2013*. These categories are outlined in Table B.7.

Table B.7: Declared pests control categories as gazetted under the *Biosecurity and Agriculture Management Regulations 2013*.

Category	Description
C1 (Exclusion)	Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.
C2 (Eradication)	Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.
C3 (Management)	Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.

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Appendix C: Database Search Results

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Click here to open ALA results 

Department of Agriculture, Water and the Environment

Protected Matters Search Tool

Report Generated - 7:51PM - 25 January 2023

Matters of National Environment Significance	Count
World Heritage Properties	0
National Heritage Places	0
Wetlands of International Importance (Ramsar Wetlands)	0
Great Barrier Reef Marine Park	0
Commonwealth Marine Area	0
Listed Threatened Ecological Communities	0
Listed Threatened Species	12
Listed Migratory Species	9

Other Matters Protected by the EPBC Act	Count
Commonwealth Lands	13
Commonwealth Heritage Places	0
Listed Marine Species	13
Whales and Other Cetaceans	0
Critical Habitats	0
Commonwealth Reserves Terrestrial	0
Australian Marine Parks	0
Habitat Critical to the Survival of Marine Turtles	0

Extra Information	Count
State and Territory Reserves	0
Regional Forest Agreements	0
Nationally Important Wetlands	0
EPBC Act Referrals	5
Key Ecological Features	0
Biologically Important Areas	0
Bioregional Assessments	0
Geological and Bioregional Assessments	0

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected and is accurate at the time of generation.
Please see the caveat for interpretation of information provided here. Consider carefully the age of information for decision making.

Report Metadata	Caveat

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Listed Threatened Species

Species ID	Scientific Name	Common Name	Class	Simple Presence	Presence Text	Threatened Category	Migratory Status	Migratory Category	Marine Status	Website	Buffer Status
856	*Calidris ferruginea*	Curlew Sandpiper	Bird	Known	Species or species habitat	Critically Endangered	Migratory	Migratory Wetlands	Listed - overfly marine	Species Profile and Threat	In feature area
77037	*Rostratula australis*	Australian Painted Snipe	Bird	May	Species or species habitat	Endangered			Listed - overfly marine	Species Profile and Threat	In buffer area only
59350	*Pezoporus occidentalis*	Night Parrot	Bird	Likely	Species or species habitat	Endangered				Species Profile and Threat	In feature area
331	*Dasyurus hallucatus*	Northern Quoll, Digul	Mammal	Likely	Species or species habitat	Endangered				Species Profile and Threat	In feature area
942	*Erythrotriorchis radiatus*	Red Goshawk	Bird	May	Species or species habitat	Vulnerable				Species Profile and Threat	In buffer area only
758	*Polytelis alexandrae*	Princess Parrot,	Bird	May	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area
83160	*Liopholis kintorei*	Great Desert Skink,	Reptile	May	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area
282	*Macrotis lagotis*	Greater Bilby	Mammal	Known	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area
929	*Falco hypoleucos*	Grey Falcon	Bird	Likely	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area
66699	*Liasis olivaceus barroni*	Olive Python (Pilbara	Reptile	Likely	Species or species habitat	Vulnerable				Species Profile and Threat	In buffer area only
82790	*Rhinonicteris aurantia*	Pilbara Leaf-nosed Bat	Mammal	Known	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area
174	*Macroderma gigas*	Ghost Bat	Mammal	Known	Species or species habitat	Vulnerable				Species Profile and Threat	In feature area

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Listed Migratory Species

				Presence							
Species ID	**Scientific Name**	**Common Name**	**Class**	**Rank**	**Text**	**Threatened Category**	**Migratory Status**	**Migratory Category**	**Marine Status**	**Website**	**Buffer Status**
678	*Apus pacificus*	Fork-tailed Swift	Bird	Likely	Species or species habitat		Migratory	Migratory Marine Birds	Listed - overfly marine	Species Profile and Threat	In feature area
642	*Motacilla cinerea*	Grey Wagtail	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine	Species Profile and Threat	In feature area
644	*Motacilla flava*	Yellow Wagtail	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine	Species Profile and Threat	In feature area
858	*Calidris melanotos*	Pectoral Sandpiper	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed - overfly marine	Species Profile and Threat	In feature area
882	*Charadrius veredus*	Oriental Plover, Oriental	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed - overfly marine	Species Profile and Threat	In feature area
59309	*Actitis hypoleucos*	Common Sandpiper	Bird	Known	Species or species habitat		Migratory	Migratory Wetlands	Listed	Species Profile and Threat	In feature area
856	*Calidris ferruginea*	Curlew Sandpiper	Bird	Known	Species or species habitat	Critically Endangered	Migratory	Migratory Wetlands	Listed - overfly marine	Species Profile and Threat	In feature area
662	*Hirundo rustica*	Barn Swallow	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine	Species Profile and Threat	In feature area
874	*Calidris acuminata*	Sharp-tailed Sandpiper	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed	Species Profile and Threat	In feature area

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Commonwealth Lands

Commonwealth Land ID	Commonwealth Land	Agency	State	Buffer Status
50159	Defence - NEWMAN	Defence	WA	In buffer area only
51736	Commonwealth Land -	Unknown	WA	In buffer area only
51733	Commonwealth Land -	Unknown	WA	In buffer area only
51738	Commonwealth Land -	Unknown	WA	In buffer area only
51734	Commonwealth Land -	Unknown	WA	In buffer area only
51739	Commonwealth Land -	Unknown	WA	In buffer area only
51742	Commonwealth Land -	Unknown	WA	In buffer area only
51740	Commonwealth Land -	Unknown	WA	In buffer area only
51741	Commonwealth Land -	Unknown	WA	In buffer area only
51735	Commonwealth Land -	Unknown	WA	In buffer area only
51743	Commonwealth Land -	Unknown	WA	In buffer area only
51732	Commonwealth Land -	Unknown	WA	In buffer area only
51737	Commonwealth Land -	Unknown	WA	In buffer area only

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Listed Marine Species

				Presence								
Species ID	Scientific Name	Common Name	Class	Rank	Text	Threatened Category	Migratory Status	Migratory Category	Marine Status	Cetacean Status	Website	Buffer Status
77037	*Rostratula australis*	Australian Painted Snipe	Bird	May	Species or species habitat	Endangered			Listed - overfly marine		Species Profile and Threat	In buffer area only
670	*Merops ornatus*	Rainbow Bee-eater	Bird	May	Species or species habitat				Listed - overfly marine		Species Profile and Threat	In feature area
66521	*Bubulcus ibis*	Cattle Egret	Bird	May	Species or species habitat				Listed - overfly marine		Species Profile and Threat	In feature area
678	*Apus pacificus*	Fork-tailed Swift	Bird	Likely	Species or species habitat		Migratory	Migratory Marine Birds	Listed - overfly marine		Species Profile and Threat	In feature area
642	*Motacilla cinerea*	Grey Wagtail	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine		Species Profile and Threat	In feature area
644	*Motacilla flava*	Yellow Wagtail	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine		Species Profile and Threat	In feature area
858	*Calidris melanotos*	Pectoral Sandpiper	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed - overfly marine		Species Profile and Threat	In feature area
882	*Charadrius veredus*	Oriental Plover, Oriental	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed - overfly marine		Species Profile and Threat	In feature area
59309	*Actitis hypoleucos*	Common Sandpiper	Bird	Known	Species or species habitat		Migratory	Migratory Wetlands	Listed		Species Profile and Threat	In feature area
856	*Calidris ferruginea*	Curlew Sandpiper	Bird	Known	Species or species habitat	Critically Endangered	Migratory	Migratory Wetlands	Listed - overfly marine		Species Profile and Threat	In feature area
662	*Hirundo rustica*	Barn Swallow	Bird	May	Species or species habitat		Migratory	Migratory Terrestrial	Listed - overfly marine		Species Profile and Threat	In feature area
874	*Calidris acuminata*	Sharp-tailed Sandpiper	Bird	May	Species or species habitat		Migratory	Migratory Wetlands	Listed		Species Profile and Threat	In feature area
83425	*Chalcites osculans*	Black-eared Cuckoo	Bird	Known	Species or species habitat				Listed - overfly marine		Species Profile and Threat	In feature area

raw_recorc	eventDate	decimalLat	decimalLor	scientificName
d5764bc66	2013-07-11	-23.3473	119.7352	Ptilotus nobilis subsp. nobilis
aecd9c98d	2012-03-28	-23.3566	119.7317	Swainsona formosa
Erickson, T.	2010-12-10	-23.3232	119.7546	Corchorus crozophorifolius
Wilson, K.L	2006-05-02	-23.4908	120.3181	Schoenoplectiella laevis
Beauglehol	1978-09-10	-23.3167	119.75	Haloragis gossei
Erickson, T.	2010-12-10	-23.3246	119.7556	Polycarpaea longiflora
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus squarrosus
Buirchell, B	2017-05-29	-23.394	119.795	Eremophila lachnocalyx
Buirchell, B	2017-05-29	-23.3942	119.7955	Eremophila lachnocalyx
Buirchell, B	2017-05-25	-23.11	120.493	Eremophila lanceolata
Buirchell, B	2017-05-25	-23.1101	120.4934	Eremophila latrobei subsp. filiformis
Buirchell, B	2017-05-25	-23.1	120.5	Eremophila capricornica
tinawa	2022-07-31	-23.566	119.7589	Eremophila latrobei
Stu Robert(	2022-12-07	-23.3631	119.7471	Aristida contorta
Miguel de S	2021-06-02	-23.3703	119.78	Senna
Stu Robert(	2022-12-07	-23.3955	119.7949	Ptilotus nobilis subsp. nobilis
Miguel de S	2021-06-02	-23.3702	119.7803	Indigofera monophylla
Miguel de S	2021-06-02	-23.3703	119.7799	Ptilotus nobilis subsp. nobilis
eeby	2021-03-29	-23.4471	119.7669	Phyllanthus
Miguel de S	2021-06-25	-23.3565	119.7316	Euphorbia hirta
smathichor	2021-10-15	-23.3465	119.7272	Trichodesma zeylanicum
Stu Robert(	2022-12-07	-23.396	119.7946	Aristida latifolia
Tim Hamm	2020-04-28	-23.2945	119.6822	Gomphrena kanisii
tinawa	2022-07-31	-23.5659	119.7592	Gomphrena kanisii
Stu Robert(	2022-12-07	-23.3961	119.7945	Acacia coriacea
smathichor	2021-10-15	-23.3477	119.7275	Ptilotus calostachyus
Stu Robert(	2022-12-07	-23.396	119.7946	Triodia
Stu Robert(	2022-12-07	-23.3963	119.7944	Senna artemisioides subsp. oligophylla
Cemone He	2016-09-04	-23.3589	119.7385	Asteraceae
Tim Hamm	2015-08-13	-23.3626	119.7259	Ptilotus rotundifolius
smathichor	2021-10-15	-23.3487	119.7321	Senna pleurocarpa
Stu Robert(	2022-12-07	-23.396	119.7946	Acacia aneura
wilful_fox	2022-09-05	-23.4471	119.796	Swainsona formosa
Stu Robert(	2022-12-07	-23.3955	119.7947	Enneapogon polyphyllus
tinawa	2022-07-31	-23.5663	119.7582	Goodenia stobbsiana
tinawa	2022-07-31	-23.566	119.7589	Goodeniaceae
wal72	2022-08-13	-23.3447	119.7058	Grevilleoideae
smathichor	2021-10-14	-23.349	119.7301	Triodia
Stu Robert(	2022-12-07	-23.3958	119.7947	Euphorbia sect. Anisophyllum
smathichor	2021-10-14	-23.3488	119.7293	Ptilotus obovatus
Stu Robert(	2022-12-07	-23.3959	119.7946	Enneapogon polyphyllus
tinawa	2022-07-31	-23.5663	119.7583	Solanum gabrielae
Cemone He	2017-01-26	-23.3391	119.8436	Capparis lasiantha
Stu Robert(	2022-12-07	-23.3953	119.795	Senna notabilis
Cemone He	2016-10-16	-23.3517	119.82	Senna notabilis
smathichor	2021-10-15	-23.3499	119.7305	Acacia pyrifolia
smathichor	2021-10-15	-23.3469	119.7267	Ptilotus clementii
Cemone He	2016-08-22	-23.3007	119.8974	Sclerolaena
tinawa	2022-07-31	-23.5662	119.7587	Bonamia

smathichor	2021-10-15	-23.3476	119.7267	Scaevola
smathichor	2021-10-15	-23.3489	119.7293	Ptilotus obovatus
Andrew Pri	2021-01-07	-23.397	119.798	Eucalyptus camaldulensis
kerry12345	2021-08-23	-23.4486	119.7964	Ptilotus nobilis subsp. nobilis
tinawa	2022-07-31	-23.566	119.759	Seringia
Tim Hamm	2015-08-13	-23.3626	119.7259	Brunonia australis
tinawa	2022-07-31	-23.5661	119.7588	Eremophila exilifolia
tinawa	2022-07-31	-23.5663	119.7583	Ptilotus astrolasius
kimbie	2020-08-31	-23.3693	119.5827	Swainsona
tinawa	2022-07-31	-23.5659	119.7593	Goodenia
tinawa	2022-07-31	-23.5659	119.7592	Ptilotus nobilis subsp. nobilis
wal72	2022-08-13	-23.3449	119.706	Tracheophyta
Cemone He	2017-01-15	-23.3692	119.8035	Triodia
Tim Hamm	2020-08-04	-23.3505	119.741	Ptilotus nobilis subsp. nobilis
Tim Hamm	2015-08-13	-23.224	119.905	Ptilotus schwartzii
wal72	2022-08-13	-23.3447	119.706	Duperreya commixta
Cassis, G.; S	1999-05-28	-23.2195	119.9035	Senna glutinosa subsp. glutinosa
Cassis, G.; I	2005-08-25	-23.2837	119.6233	Acacia inaequilatera
Cassis, G.; I	2005-08-25	-23.2837	119.6233	Hakea chordophylla
Cassis, G.; S	1999-05-28	-23.2195	119.9035	Solanum lasiophyllum
Cassis, G.; I	2005-08-25	-23.2837	119.6233	Goodenia stobbsiana
Cassis, G.; S	1999-05-28	-23.2195	119.9035	Maireana georgei
Cassis, G.; I	2005-08-25	-23.2837	119.6233	Senna artemisioides subsp. oligophylla
Cassis, G.; I	2005-08-25	-23.2837	119.6233	Androcalva luteiflora
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus trivalva
Maier, M.	2000-09-28	-23.2981	119.7811	Eriachne lanata
Chinnock, F	2004-09-02	-23.3125	119.635	Calandrinia schistorhiza
Mollemans	1987-03-01	-23.32	119.6656	Triodia wiseana
Walker, K.	1963-06-28	-23.3514	119.7133	Senna glutinosa subsp. pruinosa
Purdie, R.W	2009-09-24	-23.2678	119.6272	Ptilotus auriculifolius
Mollemans	1987-03-01	-23.3167	119.6656	Triodia wiseana
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus trivalva
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Payne, A.L.	1996-06-18	-23.4597	119.8114	Eragrostis eriopoda
Mollemans	1987-03-07	-23.2833	119.6667	Amyema bifurcata
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
Slee, A.V.	2002-06-02	-23.2878	119.6314	Eucalyptus xerothermica
Slee, A.V.	2002-06-02	-23.2878	119.6314	Eucalyptus xerothermica
Purdie, R.W	2009-09-24	-23.2678	119.6272	Tribulus hirsutus
Mitchell, A.	1994-03-28	-23.3181	119.7028	Triodia wiseana
Mitchell, A.	1996-06-21	-23.3844	120.4758	Eragrostis xerophila
Mollemans	1987-03-02	-23.4	119.6833	Amyema fitzgeraldii
Slee, A.V.	2002-06-02	-23.2975	119.6681	Corymbia hamersleyana
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
McDonald,	2001-03-11	-23.2317	119.9128	Eucalyptus
Mollemans	1987-03-05	-23.4	119.7	Tephrosia rosea
Mollemans	1987-03-05	-23.3956	119.7011	Solanum diversiflorum
Mollemans	1987-03-01	-23.2864	119.6608	Hybanthus aurantiacus
Mitchell, A.	1994-03-27	-23.6825	119.7436	Triraphis mollis
Purdie, R.W	2009-09-24	-23.2678	119.6272	Swainsona decurrens

Paton, R.		-23.2	119.8833	Ptilotus obovatus
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
Mitchell, A.	1996-06-21	-23.3847	120.4717	Eragrostis elongata
Paton, R.		-23.0333	119.8167	Rhagodia spinescens
Slee, A.V.	2002-06-02	-23.2508	119.6044	Eucalyptus xerothermica
Purdie, R.W	2009-09-24	-23.2678	119.6272	Heliotropium ovalifolium
Chinnock, F	2004-09-02	-23.3125	119.6353	Rhodanthe floribunda
Slee, A.V.	2002-06-02	-23.2878	119.6314	Eucalyptus xerothermica
Mollemans	1987-03-08	-23.3	119.7333	Lysiana casuarinae
Paton, R.		-23.2	119.8833	Acacia victoriae
Walker, K.	1980-09-10	-23.3514	119.73	Frankenia setosa
Pringle, H.	1995-03-28	-23.3172	119.8358	Eucalyptus leucophloia subsp. leucophloia
Mollemans	1987-03-01	-23.2861	119.6606	Scaevola parvifolia subsp. pilbarae
Chinnock, F	2004-09-02	-23.3111	119.6772	Eremophila forrestii subsp. forrestii
Crisp, M.D.	2011-09-14	-23.2728	119.8783	Melaleuca glomerata
Beauglehol	1978-09-10	-23.5167	119.75	Eremophila forrestii subsp. forrestii
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
Mollemans	1987-03-05	-23.3175	119.6656	Goodeniaceae
Broadbent,	1954-06-05	-22.9167	119.9833	Ptilotus axillaris
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus trivalva
Mitchell, A.	1994-03-27	-23.3606	119.73	Iseilema membranaceum
Chinnock, F	2004-09-02	-23.3111	119.6772	Eremophila platycalyx subsp. pardalota
Purdie, R.W	2009-09-24	-23.2678	119.6272	Ptilotus calostachyus
Mollemans	1987-03-05	-23.3833	119.7167	Tribulus hystrix
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
Broadbent,	1954-06-05	-22.9	120	Eucalyptus rowleyi
Leeuwen, S	2000-07-15	-23.32	119.6044	Swainsona leeana
Mitchell, A.	1994-03-28	-23.3181	119.7028	Triodia angusta
Paton, R.		-23.1667	119.9	Acacia pruinocarpa
Beauglehol	1978-09-10	-23.55	119.75	Ptilotus aervoides
Purdie, R.W	2009-09-24	-23.2678	119.6272	Heliotropium tenuifolium
Mitchell, A.	1994-03-27	-23.3606	119.73	Ptilotus carinatus
Slee, A.V.	2002-06-02	-23.3111	119.6911	Eucalyptus leucophloia subsp. leucophloia
Purdie, R.W	2009-09-24	-23.35	119.7408	Ipomoea muelleri
Maier, M.	2000-10-04	-23.2778	119.6189	Hibiscus sturtii var. platychlamys
Walker, K.	1980-06-15	-23.3514	119.73	Euphorbia coghlanii
Walker, K.		-23.3667	119.7	Calytrix carinata
Slee, A.V.	2002-06-02	-23.4514	119.7969	Eucalyptus xerothermica
Mollemans	1987-03-01	-23.2861	119.6606	Triodia vanleeuwenii
Walker, K.	1980-09-10	-23.3514	119.73	Streptoglossa odora
Purdie, R.W	2009-09-24	-23.35	119.7408	Polymeria ambigua
Paton, R.		-23.1333	119.8833	Acacia orthocarpa
Nicolle, D.	1993-10-02	-23.4333	119.8167	Eucalyptus xerothermica
Slee, A.V.	2002-06-02	-23.2878	119.6314	Eucalyptus xerothermica
Mollemans	1987-03-01	-23.3183	119.6656	Triodia wiseana
Mollemans	1987-03-01	-23.3008	119.6992	Grevillea wickhamii subsp. hispidula
Walker, K.		-23.3667	119.7	Ptilotus calostachyus
Walker, K.	1983-06-28	-23.3514	119.73	Ptilotus nobilis subsp. nobilis
Mitchell, A.	1996-06-21	-23.3833	120.4667	Glycine canescens
Mollemans	1987-03-05	-23.3667	119.7167	Triodia longiceps

Newbey, K.	1984-04-05	-23.3333	119.6667	Anthobolus leptomerioides
Slee, A.V.	2002-06-02	-23.2878	119.6314	Eucalyptus xerothermica
Leeuwen, S	1998-09-19	-23.2953	119.7867	Maireana georgei
Grace, J.|B	1993-09-29	-23.1833	119.85	Glycine canescens
Chinnock, F	2004-09-03	-23.6906	119.7744	Vittadinia virgata
Toelken, H.	1979-09-19	-23.3167	119.6333	Grevillea wickhamii subsp. hispidula
Mitchell, A.	1996-06-23	-23.7203	120.1272	Triodia bitextura
Paton, R.		-23.2	119.9	Eucalyptus gamophylla
Brooker, M	1983-07-03	-23.3333	119.8833	Eucalyptus socialis subsp. eucentrica
Brooker, M	1974-04-19	-23.3667	119.85	Eucalyptus leucophloia subsp. leucophloia
Mollemans	1987-03-05	-23.3167	119.6892	Scaevola
Crisp, M.D.	2011-09-14	-23.3075	119.6836	Eucalyptus trivalva
Lally, T.R.	1995-09-10	-23.35	119.7167	Solanum lasiophyllum
Purdie, R.W	2009-09-23	-23.2839	119.6581	Astrotricha hamptonii
Chinnock, F	2004-09-03	-23.6906	119.7744	Eremophila jucunda subsp. pulcherrima
Briggs, B.G.	1970-06-13	-23.8	120.0833	Acacia kempeana
Walker, K.	1980-07-17	-23.3514	119.73	Mirbelia viminalis
Lally, T.R.	1994-09-10	-23.35	119.7167	Trianthema glossostigmum
Grace, J.|B	1993-09-29	-23.1833	119.85	Glycine canescens
Walker, K.	1980-06-15	-23.3514	119.73	Euphorbia australis var. subtomentosa
Leeuwen, S	1993-07-09	-23.2769	119.9292	Drosera finlaysoniana
Maslin, B.R	2004-10-11	-23.3422	120.0078	Acacia trudgeniana
Mollemans	1987-03-07	-23.2886	119.7583	Hibiscus
Walker, K.	1980-09-10	-23.3514	119.73	Acacia melleodora
Demarz, H.	1978-10-13	-23.1	119.95	Acacia ancistrocarpa
Walker, K.	1981-04-07	-23.2333	120.0167	Acacia monticola
Mitchell, A.	1977-05-31	-23.35	119.7167	Urochloa subquadripara
Mollemans	1987-03-02	-23.4011	119.7111	Melaleuca eleuterostachya
Walker, K.	1983-04-06	-23.35	119.7333	Portulaca decipiens
Paton, R.		-23.4167	119.7833	Acacia sclerosperma subsp. sclerosperma
Mitchell, A.	1996-06-17	-23.2067	119.8553	Corymbia candida subsp. candida
Mollemans	1987-03-07	-23.3167	119.8833	Amyema preissii
Johnson, L.	1991-07-29	-23.25	119.6667	Eucalyptus xerothermica
Mollemans	1987-03-05	-23.3833	119.6833	Aristida contorta
Leeuwen, S	1993-07-09	-23.2769	119.9292	Schoenoplectiella laevis
Pringle, H.	1995-03-27	-23.6831	119.7439	Digitaria ctenantha
Nicholson,	1986-07-22	-23.3667	119.6667	Swainsona decurrens
Mitchell, A.	1996-07-25	-22.9361	120.1672	Cucumis melo
Walker, K.	1983-06-28	-23.3514	119.73	Cenchrus ciliaris
Mollemans	1987-03-05	-23.3247	119.6053	Triodia brizoides
Walker, K.	1980-07-16	-23.3514	119.73	Ptilotus clementii
Newbey, K.	1984-04-05	-23.3333	119.6667	Eremophila longifolia
Brooker, M	1983-07-04	-23.45	119.7667	Corymbia deserticola subsp. deserticola
Paton, R.		-23.2833	119.9	Grevillea striata
Newbey, K.	1984-04-04	-23	119.9833	Scaevola parvifolia subsp. pilbarae
Paton, R.		-23.35	119.7	Acacia aneura
Mollemans	1987-03-01	-23.3158	119.6656	Triodia wiseana
Lally, T.R.	1995-09-10	-23.35	119.7167	Calandrinia schistorhiza
Walker, K.	1980-07-13	-23.3514	119.73	Indigofera georgei
Zich, F.A.	1992-04-14	-23.3133	119.6883	Evolvulus alsinoides

Demarz, H.	1978-10-13	-23.2167	119.7333	Sida corrugata
Walker, K.	1980-07-21	-23.5	119.6833	Acacia hamersleyensis
Shepherd, S.		-23.45	119.7833	Corymbia candida subsp. candida
Mitchell, A.	1995-04-08	-22.9283	120.1325	Corymbia candida subsp. candida
Leeuwen, S	1998-09-19	-23.2964	119.7853	Triodia vanleeuwenii
Lally, T.R.	1995-09-10	-23.35	119.7167	Senna glutinosa subsp. x luerssenii
Walker, K.	1980-10-14	-23.3514	119.73	Cullen leucochaites
Zich, F.A.	1992-04-14	-23.3133	119.6883	Corchorus walcottii
Walker, K.	1980-07-16	-23.6667	119.7667	Ptilotus rotundifolius
Lazarides, M	1992-04-14	-23.3	119.6833	Triodia angusta
Demarz, H.	1978-10-13	-23.3667	119.7167	Malvastrum americanum
Shepherd, S.		-23.45	119.7833	Corymbia candida subsp. candida
Paton, R.		-23.4167	119.8333	Corymbia lenziana
Tolken, H.R	1979-09-19	-23.3167	119.6333	Scaevola browniana
Eichler, Hj.	1985-08-18	-23.6833	119.8167	Roepera iodocarpa
Erickson, T.	2011-07-16	-23.5536	119.7597	Triodia basedowii
Brooker, M	1983-07-04	-23.2667	119.7667	Eucalyptus kingsmillii subsp. kingsmillii
Leeuwen, S	2000-07-15	-23.32	119.6047	Minuria integerrima
Brooker, M	1983-07-03	-23.2833	119.7	Corymbia ferriticola
Maier, M.	2000-10-05	-23.3347	119.7347	Hibiscus sturtii var. campylochlamys
Mitchell, A.	1994-03-28	-23.2967	119.6133	Triodia pungens
Brooker, M	1991-04-14	-23.2833	119.6667	Corymbia terminalis
Leeuwen, S	1998-08-19	-23.3314	120.0197	Eucalyptus kingsmillii subsp. kingsmillii
Newbey, K.	1984-04-05	-23.3333	119.6667	Heliotropium heteranthum
Brooker, M	1983-07-03	-23.3	119.7167	Eucalyptus trivalva
Beauglehol	1974-08-18	-23.15	119.9167	Sclerolaena cornishiana
Newbey, K.	1984-04-05	-23.3333	119.6667	Tragus australianus
Walker, K.	1980-07-14	-23.3667	119.7	Calytrix carinata
Beauglehol	1978-09-10	-23.5833	119.7667	Ptilotus aervoides
Leeuwen, S	1993-07-09	-23.3231	119.9375	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Burbidge, M	1958-05-07	-23	120.25	Acacia citrinoviridis
Mitchell, A.	1977-05-02	-23.55	119.6333	Digitaria brownii
Brooker, M	1983-07-04	-23.2667	119.7667	Corymbia hamersleyana
Walker, K.	1980-07-28	-23.3514	119.73	Abutilon amplum
Leeuwen, S	2000-07-15	-23.32	119.6047	Maireana georgei
Newbey, K.	1984-04-05	-23.3333	119.6667	Ptilotus carinatus
Brooker, M	1983-07-04	-23.45	119.7667	Corymbia ferriticola
Walker, K.	1980-07-30	-23.6	119.8	Streptoglossa liatroides
Larsen, E.	1964-08-16	-23.7833	119.95	Eucalyptus socialis subsp. eucentrica
Beauglehol	1974-08-19	-23.6667	119.7333	Maireana triptera
Walker, K.	1983-04-06	-23.3514	119.73	Heliotropium cunninghamii
Walker, K.	1980-07-14	-23.3514	119.73	Pterocaulon sphacelatum
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus squarrosus
Brooker, M	1983-07-03	-23.3	119.7167	Eucalyptus gamophylla
Erickson, T.	2011-04-15	-23.2925	119.6494	Triodia pungens
Brooker, M	1983-07-06	-23.45	119.7833	Corymbia candida subsp. candida
Craven, L.A	2006-05-03	-23.29	120.1911	Lamarchea
Maier, M.	2003-08-27	-23.3711	120.1156	Eriachne lanata
Walker, K.	1980-07-14	-23.3514	119.73	Acacia spondylophylla
Telford, I.R	1977-07-20	-23.45	119.7833	Corymbia terminalis

Larsen, E.	1964-08-14	-23.0833	120.1	Corymbia hamersleyana
Leeuwin, S.	1997-10-14	-23.3	119.85	Triodia longiceps
Walker, K.	1980-07-30	-23.6	119.8	Eremophila platycalyx subsp. platycalyx
Walker, K.	1977-04-06	-23.3667	119.7	Corymbia candida subsp. candida
Leitch, E.	2016-08-04	-23.3661	120.3442	Lepidium phlebopetalum
Burbidge, N	1958-05-07	-23	120.25	Acacia coriacea subsp. pendens
Walker, K.	1980-07-18	-23.3514	119.73	Eremophila clarkei
Lally, T.R.	1995-09-10	-23.35	119.7167	Haloragis gossei var. gossei
Leitch, E.	2016-08-08	-23.3653	120.3431	Solanum lasiophyllum
Brooker, M	1983-07-06	-23.25	119.6	Corymbia hamersleyana
Newbey, K.	1984-04-05	-23.4167	119.7833	Maireana planifolia
Sweedman	2006-10-10	-23.2072	119.8819	Acacia dictyophleba
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus iria
Bean, A.R.	2006-05-02	-23.4686	120.1908	Eucalyptus socialis subsp. socialis
Walker, K.	1980-07-18	-23.3514	119.73	Velleia glabrata
Nicolle, D.	1993-10-02	-23.4511	119.7847	Corymbia candida subsp. candida
Leitch, E.	2016-08-08	-23.3653	120.3431	Paraneurachne muelleri
Brooker, M	1983-07-06	-23.25	119.6	Eucalyptus trivalva
Brooker, M	1983-07-03	-23.3333	119.8833	Eucalyptus leucophloia subsp. leucophloia
Leeuwin, S.	1997-10-14	-23.3178	119.7103	Triodia angusta
Wilson, K.L	2006-05-02	-23.4686	120.1908	Lipocarpha microcephala
Blockley, J.	1966-05-19	-23.7667	120.2667	Ptilotus aervoides
Burbidge, N	1958-05-07	-23.4	120.3167	Corymbia candida subsp. candida
Maslin, B.R	1980-07-07	-23.3167	119.6167	Acacia sclerosperma subsp. sclerosperma
Beauglehol	1974-08-19	-23.65	119.85	Atriplex lindleyi subsp. inflata
Walker, K.	1980-07-20	-23.3514	119.73	Haloragis maierae
Walker, K.	1980-07-14	-23.3514	119.73	Marsilea hirsuta
Maier, M.	2000-10-04	-23.3758	120.1081	Hibiscus sturtii var. campylochlamys
Leitch, E.	2016-08-08	-23.3653	120.3431	Bonamia erecta
George, A.S	1960-08-22	-23.1	120.25	Lepidium echinatum
Leitch, E.	2016-08-04	-23.3661	120.3442	Eremophila lanceolata
Brooker, M	1983-07-04	-23.2833	119.7667	Corymbia deserticola subsp. deserticola
Leeuwen, S	1998-08-19	-23.3311	120.0197	Triodia pungens
Walker, K.	1981-07-27	-23.3514	119.73	Eucalyptus socialis subsp. socialis
Walker, K.	1980-07-16	-23.3514	119.73	Eremophila canaliculata
Walker, K.	1980-07-21	-23.3514	119.73	Dodonaea pachyneura
Benyon, J.	1981-08-29	-23.35	119.7333	Verbenaceae
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus bifax
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus iria
Leeuwen, S	1998-08-19	-23.3314	120.0197	Triodia vanleeuwenii
Maslin, B.R	2004-05-30	-23.1147	120.51	Acacia subcontorta
Mitchell, A.	1981-11-07	-22.9	120.1667	Stemodia grossa
Demarz, H.	1978-10-13	-23.1	119.95	Acacia ancistrocarpa
Cole, A.	2011-10-07	-23.3467	120.1769	Stenopetalum decipiens
Mitchell, A.	1996-05-06	-23.1608	119.9736	Cyperus cunninghamii subsp. cunninghamii
Broadbent,	1953-05-10	-23.7167	120.25	Halgania erecta
Van Leeuw	1998-08-19	-23.295	119.7867	Amyema gibberula var. gibberula
Mitchell, A.	1996-05-06	-23.1608	119.9736	Triodia pungens
Leeuwen, S	1998-08-19	-23.3314	120.0197	Calytrix carinata
Mitchell, A.	1981-11-20	-22.9	120.1667	Astrebla pectinata

Leeuwen, S	2000-07-15	-23.3214	119.6033	Lepidium phlebopetalum
Walker, K.	1980-07-14	-23.3514	119.73	Eremophila longifolia
Leeuwen, S	1998-08-19	-23.295	119.7867	Acacia catenulata subsp. occidentalis
Beauglehol	1974-08-19	-23.3667	119.7833	Maireana planifolia
Craven, L.A	2006-05-02	-23.5361	120.3258	Hibiscus sturtii var. sturtii
Wilson, K.L	2006-05-02	-23.4686	120.1908	Bulbostylis barbata
Leeuwen, S	1998-08-19	-23.3314	120.0197	Corymbia hamersleyana
Craven, L.A	2006-05-03	-23.385	120.4578	Hibiscus burtonii
Obbens, F.	2004-05-30	-22.9483	120.2808	Calandrinia stagnensis
Newbey, K.	1984-04-05	-23.3333	119.6667	Cheilanthes sieberi subsp. sieberi
Burbidge, N	1958-05-07	-23.5	119.95	Sida
Mitchell, A.	1995-08-29	-23.4083	120.5725	Calytrix carinata
Sweedman	2006-10-10	-23.2017	119.905	Acacia hilliana
George, A.S	1960-08-22	-23.3	119.7	Goodenia tenuiloba
Van Leeuw	1998-08-19	-23.295	119.7867	Eremophila tietkensii
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus vaginatus
Leitch, E.	2016-08-04	-23.3661	120.3442	Sclerolaena lanicuspis
Brooker, M	1983-07-03	-23.3833	119.8833	Corymbia candida subsp. candida
Leitch, E.	2016-08-08	-23.3653	120.3431	Rhyncharrhena linearis
Craven, L.A	2006-05-01	-23.4647	120.1561	Hibiscus burtonii
Craven, L.A	2006-05-01	-23.4717	120.505	Hibiscus coatesii
Leitch, E.	2016-08-08	-23.3653	120.3431	Dicrastylis cordifolia
Leitch, E.	2016-08-04	-23.3661	120.3442	Aristida latifolia
Maslin, B.R	2006-08-10	-23.3867	120.5047	Acacia catenulata subsp. occidentalis
Leitch, E.	2016-08-04	-23.3661	120.3442	Pterocaulon sphacelatum
Leeuwen, S	2000-07-15	-23.3214	119.6033	Eragrostis eriopoda
Walker, K.	1980-11-21	-23.3514	119.73	Triodia basedowii
Beauglehol	1974-08-18	-23.1667	119.8833	Maireana planifolia
Maslin, B.R	2000-07-10	-23.5506	119.7611	Acacia paraneura
Leitch, E.	2016-08-04	-23.3661	120.3442	Goodenia pascua
Leitch, E.	2016-08-04	-23.3661	120.3442	Ptilotus aervoides
Leitch, E.	2016-08-04	-23.3661	120.3442	Cheilanthes sieberi subsp. sieberi
Wilson, K.L	2006-05-03	-23.29	120.1911	Fimbristylis simulans
Craven, L.A	2006-05-01	-23.4717	120.505	Hibiscus coatesii
Craven, L.A	2006-05-04	-23.0481	120.1031	Hibiscus sturtii var. platychlamys
Leitch, E.	2016-08-08	-23.3653	120.3431	Enchylaena tomentosa var. tomentosa
MacPherso	1997-11-28	-23.33	119.8367	Scaevola acacioides
Leitch, E.	2016-08-08	-23.3653	120.3431	Goodenia triodiophila
Burbidge, N	1958-05-08	-23.7833	120.2333	Bidens bipinnata
Maslin, B.R	2006-08-11	-23.1169	120.5189	Acacia subcontorta
Larsen, E.	1964-08-15	-23.3333	120.25	Eucalyptus gamophylla
Brooker, M	1983-07-03	-23.35	119.7167	Eucalyptus xerothermica
Blockley, J.	1966-05-19	-23.5	120.2333	Pluchea dentex
Leitch, E.	2016-08-08	-23.3653	120.3431	Halgania solanacea var. Mt Doreen (G.M.Chippendale 4206)
Leitch, E.	2016-08-08	-23.3653	120.3431	Kennedia prorepens
Leitch, E.	2016-08-08	-23.3019	120.2172	Eriachne aristidea
Mollemans	1987-02-24	-23.4022	119.7014	Triodia wiseana
Leeuwen, S	1998-08-19	-23.3311	120.0197	Cryptandra monticola
Mitchell, A.	1995-08-27	-22.9447	120.1667	Stemodia viscosa
Craven, L.A	2006-05-01	-23.4647	120.1561	Hibiscus sturtii var. platychlamys

Sweedman	2015-11-29	-23.0975	119.9536	Eucalyptus trivalva
Leitch, E.	2016-08-08	-23.3653	120.3431	Anthobolus leptomerioides
Leitch, E.	2016-08-08	-23.3653	120.3431	Aristida contorta
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus squarrosus
Obbens, F.	2004-05-30	-22.9639	120.1933	Calandrinia quadrivalvis
Mollemans	1987-02-27	-23.3961	119.7056	Triodia wiseana
Mitchell, A.	2016-05-01	-23.2739	119.6261	Typha domingensis
Craven, L.A	2006-05-02	-23.5361	120.3258	Hibiscus sturtii var. sturtii
Sweedman	2015-11-29	-23.0975	119.9536	Eucalyptus trivalva
Cowie, I.D.	2006-05-06	-23.3525	119.8111	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Benyon, J.	1981-08-29	-23.35	119.7333	Gompholobium polyzygum
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus iria
Leeuwen, S	1998-08-19	-23.2953	119.7867	Eriachne lanata
Wilson, K.L	2006-05-04	-22.9506	120.28	Schoenoplectiella laevis
Benyon, J.	1981-08-29	-23.35	119.7333	Bonamia erecta
Lazarides, M	1992-04-14	-23.3	119.6833	Triodia wiseana
Van Leeuw	1998-08-19	-23.3297	120.0208	Scaevola parvifolia subsp. pilbarae
Burbidge, M	1958-05-07	-23.1167	120.15	Nicotiana simulans
Mollemans	1987-02-24	-23.4	119.7	Triodia pascoeana
Beauglehol	1974-08-18	-23.1667	119.9	Sclerolaena diacantha
George, A.S	1960-08-21	-23.7	120.3	Goodenia vilmoriniae
Larsen, E.	1964-08-04	-23.0833	120.1	Corymbia hamersleyana
Leitch, E.	2016-08-04	-23.3661	120.3442	Panicum decompositum
Beauglehol	1974-08-19	-23.65	119.7333	Maireana tomentosa subsp. tomentosa
Foreman, D	1985-11-28	-23.6	119.7	Calytrix nematoclada
Walker, K.	1980-08-03	-23.35	119.7167	Ixiochlamys cuneifolia
Stacey, C.I.	1980-08-09	-23.0667	119.9667	Newcastelia hexarrhena
Wilson, K.L	2006-05-03	-23.3853	120.4578	Bulbostylis turbinata
Leitch, E.	2016-08-08	-23.3653	120.3431	Gomphrena kanisii
Maier, M.	2003-08-27	-23.3664	120.1275	Hibiscus sp. Gurinbiddy Range (M.E.Trudgen 15708)
Foreman, D	1985-11-28	-23.6	119.7	Calytrix nematoclada
Pringle, H.J	1995-08-29	-23.5203	120.3308	Calandrinia stagnensis
Short, P.S.	1995-08-26	-23.7	119.7333	Rhodanthe sterilescens
Leitch, E.	2016-08-08	-23.3019	120.2172	Goodenia triodiophila
Mollemans	1987-02-24	-23.3719	119.7192	Triodia wiseana
Beauglehol	1974-08-19	-23.6333	119.7167	Sclerolaena cuneata
Herwijnen,	2016-05-01	-23.3028	119.8608	Lepidium pedicellosum
Walker, K.	1980-08-06	-23.65	119.7833	Ptilotus polystachyus
Eichler, Hj.	1985-08-22	-23.5167	119.7667	Velleia connata
Obbens, F.	2004-05-30	-23.1139	120.51	Calandrinia ptychosperma
Mitchell, A.	1996-05-06	-23.1608	119.9736	Digitaria brownii
Benyon, J.	1981-08-29	-23.35	119.7333	Grevillea juncifolia subsp. juncifolia
Pringle, H.J	1995-08-29	-23.4953	120.4414	Iseilema membranaceum
Eichler, Hj.	1985-08-18	-23.6833	119.8167	Roepera iodocarpa
Walker, K.	1980-08-04	-23.3514	119.73	Lepidium platypetalum
Obbens, F.	2004-05-30	-22.9639	120.1933	Calandrinia quadrivalvis
Leitch, E.	2016-08-08	-23.3019	120.2172	Diplopeltis stuartii var. stuartii
Leitch, E.	2016-08-08	-23.3653	120.3431	Cymbopogon obtectus
Mitchell, A.	1995-08-29	-23.4953	120.4414	Chrysocephalum gilesii
Walker, K.	1980-08-05	-23.5833	119.65	Ptilotus rotundifolius

Walker, K.	1980-08-2(	-23.35	119.75	Ptilotus incanus
Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus iria
Maslin, B.R	2006-08-1(	-23.3856	120.2675	Acacia catenulata subsp. occidentalis
Leitch, E.	2016-08-08	-23.3653	120.3431	Cenchrus ciliaris
Walker, K.	1980-08-1(	-23.3514	119.73	Sida sp. Excedentifolia (J.L.Egan 1925)
Burbidge, N	1958-05-07	-23.2833	120.3	Eriachne mucronata
Leeuwen, S	1998-08-19	-23.2964	119.7853	Eucalyptus kingsmillii subsp. kingsmillii
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus solanifolius
Leitch, E.	2016-08-08	-23.3019	120.2172	Petalostylis cassioides
Walker, K.	1980-07-31	-23.5167	119.75	Abutilon lepidum
Walker, K.	1980-08-21	-23.2461	120.0147	Scaevola spinescens
Maslin, B.R	2006-08-1(	-23.3897	120.5164	Acacia walkeri
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus burtonii
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus sturtii var. sturtii
Cowie, I.D.	2006-05-06	-23.365	119.7631	Tephrosia sp. Clay soils (S.van Leeuwen et al. PBS 0273)
Walker, K.	1977-02-24	-23.3667	119.7	Acacia monticola
Bean, A.R.	2006-05-03	-23.3283	120.2725	Solanum sturtianum
Eichler, Hj.	1985-08-22	-23.5167	119.7667	Trigastrotheca molluginea
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus solanifolius
Leeuwen, S	1998-08-19	-23.2964	119.7853	Solanum centrale
Beauglehol	1974-08-18	-23.2	119.9	Ptilotus aervoides
Burbidge, N	1958-05-07	-23.3667	120.3167	Acacia ancistrocarpa
Craven, L.A	2006-05-03	-23.4	120.5	Calandrinia
Thomson, I	1988-11-02	-23.6667	120.0833	Acacia gregorii
Wilson, K.L	2006-05-02	-23.4908	120.3181	Schoenoplectiella laevis
Wilson, K.L	2006-05-04	-23.0481	120.1031	Bulbostylis barbata
Wilson, K.L	2006-05-03	-23.3828	120.45	Haloragis gossei
Burbidge, N	1958-05-07	-23.1833	119.95	Glinus lotoides
Bean, A.R.	2006-05-03	-23.4064	120.5531	Nicotiana rosulata subsp. ingulba
Leitch, E.	2016-08-08	-23.3019	120.2172	Jacksonia aculeata
Demarz, H.	1970-08-13	-23.5667	120.3167	Sida brownii
Leitch, E.	2016-08-08	-23.3019	120.2172	Kennedia prorepens
Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus difformis
Leitch, E.	2016-08-08	-23.3019	120.2172	Goodenia triodiophila
Leitch, E.	2016-08-08	-23.3019	120.2172	Dampiera candicans
Leitch, E.	2016-08-08	-23.3019	120.2172	Diplopeltis stuartii var. stuartii
Leeuwen, S	1998-08-19	-23.2964	119.7853	Triodia pungens
Wilson, K.L	2006-05-03	-23.3828	120.45	Haloragis gossei
Maslin, B.R	2006-08-1(	-23.3856	120.2675	Acacia catenulata subsp. occidentalis
Wilson, K.L	2006-05-02	-23.3731	120.4578	Schoenoplectiella dissachantha
Beauglehol	1974-08-19	-23.35	119.75	Maireana carnosa
Craven, L.A	2006-05-03	-23.3664	120.2731	Hibiscus sturtii var. sturtii
Briggs, B.G.	1970-06-14	-23.8	120.22	Acacia pruinocarpa
Mitchell, A.	1994-03-27	-23.6825	119.7436	Fimbristylis dichotoma
Unknown		-23.8	120.22	Acacia aneura
Briggs, B.G.	1970-06-13	-23.8	120.22	Dysphania kalpari
Cusack, W.A.		-23.08	120.12	Eucalyptus gamophylla
Briggs, B.G.	1970-06-13	-23.8	120.22	Acacia kempeana
Hancock, N	1989-09-27	-23.33	119.75	Acacia citrinoviridis
Hancock, N	1989-09-29	-23.38	119.78	Acacia pachyacra

Lyons, M.N	2005-09-07	-23.3513	120.1907 Spirogyra
Briggs, B.G.	1970-06-13	-23.8	120.22 Acacia tetragonophylla
Briggs, B.G.	1970-06-14	-23.8	120.22 Euphorbia biconvexa
Mitchell, A.	1996-06-22	-23.4597	120.1461 Goodenia
Hancock, M	1989-09-27	-23.33	119.72 Acacia inaequilatera
Chinnock, F	1986-09-05	-22.9	120 Eremophila pilosa
Errington, (	1995-06-28	-23.585	119.7733 Gomphrena kanisii
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Eriachne aristidea
Maslin, B.R	1980-07-07	-23.32	119.65 Acacia bivenosa
Toelken, H.	1979-09-19	-23.32	119.63 Cyperus vaginatus
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Brunonia australis
Brooker, M	1983-07-03	-23.38	119.88 Corymbia candida subsp. candida
Mitchell, A.	1996-06-17	-23.2067	119.8553 Indigofera georgei
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Dicrastylis
Grace, J. | I	1993-09-29	-23.18	119.85 Glycine canescens
Brooker, M	1983-07-03	-23.38	119.88 Eucalyptus camaldulensis subsp. obtusa
Nordenstar	1989-10-05	-23.5047	119.7786 Streptoglossa decurrens
McDonald,	2001-03-11	-23.2317	119.9128 Eucalyptus
Lyons, M.N	2005-09-07	-23.3513	120.1907 Oedogonium
Mitchell, A.	1996-06-23	-23.7825	120.2114 Goodenia
Errington, (	1995-06-28	-23.585	119.7733 Hakea lorea subsp. lorea
Briggs, B.G.	1970-06-13	-23.78	120.23 Euphorbia tannensis subsp. eremophila
Jobson, R.V	2014-10-19	-23.3037	119.6788 Themeda triandra
Brooker, M	1983-07-03	-23.28	119.7 Corymbia ferriticola
Brooker, M	1983-07-06	-23.25	119.6 Myrtaceae
Briggs, B.G.	1970-06-13	-23.78	120.23 Euphorbia vaccaria var. erucoides
Lullfitz, F.C.J.		-23.58	120.5 Acacia paraneura
Lyons, M.N	2005-04-23	-23.1871	119.6976 Spirogyra fluviatilis
van Leeuw	2000-07-15	-23.32	119.6047 Swainsona leeana
Brooker, M	1983-07-03	-23.33	119.88 Eucalyptus socialis subsp. eucentrica
Davis, H.F.(	1943-05-12	-23.8	120.22 Dactyloctenium radulans
Brooker, M	1983-07-06	-23.25	119.6 Eucalyptus trivalva
Reid, J.E.	2009-10-26	-23.4383	119.7858 Acacia aptaneura
Errington, (	1995-06-28	-23.585	119.7733 Eremophila forrestii
Brooker, M	1983-07-03	-23.3	119.7 Eucalyptus
Brooker, M	1974-04-19	-23.35	119.83 Eucalyptus leucophloia subsp. leucophloia
Payne, A.L.	1996-06-19	-23.4089	119.9811 Goodenia
Johnson, L.	1991-07-29	-23.25	119.67 Eucalyptus xerothermica
Wilson, K.L	2006-05-02	-23.4908	120.3181 Cyperus ixiocarpus
Hill, K.D. | J	1983-11-01	-23.43	119.78 Corymbia candida subsp. candida
Hill, K.D. | J	1983-10-31	-23.33	119.72 Eucalyptus
Brooker, M	1983-07-03	-23.33	119.88 Eucalyptus leucophloia subsp. leucophloia
Brooker, M	1983-07-03	-23.3	119.72 Eucalyptus gamophylla
Brooker, M	1983-07-04	-23.28	119.77 Corymbia deserticola subsp. deserticola
Brooker, M	1983-07-04	-23.45	119.77 Corymbia ferriticola
Mitchell, A.	1996-06-22	-23.3192	119.8708 Ruppia polycarpa
Wilson, K.L	2006-05-02	-23.4908	120.3181 Fimbristylis
Wilson, K.L	2006-05-02	-23.3731	120.4578 Schoenoplectiella dissachantha
Beauglehol	1974-08-19	-23.33	119.75 Maireana carnosa
Brooker, M	1983-07-03	-23.3	119.72 Eucalyptus trivalva

Brooker, M	1991-04-14	-23.28	119.67 Corymbia hamersleyana
Wilson, K.L	2006-05-04	-22.9506	120.28 Schoenoplectiella laevis
Brooker, M	1983-07-04	-23.45	119.77 Corymbia deserticola subsp. deserticola
Jobson, R.V	2014-10-19	-23.3037	119.6788 Themeda triandra
Brooker, M	1983-07-06	-23.45	119.78 Corymbia candida subsp. candida
Pryor, L.D.	1985-08-18	-23.33	119.75 Eucalyptus gamophylla
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus iria
Brooker, M	1983-07-04	-23.27	119.77 Eucalyptus kingsmillii
Nordenstar	1989-10-05	-23.5047	119.7786 Chrysocephalum pterochaetum
Pryor, L.D.	1985-08-18	-23.42	119.78 Eucalyptus victrix
Mitchell, A.	1995-08-27	-23.3517	119.6725 Swainsona decurrens
Brooker, M	1974-04-19	-23.38	119.78 Myrtaceae
Wilson, D.I.	1995-07-31	-23.3314	119.7331 Goodeniaceae
Wilson, K.L	2006-05-04	-23.0481	120.1031 Tribulus macrocarpus
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus ixiocarpus
Burbidge, N	1958-05-07	-23.17	120.17 Acacia coriacea subsp. pendens
Brooker, M	1983-07-03	-23.35	119.73 Corymbia hamersleyana
Wilson, K.L	2006-05-01	-23.4089	120.1367 Tribulus astrocarpus
Pryor, L.D.	1985-08-18	-23.33	119.75 Eucalyptus
Wilson, K.L	2006-05-04	-23.0481	120.1031 Bulbostylis barbata
Maslin, B.R	2004-05-30	-23.1147	120.51 Acacia subcontorta
Beauglehol	1974-08-18	-23.15	119.92 Euphorbia boophthona
Wilson, K.L	2006-05-02	-23.3731	120.4578 Schoenoplectiella laevis
Wilson, K.L	2006-05-02	-23.3586	120.4592 Grevillea wickhamii
Brooker, M	1983-07-04	-23.27	119.77 Corymbia hamersleyana
Wilson, K.L	2006-05-01	-23.4089	120.1367 Tribulus astrocarpus
Wilson, D.I.	1995-07-31	-23.3314	119.7331 Gomphrena kanisii
Wilson, K.L	2006-05-04	-23.0481	120.1031 Euphorbia
Beauglehol	1974-08-18	-23.13	119.9 Dysphania rhadinostachya subsp. rhadinostachya
Wilson, K.L	2006-05-02	-23.4686	120.1908 Bulbostylis barbata
Fensom, G.	1995-07-31	-23.3314	119.7331 Ptilotus nobilis subsp. nobilis
Wilson, K.L	2006-05-04	-23.0481	120.1031 Tribulus macrocarpus
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia bivenosa
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus bifax
Wilson, K.L	2006-05-03	-23.29	120.1911 Fimbristylis simulans
Wilson, D.I.	1995-07-31	-23.5219	119.7675 Chrysocephalum pterochaetum
Wilson, K.L	2006-05-03	-23.3828	120.45 Haloragis gossei
Bean, A.R.	2006-05-03	-23.365	120.2744 Scaevola spinescens
Wilson, K.L	2006-05-01	-23.4089	120.1367 Polycarpaea corymbosa
Wilson, K.L	2006-05-02	-23.3642	120.3139 Cyperus betchei subsp. commiscens
Wilson, K.L	2006-05-02	-23.4908	120.3181 Cyperus iria
Armitage, I	1973-08-03	-23.35	119.73 Acacia coolgardiensis
Mitchell, A.	1995-08-29	-23.5203	120.3308 Indigofera georgei
Wilson, K.L	2006-05-02	-23.4908	120.3181 Cyperus ixiocarpus
Beauglehol	1974-08-19	-23.65	119.75 Maireana melanocoma
Beauglehol	1974-08-18	-23.13	119.9 Sclerolaena costata
Mickle, D.A	2006-05-23	-23.3513	120.1907 Mougeotia
Wilson, K.L	2006-05-02	-23.4908	120.3181 Cyperus difformis
Beauglehol	1974-08-18	-23.13	119.9 Maireana planifolia
Hill, K.D. |	1983-10-31	-23.33	119.72 Eucalyptus

Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus betchei subsp. commiscens
Davis, H.F.(	1943-05-12	-23.8	120.22	Sclerolaena cornishiana
Mitchell, A.	1995-08-28	-22.9447	120.1667	Goodenia microptera
Wilson, K.L	2006-05-03	-23.3817	120.2536	Tribulus suberosus
Wilson, K.L	2006-05-02	-23.3731	120.4578	Phyllanthaceae
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus squarrosus
Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus dactylotes
Hill, K.D. | J	1983-10-31	-23.32	119.63	Corymbia hamersleyana
Wilson, K.L	2006-05-02	-23.3731	120.4578	Fimbristylis microcarya
Mickle, D.A	2006-05-23	-23.3513	120.1907	Oedogonium
Short, P.S.	1995-08-26	-23.6314	119.7597	Rhodanthe charsleyae
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus difformis
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus rigidellus
Wilson, K.L	2006-05-07	-23.3153	119.6325	Bulbostylis turbinata
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus vaginatus
Beauglehol	1974-08-18	-23.13	119.9	Maireana georgei
Beauglehol	1974-08-19	-23.35	119.78	Atriplex vesicaria
Maslin, B.R	1982-05-22	-23.37	119.72	Acacia ptychophylla
Wilson, K.L	2006-05-03	-23.3828	120.45	Dysphania kalpari
Wilson, K.L	2006-05-02	-23.4908	120.3181	Schoenoplectiella laevis
Wilson, K.L	2006-05-03	-23.3828	120.45	Haloragis gossei
Wilson, K.L	2006-05-02	-23.3661	120.4147	Fimbristylis dichotoma
van Leeuw	1998-08-19	-23.3297	120.0208	Chrysocephalum pterochaetum
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus rigidellus
Wilson, K.L	2006-05-02	-23.4686	120.1908	Lipocarpha microcephala
Cowie, I.D.	2006-05-06	-23.365	119.7631	Tephrosia
Wilson, K.L	2006-05-02	-23.4686	120.1908	Fimbristylis
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus iria
Mitchell, A.	1995-08-29	-23.4083	120.5725	Goodenia lamprosperma
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus squarrosus
Short, P.S.	1995-08-26	-23.7033	119.74	Rhodanthe sterilescens
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus bifax
Mickle, D.A	2006-05-23	-23.3513	120.1907	Mougeotia
Armitage, I.B.		-23.35	119.73	Acacia ligulata
Wilson, K.L	2006-05-03	-23.3853	120.4578	Bulbostylis turbinata
Mitchell, A.	1995-08-29	-23.4953	120.4414	Goodenia microptera
Wilson, K.L	2006-05-01	-23.4089	120.1367	Euphorbiaceae
Mickle, D.A	2006-05-23	-23.3513	120.1907	Spirogyra
Mitchell, A.	1995-08-29	-23.4953	120.4414	Velleia hispida
Bean, A.R.	2006-05-02	-23.4947	120.3206	Swainsona decurrens
Walker, K.	1983-12-05	-23.25	120	Corymbia ferriticola
Edwards, T	2008-06-16	-23.6047	120.1669	Gossypium hirsutum
Edwards, T	2008-06-16	-23.6052	120.1748	Acacia synchronicia
Lyons, M.N	2016-03-11	-22.9803	120.247	Rostellularia adscendens var. clementii
Morrissey, J.G.		-22.8997	120.1667	Triraphis mollis
Mollemans	1987-03-07	-23.3167	119.8892	Amyema preissii
Barrett, M.	2013-03-15	-23.2667	119.6275	Triodia angusta
Bull, C.; Car	2006-03-21	-23.301	119.79	Sida sp. Shovelanna Hill (S.van Leeuwen 3842)
Chinnock, F	2011-09-01	-23.3572	119.7564	Goodenia stobbsiana
Tomanovic	2013-09-03	-23.4061	120.0626	Goodenia

Bull, J.; Rok	2013-03-22	-23.3	120	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Lyons, M.N	2016-03-11	-22.9803	120.247	Centipeda crateriformis subsp. crateriformis
Grace, J.; B	1993-09-29	-23.1833	119.85	Glycine canescens
Royce, R.D.	1947-06-05	-22.8997	120.1667	Panicum laevinode
Mitchell, A.	1996-06-23	-23.7203	120.1272	Triodia schinzii
Walker, K.	1991-09-17	-23.3833	120.2	Eremophila lanceolata
Beauglehol	1978-09-10	-23.6167	119.7667	Ptilotus aervoides
Walker, K.		-23.3667	119.7	Acacia maitlandii
Mitchell, A.	1994-03-28	-23.3022	119.6089	Dysphania melanocarpa
Lyons, M.N	2016-03-11	-22.9803	120.247	Acacia tetragonophylla
Bull, J.; Rok	2014-09-12	-23.2975	120.0857	Acacia corusca
Sweedman	1995-06-28	-23.5872	119.7731	Gomphrena kanisii
Mollemans	1987-03-01	-23.2956	119.6706	Sida sp. L (A.M.Ashby 4202)
Bull, J.; Car	2006-03-18	-23.3141	119.8263	Chrysocephalum pterochaetum
Edwards, T	2008-06-16	-23.6047	120.1669	Abutilon fraseri
Walker, K.	1983-12-04	-23.3667	119.7	Acacia pruinocarpa
Rogerson, W.		-23.1136	120.1733	Diplopeltis stuartii var. stuartii
Lyons, M.N	2016-03-11	-22.9803	120.247	Solanum austropiceum
Erickson, T.	2010-12-13	-23.2758	119.6108	Trachymene oleracea subsp. oleracea
Mitchell, A.	1995-08-31	-22.9642	120.3656	Sclerolaena gardneri
Albrecht, D	2004-09-02	-23.3	119.6	Goodenia sp. East Pilbara (A.R.Mitchell PRP 727) WA Herbari
Walker, K.		-23.3667	119.7	Corymbia candida
Barrett, M.	2013-03-15	-23.2667	119.6275	Triodia vanleeuwenii
Cole, A.	2012-09-20	-23.3531	119.8038	Stenopetalum velutinum
Erickson, T.	2008-05-31	-23.3464	119.7439	Convolvulus clementii
Mitchell, A.	1996-06-21	-23.4217	120.5525	Eremophila forrestii subsp. inland (A.A.Mitchell PRP 1175)
Beauglehol	1978-09-10	-23.6167	119.7667	Eremophila margarethae
Stewart, A.		-23.5	120.3667	Panicum
Love, M.	2006-03-28	-23.3	119.8	Gymnanthera cunninghamii
Walker, K.		-23.3667	119.7	Acacia coriacea subsp. pendens
Walker, K.		-23.3667	119.7	Indigofera monophylla
Maier, M.		-23.3	119.7	Lepidium catapycnon
Erickson, T.	2008-05-31	-23.3464	119.7439	Aristida latifolia
French, M.	2001-06-05	-23.2964	119.6691	Corymbia opaca
Mitchell, A.	1994-03-28	-23.2967	119.6136	Triodia pungens
Mitchell, A.	1996-06-22	-23.4597	120.1461	Cheilanthes lasiophylla
Webb, C.	2011-06-02	-23.3	119.7	Lepidium catapycnon
Walker, K.		-23.3667	119.7	Senna artemisioides subsp. filifolia
Walker, K.		-23.3667	119.7	Plumbago zeylanica
Erickson, T.	2008-12-22	-23.3	119.7	Lepidium catapycnon
Albrecht, D	2004-09-02	-23.3139	119.6339	Sclerolaena densiflora
McCreery,	2013-08-31	-23.4033	120.0517	Sclerolaena lanicuspis
Walker, K.		-23.3667	119.7	Trichodesma zeylanicum
Rose, K.	2011-03-24	-22.9	120.1	Eremophila pilosa
Walker, K.		-23.3667	119.7	Calytrix carinata
Walker, K.	1991-09-23	-23.3667	119.7	Peplidium
Walker, K.		-23.3667	119.7	Solanum lasiophyllum
Morrissey, J.G.		-23.3333	119.7667	Eulalia aurea
Albrecht, D	2004-09-02	-23.3139	119.6339	Swainsona leeana
Walker, K.		-23.3667	119.7	Haloragis gossei

Walker, K.		-23.3667	119.7	Eucalyptus leucophloia subsp. leucophloia
Love, M.	2006-03-21	-23.3175	119.8725	Trianthema triquetrum
Walker, K.		-23.3667	119.7	Goodenia prostrata
Edwards, T	2008-06-16	-23.6047	120.1669	Acrachne racemosa
Simpson, E.S.		-23.5	120.3664	Ptilotus rotundifolius
Tomanovic	2012-09-20	-23.3438	119.827	Vigna sp. Hamersley Clay (A.A.Mitchell PRP 113)
Bull, J.; Car	2006-03-22	-23.2887	119.77	Senna venusta
Kaljuste, D.	1987-06-22	-23.2561	120.0169	Eragrostis dielsii
Walker, K.		-23.3667	119.7	Eremophila latrobei subsp. latrobei
Bailey, E.T.		-22.9617	119.9533	Acacia trachycarpa
Walker, K.		-23.3667	119.7	Calytrix carinata
Walker, K.		-23.3667	119.7	Eremophila exilifolia
Lyons, M.N	2016-03-11	-22.9803	120.247	Cenchrus setiger
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Foote, N.		-23.35	119.7333	Rhodanthe margarethae
Edinger, D.		-23.2667	119.6167	Genus
C.F. Wilkins	2002-09-09	-23.2822	119.6208	Androcalva luteiflora
Lyons, M.N	2016-03-11	-22.9803	120.247	Cenchrus ciliaris
Walker, K.		-23.3667	119.7	Ptilotus calostachyus
Chinnock, F	2011-09-02	-23.3	120	Goodenia hartiana
Albrecht, D	2004-09-03	-23.6919	119.7733	Olearia xerophila
Stewart		-23.5	120.3664	Evolvulus alsinoides var. villosicalyx
Mitchell, A.	1994-03-27	-23.6825	119.7436	Enneapogon polyphyllus
Morrissey, J.G.		-22.8997	120.1667	Cynodon prostratus
Mollemans	1987-03-08	-23.3033	119.7047	Triodia vanleeuwenii
Lyons, M.N	2016-03-11	-22.9803	120.247	Eucalyptus victrix
Mitchell, A.	1996-06-22	-23.4597	120.1461	Lepidium oxytrichum
Barrett, M.	2013-03-15	-23.2092	119.9046	Triodia longiceps
Morrissey, J.G.		-22.9	120.1667	Triraphis mollis
McCreery,	2013-08-31	-23.4033	120.0517	Abutilon oxycarpum subsp. Prostrate (A.A.Mitchell PRP 1266)
Simpson, E.		-23.5	120.4	Seringia exastia
Walker, K.		-23.3667	119.7	Cheilanthes sieberi subsp. sieberi
Lyons, M.N	2016-03-11	-22.9803	120.247	Alternanthera denticulata
Lyons, M.N	2016-03-11	-22.9803	120.247	Cucumis
Casson, N.;	1995-09-04	-23.275	119.6083	Acacia bivenosa
Bull, J.; Car	2006-03-18	-23.2969	119.7987	Fimbristylis dichotoma
Mitchell, A.	1995-08-31	-22.9561	120.2819	Polypogon monspeliensis
Bull, J.; Car	2006-03-18	-23.2969	119.7987	Schizachyrium fragile
Bailey, E.T.		-23.1758	120.2381	Senna notabilis
Casson, N.E	1995-09-04	-23.2737	119.6097	Ptilotus schwartzii
Walker, K.	1980-09-10	-23.3	119.8664	Acacia victoriae
Lyons, M.N	2016-03-11	-22.9803	120.247	Eriochloa pseudoacrotricha
Casson, N.;	1995-09-04	-23.275	119.6083	Abutilon otocarpum
Casson, N.E	1995-09-04	-23.275	119.6083	Acacia rhodophloia
Kaljuste, D.	1987-06-22	-23.2525	120.0178	Boerhavia coccinea
Albrecht, D	2004-09-03	-23.6919	119.7733	Dodonaea pachyneura
Bailey, E.T.		-23.1758	120.2381	Dicrastylis cordifolia
Mollemans	1987-03-05	-23.4008	119.705	Glycine
George, A.S	1962-03-04	-23.1833	119.9136	Ptilotus aphyllus
Casson, N.E	1995-09-04	-23.275	119.6083	Haloragis maierae

Henson, M	2008-09-27	-23.3606	120.2046	Acacia balsamea
Casson, N.E	1995-09-04	-23.275	119.6083	Calandrinia reticulata
Walker, K.		-23.2525	120.0178	Rumex vesicarius
Maier, M.	2000-09-28	-23.2982	119.7812	Eriachne lanata
Bailey, E.T.		-23.1758	120.2381	Petalostylis cassioides
Walker, K.	1991-09-17	-23.3667	120.2167	Seringia nephrosperma
Gardner, C.A.		-23.5	120.3664	Newcastelia hexarrhena
Albrecht, D	2004-09-03	-23.6919	119.7733	Astrotricha hamptonii
Walker, K.	1991-09-23	-23.2008	120.0753	Eulalia aurea
Walker, K.	1991-09-17	-23.3667	120.2	Roebuckiella similis
Barrett, M.	2013-03-15	-23.3751	119.782	Triodia angusta
Albrecht, D	2004-09-02	-23.3139	119.6339	Streptoglossa sp. Cracking clays (S.van Leeuwen et al. PBS 73
Bailey, E.T.		-23.1758	120.2381	Cajanus marmoratus
Mitchell, A.	1994-03-27	-23.3606	119.73	Iseilema membranaceum
Mitchell, A.	1996-06-22	-23.4597	120.1461	Solanum cleistogamum
Walker, K.	1991-09-17	-23.3667	120.2	Rhodanthe floribunda
Mitchell, A.	1994-03-27	-23.3606	119.73	Neptunia dimorphantha
Walker, K.	1991-09-17	-23.3667	120.2	Aristida contorta
Mitchell, A.	1996-06-20	-23.5	120.5	Eremophila capricornica
Casson, N.E	1995-09-04	-23.275	119.6083	Acacia maitlandii
Mitchell, A.	1994-03-27	-23.3606	119.73	Eremophila lanceolata
Bailey, E.J.		-23.8	120.0833	Indigofera monophylla
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Mitchell, A.	1995-08-31	-22.9136	120.1747	Ptilotus gomphrenoides
Albrecht, D	2004-09-02	-23.3139	119.6339	Calotis plumulifera
Bull, J.; Rob	2013-03-22	-23.3	120	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Albrecht, D	2004-09-02	-23.3139	119.6339	Senna hamersleyensis
Walker, K.	1991-09-23	-23.3333	120.2333	Euphorbia boophthona
Pringle, H.J	1994-03-27	-23.3606	119.73	Aristida latifolia
Mollemans	1987-03-02	-23.4044	119.6889	Amyema fitzgeraldii
Lyons, M.N	2016-03-11	-22.9803	120.247	Chrysopogon fallax
Mitchell, A.	1995-08-31	-22.9561	120.2819	Calocephalus knappii
Tomanovic	2012-09-20	-23.4	119.9	Goodenia sp. East Pilbara (A.R.Mitchell PRP 727) WA Herbariu
Bull, J.; Rob	2013-03-25	-23.3	120	Isotropis parviflora
Mitchell, A.	1994-03-27	-23.3606	119.73	Euphorbia coghlanii
Bull, J.; Rob	2013-03-23	-23.3337	120.011	Aenictophyton reconditum subsp. macrophyllum
Love, M.	2006-03-28	-23.3097	119.855	Sida sp. Pilbara (A.A.Mitchell PRP1543)
Mitchell, A.	1994-03-27	-23.6825	119.7436	Triraphis mollis
Lyons, M.N	2016-03-11	-22.9803	120.247	Eragrostis cumingii
Bull, J.; Rob	2013-03-21	-23.32	119.9822	Acacia arida
Bailey, E.T.		-23.1758	120.2381	Solanum elatius
Bull, J.; Rob	2013-03-23	-23.3	120	Isotropis parviflora
Cole, A.	2012-09-20	-23.3438	119.827	Centipeda minima subsp. macrocephala
H.F. & M. B	1954-06-05	-22.9092	119.955	Eucalyptus lucasii
Bull, J.; Rob	2014-09-10	-23.3026	120.1766	Sida kingii
Mitchell, A.	1994-03-27	-23.6825	119.7436	Setaria dielsii
Lyons, M.N	2016-03-11	-22.9803	120.247	Cleome viscosa
Bull, J.; Car	2006-03-23	-23.3141	119.8148	Sida echinocarpa
Mitchell, A.	1994-03-27	-23.6825	119.7436	Enneapogon avenaceus
Bull, J.; Rob	2013-03-20	-23.3	120	Isotropis parviflora

Lander, N.S	1981-09-23	-23.1833	119.9167	Acacia synchronicia
Lyons, M.N	2016-03-11	-22.9803	120.247	Tribulus occidentalis
Walker, K.		-23.3667	119.7	Gompholobium oreophilum
Mitchell, A.	1994-03-27	-23.6825	119.7436	Fimbristylis
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Mollemans	1987-03-01	-23.285	119.6608	Bulbostylis barbata
Young, J.	1999-06-23	-23.1153	119.6347	Ptilotus aervoides
Albrecht, D	2004-09-02	-23.3139	119.6339	Sida sp. (Small Flower)
Carroll, E.	2006-03-22	-23.3175	119.8725	Synostemon rhytidospermus
Lyons, M.N	2016-03-11	-22.9803	120.247	Setaria dielsii
Walker, K.	1991-09-23	-23.3667	119.7	Poaceae
Mollemans	1987-03-07	-23.29	119.7583	Solanum centrale
Mitchell, A.	1996-06-22	-23.4597	120.1461	Goodenia muelleriana
Mitchell, A.	1994-03-27	-23.3606	119.73	Ptilotus carinatus
Walker, K.	1980-09-03	-23.35	119.7333	Hakea preissii
Albrecht, D	2004-09-02	-23.3139	119.6339	Ptilotus carinatus
Love, M.	2006-03-21	-23.3175	119.8725	Panicum australiense var. australiense
George, A.S	1962-03-04	-23.8	120.0833	Eremophila margarethae
Walker, K.		-23.3667	119.7	Petalostylis labicheoides
Bull, J.	2014-12-17	-23.351	119.7386	Cyperus tenuiflorus
Mollemans	1987-03-05	-23.4008	119.705	Eremophila fraseri subsp. fraseri
Bull, J.; Car	2006-03-17	-23.295	119.7853	Corchorus lasiocarpus subsp. parvus
Foote, N.		-23.35	119.7333	Rhodanthe polakii
Casson, N.E	1995-09-04	-23.275	119.6083	Sida arenicola
Mitchell, A.	1996-06-22	-23.4597	120.1461	Corchorus lasiocarpus subsp. lasiocarpus
Ajduk, H.	2011-06-01	-23.4	119.6	Calotis latiuscula
Walker, K.	1991-09-23	-23.3667	119.7	Poaceae
Bull, J.; Rob	2013-03-25	-23.3	120	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Mitchell, A.	1994-03-28	-23.3022	119.6089	Ptilotus gaudichaudii
Mitchell, A.	1995-08-31	-22.9725	120.3794	Eremophila lanceolata
French, M.	2001-06-06	-23.0139	120.4127	Corymbia aspera
Cole, A.	2011-03-16	-23.4019	120.0756	Alloteropsis cimicina
Love, M.	2006-03-21	-23.3175	119.8725	Eriachne obtusa
Chinnock, F	2011-09-16	-23.3533	119.7525	Goodenia lamprosperma
Maier, M.	1996-03-25	-23.3275	120.0481	Triumfetta maconochieana
Erickson, T.	2008-06-10	-23.3344	119.7351	Goodenia triodiophila
Walker, K.		-23.3667	119.7	Acacia citrinoviridis
Erickson, T.	2010-12-10	-23.3232	119.7546	Corchorus crozophorifolius
Erickson, T.	2010-12-13	-23.3662	119.7196	Eucalyptus leucophloia subsp. leucophloia
Payne, A.L.	1996-06-19	-23.5022	120.0828	Tephrosia rosea var. Fortescue creeks (M.I.H.Brooker 2186)
Tomanovic	2012-09-20	-23.3407	119.8441	Fimbristylis microcarya
Walker, K.	1983-06-28	-23.35	119.7333	Acacia dictyophleba
Young, J.	1999-06-23	-23.1333	119.6333	Ptilotus helipteroides
Bull, J.; Rob	2013-03-20	-23.3	120	Isotropis parviflora
Casson, N.E	1995-09-04	-23.275	119.6083	Acacia rhodophloia
Young, J.	1999-06-21	-23.132	119.6847	Polycarpaea longiflora
McIntyre, F	2007-06-24	-23.3867	120.106	Corchorus sidoides
Ryan, P.		-23.3281	120.0181	Acacia sp. (NEQ)
Erickson, T.	2008-06-09	-23.3161	119.7782	Eragrostis eriopoda
Walker, K.	1980-09-10	-23.35	119.7333	Frankenia setosa

Ajduk, H.	2011-05-31	-23.3	119.7	Eremophila magnifica subsp. magnifica
Mitchell, A.	1996-06-22	-23.4597	120.1461	Sida brownii
Edwards, T	2008-06-16	-23.6026	120.1727	Euphorbia coghlanii
Payne, A.L.	1996-06-17	-23.1853	119.6419	Stenopetalum decipiens
Young, J.	1999-06-23	-23.132	119.6347	Maireana
Bull, J.; Rob	2013-03-24	-23.34	119.9896	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Henson, M	2008-09-27	-23.3607	120.2046	Frankenia
Mollemans	1987-03-02	-23.4044	119.6889	Euploca tanythrix
Edwards, T	2010-03-03	-23.3	119.8	Gymnanthera cunninghamii
Williams, A	2008-09-24	-23.3978	120.2101	Frankenia
Mollemans	1987-03-05	-23.3842	119.7167	Zygophyllaceae
Foster, J.; D	2008-12-03	-23.4017	120.5125	Synostemon rhytidospermus
Walker, K.	1983-06-28	-23.3514	119.73	Senna artemisioides subsp. helmsii
Young, J.	1999-06-21	-23.132	119.6847	Corchorus laniflorus
Mollemans	1987-03-02	-23.4011	119.7111	Myrtaceae
Carroll, E.	2006-03-27	-23.3183	119.8544	Tribulus macrocarpus
Bull, J.; Rob	2014-09-07	-23.3335	120.1823	Eragrostis speciosa
Mitchell, A.	1994-03-28	-23.3022	119.6089	Enneapogon polyphyllus
Walker, K.	1991-09-17	-23.3667	120.2167	Acacia pachyacra
Walker, K.		-23.3667	119.7	Ptilotus aervoides
Deighton, M	1982-12-01	-23.3514	119.73	Cheilanthes sieberi subsp. sieberi
Mollemans	1987-03-01	-23.3333	119.6892	Operculina aequisepala
Casson, N.E	1995-09-04	-23.275	119.6083	Wahlenbergia tumidifructa
Mollemans	1987-03-01	-23.32	119.6656	Triodia wiseana
Carroll, E.	2006-03-21	-23.3175	119.8725	Xerochloa imberbis
Williams, A	2008-09-24	-23.3978	120.2101	Frankenia setosa
Alford, J.J.	1987-06-09	-23.3167	119.7833	Mitrasacme connata
WAlker, K.		-23.3667	119.7	Acacia adoxa var. adoxa
Deighton, M	1983-03-18	-23.3514	119.73	Eragrostis lanipes
Young, J.	1999-06-21	-23.132	119.6847	Trichodesma zeylanicum
Mollemans	1987-03-07	-23.2953	119.6725	Amyema bifurcata
Bull, J.	2014-12-17	-23.3508	119.739	Symphyotrichum squamatum
Love, M.	2006-03-27	-23.3	119.85	Enneapogon caerulescens
Mitchell, A.	1995-08-31	-23	120.4	Eremophila youngii subsp. lepidota
Briggs, B.G.	1970-06-14	-23.7167	120.1167	Eremophila forrestii subsp. forrestii
Walker, K.		-23.3667	119.7	Senna glutinosa subsp. glutinosa
Deighton, M.K.		-23.3514	119.73	Ptilotus gomphrenoides
Chinnock, F	2009-06-05	-23.3192	119.7706	Scrophulariaceae
Bull, J.; Car	2006-03-23	-23.3141	119.8148	Hibiscus haynaldii
Kaljuste, D.	1988-06-29	-23.35	119.75	Sida fibulifera
Mitchell, A.	1996-06-23	-23.6731	120.095	Eremophila fraseri subsp. fraseri
Casson, N.;	1995-09-04	-23.275	119.6083	Acacia sibirica
Mitchell, A.	1996-06-21	-23.3925	120.5211	Senna sericea
Love, M.	2006-03-27	-23.3183	119.8544	Abutilon sp. Pilbara (W.R.Barker 2025)
Walker, K.	1980-09-10	-23.3514	119.73	Acacia melleodora
Deighton, M.K.		-23.35	119.7333	Triodia vanleeuwenii
Walker, K.	1983-06-28	-23.35	119.7333	Acacia tetragonophylla
Tomanovic	2012-03-18	-23.2	119.8	Goodenia nuda
Bull, J.; Rob	2014-09-10	-23.2957	120.1817	Fimbristylis elegans
Casson, N.E	1995-09-04	-23.275	119.6083	Acacia ancistrocarpa

Mitchell, A.	1996-06-21	-23.3925	120.5211	Acacia walkeri
Mcdonald,	2001-03-11	-23.2317	119.9128	Eucalyptus
Walker, K.	1980-06-15	-23.3514	119.73	Dampiera candicans
Deighton, M	1982-03-18	-23.3514	119.73	Iseilema vaginiflorum
Young, J.	1999-06-21	-23.132	119.6847	Goodenia connata
Craig, A.		-23.3514	119.73	Eremophila lachnocalyx
Walker		-23.3667	119.7833	Acacia dictyophleba
Walker, K.		-23.3667	119.7	Goodenia stobbsiana
Young, J.	1999-06-21	-23.132	119.6847	Vittadinia virgata
Deighton, M.K.		-23.3514	119.73	Enneapogon caerulescens
Mitchell, A.	1977-05-31	-23.3514	119.73	Alternanthera nodiflora
Deighton, M.K.		-23.3514	119.73	Senna artemisioides subsp. oligophylla
Young, J.	1999-06-21	-23.132	119.6847	Indigofera monophylla
Mitchell, A.	1977-05-31	-23.3514	119.73	Urochloa piligera
Walker, K.	1991-09-22	-23.3539	120.2614	Chrysopogon fallax
Walker, K.	1983-06-28	-23.3667	119.7	Cenchrus ciliaris
Mollemans	1987-03-07	-23.3283	119.745	Maireana georgei
Foote, N.		-23.3514	119.73	Rhodanthe margarethae
Mitchell, A.	1977-05-31	-23.3514	119.73	Amaranthus undulatus
Walker, K.	1980-12-22	-23.3833	120.1833	Vigna lanceolata var. lanceolata
Hyland, B.	2004-06-26	-23.382	119.768	Corymbia candida subsp. candida
Walker, K.	1981-12-06	-23.2342	119.9314	Melaleuca glomerata
Lyons, M.N	2016-03-11	-22.9803	120.247	Bidens bipinnata
Walker, K.	1980-06-15	-23.25	120.0167	Brunonia australis
Walker, K.	1983-06-28	-23.35	119.7333	Acacia bivenosa
Walker, K.	1980-06-15	-23.3514	119.73	Gomphrena cunninghamii
Walker, K.	1980-06-15	-23.3514	119.73	Roepera eichleri
Walker, K.		-23.3514	119.73	Setaria verticillata
Walker, K.	1980-12-18	-23.3514	119.73	Corymbia candida
Walker, K.	1980-09-10	-23.3514	119.73	Hibiscus burtonii
Carroll, E.	2006-03-21	-23.3175	119.8725	Sporobolus actinocladus
Young, J.	1999-06-21	-23.132	119.6847	Cleome viscosa
Mollemans	1987-03-05	-23.3167	119.6892	Scaevola spinescens
Walker, K.	1983-06-28	-23.3514	119.73	Cenchrus ciliaris
Walker, K.	1983-06-28	-23.3514	119.73	Senna artemisioides
Deighton, M	1983-03-18	-23.3514	119.73	Aristida
Mitchell, A.	1977-05-31	-23.3514	119.73	Setaria dielsii
Deighton, M	1982-03-18	-23.3514	119.73	Enneapogon caerulescens
Dr Simpson		-23.5	120.3664	Brunonia australis
Pringle, H.	1995-03-30	-23.0911	120.4608	Dicrastylis cordifolia
Mollemans	1987-03-05	-23.3875	119.7125	Triodia wiseana
Tomanovic	2011-03-12	-23.3179	120.1122	Abutilon macrum
Walker, K.	1983-06-28	-23.3514	119.73	Ptilotus xerophilus
Walker, K.	1980-09-10	-23.3514	119.73	Hibiscus burtonii
Walker, K.	1980-06-15	-23.3514	119.73	Euphorbia biconvexa
Deighton, M.K.		-23.3514	119.73	Euploca heterantha
Love, M.	2006-03-27	-23.3183	119.8544	Flaveria trinervia
Young, J.	1999-06-21	-23.132	119.6847	Nicotiana benthamiana
Deighton, M	1982-03-18	-23.3514	119.73	Eragrostis setifolia
McIntyre, F	2007-06-24	-23.3867	120.106	Eragrostis elongata

Deighton, M	1982-03-18	-23.3514	119.73	Ptilotus gomphrenoides
Walker, K.	1981-03-23	-23.3514	119.73	Codonocarpus cotinifolius
Walker, K.	1983-06-28	-23.3514	119.73	Senna notabilis
Walker, K.		-23.6	119.7	Bonamia erecta
Walker, K.	1983-06-28	-23.3514	119.73	Solanum lasiophyllum
Young, J.	1999-06-21	-23.132	119.6847	Tribulus suberosus
Deighton, M	1983-03-18	-23.3514	119.73	Aristida contorta
Chinnock, F	2004-09-03	-23.3573	119.7747	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Deighton, M.K.		-23.3514	119.73	Euploca heterantha
Walker, K.	1983-06-28	-23.3514	119.73	Senna artemisioides subsp. oligophylla
Walker, K.	1983-06-28	-23.3514	119.73	Ptilotus nobilis subsp. nobilis
Deighton, M.K.		-23.3514	119.73	Enneapogon lindleyanus
Deighton, M	1982-03-14	-23.3514	119.73	Ptilotus gomphrenoides
Young, J.	1999-06-21	-23.132	119.6847	Enneapogon lindleyanus
Deighton, M	1982-03-18	-23.3514	119.73	Paraneurachne muelleri
Walker, K.	1980-06-15	-23.3514	119.73	Brunonia australis
Deighton, M	1982-03-18	-23.3514	119.73	Enneapogon caerulescens
Walker, K.	1980-06-15	-23.3514	119.73	Euphorbia australis var. subtomentosa
Deighton, M	1982-03-18	-23.3514	119.73	Ptilotus carinatus
Erickson, T.	2010-12-10	-23.3246	119.7556	Wahlenbergia tumidifructa
Walker, K.	1981-03-04	-23.3514	119.73	Triodia longiceps
Chinnock, F	2004-09-02	-23.3112	119.6775	Eremophila forrestii subsp. forrestii
French, M.	2001-06-05	-23.2584	119.6147	Corymbia hamersleyana
Walker, K.	1980-09-10	-23.3514	119.73	Streptoglossa odora
Walker, K.		-23.3514	119.73	Setaria dielsii
Nelson, P.	1992-06-22	-23.3514	119.73	Eragrostis leptocarpa
Walker, K.	1980-09-10	-23.3514	119.73	Frankenia setosa
Tomanovic	2011-12-16	-23.3368	120.1162	Evolvulus alsinoides var. decumbens
Walker, K.	1980-09-10	-23.3514	119.73	Dodonaea coriacea
Chinnock, F	2004-09-03	-23.6906	119.7747	Eremophila jucunda subsp. pulcherrima
Young, J.	1999-06-23	-23.132	119.6347	Acacia aptaneura
Edwards, T	2008-06-17	-23.6075	120.1672	Enneapogon caerulescens
Carroll, E.	2011-05-31	-23.3327	119.6456	Goodenia triodiophila
Ecologia	1997-06-17	-23.3158	119.8414	Scaevola acacioides
Walker, K.	1980-06-15	-23.3514	119.73	Euphorbia australis var. subtomentosa
McCreery, K.		-23.4013	120.0413	Maireana pyramidata
Walker, K.	1981-03-12	-23.3514	119.73	Corymbia hamersleyana
Chinnock, F	2004-09-02	-23.3126	119.6352	Rhodanthe floribunda
Deighton, M	1982-03-18	-23.3514	119.73	Cymbopogon ambiguus
Bull, J.; Car	2006-03-16	-23.3103	119.8322	Ptilotus clementii
Bull, J.; Car	2006-03-17	-23.3124	119.8371	Afrohybanthus aurantiacus
Chinnock, F	2009-06-05	-23.3078	119.7964	Scrophulariaceae
Walker, K.	1980-06-15	-23.3514	119.73	Dodonaea coriacea
Rowles, L.	2018-09-17	-23.2	119.6	Indigofera gilesii
Toelken, H.	1979-09-19	-23.3167	119.6333	Rhodanthe margarethae
Mollemans	1987-03-02	-23.3994	119.7097	Triodia angusta
Walker, K.	1983-12-04	-23.3514	119.73	Acacia pruinocarpa
McIntyre, F	2007-06-24	-23.3867	120.106	Triodia schinzii
Bull, J.; Car	2006-03-17	-23.3124	119.8371	Stenopetalum decipiens
Young, J.	1999-06-23	-23.132	119.6347	Acacia maitlandii

Walker, K.	1980-09-1(	-23.3514	119.73	Afrohybanthus aurantiacus
Walker, K.	1980-09-1(	-23.3514	119.73	Acacia pachyacra
Bull, J.; Car	2006-03-1{	-23.314	119.8295	Corchorus lasiocarpus subsp. lasiocarpus
Bull, J.; Car	2006-03-21	-23.3112	119.7979	Fimbristylis simulans
Walker, K.	1980-06-1!	-23.3514	119.73	Amaranthus mitchellii
Young, J.	1999-06-2:	-23.132	119.6347	Acacia bivenosa
Erickson, T.	2010-12-1(	-23.3246	119.7556	Polycarpaea longiflora
Young, J.	1999-06-2:	-23.132	119.6347	Eremophila forrestii subsp. forrestii
Deighton, M.K.		-23.3514	119.73	Tephrosia rosea var. Fortescue creeks (M.I.H.Brooker 2186)
Walker, K.	1980-09-1(	-23.3514	119.73	Afrohybanthus aurantiacus
Bull, J.	2014-12-1{	-23.3508	119.739	Lactuca saligna
Love, M.	2006-03-2{	-23.3058	119.8719	Indigofera colutea
Erickson, T.	2008-05-31	-23.3464	119.7439	Malvastrum americanum
Walker, K.	1983-06-2{	-23.3514	119.73	Senna glutinosa subsp. pruinosa
Carroll, E.	2006-03-2{	-23.3056	119.8583	Sclerolaena minuta
Bull, J.	2014-12-1{	-23.3453	119.7426	Eremophila maculata subsp. maculata
Young, J.	1999-06-2:	-23.132	119.6347	Acacia dictyophleba
Payne, A.L.	1996-06-1!	-23.5172	120.1183	Olearia stuartii
Pringle, H.J	1995-03-2{	-23.3344	119.7828	Cymbopogon ambiguus
Payne, A.L.	1996-06-1{	-23.4861	119.8719	Wurmbea deserticola
Hyland, B.	2004-06-2!	-23.3833	119.75	Diplopeltis stuartii var. stuartii
Payne, A.L.	1996-06-1{	-23.1853	119.6419	Stenopetalum decipiens
Mitchell, A.	1996-06-21	-23.3847	120.4717	Eragrostis elongata
Tomanovic	2013-08-31	-23.4	120	Aristida jerichoensis var. subspinulifera
Young, J.	1999-06-2:	-23.132	119.6347	Eremophila latrobei subsp. filiformis
Hyland, B.	2004-06-2(	-23.382	119.768	Acacia maitlandii
Walker, K.	1980-06-1!	-23.35	119.75	Ptilotus carinatus
Nordenstam, B.; Ande		-23.5403	119.73	Lepidium phlebopetalum
Mollemans	1987-03-01	-23.3025	119.6956	Goodenia microptera
Walker, K.	1980-09-1(	-23.35	119.7333	Grevillea juncifolia subsp. juncifolia
Hall, C.		-23.3514	119.73	Alternanthera pungens
Bull, J.; Car	2006-03-1(	-23.3103	119.8322	Paraneurachne muelleri
Walker, K.	1980-06-1!	-23.3514	119.73	Senna glutinosa subsp. glutinosa
Young, J.	1999-06-2:	-23.132	119.6347	Ptilotus helipteroides
Erickson, T.	2010-12-1(	-23.3645	119.7498	Ptilotus auriculifolius
Mollemans	1987-03-01	-23.2863	119.6612	Paraneurachne muelleri
Tomanovic	2013-08-31	-23.4	120.1	Vittadinia sp. Coondewanna Flats (S.van Leeuwen 4684)
George, A.	1962-03-0{	-23.1325	120.2381	Goodenia armitiana
Walker, K.	1980-06-1!	-23.25	120.0167	Dampiera candicans
Albrecht, D	2004-09-02	-23.35	119.7167	Ptilotus xerophilus
Deighton, M	1982-03-1{	-23.3514	119.73	Gomphrena kanisii
Graham, R.	2008-09-2{	-23.1844	119.9703	Streptoglossa macrocephala
Lally, T.R.	1994-09-1(	-23.35	119.7167	Trianthema glossostigmum
Bull, J.; Car	2006-03-2:	-23.3141	119.8244	Cassytha capillaris
Payne, A.L.	1996-06-2(	-23.4	120.1	Aristida jerichoensis var. subspinulifera
Payne, A.L.	1996-06-21	-23.7172	120.0547	Thyridolepis xerophila
Deighton, M	1983-03-1{	-23.3514	119.73	Dactyloctenium radulans
Toelken, H.	1979-09-1!	-23.3167	119.6333	Cyperus vaginatus
Walker, K.	1980-06-1!	-23.3514	119.73	Goodenia muelleriana
Mollemans	1987-03-01	-23.2864	119.6611	Dampiera candicans

Mollemans	1987-03-01	-23.3333	119.6892	Citrullus amarus
Gibson, N.;	2004-09-23	-23.187	119.6974	Charophyta
Lally, T.R.	1995-09-10	-23.35	119.7167	Senna glutinosa subsp. x luerssenii
Wajon, J.E.	2004-07-30	-23.2878	119.6324	Hakea
Erickson, T.	2010-12-10	-23.3645	119.7498	Dysphania rhadinostachya subsp. rhadinostachya
Bull, J.; Car	2006-03-18	-23.314	119.8295	Sporobolus australasicus
Erickson, T.	2008-09-04	-23.3625	119.7537	Corchorus
George, A.S	1962-03-04	-23.1325	120.2381	Dampiera candicans
Mitchell, A.	1994-03-27	-23.3606	119.73	Vigna sp. Hamersley Clay (A.A.Mitchell PRP 113)
Chinnock, F	2004-09-03	-23.6906	119.7747	Ptilotus obovatus
Mitchell, A.	1994-03-27	-23.3606	119.73	Tephrosia
Chinnock, F	2004-09-02	-23.3126	119.6352	Lepidium phlebopetalum
Mitchell, A.	1996-06-21	-23.2014	120.3286	Peplidium
Tomanovic	2013-09-02	-23.4	120.1	Euphorbia inappendiculata var. inappendiculata
Bull, J.; Car	2006-03-18	-23.314	119.8295	Paspalidium constrictum
Lally, T.R.	1995-09-10	-23.35	119.7167	Haloragis gossei var. gossei
Deighton, M	1983-03-26	-23.35	119.7333	Eremophila margarethae
Bull, J.; Rob	2014-09-09	-23.3208	120.1666	Acacia clelandii
Walker, K.	1991-09-17	-23.3794	120	Calocephalus beardii
George, A.S	1962-03-04	-23.8	120.1167	Scaevola parvifolia subsp. pilbarae
Maier, M.	1996-03-25	-23.3358	120.0392	Triumfetta maconochieana
Young, J.	1999-06-21	-23.132	119.6847	Tephrosia densa
Bull, J.; Car	2006-03-18	-23.314	119.8295	Bidens bipinnata
Severne, B.		-23.3917	119.7086	Vittadinia eremaea
Young, J.	1999-06-23	-23.132	119.6347	Dysphania kalpari
Erickson, T.	2009-10-22	-23.3222	119.7672	Acacia hilliana
Albrecht, D	2004-09-02	-23.3139	119.6339	Atriplex semilunaris
Carroll, E.	2006-03-28	-23.3086	119.8617	Eriochloa pseudoacrotricha
Young, J.	1999-06-21	-23.132	119.6847	Indigofera rugosa
Young, J.	1999-06-21	-23.132	119.6847	Amaranthus cuspidifolius
Bull, J.; Car	2006-03-18	-23.314	119.8295	Boerhavia repleta
Pringle, H.	1995-03-27	-23.6831	119.7439	Digitaria ctenantha
Young, J.	1999-06-23	-23.132	119.6347	Acacia tenuissima
Lullfitz, F.; I	1963-10-15	-23.1106	119.8572	Streptoglossa macrocephala
Brearley, D	2006-06-26	-23.349	120.0481	Eucalyptus trivalva
Erickson, T.	2008-06-10	-23.291	119.6503	Cymbopogon obtectus
Pringle, H.	1995-03-28	-23.3344	119.7828	Sida fibulifera
S. van Leeu	2004-09-02	-23.3144	119.6331	Minuria integerrima
Lally, T.R.	1995-09-10	-23.35	119.7167	Calandrinia schistorhiza
French, M.	2001-06-04	-23.5181	119.7736	Eucalyptus leucophloia subsp. leucophloia
Walker, K.	1981-03-08	-23.3514	119.73	Ipomoea muelleri
Hyland, B.	2004-06-29	-23.3833	119.75	Indigofera monophylla
Walker, K.	1991-09-17	-23.3333	120.2167	Grevillea juncifolia subsp. juncifolia
Erickson, T.	2008-06-08	-23.3162	119.7812	Enneapogon polyphyllus
Bull, J.; Car	2006-03-21	-23.3112	119.9396	Euphorbia biconvexa
S. van Leeu	2004-09-02	-23.3144	119.6331	Goodenia
Craig, A.		-23.2942	119.6569	Androcalva luteiflora
Tomanovic	2013-08-31	-23.4037	120.0355	Sida ectogama
Mollemans	1987-03-01	-23.2864	119.6611	Dicrastylis cordifolia
Walker, K.	1980-09-10	-23.35	119.75	Acacia melleodora

Deighton, M.K.	-23.3514	119.73	Triodia pungens
Chinnock, F	2004-09-03	-23.6906	119.7747	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Payne, A.L.	1996-06-18	-23.4597	119.8114	Eragrostis eriopoda
Maier, M.	2003-10-02	-23.3451	119.763	Eriachne tenuiculmis
Mollemans	1987-03-01	-23.285	119.6606	Scaevola parvifolia subsp. pilbarae
Bull, J.; Wa	2016-04-02	-23.2	120.2	Ipomoea racemigera
Bull, J.; Car	2006-03-18	-23.314	119.8295	Perotis rara
Tolken, H.R	1979-09-19	-23.3167	119.6333	Scaevola sp. Mt Nameless (P.A.S.Wurm 1443)
Erickson, T.		-23.2838	119.6587	Astrotricha hamptonii
Cole, A.	2008-09-12	-23.3837	120.4731	Eucalyptus repullulans
Walker		-23.3833	119.7	Acacia pachycarpa
Simpson, D	1979-01-11	-22.8997	120.1667	Capparis lasiantha
Barrett, M.	2013-03-15	-23.1776	119.917	Triodia pungens
S. van Leeu	2004-09-02	-23.3144	119.6331	Polygala glaucifolia
Cook, B.	2006-07-28	-23.3254	120.0817	Calytrix carinata
Lally, T.R.	1995-09-10	-23.35	119.7167	Solanum lasiophyllum
Foote, H.N.		-23.35	119.7333	Cullen cinereum
Conrick, P.I	1983-08-31	-23.6333	119.6833	Capparis umbonata
Erickson, T.	2008-06-10	-23.291	119.6503	Chrysocephalum apiculatum
Bull, J.; Wa	2015-07-07	-23.2965	119.87	Eragrostis olida
Mollemans	1987-03-02	-23.4	119.6914	Euphorbia tannensis subsp. eremophila
Mirrington, R.		-23.2167	119.9	Rhodanthe charsleyae
Reid, J.E.	2009-10-26	-23.4385	119.7859	Acacia aptaneura
Mitchell, A.	1996-06-20	-23.375	120.1925	Digitaria longiflora
Mollemans	1987-03-08	-23.3038	119.7055	Acacia ptychophylla
S. van Leeu	2004-09-02	-23.3144	119.6331	Ptilotus carinatus
Carroll, E.	2006-03-28	-23.3086	119.8617	Cyperus bifax
Bull, J.; Rob	2014-07-07	-23.2964	120.0888	Acacia corusca
Mollemans	1987-03-01	-23.2864	119.6611	Tephrosia oxalidea
Walker, K.	1983-12-06	-23.3786	120.1892	Grevillea striata
Lazarides, M	1992-04-14	-23.3	119.6833	Triodia angusta
Mitchell, A.	1996-06-21	-23.3847	120.4717	Glycine canescens
Mitchell, A.	1996-06-21	-23.3844	120.4758	Eragrostis
S. van Leeu	2004-09-02	-23.3144	119.6331	Pterocaulon sphacelatum
Chinnock, F	2004-09-02	-23.3126	119.6352	Ptilotus carinatus
Rogerson, W.		-23.7836	120.2381	Macgregoria racemigera
Cook, B.	2006-07-30	-23.3271	120.0444	Streptoglossa decurrens
Chinnock, F	2004-09-03	-23.6906	119.7747	Vittadinia virgata
Sgherza, C.	2009-04-22	-23.3411	119.7244	Sida echinocarpa
Erickson, T.	2008-09-04	-23.3625	119.7537	Sida echinocarpa
Mitchell, A.	1996-06-22	-23.3192	119.8708	Chara fibrosa
van Leeuwe	1998-09-30	-23.3	119.6	Seringia exastia
Carroll, E.	2006-03-28	-23.3086	119.8617	Alternanthera angustifolia
Chinnock, F	2004-09-02	-23.3126	119.6352	Calandrinia schistorhiza
Sweedman	2006-07-21	-23.1791	119.7299	Acacia adoxa var. adoxa
Chinnock, F	2004-09-03	-23.6906	119.7747	Ptilotus obovatus
Bull, J.; Car	2006-03-21	-23.3112	119.7979	Goodenia muelleriana
Mitchell, A.	1996-06-23	-23.7825	120.2114	Goodenia
Edwards, T	2008-06-17	-23.6075	120.1672	Eragrostis eriopoda
Walker, K.	1980-07-29	-23.65	119.7167	Acacia hamersleyensis

Bailey, E.T.	-23.1614	120.2381	Newcastelia hexarrhena
Erickson, T.	2008-06-08	-23.3145	119.7822	Tribulus suberosus
Bull, J.; Car	2006-04-05	-23.312	119.7673	Malvastrum americanum
Mitchell, A.	1996-06-21	-23.3847	120.4717	Chrysocephalum apiculatum subsp. pilbarense
Carroll, E.	2006-03-28	-23.3086	119.8617	Echinochloa colona
Mitchell, A.	1994-03-28	-23.3181	119.7028	Triodia angusta
Albrecht, D	2004-09-03	-23.7	119.8	Rhagodia sp. Hamersley (M.Trudgen 17794)
Cook, B.	2006-07-27	-23.345	120.0582	Isotropis atropurpurea
Bull, J.; Car	2006-03-19	-23.2963	119.7741	Cynodon prostratus
Bull, J.; Rob	2013-03-24	-23.336	119.9994	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Edgecombe	1983-07-03	-23.25	119.75	Eucalyptus xerothermica
Toelken, H.	1979-09-19	-23.3167	119.6333	Grevillea wickhamii subsp. aprica
Bull, J.; Rob	2014-09-12	-23.3018	120.0921	Acacia corusca
Tomanovic	2011-03-13	-23.4142	120.0451	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Carroll, E.	2006-03-28	-23.3086	119.8617	Leptochloa digitata
van Leeuw	1993-07-09	-23.3217	119.9389	Acacia sp. Jimblebar (S.van Leeuwen 1342)
George, A.S	1962-03-04	-23.8	120.1167	Scaevola parvifolia subsp. pilbarae
Carroll, E.	2006-03-20	-23.3014	119.8117	Polycarpaea involucrata
Edwards, T	2009-04-23	-23.3236	119.8756	Gomphrena sordida
Walker, K.	1981-03-08	-23.2333	120.0167	Eucalyptus leucophloia
Mirrington, R.	-23.2167	119.9	Rhodanthe charsleyae
Bull, J.; Car	2006-03-18	-23.314	119.8295	Polycarpaea holtzei
Edwards, T	2008-06-16	-23.6057	120.1733	Enneapogon robustissimus
Maslin, B.R	1980-07-07	-23.3167	119.7167	Acacia tetragonophylla
Mitchell, A.	1996-06-22	-23.3192	119.8708	Ruppia polycarpa
Barrett, M.	2012-03-07	-23.501	119.7802	Triodia basedowii
Demarz, H.	1978-10-13	-23.1167	119.9333	Acacia aptaneura
Gardner, C.A.	-23.1614	120.2381	Newcastelia hexarrhena
Payne, A.L.	1996-06-20	-23.4533	120.3264	Drosera finlaysoniana
McCreery, K.	-23.4013	120.0129	Eremophila margarethae
Reiffer, S.	2016-12-10	-23.1739	119.8246	Hibiscus
Sgherza, C.	2009-04-22	-23.3411	119.7244	Themeda triandra
Bull, J.; Wa	2015-10-07	-23.3	119.6	Indigofera gilesii
Mollemans	1987-03-07	-23.2886	119.7583	Eremophila latrobei subsp. latrobei
Brooker, M	1983-07-04	-23.45	119.7667	Corymbia ferriticola
Bull, J.; Wa	2015-10-07	-23.2868	119.713	Hibiscus
Bull, J.; Rob	2014-04-26	-23.3012	120.1062	Acacia corusca
Bull, J.; Car	2006-03-18	-23.314	119.8295	Eriachne pulchella subsp. dominii
George, A.S	1962-03-04	-23.8	120.1167	Corynotheca pungens
Bull, J.	2015-07-12	-23.3	120	Goodenia nuda
Walker, K.	1977-04-06	-23.3667	119.7	Corymbia opaca
Barrett, M.	2012-03-07	-23.501	119.7802	Triodia basedowii
Cook, B.	2006-07-28	-23.3219	120.0769	Trichodesma zeylanicum var. zeylanicum
Tomanovic	2013-09-03	-23.4002	120.0596	Gnephosis arachnoidea
Mitchell, A.	1995-04-08	-22.9283	120.1325	Corymbia candida
Kaljuste, D.	1987-06-22	-23.1439	119.9044	Tribulus terrestris
Mitchell, A.	1996-06-17	-23.2067	119.8553	Indigofera georgei
Lazarides, M	1992-04-14	-23.3	119.6833	Triodia wiseana
Walker, K.	1977-04-06	-23.3667	119.7	Acacia ancistrocarpa
Reiffer, S.	2016-12-10	-23.1739	119.8246	Hibiscus

Mitchell, A.	1996-07-25	-23	120.2	Crotalaria smithiana
Erickson, T.	2009-10-22	-23.3316	119.7447	Pterocaulon sphacelatum
Lullfitz; Fai	1963-10-15	-23.6572	119.73	Kennedia prorepens
Deighton, M	1983-03-18	-23.3514	119.73	Brachyachne convergens
Bull, J.; Car	2006-03-19	-23.2996	119.7699	Chloris pectinata
Lullfitz, F.; I	1963-10-15	-23.1106	119.8572	Goodenia vilmoriniae
Walker, K.	1980-07-30	-23.3667	119.7	Roebuckiella similis
Tomanovic	2013-08-31	-23.3991	120.0963	Minuria integerrima
Blockley, J.	1966-04-19	-23.7547	120.2381	Lepidium echinatum
Cook, B.	2006-07-28	-23.325	120.0703	Goodenia microptera
Bull, J.; Pal	2013-10-07	-23.3	120.1	Rhagodia sp. Hamersley (M.Trudgen 17794)
Walker, K.	1981-03-08	-23.3514	119.73	Anthobolus leptomerioides
Walker, K.	1981-04-07	-23.2406	120.0194	Acacia dictyophleba
Lullfitz [L.]	1963-10-15	-23.3019	119.73	Acacia pyrifolia var. morrisonii
Walker, K.	1980-07-21	-23.3667	119.7	Acacia hamersleyensis
French, M.	2001-06-04	-23.5181	119.7736	Eucalyptus trivalva
Maslin, B.R	2007-10-15	-23.1143	120.5056	Acacia aptaneura
McCreery,	2011-10-05	-23.3254	120.1399	Podolepis eremaea
McCreery,	2011-10-05	-23.3254	120.1399	Pseudognaphalium luteoalbum
Deighton, M.K.		-23.3514	119.73	Triodia angusta
Reiffer, S.	2016-12-10	-23.1734	119.8256	Hibiscus
Walker, K.	1980-07-28	-23.3667	119.7	Ptilotus gaudichaudii
Walker, K.	1980-07-30	-23.3667	119.7	Roebuckiella similis
Van Vreesv	1996-06-18	-23.4861	119.8719	Chrysocephalum pterochaetum
Latz, P.K.	2001-07-16	-22.9833	120.1833	Ptilotus gomphrenoides
Edgecombe	1983-07-03	-23.3333	119.9167	Eucalyptus leucophloia subsp. leucophloia
Walker, K.	1980-07-21	-23.3667	119.7	Acacia hamersleyensis
Walker, K.	1980-09-10	-23.3514	119.73	Dodonaea coriacea
Walker, K.	1981-04-08	-23.3667	119.7	Acacia citrinoviridis
Walker, K.	1977-04-13	-23.3667	119.7	Eremophila latrobei subsp. latrobei
Walker, K.	1977-04-20	-23.3667	119.7	Senna glutinosa subsp. x luerssenii
Sweedman	2006-10-10	-23.1846	119.7238	Acacia maitlandii
Newbey, K.	1984-04-04	-23.0333	119.9667	Acacia wanyu
Maslin, B.R	1980-07-07	-23.3164	119.6856	Acacia catenulata subsp. occidentalis
Newbey, K.	1984-04-04	-23.0333	119.9667	Solanum elatius
Deighton, M	1983-03-18	-23.3514	119.73	Ptilotus carinatus
Walker, K.	1980-07-14	-23.3667	119.7	Cheilanthes brownii
Walker, K.	1977-04-14	-23.3667	119.7	Ptilotus rotundifolius
Mitchell, A.	1996-06-21	-23.2067	119.8553	Sclerolaena costata
Maslin, B.R	2007-10-15	-23.1143	120.5056	Acacia paraneura
Erickson, T.	2008-10-29	-23.3098	119.7974	Acacia adsurgens
Purdie, R.W	2009-10-24	-23.2678	119.6272	Ptilotus calostachyus
Sgherza, C.	2009-04-24	-23.3386	119.9731	Triodia schinzii
Walker, K.	1980-06-15	-23.3514	119.73	Goodenia muelleriana
Walker, K.	1980-07-28	-23.3667	119.7	Trichodesma zeylanicum var. zeylanicum
Albrecht, D	2004-09-02	-23.3139	119.6417	Goodenia muelleriana
Walker, K.	1991-09-17	-23.2167	120.0333	Brunonia australis
Walker, K.	1980-07-21	-23.25	120	Newcastelia
Young, J.	1999-06-23	-23.1167	119.6333	Senna artemisioides
Bull, J.	2015-07-11	-23.1805	119.9331	Hypertelis cerviana

Walker, K.	1991-09-23	-23.2	120.0667	Cullen cinereum
Mollemans	1987-03-08	-23.3038	119.7055	Acacia hilliana
Walker, K.	1980-07-28	-23.2511	120.0178	Duperreya commixta
Van Vreesv	1996-06-18	-23.4861	119.8719	Eremophila margarethae
Bull, J.; Wa	2015-07-10	-23.2151	119.9293	Solanum piceum
Nicolle, D.	1993-10-02	-23.4403	119.8183	Eucalyptus xerothermica
Beauglehol	1978-09-10	-23.6	119.7667	Trachymene bialata
Bull, J.	2015-07-12	-23.3495	119.9166	Sida sp. Kathleen Springs (A.C.Beauglehole 26934)
McCreery,	2013-08-31	-23.4002	120.0596	Abutilon malvifolium
Bull, J.	2014-12-17	-23.3512	119.7381	Senna occidentalis
Walker, K.	1980-10-29	-23.3667	119.7	Solanum elatius
Edwards, T	2009-04-24	-23.32	119.9167	Eragrostis eriopoda
Newbey, K.	1984-04-05	-23.35	119.6833	Amaranthus mitchellii
Demarz, H.	1978-10-13	-23.1167	119.9333	Acacia ancistrocarpa
Reiffer, S.	2016-12-10	-23.1734	119.8256	Hibiscus
Edwards, T	2009-04-25	-23.3239	119.8722	Eremophila margarethae
Wajon, J.E.	2004-07-30	-23.2878	119.6324	Hakea lorea subsp. lorea
Deighton, M.K.		-23.3514	119.73	Chrysopogon fallax
Walker, K.	1977-04-06	-23.3667	119.7	Corymbia candida subsp. candida
Ajduk, H.	2011-04-12	-23.3281	119.7389	Symphyotrichum squamatum
Macpherso	1997-04-18	-23.3108	119.8639	Scaevola acacioides
Coultas, D.	2018-04-15	-23.1471	119.8807	Sida sp. Rabbit Flat (B.J.Carter 626)
Mitchell, A.	1994-06-09	-22.96	120.2547	Lepidium phlebopetalum
Ladyman, M	2006-07-25	-23.3321	120.0292	Eriachne aristidea
Erickson, T.	2009-10-22	-23.3222	119.7672	Mirbelia viminalis
Deighton, M.K.		-23.3514	119.73	Eragrostis elongata
Walker, K.	1980-07-21	-23.3667	119.7	Acacia hamersleyensis
Lullfitz, F.	1963-10-15	-23.2181	119.9003	Halgania solanacea var. Mt Doreen (G.M.Chippendale 4206)
Beard, J.S.	1967-04-12	-23.3333	120.1667	Acacia ancistrocarpa
Coultas, D.	2018-04-15	-23.1471	119.8807	Corchorus
Brearley, D	2004-03-19	-23.3062	119.8721	Eremophila margarethae
Edwards, T	2009-04-23	-23.3236	119.8756	Perotis rara
Love, M.	2006-03-27	-23.3169	119.8597	Seringia nephrosperma
Deighton, M.K.		-23.3514	119.73	Euploca pachyphylla
Edgecombe	1983-07-03	-23.3333	119.9167	Atriplex semilunaris
Erickson, T.	2011-07-15	-23.3169	119.7167	Triodia brizoides
Walker, K.	1980-07-21	-23.25	120	Nicotiana benthamiana
Angus, D.	2009-04-20	-23.2054	119.8264	Eremophila lanceolata
Carroll, E.	2006-04-05	-23.3119	119.7672	Iseilema eremaeum
McCreery,	2011-10-05	-23.3254	120.1399	Cyperus ixiocarpus
Brockway, G.E.		-23.05	119.9667	Acacia paraneura
Walker, K.	1980-06-15	-23.3514	119.73	Acacia adoxa var. adoxa
Rogerson, W.		-23.7836	120.2381	Goodenia prostrata
Walker, K.	1980-07-14	-23.3514	119.73	Marsilea hirsuta
Edwards, T	2009-04-22	-23.325	119.855	Solanum cleistogamum
Sweedman	2006-07-21	-23.1791	119.7299	Amaranthus undulatus
Tomanovic	2012-09-20	-23.3484	119.7785	Abutilon malvifolium
Walker, K.	1980-07-16	-23.3667	119.7	Acacia sibirica
George, A.S.		-23.1614	120.2381	Goodenia connata
Duffy, M.	1997-06-05	-23.3514	119.73	Desmanthus virgatus

Graham, R.	2008-09-29	-23.2167	119.9	Cullen lachnostachys
Walker, K.	1980-07-20	-23.3514	119.73	Haloragis maierae
van Leeuwe	1997-10-14	-23.3144	119.855	Triodia longiceps
Walker, K.	1980-07-13	-23.3667	119.7	Senna artemisioides subsp. helmsii
Bull, J.; Car	2006-03-21	-23.3112	119.7979	Corchorus tridens
McCreery,	2011-10-05	-23.3254	120.1399	Ammannia multiflora
Blockley, J.	1966-04-19	-23.5089	120.2381	Pluchea dentex
Young, J.	1999-06-23	-23.132	119.6347	Maireana villosa
Bull, J.; Car	2006-03-21	-23.3112	119.7979	Paspalidium rarum
Walker, K.	1980-10-30	-23.3514	119.73	Acacia coriacea subsp. pendens
Edwards, T	2009-04-25	-23.3247	119.9308	Setaria surgens
Walker, K.	1980-07-16	-23.3667	119.7	Eremophila latrobei subsp. latrobei
S. van Leeu	2004-09-02	-23.3144	119.6331	Streptoglossa sp. Cracking clays (S.van Leeuwen et al. PBS 73
Pringle, H.	1995-03-28	-23.3172	119.8358	Eucalyptus leucophloia subsp. leucophloia
Zich, F.A.	1992-04-14	-23.3133	119.6883	Evolvulus alsinoides var. villosicalyx
Deighton, M	1982-03-18	-23.3514	119.73	Gomphrena canescens
Blockley, J.	1967-09-01	-23.1847	119.6897	Myoporum montanum
Walker, K.	1980-10-25	-23.3514	119.73	Acacia bivenosa
Maslin, B.R	2004-10-11	-23.3422	120.0078	Acacia adoxa var. adoxa
Walker, K.	1981-04-08	-23.3667	119.7	Acacia citrinoviridis
S. van Leeu	2004-09-02	-23.3144	119.6331	Rumex vesicarius
Brooker, M	1983-07-03	-23.3	119.7167	Eucalyptus gamophylla
Walker, K.	1985-09-30	-23.3667	119.7	Capparis lasiantha
Walker, K.	1983-06-28	-23.3514	119.73	Trichodesma zeylanicum
Chinnock, F	2004-09-03	-23.6906	119.7747	Ptilotus obovatus
Walker, K.	1980-07-17	-23.3514	119.73	Santalum lanceolatum
Edwards, T	2009-04-24	-23.3186	119.9028	Goodenia lamprosperma
Sgherza, C.	2009-04-24	-23.3364	119.9661	Amphipogon sericeus
Barrett, M.	2012-03-07	-23.4737	119.7948	Triodia pungens
Bull, J.; Rob	2013-04-25	-23.3	120.1	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Walker, K.	1980-07-20	-23.3667	119.7	Lepidium echinatum
Deighton, M	1983-03-18	-23.3514	119.73	Sporobolus australasicus
Tomanovic	2013-09-02	-23.4153	120.0401	Monachather paradoxus
Walker, K.	1980-07-17	-23.3514	119.73	Mimulus gracilis
Cook, B.	2006-07-28	-23.3234	120.0744	Senna glutinosa subsp. x luerssenii
Eckersley, J	2020-04-21	-23.4	119.6	Isotropis parviflora
Payne, A.L.	1996-06-19	-23.4089	119.9811	Goodenia prostrata
Walker, K.	1980-07-28	-23.65	119.7	Eremophila lanceolata
Maslin, B.R	2004-10-11	-23.315	119.8736	Acacia macraneura
Deighton, M.K.		-23.3514	119.73	Triodia pungens
Bull, J.; Wa	2015-07-10	-23.2315	119.9172	Tephrosia sp. deserts (J.R.Maconochie 1403)
Walker, K.	1980-07-20	-23.3514	119.73	Haloragis maierae
Bull, J.	2015-07-15	-23.3428	119.9193	Halgania erecta
Sgherza, C.	2009-04-24	-23.3364	119.9661	Scaevola browniana
Erickson, T.	2008-06-10	-23.291	119.6503	Goodenia vilmoriniae
Walker, K.	1981-07-26	-23.3514	119.73	Acacia bivenosa
Brooker, M	1991-04-14	-23.2833	119.6667	Corymbia hamersleyana
Walker, K.	1980-09-10	-23.6	119.7	Acacia pachyacra
Maslin, B.R	1980-07-07	-23.3006	119.665	Acacia pyrifolia var. pyrifolia
Walker, K.	1980-07-13	-23.3514	119.73	Atriplex semilunaris

Trudgen, M	1973-04-05	-23.3	119.6667 Cheilanthes sieberi subsp. pseudovellea
Sgherza, C.	2009-04-22	-23.3308	119.7456 Goodenia muelleriana
Walker, K.	1991-09-17	-23.3758	120.2064 Aristida contorta
Deighton, M	1981-07-11	-23.3514	119.73 Dolichocarpa crouchiana
Bull, J.; Rob	2014-04-24	-23.2976	120.0858 Acacia corusca
Young, J.	1999-06-21	-23.132	119.6847 Pterocaulon sphacelatum
Erickson, T.	2008-07-16	-23.3075	119.8124 Eucalyptus gamophylla
Deighton, M	1982-07-14	-23.3514	119.73 Pterocaulon sphacelatum
Bull, J.; Rob	2014-09-09	-23.3225	120.1624 Acacia clelandii
McIntyre, F	2008-04-16	-23.1	119.9 Goodenia nuda
Carroll, E.	2006-03-28	-23.3086	119.8617 Cynodon dactylon
Walker, K.	1980-07-14	-23.3514	119.73 Sporobolus australasicus
Chinnock, F	2004-09-02	-23.3112	119.6775 Eremophila platycalyx subsp. Neds Creek (N.H.Speck 1228)
Young, J.	1999-06-21	-23.132	119.6847 Senna artemisioides subsp. oligophylla
Ladyman, M	2006-07-26	-23.3444	120 Solanum morrisonii
Walker, K.	1980-10-14	-23.3514	119.73 Cullen leucochaites
Bull, J.	2015-07-13	-23.3512	119.9017 Gomphrena lanata
Love, M.	2006-04-07	-23.3078	119.7753 Trianthema pilosum
Mollemans	1987-03-07	-23.2886	119.7583 Hibiscus
Walker, K.	1980-07-17	-23.3514	119.73 Lotus cruentus
S. van Leeu	2004-09-02	-23.3144	119.6331 Calocephalus pilbarensis
Erickson, T.	2008-05-31	-23.3464	119.7439 Ptilotus xerophilus
Walker, K.	1983-04-05	-23.35	119.6833 Chrysopogon fallax
Walker, K.	1980-07-16	-23.3514	119.73 Eremophila maculata subsp. brevifolia
Erickson, T.	2009-10-22	-23.3316	119.7448 Acacia dictyophleba
Sweedman	2012-10-21	-23.1878	119.7152 Grevillea pyramidalis
Walker, K.	1980-10-25	-23.3667	119.7 Acacia bivenosa
Walker, K.	1980-07-16	-23.3514	119.73 Eremophila longifolia
Carroll, E.	2006-03-28	-23.3058	119.8719 Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Mitchell, A.	1995-03-28	-23.3181	119.7028 Triodia wiseana
Reid, J.E.	2009-10-26	-23.4385	119.7859 Acacia aptaneura
Demarz, H.	1978-10-13	-23.1717	119.73 Ptilotus astrolasius
Walker, K.	1980-07-30	-23.3514	119.73 Sida sp. spiciform panicles (E.Leyland s.n. 14/8/1990)
Brooker, M	1974-04-19	-22.9611	119.8458 Corymbia hamersleyana
Edwards, T	2009-04-26	-23.3	119.8 Goodenia nuda
Walker, K.	1980-07-14	-23.3514	119.73 Eremophila longifolia
Bull, J.; Car	2006-03-18	-23.2976	119.7969 Paspalidium clementii
Walker, K.	1980-07-17	-23.35	119.75 Ptilotus gomphrenoides
Macdonald	2017-04-17	-23.3313	119.7772 Hibiscus
Brearley, D	2006-07-26	-23.3388	120.0251 Scaevola browniana subsp. browniana
Walker, K.	1980-07-13	-23.3514	119.73 Senna artemisioides subsp. helmsii
Bull, J.; Car	2006-04-03	-23.3205	119.762 Sclerolaena cornishiana
Mounsey, (	2017-04-17	-23.3	119.8 Aristida jerichoensis var. subspinulifera
Walker, K.	1980-07-16	-23.3514	119.73 Eremophila maculata subsp. brevifolia
Tomanovic	2013-09-02	-23.4153	120.0401 Tephrosia insolens
Walker, K.	1980-07-13	-23.35	119.75 Ptilotus aervoides
Brooker, M	1983-07-06	-23.45	119.7833 Corymbia aspera
Carroll, E.	2006-04-04	-23.3089	119.7886 Enneapogon robustissimus
Walker, K.	1980-07-14	-23.3514	119.73 Goodenia muelleriana
Bull, J.; Car	2006-04-03	-23.3205	119.762 Sida sp. Excedentifolia (J.L.Egan 1925)

Sweedman	2006-10-1(	-23.1885	119.7005	Acacia citrinoviridis
Walker, K.	1980-07-16	-23.3514	119.73	Acacia sibirica
cole, A.	2011-12-16	-23.359	120.1656	Eremophila oppositifolia subsp. angustifolia
Bergh, C. v	2019-04-08	-23.4	120.4	Eremophila capricornica
Bull, J.; Car	2006-04-05	-23.312	119.7673	Digitaria ctenantha
Bull, J.; Rol	2014-04-24	-23.2997	120.0833	Acacia corusca
Walker, K.	1980-07-3(	-23.3514	119.73	Eremophila margarethae
Walker, K.	1980-07-15	-23.35	119.7333	Convolvulus clementii
Maslin, B.R	2007-10-17	-23.6705	119.7448	Acacia aptaneura
Pringle, H.	1990-10-27	-23.3514	119.73	Acacia dictyophleba
Walker, K.	1980-07-16	-23.6667	119.7667	Ptilotus rotundifolius
Edwards, T	2009-04-23	-23.3239	119.8756	Muelleranthus trifoliolatus
Brooker, M	1983-07-03	-23.3	119.7167	Eucalyptus trivalva
van Leeuw(	2000-07-15	-23.3201	119.6047	Calotis plumulifera
Deighton, M	1981-04-03	-23.3514	119.73	Maireana
Walker, K.	1983-04-06	-23.35	119.7333	Portulaca decipiens
McCreery,	2011-04-13	-23.3	119.8	Calotis latiuscula
Erickson, T.	2009-10-23	-23.3228	119.7588	Senna artemisioides subsp. oligophylla
Eakin-Bush	2020-04-16	-23.4135	119.6624	Scrophulariaceae
Reid, J.E.	2009-10-25	-23.4131	119.7989	Acacia paraneura
Sweedman	2006-10-1(	-23.2057	119.8805	Acacia pyrifolia var. pyrifolia
van Leeuw(	2000-07-15	-23.3201	119.6047	Maireana georgei
Walker, K.	1980-07-13	-23.3514	119.73	Senna glutinosa subsp. x luerssenii
Deighton, M	1981-07-11	-23.3514	119.73	Goodenia stobbsiana
Walker, K.	1980-07-2(	-23.3667	119.7	Ptilotus obovatus
Erickson, T.	2009-10-23	-23.3263	119.766	Grevillea wickhamii subsp. hispidula
Maslin, B.R	1980-07-07	-23.3006	119.665	Acacia dictyophleba
Lullfitz; Fai	1963-10-15	-23.0442	119.8925	Senna glutinosa subsp. x luerssenii
Sgherza, C.	2009-04-22	-23.3308	119.7456	Eulalia aurea
van Leeuw(	2000-07-15	-23.3201	119.6047	Brachyscome rudallensis
Walker, K.	1980-07-13	-23.3514	119.73	Indigofera georgei
Brooker, M	1983-07-03	-23.3514	119.73	Eucalyptus xerothermica
Mounsey, (	2017-04-22	-23.4	119.7	Swainsona thompsoniana
Walker, K.	1980-07-15	-23.3514	119.73	Acacia atkinsiana
Cook, B.	2006-07-28	-23.3221	120.0769	Pterocaulon sphaeranthoides
Bull, J.; Car	2006-04-07	-23.296	119.7559	Triumfetta maconochieana
Erickson, T.	2009-10-23	-23.3258	119.7656	Acacia hamersleyensis
Edwards, T	2009-04-23	-23.3258	119.86	Triodia longiceps
Deighton, M	1982-07-14	-23.3514	119.73	Eragrostis tenellula
Walker, K.	1980-07-21	-23.3514	119.73	Acacia sibirica
Buirchell, B	2009-07-23	-23.5	120.4	Eremophila capricornica
Deighton, M	1982-07-17	-23.3514	119.73	Isotropis iophyta
Mitchell, A.	1996-07-24	-22.9131	120.1972	Pluchea dunlopii
Walker, K.	1981-04-08	-23.2333	120.0167	Acacia citrinoviridis
Walker, K.	1980-07-16	-23.2417	120.0167	Solanum austropiceum
Bergh, C. v	2019-04-16	-23.4	120.3	Rhagodia sp. Hamersley (M.Trudgen 17794)
Deighton, M	1981-07-11	-23.3514	119.73	Euphorbia careyi
Walker, K.	1985-09-3(	-23.3514	119.73	Gossypium sturtianum var. sturtianum
Walker, K.	1980-07-15	-23.35	119.7333	Ptilotus clementii
Walker, K.	1981-01-01	-23.3514	119.73	Eucalyptus victrix

Maslin, B.R	2007-10-14	-23.4653	120.1775	Acacia mulganeura
Lyons, M.N	2005-04-23	-23.187	119.6974	Chara fibrosa
Edwards, T	2009-04-24	-23.3231	119.8781	Cenchrus setiger
Erickson, T.	2009-10-24	-23.3243	119.7574	Acacia citrinoviridis
Deighton, M	1981-07-11	-23.3514	119.73	Trichodesma zeylanicum
Deighton, M	1982-04-03	-23.3514	119.73	Dicladanthera forrestii
Walker, K.	1980-07-16	-23.35	119.7333	Eriachne pulchella subsp. pulchella
Maslin, B.R	1980-07-07	-23.3514	119.73	Mirbelia viminalis
Bull, J.; Wa	2015-07-07	-23.2965	119.87	Polycarpaea involucrata
Maslin, B.R	2007-10-14	-23.4792	120.3164	Acacia pteraneura
Bull, J.; Pal	2013-10-14	-23.3	120.1	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Bull, J.; Rob	2014-07-09	-23.3011	120.1051	Acacia corusca
Walker, K.	1980-07-14	-23.3514	119.73	Cheilanthes lasiophylla
Walker, K.	1980-07-20	-23.3514	119.73	Senna artemisioides subsp. filifolia
Walker, K.	1980-07-17	-23.35	119.7333	Lotus cruentus
Walker, K.	1980-10-14	-23.3514	119.73	Cullen leucochaites
Bull, J.; Wa	2015-07-11	-23.3034	119.8632	Podolepis capillaris
Erickson, T.	2008-07-16	-23.2973	119.7671	Senna venusta
Erickson, T.	2009-10-22	-23.3316	119.7448	Acacia dictyophleba
Pringle, H.	1990-10-30	-22.9	120.1667	Acacia trudgeniana
Walker, K.	1980-07-13	-23.3514	119.73	Solanum lasiophyllum
Walker, K.	1980-07-21	-23.3514	119.73	Pterocaulon sphacelatum
Walker, K.	1980-10-25	-23.35	119.7333	Acacia sericophylla
Walker, K.	1981-07-27	-23.3514	119.73	Eucalyptus socialis
Cole, A.	2011-10-10	-23.3377	120.1803	Santalum spicatum
Haycock, R	2011-04-19	-23.2	119.9	Rhagodia sp. Hamersley (M.Trudgen 17794)
Bull, J.	2015-07-15	-23.3426	119.9194	Mirbelia
van Leeuw	1993-07-09	-23.3408	120.0222	Acacia sp. (NEQ)
Walker, K.	1980-07-07	-23.3514	119.73	Acacia tenuissima
Walker, K.	1980-07-14	-23.3514	119.73	Solanum lasiophyllum
Walker, K.	1980-07-28	-23.35	119.7333	Isotropis iophyta
Deighton, M	1981-07-11	-23.3514	119.73	Euphorbia careyi
Walker, K.	1984-04-11	-23.3833	120.1833	Acacia aptaneura
Newbey, K.	1984-04-05	-23.3333	119.6667	Sclerolaena cornishiana
Craig, A.	1988-07-20	-23.3769	119.6975	Eremophila canaliculata
Newbey, K.	1984-04-05	-23.3333	119.6667	Alternanthera nana
Erickson, T.	2008-07-15	-23.3466	119.8915	Eragrostis dielsii
Walker, K.	1980-07-14	-23.3514	119.73	Iseilema dolichotrichum
Sgherza, C.	2009-04-24	-23.3386	119.9731	Dicrastylis cordifolia
Fairall; Lull	1963-10-16	-23.8	120.1	Eremophila pilosa
Thomson, I	1988-10-21	-23.1333	119.9333	Acacia wanyu
Reid, J.E.	2009-10-26	-23.2296	119.905	Acacia paraneura
Demarz, H.	1978-10-13	-23.1717	119.73	Polymeria calycina
Newbey, K.	1984-04-05	-23.3333	119.6667	Eremophila lanceolata
Walker, K.	1980-07-17	-23.6	119.7	Malvastrum americanum
Walker, K.	1980-07-18	-23.3514	119.73	Eremophila forrestii subsp. forrestii
Demarz, H.	1970-10-26	-23.5667	120.2381	Rhodanthe charsleyae
Edwards, T	2009-04-26	-23.3219	119.8331	Triodia pungens
Crespi, B.	1997-04-21	-23.32	119.73	Acacia catenulata subsp. occidentalis
Bull, J.; Pal	2013-10-09	-23.317	120.1109	Acacia clelandii

Start, A.N.	1994-07-14	-22.9533	119.9667	Amyema fitzgeraldii
Walker, K.	1980-07-21	-23.3167	119.75	Chrysocephalum pterochaetum
Maslin, B.R	2007-10-15	-23.1974	119.9072	Acacia paraneura
Deighton, M	1982-04-03	-23.3514	119.73	Dicladanthera forrestii
Sgherza, C.	2009-04-26	-23.3164	119.7956	Triodia pungens
Bull, J.	2015-07-15	-23.3428	119.9193	Halgania erecta
Walker, K.	1980-07-14	-23.3514	119.73	Goodenia stobbsiana
Latz, P.K.	2001-07-16	-23.6631	119.7531	Sida sp. spiciform panicles (E.Leyland s.n. 14/8/1990)
Sweedman	2006-10-10	-23.1894	119.7116	Gompholobium oreophilum
Bull, J.	2015-07-15	-23.3225	120.1635	Acacia clelandii
Bull, J.; Car	2006-03-31	-23.3155	119.8327	Eucalyptus socialis subsp. eucentrica
Walker, K.	1980-07-14	-23.3514	119.73	Acacia spondylophylla
Walker, K.	1980-07-28	-23.3514	119.73	Tephrosia rosea var. Fortescue creeks (M.I.H.Brooker 2186)
Cook, B.	2006-07-29	-23.3213	120.0631	Trianthema glossostigmum
Walker, K.	1980-07-15	-23.3514	119.73	Goodenia prostrata
Erickson, T.	2008-07-13	-23.2915	119.6516	Abutilon otocarpum
Walker, K.	1980-07-30	-23.6	119.8	Eremophila platycalyx subsp. Neds Creek (N.H.Speck 1228)
Edwards, T	2009-04-24	-23.3325	119.9169	Hibiscus sturtii var. truncatus
Walker, K.	1980-07-30	-23.6	119.8	Senna hamersleyensis
Walker, K.	1980-07-21	-23.3514	119.73	Acacia hamersleyensis
Deighton, M	1982-04-03	-23.3514	119.73	Eragrostis
Bull, J.; Wa	2015-10-06	-23.2687	119.6847	Leiocarpa semicalva subsp. semicalva
Brooker, M	1983-07-03	-23.3514	119.73	Corymbia hamersleyana
Sweedman	2017-10-19	-23.2052	119.8618	Eremophila forrestii subsp. forrestii
Deighton, M	1981-04-03	-23.3514	119.73	Cymbopogon ambiguus
Latz, P.K.	2001-07-16	-23.6631	119.7531	Cynodon prostratus
Sweedman	2006-10-10	-23.3466	119.8247	Acacia inaequilatera
Walker, K.	1983-04-05	-23.3514	119.73	Goodenia lamprosperma
Walker, K.	1983-04-06	-23.3514	119.73	Areocleome oxalidea
Cook, B.	2006-07-26	-23.345	120.0587	Bonamia rosea
Walker, K.	1980-07-18	-23.3514	119.73	Eremophila platycalyx subsp. Neds Creek (N.H.Speck 1228)
Brooker, M	1983-07-06	-23.25	119.6	Eucalyptus trivalva
Walker, K.	1980-07-18	-23.3514	119.73	Goodenia glabrata
Reid, J.E.	2009-10-26	-23.3447	119.8899	Acacia aptaneura
Mather, S.;	2009-07-17	-23.1872	119.6975	Lysiana
Walker, K.	1981-04-08	-23.3514	119.73	Acacia citrinoviridis
Walker, K.	1980-07-21	-23.3514	119.73	Dodonaea pachyneura
Edwards, T	2009-04-25	-23.3247	119.9308	Eriachne mucronata
Deighton, M	1982-07-17	-23.3514	119.73	Androcalva luteiflora
Bull, J.	2015-07-12	-23.3516	119.9008	Phyllanthus virgatus
Walker, K.	1980-10-25	-23.3514	119.73	Acacia elachantha
Kaljuste, D.	1988-07-02	-23.05	119.85	Gomphrena kanisii
van Leeuw	1993-07-09	-23.3408	120.0222	Acacia sp. (NEQ)
Walker, K.	1980-07-13	-23.3514	119.73	Atriplex semilunaris
Walker, K.	1980-07-30	-23.6	119.8	Senna hamersleyensis
van Leeuw	1993-07-09	-23.3027	119.8732	Rotala diandra
Walker, K.	1980-07-16	-23.3514	119.73	Ptilotus clementii
Cook, B.	2006-07-29	-23.3213	120.0631	Mirbelia viminalis
Walker, K.	1980-07-14	-23.3514	119.73	Cheilanthes lasiophylla
Erickson, T.	2008-10-30	-23.342	119.8211	Acacia sclerosperma subsp. sclerosperma

van Leeuw	2000-07-15	-23.3214	119.6033	Goodenia forrestii
Walker, K.	1980-07-18	-23.3514	119.73	Eremophila clarkei
Walker, K.	1980-07-30	-23.6	119.8	Streptoglossa liatroides
Maslin, B.R	2007-10-14	-23.4653	120.1775	Acacia aneura
Walker, K.	1983-04-06	-23.3514	119.73	Euploca cunninghamii
Start, A.N.	1994-07-14	-22.9533	119.9667	Amyema hilliana
Walker, K.	1980-07-17	-23.3514	119.73	Mirbelia viminalis
Lullfitz, F.;	1963-10-15	-23.2617	119.73	Goodenia ramelii
Lullfitz; Fai	1963-10-15	-23.8	120.0833	Calandrinia papillata
Walker, K.	1980-07-30	-23.3514	119.73	Scaevola spinescens
Walker, K.	1980-07-17	-23.3514	119.73	Eremophila exilifolia
Demarz, H.	1970-10-26	-23.5667	120.2381	Calotis multicaulis
Deighton, M	1982-04-04	-23.3514	119.73	Enchylaena tomentosa var. tomentosa
van Leeuw	2000-07-15	-23.3201	119.6047	Sclerolaena cuneata
Walker, K.	1980-07-21	-23.3514	119.73	Eremophila margarethae
Newbey, K.	1984-04-05	-23.3333	119.6667	Maireana
Walker, K.	1981-07-26	-23.2167	120.0167	Acacia adsurgens
Walker, K.	1980-07-17	-23.3514	119.73	Mimulus
Walker, K.	1980-07-21	-23.3514	119.73	Cheilanthes
Fairall; Lull	1963-10-15	-23.2186	119.8003	Ipomoea muelleri
Deighton, M	1982-07-17	-23.3514	119.73	Indigofera georgei
Henson, M	2008-07-11	-23.3589	120.0779	Tephrosia sp. NW Eremaean (S.van Leeuwen et al. PBS 0356)
Newbey, K.	1984-04-05	-23.3514	119.73	Acacia eriopoda
Newbey, K.	1984-04-05	-23.3333	119.6667	Euploca heterantha
Maslin, B.R	1980-07-07	-23.2817	119.6406	Acacia aptaneura
Cook, B.	2006-07-29	-23.3242	120.0674	Androcalva luteiflora
Walker, K.	1981-04-07	-23.3514	119.73	Acacia inaequilatera
Latz, P.K.	2001-07-16	-23.6617	119.7544	Eremophila exilifolia
Maslin, B.R	1980-07-07	-23.2817	119.6406	Acacia bivenosa
Maier, M.;	2000-10-02	-23.3101	119.7479	Eriachne tenuiculmis
Walker, K.	1980-10-29	-23.3514	119.73	Solanum elatius
Carroll, E.	2006-04-08	-23.3181	119.7542	Ipomoea plebeia
Eckersley, J	2020-04-17	-23.4	119.6	Indigofera gilesii
Maslin, B.R	1980-07-07	-23.2817	119.6406	Acacia sclerosperma subsp. sclerosperma
Walker, K.	1980-07-11	-23.3514	119.73	Eremophila latrobei subsp. latrobei
Ladyman, M	2006-07-26	-23.3487	120.0385	Acacia hilliana
McCreery,	2011-10-05	-23.3197	120.172	Ventilago viminalis
Walker, K.	1981-07-26	-23.3231	119.9375	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Walker, K.	1980-07-16	-23.3514	119.73	Paraneurachne muelleri
Maslin, B.R	2007-10-16	-23.5167	120.1179	Acacia pteraneura
van Leeuw	1993-07-09	-23.3027	119.8732	Gonocarpus ephemerus
Love, M.	2006-04-04	-23.3147	119.7783	Sida cardiophylla
Walker, K.	1980-07-21	-23.3514	119.73	Rutidosis helichrysoides
Newbey, K.	1984-04-04	-23	119.9833	Scaevola parvifolia subsp. pilbarae
Bergh, C. v	2020-04-16	-23.4	119.6	Goodenia nuda
Demarz, H.	1978-10-13	-23.1178	119.73	Tribulus hirsutus
Walker, K.	1980-07-17	-23.3514	119.73	Minuria integerrima
Bull, J.; Car	2006-04-06	-23.3054	119.7607	Polycarpaea involucrata
Maslin, B.R	2007-10-14	-23.4653	120.1775	Acacia mulganeura
Walker, K.	1980-07-11	-23.35	119.75	Acacia sibirica

Deighton, M	1982-07-14	-23.3514	119.73	Calotis hispidula
Newbey, K.	1984-04-04	-23	119.9833	Scaevola parvifolia
Walker, K.	1980-07-28	-23.65	119.7	Eremophila lanceolata
McCreery,	2011-07-19	-23.327	120.1797	Phyllanthus maderaspatensis
Walker, K.	1980-07-28	-23.3514	119.73	Abutilon amplum
Maslin, B.R	2004-10-11	-23.3375	119.9856	Acacia monticola
Maslin, B.R	1980-07-07	-23.2719	119.6283	Acacia inaequilatera
Bergh, C. v	2019-04-14	-23.4	120.3	Goodenia nuda
Deighton, M	1981-07-11	-23.3514	119.73	Stemodia viscosa
Erickson, T.	2011-07-16	-23.444	119.763	Triodia angusta
Brearley, D	2006-07-26	-23.3388	120.0251	Ptilotus astrolasius
Bull, J.; Pal	2013-10-08	-23.3207	120.1314	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Bull, J.	2015-07-12	-23.3516	119.9008	Cyperus betchei subsp. commiscens
Mitchell, A.	1995-08-29	-23.4939	120.4427	Goodenia microptera
van Leeuw	1997-10-14	-23.3178	119.7103	Triodia angusta
Bergh, C. v	2019-04-16	-23.4	120.3	Rhagodia sp. Hamersley (M.Trudgen 17794)
Sweedman	2006-10-10	-23.2058	119.8682	Senna artemisioides subsp. oligophylla
Sweedman	2006-10-10	-23.2058	119.8682	Senna glutinosa subsp. x luerssenii
Walker, K.	1980-07-07	-23.35	119.75	Acacia tenuissima
Edwards, T	2009-04-25	-23.3292	119.9458	Boerhavia repleta
McIntyre, F	2007-04-05	-23.3867	120.106	Scaevola spinescens
Wilson, K.L	2006-05-07	-23.3153	119.6325	Bulbostylis turbinata
van Leeuw	2000-07-15	-23.3201	119.6047	Rutidosis helichrysoides subsp. helichrysoides
Demarz, H.	1978-10-13	-23	119.9833	Podolepis eremaea
Bull, J.; Wa	2015-07-08	-23.2884	119.8778	Sida calyxhymenia
Maslin, B.R	2007-10-17	-23.4474	119.7957	Acacia aptaneura
Walker, K.	1980-07-14	-23.35	119.75	Ptilotus astrolasius
Edwards, T	2009-04-25	-23.3319	119.9533	Triodia basedowii
Walker, K.	1980-07-18	-23.3514	119.73	Acacia adsurgens
Fryer, R.A.;	2016-08-03	-23.465	119.7958	Lysiana subfalcata
van Leeuw	2000-07-15	-23.3201	119.6047	Panicum decompositum
Brooker, M	1983-07-03	-23.3833	119.8833	Eucalyptus camaldulensis subsp. obtusa
Walker, K.	1980-07-11	-23.6	119.7	Eremophila latrobei subsp. latrobei
Edwards, T	2009-04-23	-23.3903	119.8756	Sporobolus actinocladus
Tomanovic	2011-10-07	-23.3607	120.1544	Eremophila oppositifolia subsp. angustifolia
Lullfitz, F.;	1963-10-15	-23.0833	119.9667	Ptilotus aphyllus
Walker, K.	1980-07-20	-23.3514	119.73	Rhodanthe charsleyae
Mitchell, A.	1995-08-29	-23.4942	120.45	Acacia paraneura
Brearley, D	2006-07-26	-23.3388	120.0251	Trachymene oleracea subsp. oleracea
Erickson, T.	2008-10-30	-23.3175	119.7698	Acacia bivenosa
McIntyre, F	2007-04-15	-23.3867	120.106	Triodia basedowii
Walker, K.	1980-07-21	-23.3667	119.6833	Acacia hamersleyensis
McCann, K.	2009-04-23	-23.3178	119.8892	Chloris pumilio
Lyons, M.N	2005-04-23	-23.1873	119.6993	Chara fibrosa
Bull, J.; Wa	2015-07-09	-23.255	119.9108	Muelleranthus
Tomanovic	2011-10-09	-23.3253	120.1301	Streptoglossa macrocephala
Brooker, M	1983-07-03	-23.3833	119.8833	Eucalyptus camaldulensis subsp. obtusa
Latz, P.K.	2001-07-16	-23.6531	119.7531	Sida brownii
Brooker, M	1983-07-04	-23.2667	119.7667	Eucalyptus kingsmillii
Walker, K.	1980-07-13	-23.3667	119.6833	Eragrostis dielsii

Edwards, T	2009-04-23	-23.3214	119.92	Goodenia sp. Sandy Creek (R.D.Royce 1653)
Erickson, T.	2008-07-17	-23.3431	119.888	Melaleuca glomerata
Mitchell, A.	1996-07-25	-23.0519	120.1456	Corchorus crozophorifolius
Sweedman	2006-10-10	-23.1966	119.7841	Acacia monticola
Reid, J.E.	2009-10-26	-23.4341	119.7837	Acacia macraneura
Pringle, H.	1995-04-07	-23.0911	120.4608	Halgania solanacea var. Mt Doreen (G.M.Chippendale 4206)
Walker, K.	1980-07-17	-23.6	119.7	Eremophila exilifolia
Newbey, K.	1984-04-05	-23.3333	119.6667	Anthobolus leptomerioides
Newbey, K.	1984-04-05	-23.3333	119.6667	Acacia sibirica
Beard, J.S.	1967-04-12	-23.1992	120.0956	Acacia citrinoviridis
Maslin, B.R	2007-10-14	-23.4653	120.1775	Acacia aptaneura
Sweedman	2006-10-10	-23.1966	119.7841	Acacia monticola
Brooker, M	1983-07-03	-23.3833	119.8833	Corymbia aspera
Fairall, A.R.	1963-10-15	-23.1744	119.73	Goodenia azurea subsp. hesperia
Cole, A.	2011-10-07	-23.3469	120.177	Stenopetalum decipiens
Erickson, T.	2008-10-02	-23.2928	119.6491	Indigofera monophylla
Love, M.	2006-04-06	-23.3017	119.7764	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Sweedman	2006-10-10	-23.3466	119.8247	Acacia ancistrocarpa
van Leeuw	1993-07-09	-23.3027	119.8732	Schoenoplectiella laevis
Walker, K.	1984-04-30	-23.2	120	Acacia adsurgens
Walker, K.	1980-07-15	-23.35	119.75	Ptilotus gomphrenoides
Bull, J.; Wa	2015-09-30	-23.2841	119.6139	Streptoglossa
Walker, K.	1980-07-30	-23.3514	119.73	Eremophila lachnocalyx
Edwards, T	2009-04-25	-23.3306	119.9547	Sida sp. L (A.M.Ashby 4202)
Reid, J.E.	2009-10-25	-23.4441	119.7853	Acacia macraneura
Edgecombe	1983-07-04	-23.3333	119.75	Eucalyptus kingsmillii
Brooker, M	1974-04-19	-23.3667	119.85	Eucalyptus leucophloia subsp. leucophloia
Speed, D.	2008-11-14	-22.9909	119.7912	Acacia ancistrocarpa
Walker, K.	1981-04-08	-23.2333	120.0167	Acacia citrinoviridis
Walker, K.	1980-07-17	-23.2425	120.0167	Hakea
Maslin, B.R	1980-07-07	-23.2817	119.6406	Acacia pruinocarpa
van Leeuw	2000-07-15	-23.3201	119.6047	Lepidium
Sgherza, C.	2009-04-25	-23.3381	119.7303	Echinochloa colona
Edwards, T	2009-04-23	-23.325	119.8669	Dichanthium fecundum
Walker, K.	1984-04-11	-23.2533	120.0158	Dipteracanthus australasicus
Walker, K.	1984-04-30	-23.2	120	Acacia hilliana
Winton, C.	2008-04-19	-23.3517	120.3834	Calandrinia balonensis
Demarz, H.	1970-10-26	-23.5667	120.2381	Roebuckiella similis
van Leeuw	1993-07-09	-23.3027	119.8732	Drosera finlaysoniana
van Leeuw	2000-07-15	-23.3201	119.6047	Atriplex codonocarpa
Erickson, T.	2011-07-16	-23.5539	119.7598	Triodia basedowii
Walker, K.	1980-07-30	-23.2333	120	Scaevola spinescens
Edwards, T	2009-04-25	-23.3319	119.9533	Panicum effusum
Bull, J.	2006-08-08	-23.3914	119.6926	Haloragis gossei var. gossei
Reid, J.E.	2009-10-26	-23.3447	119.8899	Acacia aptaneura
Bull, J.; Wa	2015-10-05	-23.3	119.6	Triodia sp. Mt Ella (M.E.Trudgen 12739)
Walker, K.	1980-10-29	-23.3667	120.2	Acacia synchronicia
Bull, J.; Pal	2013-10-11	-23.2934	120.1111	Acacia kempeana
Walker, K.	1981-04-08	-23.2333	120.0167	Acacia citrinoviridis
Sweedman	2006-10-10	-23.3466	119.8247	Acacia bivenosa

Endersby, M	1995-04-22	-23.2033	120.3614	Ptilotus aphyllus
Whitehead	2007-05-06	-23.3413	119.8145	Acacia sclerosperma subsp. sclerosperma
Thiele, K.R.	2012-07-06	-23.1884	119.6994	Ammannia multiflora
Brearley, D	2006-07-29	-23.3202	120.0721	Rutidosis helichrysoides
Graham, R.	2008-10-01	-23.1	119.9	Goodenia nuda
Walker, K.	1981-07-27	-23.3514	119.73	Eucalyptus socialis
Walker, K.	1981-04-07	-23.2333	120.0167	Acacia monticola
Walker, K.	1980-07-11	-23.3514	119.73	Acacia sibirica
Sweedman	2006-10-10	-23.206	119.8834	Acacia dictyophleba
Mitchell, A.	1981-11-20	-22.8997	120.1667	Astrebla pectinata
Demarz, H.	1973-10-24	-23.3333	119.8333	Portulaca cyclophylla
van Leeuwe	1993-07-09	-23.3406	120.0031	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Bull, J.; Rob	2013-04-26	-23.3566	120.096	Hibiscus
Fox, J.	1984-04-04	-23.3514	119.73	Ptilotus auriculifolius
van Leeuwe	2000-07-15	-23.3201	119.6047	Minuria integerrima
Walker, K.	1980-07-11	-23.3514	119.73	Acacia adsurgens
Bull, J.	2015-07-15	-23.3202	120.1661	Acacia clelandii
Hammer, T	2015-08-13	-23.2236	119.9053	Ptilotus schwartzii
Brooker, M	1983-07-04	-23.2667	119.7667	Corymbia hamersleyana
Bull, J.; Car	2006-04-04	-23.3079	119.795	Sida sp. Excedentifolia (J.L.Egan 1925)
Bull, J.	2015-07-10	-23.2	120	Eremophila youngii subsp. lepidota
Deighton, M	1982-07-23	-23.3514	119.73	Sclerolaena lanicuspis
van Leeuwe	2000-07-15	-23.3201	119.6047	Swainsona leeana
Walker, K.	1980-07-15	-23.3514	119.73	Goodenia prostrata
Trudgen, M	1972-02-01	-23.3581	119.7172	Abutilon fraseri
Hammer, T	2015-08-13	-23.2236	119.9053	Ptilotus helipteroides
Maslin, B.R	2007-10-14	-23.4806	120.315	Acacia pteraneura
McCreery,	2011-07-19	-23.3583	120.098	Eragrostis olida
Bull, J.; Pal	2013-10-12	-23.2989	120.0894	Acacia clelandii
Deighton, M	1982-07-14	-23.3514	119.73	Rhodanthe stricta
van Leeuwe	2000-07-15	-23.3201	119.6047	Streptoglossa liatroides
Walker, K.	1980-07-16	-23.3514	119.73	Acacia adsurgens
Walker, K.	1980-11-06	-23.3667	119.7	Acacia pruinocarpa
Watkins, B.	2011-05-29	-23.3	119.7	Lepidium catapycnon
Maslin, B.R	2004-10-11	-23.3375	119.9856	Acacia monticola
McCreery,	2011-07-19	-23.3583	120.098	Scleromitrion galioides
Reid, J.E.	2009-10-25	-23.4441	119.7853	Acacia fuscaneura
Walker, K.	1980-07-13	-23.35	119.75	Ptilotus obovatus
Maslin, B.R	2007-10-14	-23.4806	120.315	Acacia paraneura
Maslin, B.R	1980-07-07	-23.2719	119.6283	Acacia ancistrocarpa
Walker, K.	1980-11-05	-23.3667	119.7	Acacia acradenia
Wajon, J.E.	2003-08-07	-23.2866	119.6578	Streptoglossa decurrens
Love, M.	2006-04-03	-23.3167	119.8322	Abutilon amplum
McCreery,	2001-01-29	-22.9209	120.1977	Urochloa subquadripara
van Leeuwe	2000-07-15	-23.3201	119.6047	Desmodiopsis campylocaulon
Latz, P.K.	2001-07-16	-23.6631	119.7531	Eremophila cuneifolia
Maslin, B.R	2007-10-14	-23.4806	120.315	Acacia pteraneura
Bull, J.; Wa	2015-07-08	-23.2835	119.8798	Eragrostis speciosa
Lyons, M.N	2016-08-27	-22.9803	120.247	Convolvulus clementii
McCreery,	2013-08-28	-23.4122	120.0829	Goodenia

Walker, K.	1980-07-17	-23.3514	119.73	Amyema preissii
Reid, J.E.	2009-10-26	-23.3447	119.8899	Acacia aptaneura
van Leeuw	2000-07-15	-23.3201	119.6047	Maireana tomentosa
Edwards, T	2009-04-25	-23.3258	119.9347	Eragrostis tenellula
Erickson, T.	2011-04-15	-23.2926	119.6497	Triodia pungens
Brooker, M	1983-07-03	-23.2833	119.7	Corymbia ferriticola
Lyons, M.N	2016-08-26	-22.9803	120.247	Eucalyptus victrix
Obbens, F.;	2004-05-30	-22.964	120.1934	Calandrinia quadrivalvis
Walker, K.	1980-10-14	-23.3514	119.73	Acacia arida
Latz, P.K.	2001-07-15	-23.6517	119.7747	Goodenia prostrata
Bull, J.; Pal	2013-10-11	-23.3013	120.1132	Fimbristylis eremophila
Maslin, B.R	1980-07-07	-23.2561	119.6081	Acacia maitlandii
Latz, P.K.	2001-07-16	-23.6631	119.7531	Corchorus crozophorifolius
Mattner, J.	2011-04-13	-23.3	119.7	Aristida jerichoensis var. subspinulifera
Bull, J.; Wa	2016-05-25	-23.3638	120.192	Fimbristylis microcarya
Maslin, B.R	2004-05-30	-22.9842	120.3366	Acacia trudgeniana
Deighton, M	1981-04-03	-23.3514	119.73	Themeda triandra
Newbey, K.	1984-04-05	-23.3333	119.6667	Acacia aptaneura
Beard, J.S.	1967-04-12	-23.1992	120.0956	Acacia citrinoviridis
Wilson, K.L	2006-05-02	-23.4908	120.3181	Schoenoplectiella laevis
Maslin, B.R	2007-10-13	-23.1828	119.8964	Acacia aptaneura
Walker, K.	1980-10-25	-23.3667	119.7	Acacia sericophylla
Hammer, T	2015-08-13	-23.2236	119.9053	Ptilotus helipteroides
Mollemans	1987-02-26	-23.2803	119.6256	Trianthema pilosum
Walker, K.	1980-07-17	-23.3514	119.73	Santalum lanceolatum
Reid, J.E.	2009-10-26	-23.2296	119.905	Acacia pteraneura
Brooker, M	1983-07-03	-23.3333	119.8833	Eucalyptus leucophloia subsp. leucophloia
van Leeuw	1993-07-09	-23.3406	120.0031	Acacia sp. Jimblebar (S.van Leeuwen 1342)
Thiele, K.R.	2012-07-06	-23.1884	119.6994	Ptilotus incanus
Love, M.	2006-04-08	-23.3181	119.7542	Dichanthium sericeum subsp. sericeum
Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus iria
Erickson, T.	2008-11-01	-23.2484	119.5973	Acacia inaequilatera
Carroll, E.	2006-04-05	-23.3186	119.7706	Amaranthus cuspidifolius
Newbey, K.	1984-04-05	-23.3333	119.6667	Eremophila longifolia
Brooker, M	1983-07-04	-23.2833	119.7667	Corymbia deserticola subsp. deserticola
Walker, K.	1983-04-12	-23.2167	120.0333	Acacia wanyu
Newbey, K.	1984-04-05	-23.3333	119.6667	Dipteracanthus australasicus subsp. australasicus
Cook, B.	2006-07-27	-23.3484	120.0496	Ptilotus rotundifolius
Beard, J.S.	1963-08-13	-23.3	119.85	Acacia bivenosa
Lyons, M.N	2016-08-27	-22.9803	120.247	Pseudognaphalium luteoalbum
Erickson, T.	2008-10-02	-23.2973	119.7671	Trichodesma zeylanicum var. zeylanicum
Lullfitz, F.;	1963-10-15	-23.1394	119.9533	Goodenia armitiana
Maslin, B.R	2004-10-11	-23.3394	119.8775	Acacia citrinoviridis
Nordenstar	1989-10-05	-23.5403	119.73	Streptoglossa decurrens
Sgherza, C.	2009-04-26	-23.3164	119.7956	Triodia angusta
Maslin, B.R	2007-10-15	-23.1143	120.5056	Acacia
van Leeuw	2000-07-15	-23.3201	119.6047	Eragrostis setifolia
S. van Leeu	2006-05-02	-23.3725	120.4586	Triraphis mollis
Erickson, T.	2008-07-16	-23.2973	119.7671	Hibiscus haynaldii
Newbey, K.	1984-04-05	-23.3333	119.6667	Isotropis iophyta

Reid, J.E.	2009-10-25	-23.4131	119.7989	Acacia macraneura
Erickson, T.	2008-05-29	-23.3248	119.7555	Portulaca oleracea
Maslin, B.R	2004-10-11	-23.3375	119.9856	Acacia tenuissima
Roberts, D.	2013-10-09	-23.3236	120.1151	Halgania solanacea var. Mt Doreen (G.M.Chippendale 4206)
Mitchell, A.	1996-07-25	-22.9361	120.1672	Cucumis melo
S. van Leeu	2006-05-02	-23.3725	120.4586	Isotropis iophyta
Newbey, K.	1984-04-05	-23.3333	119.6667	Goodenia prostrata
Reid, J.E.	2009-10-25	-23.4131	119.7989	Acacia macraneura
Maslin, B.R	1980-07-07	-23.3667	119.6833	Acacia hamersleyensis
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus vaginatus
Kaljuste, D.	1988-01-06	-23.4653	120.2456	Capparis spinosa
Edwards, T	2009-04-24	-23.3186	119.9028	Cymbopogon ambiguus
Bull, J.; Wa	2015-07-07	-23.3014	119.8688	Senna sp. Billabong (J.D.Alonzo 721)
Lyons, M.N	2016-08-27	-22.9803	120.247	Centipeda minima subsp. macrocephala
Newbey, K.	1984-04-05	-23.3333	119.6667	Santalum lanceolatum
Reid, J.E.	2009-10-25	-23.4441	119.7853	Acacia fuscaneura
Walker, K.	1981-04-07	-23.2333	120.0167	Acacia hilliana
Mitchell, A.	1995-08-28	-22.9447	120.1667	Lotus cruentus
van Leeuw	1993-07-09	-23.3013	119.8746	Charophyta
Bull, J.	2015-07-15	-23.3428	119.9193	Dampiera cinerea
Erickson, T.	2008-07-15	-23.3449	119.8888	Eragrostis tenellula
Whitehead	2007-05-06	-23.337	119.779	Paspalidium constrictum
Newbey, K.	1984-04-05	-23.3333	119.6667	Tragus australianus
Sweedman	2012-10-19	-23.6686	120.3111	Corymbia deserticola subsp. deserticola
Latz, P.K.	2001-07-16	-23.6631	119.7531	Acacia rhodophloia
Mitchell, A.	1995-08-28	-22.9447	120.1667	Stylidium desertorum
Maslin, B.R	2007-10-15	-23.1974	119.9072	Acacia paraneura
Maslin, B.R	2004-10-11	-23.3422	120.0078	Acacia trudgeniana
Erickson, T.	2008-11-02	-23.4481	119.7831	Senna glutinosa subsp. pruinosa
Cassis, G.	1999-05-28	-23.2194	119.9033	Senna glutinosa subsp. glutinosa
Hopper, S.I	1986-07-29	-23.35	119.6333	Corymbia hamersleyana
Angus, D.	2009-04-22	-23.1782	119.7358	Senna venusta
Newbey, K.	1984-04-05	-23.3333	119.6667	Bidens subalternans var. araneosa
Bull, J.	2006-08-07	-23.3383	119.6958	Abutilon amplum
McCann, K.	2009-04-25	-23.3239	119.8719	Eremophila margarethae
Maslin, B.R	2004-10-11	-23.3422	120.0078	Acacia adsurgens
Mitchell, A.	1995-08-29	-23.4083	120.5725	Acacia hilliana
Mitchell, A.	2017-05-08	-23.2737	119.6258	Solanum cleistogamum
Reid, J.E.	2009-10-25	-23.4131	119.7989	Acacia
Maslin, B.R	2007-10-14	-23.4806	120.315	Acacia pteraneura
Newbey, K.	1984-04-05	-23.3333	119.6667	Senna hamersleyensis
Bull, J.	2015-07-15	-23.3016	120.092	Acacia corusca
Maslin, B.R	2007-10-14	-23.4806	120.315	Acacia paraneura
Walker, K.	1980-07-14	-23.2525	120.0178	Swainsona decurrens
Walker, K.	1980-08-20	-23.6667	119.7667	Ptilotus rotundifolius
Mitchell, A.	1996-05-23	-23.0969	120.0069	Eccremidium arcuatum
Maslin, B.R	1980-07-07	-23.2561	119.6081	Acacia monticola
Erickson, T.	2009-10-20	-23.3175	119.77	Acacia hilliana
Newbey, K.	1984-04-05	-23.3333	119.6667	Ptilotus carinatus
Stacey, C.I.	1980-08-09	-23.5	119.7667	Dicrastylis cordifolia

Short, P.S.	1995-08-27	-23.1667	119.9	Rhodanthe floribunda
Coultas, S.	2020-04-18	-23.4	119.6	Isotropis parviflora
Beard, J.S.	1963-08-13	-23.7258	120.2381	Eremophila cuneifolia
Wilson, K.L	2006-05-04	-22.9506	120.28	Schoenoplectiella laevis
Newbey, K.	1984-04-05	-23.3333	119.6667	Salsola australis
Walker, K.	1980-07-21	-23.3667	119.6833	Acacia hamersleyensis
McCreery,	2001-01-29	-22.9209	120.1977	Erigeron bonariensis
Maslin, B.R	2006-08-10	-23.3897	120.5164	Acacia maitlandii
S. van Leeu	2006-08-09	-23.4128	120.3175	Senna symonii
Walker, K.	1984-04-11	-23.4	119.7	Ipomoea racemigera
Latz, P.K.	2001-07-16	-23.6631	119.7531	Frankenia setosa
Bull, J.	2006-08-08	-23.3925	119.6994	Acacia tenuissima
Wilson, K.L	2006-05-02	-23.4686	120.1908	Bulbostylis barbata
McCann, K.	2009-04-26	-23.3006	119.8039	Acacia ancistrocarpa
Erickson, T.	2008-10-02	-23.2928	119.6491	Senna notabilis
Bull, J.	2006-08-03	-23.3561	119.6356	Cullen leucochaites
Bull, J.; Wa	2015-02-22	-23.4104	119.9932	Eragrostis speciosa
Bull, J.; Pal	2013-10-14	-23.3	120.1	Eremophila capricornica
S. van Leeu	2006-05-02	-23.3725	120.4586	Panicum decompositum
Tomanovic	2011-10-04	-23.3376	120.0968	Frankenia setosa
Mitchell, A.	1995-08-28	-22.9447	120.1667	Stackhousia muricata
Sweedman	2006-07-21	-23.2037	119.8105	Abutilon lepidum
Erickson, T.	2008-07-13	-23.2915	119.6516	Ptilotus nobilis subsp. nobilis
Bull, J.; Bre	2015-08-02	-23.2961	120.0896	Acacia corusca
Craven, L.A	2006-05-02	-23.5361	120.3258	Hibiscus sturtii var. campylochlamys
Bull, J.; Rob	2013-04-25	-23.3	120.1	Triodia sp. Mt Ella (M.E.Trudgen 12739)
S. van Leeu	2006-05-02	-23.3725	120.4586	Cyperus iria
Maslin, B.R	2009-05-25	-23.4399	119.7873	Acacia macraneura
Erickson, T.	2008-05-30	-23.3248	119.7555	Cymbopogon ambiguus
Brooker, M	1983-07-04	-23.45	119.7667	Corymbia deserticola subsp. deserticola
Sweedman	2006-10-10	-23.2018	119.9051	Acacia hilliana
Mitchell, A.	1995-08-29	-23.4083	120.5725	Calytrix carinata
Walker, K.	1980-08-05	-23.5833	119.65	Ptilotus rotundifolius
Love, M.	2006-04-07	-23.3078	119.7753	Paspalidium rarum
Bull, J.; Wa	2015-10-01	-23.2872	119.6535	Gossypium sturtianum var. sturtianum
Beauglehol	1974-08-18	-23.2333	119.9	Goodenia prostrata
Walker, K.	1984-04-30	-23.2244	120.0211	Acacia sp. (NEQ)
Maslin, B.R	1980-07-07	-23.2467	119.5958	Acacia tenuissima
Walker, K.	1980-07-07	-23.35	119.75	Acacia tenuissima
Mitchell, A.	1995-08-29	-23.4083	120.5725	Afrohybanthus aurantiacus
S. van Leeu	2006-05-03	-23.384	120.4794	Swainsona oroboides
Mitchell, A.	1996-06-17	-23.2067	119.8553	Corymbia candida subsp. candida
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus iria
Mitchell, A.	1985-08-29	-23.7167	120.05	Ptilotus obovatus
Edwards, T	2009-05-05	-23.2797	119.6756	Hibiscus coatesii
van Leeuw	2000-07-15	-23.3201	119.6047	Lepidium phlebopetalum
Latz, P.K.	2001-07-16	-23.6631	119.7531	Goodenia muelleriana
Edgecombe	1983-11-01	-23.3167	119.8333	Eucalyptus xerothermica
S. van Leeu	2006-05-02	-23.4128	120.3175	Citrullus amarus
Trudgen, M	1973-01-14	-23.35	119.7333	Marsilea exarata

S. van Leeu	2006-05-02	-23.3725	120.4586	Euphorbia
S. van Leeu	2006-05-04	-23.1175	120.5189	Chloris pectinata
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus difformis
van Leeuwe	2000-07-15	-23.3201	119.6047	Sclerolaena lanicuspis
Nordenstar	1989-10-05	-23.5403	119.73	Chrysocephalum pterochaetum
Maslin, B.R	2006-08-10	-23.3814	120.2519	Acacia marramamba
van Leeuwe	1998-08-19	-23.33	120.0211	Dicrastylis cordifolia
Mitchell, A.	1977-04-10	-23.35	119.7333	Eremophila gilesii
van Leeuwe	1992-05-28	-23.3331	120.0383	Cryptandra monticola
S. van Leeu	2006-05-04	-23.1175	120.5189	Acacia paraneura
Walker, K.	1980-11-05	-23.3667	119.7	Acacia acradenia
Bull, J.	2015-07-15	-23.3217	120.1602	Acacia clelandii
Bull, J.; Wa	2016-04-02	-23.2563	120.1307	Hibiscus arenicola
Mitchell, A.	1995-08-29	-23.5189	120.3322	Solanum centrale
van Leeuwe	1998-08-19	-23.33	120.0211	Sida sp. Shovelanna Hill (S.van Leeuwen 3842)
Walker, K.	1980-07-13	-23.35	119.7333	Acacia tetragonophylla
Burbidge, N	1958-05-07	-23.2	119.9	Acacia coriacea subsp. pendens
Carroll, E.	2007-05-16	-23.3878	120.0253	Triodia vanleeuwenii
Bergh, C. v	2021-05-03	-23.4393	119.8747	Heteropogon contortus
Bean, A.R.	2006-05-02	-23.4961	120.3192	Swainsona decurrens
Maslin, B.R	2006-08-11	-23.1169	120.5189	Acacia subcontorta
S. van Leeu	2006-05-03	-23.4088	120.5603	Paspalidium basicladum
van Leeuwe	1998-08-19	-23.33	120.0211	Sida sp. Excedentifolia (J.L.Egan 1925)
Walker, K.	1980-07-15	-23.3514	119.73	Ptilotus polystachyus
Bean, A.R.	2006-05-02	-23.3634	120.3816	Gomphrena kanisii
Jackson, E.I	1977-08-16	-23.1167	119.9167	Senna notabilis
Lyons, M.N	2016-08-27	-22.9803	120.247	Duperreya commixta
S. van Leeu	2006-05-03	-23.4088	120.5603	Acacia paraneura
Mitchell, A.	1979-05-16	-23.05	120.0833	Aerva javanica
S. van Leeu	2006-05-03	-23.4088	120.5603	Areocleome oxalidea
S. van Leeu	2006-05-01	-23.4588	120.1555	Senna glutinosa subsp. pruinosa
Walker, K.	1980-07-16	-23.3514	119.73	Acacia sclerosperma subsp. sclerosperma
Erickson, T.	2008-10-31	-23.3095	119.7968	Acacia tenuissima
Mitchell, A.	1995-08-29	-23.4083	120.5725	Haloragis gossei var. gossei
Lyons, M.N	2016-08-27	-22.9803	120.247	Isolepis congrua
S. van Leeu	2006-05-03	-23.4088	120.5603	Eriachne aristidea
Sgherza, C.	2009-04-22	-23.3333	119.7381	Eriachne lanata
Lyons, M.N	2016-08-27	-22.9803	120.247	Evolvulus alsinoides var. villosicalyx
Mitchell, A.	1981-11-07	-22.9	120.1667	Stemodia viscosa
Walker, K.	1980-07-21	-23.3514	119.73	Dodonaea pachyneura
Walker, K.	1984-04-30	-23.2	120	Acacia ancistrocarpa
Walker, K.	1981-11-26	-23.3667	119.7	Grevillea striata
Walker, K.	1981-11-01	-23.3667	119.7	Eucalyptus victrix
S. van Leeu	2006-05-02	-23.3725	120.4586	Alternanthera denticulata
Edwards, T	2009-05-05	-23.2958	119.6794	Euphorbia australis var. subtomentosa
S. van Leeu	2006-05-02	-23.3725	120.4586	Fimbristylis elegans
Carroll, E.	2007-05-17	-23.3964	120.0397	Euploca cunninghamii
Walker, K.	1980-07-14	-23.3514	119.73	Senna glutinosa subsp. pruinosa
Brooker, M	1983-07-03	-23.3333	119.8833	Eucalyptus socialis
Walker, K.	1977-02-24	-23.3667	119.7	Acacia monticola

Walker, K.	1980-11-05	-23.3667	119.7	Acacia acradenia
Lyons, M.N	2016-08-27	-22.9803	120.247	Myriocephalus oldfieldii
S. van Leeu	2006-08-09	-23.5352	120.3255	Ptilotus obovatus
Lyons, M.N	2016-08-27	-22.9803	120.247	Lepidium muelleri-ferdinandi
Tomanovic	2013-08-28	-23.4131	120.0702	Gnephosis arachnoidea
Walker, K.	1980-07-16	-23.3514	119.73	Eremophila maculata subsp. brevifolia
Bull, J.; Pal	2013-10-06	-23.2982	120.1158	Acacia
Bean, A.R.	2006-04-30	-23.0034	119.9886	Ptilotus nobilis subsp. nobilis
Mitchell, A.	1995-08-29	-23.4953	120.4414	Goodenia glabrata
Walker, K.	1980-08-05	-23.3667	119.7	Operculina aequisepala
Beard, J.S.	1963-08-13	-23.35	119.8167	Ptilotus axillaris
S. van Leeu	2006-05-02	-23.3725	120.4586	Aristida hygrometrica
S. van Leeu	2006-05-03	-23.3019	120.2174	Triodia basedowii
Walker, K.	1980-07-16	-23.3514	119.73	Eremophila canaliculata
Newbey, K.	1984-04-05	-23.3333	119.6667	Gomphrena kanisii
Edgecombe	1983-11-02	-23.3667	119.85	Eucalyptus xerothermica
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus iria
Bean, A.R.	2006-05-02	-23.3634	120.3816	Ptilotus gaudichaudii
S. van Leeu	2006-05-02	-23.4128	120.3175	Dysphania melanocarpa
Maslin, B.R	2006-08-10	-23.4622	120.3125	Acacia subcontorta
S. van Leeu	2006-05-03	-23.3019	120.2174	Triodia schinzii
Deighton, M	1981-07-11	-23.3514	119.73	Dolichocarpa crouchiana
Newbey, K.	1984-04-05	-23.3333	119.6667	Cheilanthes sieberi subsp. sieberi
burbidge, M	1958-05-07	-23.55	119.75	Corymbia aspera
Mitchell, A.	1996-05-23	-23.0969	120.0069	Riccia crinita
Demarz, H.	1968-11-06	-23.5883	119.9711	Acacia cuspidifolia
S. van Leeu	2006-08-09	-23.4128	120.3175	Senna artemisioides subsp. helmsii
Cole, A.	2011-10-09	-23.3253	120.1301	Rutidosis helichrysoides subsp. helichrysoides
Carroll, E.	2006-08-11	-23.3817	119.7092	Rhodanthe margarethae
Walker, K.	1980-07-20	-23.3514	119.73	Lepidium echinatum
Walker, K.	1980-07-14	-23.3667	119.6833	Acacia bivenosa
Burbidge, M	1958-05-07	-23.3167	119.8167	Jacksonia aculeata
Walker, K.	1980-08-20	-23.6667	119.7667	Corchorus lasiocarpus subsp. lasiocarpus
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Trianthema glossostigmum
Beauglehol	1974-08-19	-23.1833	119.7333	Tecticornia disarticulata
Lyons, M.N	2016-08-27	-22.9803	120.247	Marsilea costulifera
Dillon, S.; H	2015-08-13	-23.3631	119.7251	Goodenia stobbsiana
Walker, K.	1980-07-13	-23.3514	119.73	Indigofera georgei
Bull, J.	2015-07-15	-23.2968	120.0838	Acacia corusca
S. van Leeu	2006-05-01	-23.4588	120.1555	Cymbopogon ambiguus
Maslin, B.R	2006-08-11	-23.1169	120.5189	Acacia subcontorta
Maslin, B.R	2004-05-30	-23.3423	120.0075	Acacia trudgeniana
S. van Leeu	2006-05-02	-23.4128	120.3175	Panicum decompositum
Erickson, T.	2008-05-29	-23.3244	119.7568	Boerhavia coccinea
Bull, J.; Wa	2015-02-24	-23.3689	119.9761	Triodia pungens
Deighton, M	1982-07-14	-23.3514	119.73	Amyema gibberula var. gibberula
Sweedman	2006-10-10	-23.2011	119.7976	Acacia tenuissima
S. van Leeu	2006-05-01	-23.4588	120.1555	Polycarpaea longiflora
Pringle, H.J	1995-08-29	-23.4486	120.5264	Isotropis iophyta
S. van Leeu	2006-05-04	-23.1175	120.5189	Ptilotus helipteroides

Maslin, B.R	1982-05-22	-23.2814	119.6414	Acacia ptychophylla
Bean, A.R.	2006-05-02	-23.4136	120.3153	Lepidium echinatum
Short, P.S.	1995-08-27	-23.3169	119.855	Petalostylis labicheoides
Walker, K.	1980-07-13	-23.3514	119.73	Eremophila lanceolata
Sweedman	2006-10-10	-23.2074	119.882	Acacia dictyophleba
S. van Leeu	2006-05-02	-23.4659	120.1762	Phyllanthus erwinii
Bull, J.	2006-08-08	-23.3914	119.6926	Amphipogon sericeus
S. van Leeu	2006-05-04	-23.1175	120.5189	Urochloa occidentalis var. occidentalis
Walker, K.	1980-08-04	-23.3514	119.73	Lepidium platypetalum
Mitchell, A.	1995-08-27	-22.9447	120.1667	Glinus lotoides
S. van Leeu	2006-05-02	-23.4659	120.1762	Psydrax suaveolens
Walker, K.	1980-07-13	-23.3514	119.73	Atriplex codonocarpa
Bull, J.; Rob	2013-04-26	-23.3563	120.0962	Hibiscus
S. van Leeu	2006-05-02	-23.4659	120.1762	Santalum lanceolatum
Tomanovic	2013-10-04	-23.4129	120.0503	Goodenia
Vincent, B.	2004-08-06	-23.2986	119.8408	Triumfetta leptacantha
S. van Leeu	2006-05-03	-23.3861	120.268	Sida ectogama
Mitchell, A.	1995-08-29	-23.5	120.4	Eremophila capricornica
S. van Leeu	2006-05-02	-23.4659	120.1762	Gomphrena cunninghamii
Maslin, B.R	2000-07-10	-23.5492	119.7625	Acacia paraneura
Erickson, T.	2009-10-24	-23.3244	119.7571	Petalostylis labicheoides
Erickson, T.	2008-11-02	-23.3113	119.8007	Androcalva luteiflora
Erickson, T.	2008-05-28	-23.3248	119.7555	Gomphrena cunninghamii
Bean, A.R.	2006-05-02	-23.4948	120.3205	Polygala glaucifolia
S. van Leeu	2006-05-02	-23.3595	120.4602	Eragrostis leptocarpa
S. van Leeu	2006-05-02	-23.5352	120.3255	Sida sp. Kathleen Springs (A.C.Beauglehole 26934)
Maslin, B.R	2009-05-25	-23.4341	119.7837	Acacia macraneura
Maslin, B.R	1980-07-07	-23.2817	119.6406	Acacia synchronicia
Cassis, G.	2005-08-25	-23.2837	119.6233	Goodenia stobbsiana
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Senna notabilis
Walker, K.	1980-07-14	-23.3667	119.6833	Sporobolus australasicus
Wilson, K.L	2006-05-02	-23.4908	120.3181	Cyperus difformis
S. van Leeu	2006-05-03	-23.3861	120.268	Monachather paradoxus
S. van Leeu	2006-05-02	-23.4659	120.1762	Vittadinia virgata
S. van Leeu	2006-08-10	-23.3627	120.2948	Senna glutinosa
Maslin, B.R	2006-08-10	-23.3897	120.5164	Acacia walkeri
Bean, A.R.	2006-05-03	-23.405	120.5544	Hibiscus burtonii
Mitchell, A.	1990-02-27	-23.5	120.5	Maireana amoena
Bull, J.; Rob	2014-04-25	-23.2994	120.0832	Acacia corusca
Mitchell, A.	1995-08-28	-22.9447	120.1667	Rhodanthe sterilescens
Maddox, L.	2008-05-21	-23.197	119.6821	Acacia ampliceps
S. van Leeu	2006-05-02	-23.4659	120.1762	Ptilotus aphyllus
S. van Leeu	2006-05-03	-23.3627	120.2948	Triodia basedowii
S. van Leeu	2006-05-02	-23.4128	120.3175	Citrullus amarus
van Leeuw	1998-08-19	-23.33	120.0211	Calytrix carinata
S. van Leeu	2006-08-11	-23.3019	120.2174	Leptosema chambersii
Latz, P.K.	2001-07-16	-23.6631	119.7531	Enneapogon caerulescens
Edgecombe	1983-07-03	-23.3333	119.9	Eucalyptus socialis
S. van Leeu	2006-05-03	-23.3861	120.268	Portulaca
S. van Leeu	2006-05-02	-23.4659	120.1762	Tribulus suberosus

S. van Leeu	2006-05-03	-23.3627	120.2948 Monachather paradoxus
S. van Leeu	2006-05-02	-23.4128	120.3175 Amyema fitzgeraldii
S. van Leeu	2006-05-02	-23.5352	120.3255 Setaria surgens
S. van Leeu	2006-08-11	-23.3019	120.2174 Jacksonia aculeata
Maslin, B.R	2006-08-10	-23.3856	120.2675 Acacia catenulata subsp. occidentalis
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus squarrosus
S. van Leeu	2006-05-03	-23.3861	120.268 Aristida holathera
S. van Leeu	2006-05-02	-23.4659	120.1762 Euphorbia myrtoides
Mitchell, A.	2017-05-09	-23.3646	119.7601 Vigna sp. Hamersley Clay (A.A.Mitchell PRP 113)
S. van Leeu	2006-08-09	-23.4128	120.3175 Pluchea dunlopii
Speed, D.	2008-11-14	-23.3404	119.8434 Petalostylis labicheoides
Bean, A.R.	2006-05-04	-22.9492	120.248 Ptilotus gomphrenoides
Maslin, B.R	2006-08-10	-23.3856	120.2675 Acacia sp. (NEQ)
Erickson, T.	2008-05-29	-23.3248	119.7555 Cleome viscosa
S. van Leeu	2006-05-03	-23.3861	120.268 Perotis rara
S. van Leeu	2006-05-02	-23.4659	120.1762 Cymbopogon obtectus
S. van Leeu	2006-05-02	-23.3595	120.4602 Polycarpaea corymbosa
Maslin, B.R	2006-08-09	-23.4756	120.2472 Acacia orthocarpa
S. van Leeu	2006-05-02	-23.4128	120.3175 Setaria dielsii
Wajon, J.E.	2003-08-03	-23.3321	119.8682 Ptilotus calostachyus
Maslin, B.R	2004-05-30	-23.3423	120.0075 Acacia tenuissima
Hammer, T	2015-08-13	-23.2236	119.9053 Ptilotus schwartzii
Deighton, M	1982-08-21	-23.3514	119.73 Cullen pogonocarpum
Bean, A.R.	2006-05-03	-23.405	120.5544 Ptilotus schwartzii
Tomanovic	2013-08-26	-23.413	120.0475 Goodenia
Wajon, J.E.	2003-08-03	-23.3321	119.8682 Rutidosis helichrysoides
Sgherza, C.	2009-08-11	-23.3242	119.7553 Cyperus ixiocarpus
Wajon, J.E.	2003-08-03	-23.3321	119.8682 Goodenia triodiophila
Wajon, J.E.	2003-08-03	-23.3321	119.8682 Gomphrena kanisii
Carroll, E.	2007-05-14	-23.3831	120.0367 Aristida inaequiglumis
Deighton, M	1982-08-01	-23.3514	119.73 Acacia pyrifolia var. morrisonii
Walker, K.	1981-11-26	-23.3514	119.73 Grevillea striata
McCreery,	2011-05-17	-23.3	120.1 Aristida jerichoensis var. subspinulifera
Wajon, J.E.	2003-08-03	-23.3321	119.8682 Eremophila cuneifolia
S. van Leeu	2006-05-02	-23.4128	120.3175 Sclerolaena densiflora
Deighton, M	1982-08-16	-23.3514	119.73 Goodenia glabrata
Beauglehol	1974-08-18	-23.2333	119.9 Ptilotus aervoides
Atkins, L.; H	2012-08-04	-22.9	120 Eremophila pilosa
Walker, K.	1980-08-20	-23.3514	119.73 Corchorus crozophorifolius
Ballingall, M	1985-07-31	-23.3514	119.73 Swainsona decurrens
S. van Leeu	2006-05-02	-23.5352	120.3255 Boerhavia coccinea
Wilson, K.L	2006-05-04	-23.0481	120.1031 Bulbostylis barbata
Bean, A.R.	2006-04-30	-23.0034	119.9886 Ptilotus helipteroides
Deighton, M	1981-05-20	-23.3514	119.73 Ptilotus calostachyus
Speed, D.	2008-11-14	-23.3404	119.8434 Acacia sclerosperma subsp. sclerosperma
S. van Leeu	2006-05-02	-23.3725	120.4586 Aristida holathera
Walker, K.	1980-11-03	-23.35	119.7333 Acacia wanyu
Deighton, M	1982-08-14	-23.3514	119.73 Haloragis gossei
S. van Leeu	2006-05-02	-23.5352	120.3255 Eriachne aristidea
Craven, L.A	2006-05-04	-23.0481	120.1031 Hibiscus sturtii var. platychlamys

Maslin, B.R	2006-08-1(	-23.3867	120.5047	Acacia ayersiana
Walker, K.	1980-08-2(	-23.3514	119.73	Corchorus crozophorifolius
S. van Leeu	2006-05-02	-23.3595	120.4602	Setaria dielsii
Lyons, M.N	2016-08-27	-22.9803	120.247	Solanum nigrum
Walker, K.	1980-11-0(	-23.3514	119.73	Acacia aptaneura
Walker, K.	1980-08-0(	-23.3514	119.73	Drosera finlaysoniana
S. van Leeu	2006-05-03	-23.3861	120.268	Eragrostis pergracilis
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Maireana georgei
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Tephrosia densa
Demarz, H.	1973-08-22	-23.3514	119.73	Dicrastylis cordifolia
S. van Leeu	2006-05-02	-23.3595	120.4602	Schizachyrium fragile
S. van Leeu	2006-05-02	-23.3725	120.4586	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Deighton, M	1982-08-18	-23.3514	119.73	Bonamia erecta
Deighton, M	1982-08-14	-23.3514	119.73	Ptilotus auriculifolius
S. van Leeu	2006-05-03	-23.3861	120.268	Portulaca
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Ptilotus rotundifolius
Walker, K.	1980-08-0(	-23.65	119.7833	Ptilotus polystachyus
Deighton, M	1982-08-14	-23.3514	119.73	Ptilotus clementii
Mitchell, A.	2017-05-09	-23.3646	119.7601	Austrobryonia pilbarensis
S. van Leeu	2006-05-02	-23.3725	120.4586	Bulbostylis barbata
Walker, K.	1980-08-03	-23.35	119.7333	Erodium cygnorum
Deighton, M	1982-08-18	-23.3514	119.73	Goodenia muelleriana
S. van Leeu	2006-05-02	-23.3595	120.4602	Rhagodia eremaea
Jackson, E.I	1977-08-16	-23.1167	119.9167	Acacia wanyu
Davis, R.	2008-08-09	-23.6237	119.7641	Ptilotus obovatus
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus brachychlaenus
S. van Leeu	2006-05-03	-23.3627	120.2948	Aristida inaequiglumis
Bull, J.	2006-08-08	-23.3925	119.6994	Goodenia muelleriana
Deighton, M	1982-08-18	-23.3514	119.73	Euploca pachyphylla
Deighton, M	1982-08-18	-23.3514	119.73	Gompholobium oreophilum
Deighton, M	1982-11-19	-23.3514	119.73	Melaleuca glomerata
Wilson, K.L	2006-05-02	-23.3731	120.4578	Schoenoplectiella dissachantha
Bull, J.	2006-08-09	-23.3921	119.6976	Abutilon cunninghamii
Mitchell, A.	2017-05-09	-23.4025	119.7952	Eriochloa pseudoacrotricha
Reid, J.E.	2009-05-25	-23.4341	119.7837	Acacia
Anderson, I	2014-02-25	-23.1839	119.8333	Triodia vanleeuwenii
Walker, K.	1980-08-03	-23.3514	119.73	Clerodendrum floribundum var. angustifolium
Walker, K.	1980-08-03	-23.3514	119.73	Gompholobium oreophilum
Walker, K.	1980-08-03	-23.3514	119.73	Gompholobium oreophilum
Kaljuste, D.	1987-05-05	-23.0606	119.9003	Euploca inexplicita
van Leeuw(	1998-08-19	-23.33	120.0211	Triodia pungens
S. van Leeu	2006-05-03	-23.3019	120.2174	Acacia sericophylla
Deighton, M	1982-08-16	-23.3514	119.73	Euploca heterantha
Bean, A.R.	2006-04-30	-23.0034	119.9886	Dicrastylis cordifolia
Walker, K.	1980-08-03	-23.3514	119.73	Lamarchea sulcata
Mitchell, A.	1996-05-06	-23.1608	119.9736	Triodia pungens
Walker, K.	1980-11-0(	-23.3514	119.73	Acacia pruinocarpa
Mitchell, A.	1995-08-28	-22.9447	120.1667	Rhodanthe charsleyae
van Leeuw(	1998-08-19	-23.33	120.0211	Acacia mulganeura
Maslin, B.R	2006-08-1(	-23.3867	120.5047	Acacia catenulata subsp. occidentalis

Walker, K.	1980-08-2(	-23.3514	119.73	Petalostylis labicheoides
S. van Leeu	2006-05-02	-23.4128	120.3175	Acacia sclerosperma
Deighton, M	1982-08-17	-23.3514	119.73	Stackhousia
S. van Leeu	2006-05-02	-23.5352	120.3255	Eragrostis eriopoda
Deighton, M	1982-08-21	-23.3514	119.73	Tribulus hirsutus
Chase, N.C.	1953-05-1(	-23.7258	120.2381	Halgania erecta
Beard, J.S.	1963-08-13	-23.35	119.8167	Ptilotus axillaris
Burbidge, M	1958-05-07	-23.4681	119.9533	Haloragis gossei
Deighton, M	1981-08-14	-23.3514	119.73	Cynanchum floribundum
S. van Leeu	2006-05-02	-23.5352	120.3255	Gomphrena kanisii
Leitch, E.	2016-08-0(	-23.3852	120.4957	Mirbelia
S. van Leeu	2006-05-02	-23.5352	120.3255	Eriachne mucronata
Walker, K.	1980-08-03	-23.3514	119.73	Lamarchea sulcata
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus leptocarpus
Bull, J.; Bre	2015-08-03	-23.3	120	Isotropis parviflora
Beard, J.S.	1963-08-13	-23.1992	120.0956	Newcastelia hexarrhena
Deighton, M	1982-11-14	-23.3514	119.73	Eucalyptus lucasii
S. van Leeu	2006-05-02	-23.5352	120.3255	Schizachyrium fragile
Wajon, J.E.	2003-08-07	-23.2844	119.6576	Dampiera candicans
S. van Leeu	2006-05-02	-23.5352	120.3255	Tripogonella loliiformis
Deighton, M	1982-08-18	-23.3514	119.73	Goodenia stobbsiana
Bean, A.R.	2006-05-02	-23.4136	120.3153	Sclerolaena convexula
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Gompholobium oreophilum
S. van Leeu	2006-05-02	-23.4128	120.3175	Aristida inaequiglumis
Mollemans	1987-02-27	-23.3683	119.722	Chrysocephalum pterochaetum
Beard, J.S.	1966-08-07	-23.0222	120.3664	Ptilotus helipteroides
Wajon, J.E.	2003-08-07	-23.2844	119.6576	Nicotiana benthamiana
S. van Leeu	2006-05-02	-23.5352	120.3255	Cymbopogon obtectus
Deighton, M	1982-08-14	-23.3514	119.73	Euploca pachyphylla
Mitchell, A.	1995-08-28	-22.9447	120.1667	Swainsona paucifoliolata
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Maireana melanocoma
Mollemans	1987-02-18	-23.3913	119.7112	Gomphrena kanisii
Wajon, J.E.	2003-08-04	-23.1821	119.7014	Nicotiana
S. van Leeu	2006-05-03	-23.3627	120.2948	Portulaca
Wajon, J.E.	2003-08-07	-23.2844	119.6576	Rhodanthe margarethae
Deighton, M	1981-02-16	-23.3514	119.73	Chrysocephalum pterochaetum
Deighton, M	1981-02-16	-23.3514	119.73	Chrysocephalum pterochaetum
Mitchell, A.	1995-08-28	-22.9447	120.1667	Streptoglossa cylindriceps
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Ptilotus nobilis subsp. nobilis
Royce, R.D.	1947-05-14	-23.1667	119.9167	Calandrinia pumila
Obbens, F.;	2004-05-3(	-23.3144	119.8748	Calandrinia quadrivalvis
S. van Leeu	2006-05-03	-23.3861	120.268	Abutilon
S. van Leeu	2006-05-01	-23.4588	120.1555	Iseilema membranaceum
van Leeuw(	1998-08-19	-23.33	120.0211	Halgania solanacea var. Mt Doreen (G.M.Chippendale 4206)
Bull, J.	2006-08-11	-23.3759	119.7029	Chrysocephalum apiculatum
Maslin, B.R	2004-05-3(	-22.9842	120.3366	Acacia dictyophleba
S. van Leeu	2006-05-01	-23.4588	120.1555	Tephrosia sp. NW Eremaean (S.van Leeuwen et al. PBS 0356)
S. van Leeu	2006-08-1(	-23.3627	120.2948	Portulaca
S. van Leeu	2006-08-1(	-23.3861	120.268	Pterocaulon sphacelatum
S. van Leeu	2006-05-02	-23.4659	120.1762	Senna glutinosa

Short, P.S.	1995-08-27	-23.3614	119.7897	Roebuckiella similis
van Leeuw	1998-08-19	-23.33	120.0211	Chrysocephalum pterochaetum
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus burtonii
Maslin, B.R	2004-05-30	-22.9842	120.3366	Acacia sclerosperma subsp. sclerosperma
S. van Leeu	2006-05-02	-23.4659	120.1762	Acacia rhodophloia
Walker, K.	1980-11-03	-23.2333	120	Acacia synchronicia
S. van Leeu	2006-05-02	-23.3595	120.4602	Euphorbia
S. van Leeu	2006-08-10	-23.3627	120.2948	Senna artemisioides subsp. oligophylla
Mitchell, A.	1995-08-27	-23.3517	119.6725	Swainsona decurrens
Short, P.S.	1995-08-27	-23.1667	119.9	Calotis multicaulis
Beauglehol	1974-08-18	-23.1733	119.9572	Euploca heterantha
Deluca, S.;	1995-05-07	-23.1189	119.7667	Dicladanthera forrestii
S. van Leeu	2006-05-02	-23.4659	120.1762	Cheilanthes austrotenuifolia
S. van Leeu	2006-08-10	-23.3807	120.2512	Chrysocephalum pterochaetum
S. van Leeu	2006-05-02	-23.4703	120.2149	Tragus australianus
S. van Leeu	2006-05-03	-23.3627	120.2948	Gomphrena lanata
Carroll, E.	2006-08-11	-23.3849	119.6869	Stackhousia intermedia
Erickson, T.	2008-10-31	-23.3246	119.756	Acacia pyrifolia var. pyrifolia
Carr, G.W.;	1974-08-03	-23.4333	119.8	Hibiscus austrinus var. austrinus
Edwards, T	2009-04-23	-23.3239	119.8692	Cyperus vaginatus
S. van Leeu	2006-05-02	-23.4659	120.1762	Gomphrena kanisii
S. van Leeu	2006-05-03	-23.3807	120.2512	Fimbristylis dichotoma
Walker, K.	1980-11-20	-23.3514	119.73	Triodia pungens
S. van Leeu	2006-05-02	-23.3595	120.4602	Dysphania rhadinostachya subsp. rhadinostachya
Mollemans	1987-02-18	-23.3875	119.7125	Heliotropium tenuifolium
Wilson, K.L	2006-05-03	-23.29	120.1911	Fimbristylis simulans
Walker, K.	1980-08-20	-23.6667	119.7667	Corchorus lasiocarpus subsp. lasiocarpus
Mitchell, A.	1979-05-16	-23.05	120.0833	Ptilotus gomphrenoides
S. van Leeu	2006-05-02	-23.4659	120.1762	Paspalidium clementii
S. van Leeu	2006-05-03	-23.3019	120.2174	Petalostylis cassioides
Walker, K.	1980-11-21	-23.3514	119.73	Triodia basedowii
Maslin, B.R	2009-05-25	-23.4341	119.7837	Acacia macraneura
Mollemans	1987-02-18	-23.3875	119.7125	Ipomoea muelleri
Mollemans	1987-02-18	-23.3956	119.7097	Zygophyllaceae
Maslin, B.R	2004-05-30	-23.1148	120.5102	Acacia subcontorta
Cook, B.	2006-07-28	-23.325	120.0769	Polycarpaea corymbosa var. corymbosa
Mollemans	1987-02-18	-23.3875	119.7125	Triodia brizoides
Mitchell, A.	1990-08-01	-22.9667	120.0333	Acacia sericophylla
Walker, K.	1980-08-20	-23.3514	119.73	Petalostylis labicheoides
S. van Leeu	2006-05-02	-23.4703	120.2149	Sida sp. dark green fruits (S.van Leeuwen 2260)
Trendall, K.	1977-08-20	-22.9667	120.0833	Ipomoea muelleri
Wait, R.	2017-08-05	-23.5599	119.763	Eremophila clarkei
Tomanovic	2011-10-04	-23.3376	120.0968	Sclerolaena minuta
Sweedman	2006-10-10	-23.1966	119.7841	Acacia elachantha
Beauglehol	1974-08-19	-23.6833	119.75	Atriplex codonocarpa
Obbens, F.;	2004-05-30	-23.1141	120.5101	Calandrinia ptychosperma
Walker, K.	1980-11-05	-23.35	119.7333	Acacia acradenia
Deighton, M	1982-08-21	-23.3514	119.73	Hibiscus coatesii
S. van Leeu	2006-05-02	-23.4128	120.3175	Chloris virgata
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Petalostylis labicheoides

Erickson, T.	2008-10-29	-23.3195	119.7716	Acacia hilliana
Johnson, L.	1991-07-29	-23.25	119.6667	Eucalyptus xerothermica
S. van Leeu	2006-05-02	-23.4703	120.2149	Cymbopogon obtectus
Mitchell, A.	1995-08-27	-23.1	120.4	Crotalaria smithiana
Beauglehol	1974-08-19	-23.3514	119.73	Maireana planifolia
Deighton, M	1982-08-14	-23.3514	119.73	Haloragis gossei var. gossei
Beauglehol	1974-08-18	-23.2333	119.9	Goodenia tenuiloba
Craven, L.A	2006-05-02	-23.5361	120.3258	Hibiscus sturtii var. truncatus
Crespi, B.	1997-04-20	-23.5403	119.73	Acacia ancistrocarpa
Mitchell, A.	1995-08-27	-22.9447	120.1667	Stemodia viscosa
S. van Leeu	2006-05-02	-23.4703	120.2149	Portulaca
Morse, G.J.	1994-11-08	-23.1964	119.7831	Acacia elachantha
Macpherso	1997-11-07	-23.2366	119.8464	Paspalidium constrictum
Deighton, M	1982-08-18	-23.3514	119.73	Goodenia tenuiloba
Beauglehol	1974-08-18	-23.2333	119.9	Goodenia vilmoriniae
van Leeuwe	1998-08-19	-23.33	120.0211	Lamarchea sulcata
Mitchell, A.	1995-08-28	-22.9447	120.1667	Eremophila margarethae
S. van Leeu	2006-05-03	-23.4088	120.5603	Acacia subcontorta
S. van Leeu	2006-05-02	-23.4703	120.2149	Gomphrena kanisii
Mitchell, A.	1995-08-29	-23.5561	120.3167	Buchnera linearis
Mitchell, A.	1995-08-29	-23.407	120.5739	Goodenia lamprosperma
Deighton, M	1982-08-14	-23.3514	119.73	Ptilotus clementii
Tomanovic	2013-08-26	-23.4101	120.0444	Streptoglossa decurrens
van Leeuwe	1998-08-19	-23.33	120.0211	Triodia pungens
Barnett, B.	2009-11-08	-23.3	119.7	Lepidium catapycnon
van Leeuwe	1998-08-19	-23.33	120.0211	Waltheria virgata
Mitchell, A.	1995-08-29	-23.4228	120.3719	Calandrinia balonensis
Erickson, T.	2008-11-01	-23.298	119.7667	Acacia monticola
Bean, A.R.	2006-05-03	-23.405	120.5544	Roebuckiella similis
Deighton, M	1981-02-16	-23.3514	119.73	Polymeria
Cassis, G.	2005-08-25	-23.2837	119.6233	Androcalva luteiflora
S. van Leeu	2006-05-04	-23.1175	120.5189	Cenchrus ciliaris
McCreery,	2013-08-26	-23.4072	120.0399	Pluchea ferdinandi-muelleri
Mitchell, A.	1995-08-29	-23.407	120.5739	Goodenia lamprosperma
S. van Leeu	2006-05-03	-23.3627	120.2948	Portulaca oleracea
Beauglehol	1974-08-18	-23.1733	119.9572	Ptilotus helipteroides
S. van Leeu	2006-05-02	-23.5352	120.3255	Sida sp. dark green fruits (S.van Leeuwen 2260)
Deighton, M	1981-05-20	-23.3514	119.73	Dodonaea coriacea
Cassis, G.	2005-08-25	-23.2837	119.6233	Acacia tetragonophylla
S. van Leeu	2006-05-04	-23.1175	120.5189	Sclerolaena cornishiana
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus vaginatus
McCreery,	2013-08-26	-23.4101	120.0444	Sclerolaena lanicuspis
S. van Leeu	2006-05-03	-23.3627	120.2948	Portulaca oleracea
Beauglehol	1974-08-18	-23.1733	119.9572	Maireana planifolia
S. van Leeu	2006-05-02	-23.5352	120.3255	Cleome viscosa
Mitchell, A.	1989-07-31	-22.9	120.1667	Chenopodium auricomum
Cassis, G.	2005-08-25	-23.2837	119.6233	Acacia inaequilatera
Speed, D.	2008-11-14	-23.1642	119.9255	Acacia pruinocarpa
Mitchell, A.	1995-08-27	-22.9447	120.1667	Lotus cruentus
S. van Leeu	2006-05-03	-23.4088	120.5603	Sida sp. Kathleen Springs (A.C.Beauglehole 26934)

S. van Leeu	2006-05-03	-23.3019	120.2174	Cassytha capillaris
Burbidge, M	1958-05-07	-23.2	119.9	Crotalaria smithiana
S. van Leeu	2006-05-02	-23.5352	120.3255	Eulalia aurea
Maier, M.;	2003-08-27	-23.3711	120.1157	Eriachne lanata
van Leeuwe	1998-08-19	-23.33	120.0211	Eucalyptus kingsmillii
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Senna notabilis
Whitehead	2007-05-06	-23.3385	119.8133	Sclerolaena convexula
Burbidge, M	1958-05-07	-23.6128	119.9533	Corymbia candida subsp. candida
S. van Leeu	2006-05-03	-23.3019	120.2174	Aristida holathera
Leitch, E.	2016-08-07	-23.4	120.5	Goodenia nuda
Cassis, G.	2005-08-25	-23.2837	119.6233	Senna artemisioides subsp. oligophylla
S. van Leeu	2006-05-02	-23.5352	120.3255	Polycarpaea corymbosa
Mitchell, A.	1995-08-28	-22.9447	120.1667	Trachymene bialata
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Ptilotus helipteroides
Nordenstar	1989-10-05	-23.5403	119.73	Senna artemisioides subsp. helmsii
Cassis, G.	1999-05-28	-23.2194	119.9033	Maireana georgei
S. van Leeu	2006-05-03	-23.3019	120.2174	Dysphania kalpari
Beauglehol	1974-08-18	-23.1733	119.9572	Euphorbia boophthona
van Leeuwe	1998-08-19	-23.33	120.0211	Cryptandra monticola
Bean, A.R.	2006-05-03	-23.405	120.5544	Spermacoce brachystema
Edgecombe	1983-11-02	-23.3667	119.85	Eucalyptus xerothermica
Macpherso	1997-11-28	-23.33	119.8367	Scaevola acacioides
Mitchell, A.	1995-08-27	-22.9581	120.1356	Swainsona kingii
Nicholson,	1986-07-22	-23.3667	119.6667	Swainsona decurrens
Mitchell, A.	1996-05-06	-23.1608	119.9736	Cyperus cunninghamii
Beauglehol	1974-08-18	-23.1733	119.9572	Dysphania rhadinostachya subsp. inflata
van Leeuwe	1998-08-19	-23.33	120.0211	Scaevola parvifolia subsp. pilbarae
S. van Leeu	2006-05-04	-23.1175	120.5189	Tephrosia sp. Northern (K.F.Kenneally 11950)
Mitchell, A.	1996-05-06	-23.1608	119.9736	Digitaria brownii
Maslin, B.R	2004-05-30	-23.3423	120.0075	Acacia adsurgens
Mitchell, A.	1995-08-29	-23.4083	120.5725	Stackhousia
Mattiske, L	2008-05-22	-23.2049	119.8772	Acacia monticola
Carroll, E.	2007-05-17	-23.3772	120.0275	Wurmbea deserticola
Walker, K.	1980-08-20	-23.35	119.75	Ptilotus incanus
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Goodenia stobbsiana
Wajon, J.E.	2003-08-04	-23.1821	119.7015	Goodenia stobbsiana
S. van Leeu	2006-05-02	-23.4659	120.1762	Eriachne mucronata
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus squarrosus
Bull, J.; Wa	2015-02-24	-23.3723	119.9829	Tribulus eichlerianus
Mitchell, A.	1987-05-10	-23.45	119.6167	Eremophila canaliculata
Maslin, B.R	2009-05-25	-23.434	119.7883	Acacia aptaneura
Beauglehol	1974-08-18	-23.1733	119.9572	Roebuckiella similis
S. van Leeu	2006-05-04	-23.1175	120.5189	Euphorbia biconvexa
Walker, K.	1980-08-06	-23.65	119.7833	Ptilotus polystachyus
S. van Leeu	2006-05-02	-23.4659	120.1762	Digitaria brownii
S. van Leeu	2006-08-09	-23.4128	120.3175	Lepidium phlebopetalum
Walker, K.	1977-05-03	-23.3667	119.7	Petalostylis labicheoides
S. van Leeu	2006-05-03	-23.4088	120.5603	Eriachne pulchella subsp. pulchella
Bull, J.; Wa	2015-05-24	-23.3689	119.9761	Triodia angusta
Mitchell, A.	1995-08-29	-23.6978	120.3261	Acacia ramulosa var. linophylla

S. van Leeu	2006-05-04	-23.1175	120.5189 Dichanthium sericeum subsp. humilius
Beard, J.S.	1963-08-13	-23.2533	119.6797 Trachymene oleracea subsp. oleracea
S. van Leeu	2006-05-03	-23.3807	120.2512 Eriachne pulchella subsp. dominii
Walker, K.	1981-11-06	-23.2956	120.0225 Corymbia candida
Bean, A.R.	2006-05-03	-23.3817	120.2536 Androcalva luteiflora
S. van Leeu	2006-05-02	-23.3725	120.4586 Gomphrena canescens
Demarz, H.	1973-08-22	-23.05	119.95 Calocephalus pilbarensis
George, A.S	1960-08-22	-23.1906	120.2381 Lepidium echinatum
S. van Leeu	2006-05-04	-23.1175	120.5189 Hibiscus sturtii
Cassis, G.	2005-08-25	-23.2837	119.6233 Hakea chordophylla
S. van Leeu	2006-05-03	-23.3807	120.2512 Maireana
S. van Leeu	2006-05-03	-23.3861	120.268 Abutilon cryptopetalum
Bull, J.; Wa	2015-02-27	-23.3511	119.7381 Fabaceae
Lyons, M.N	2016-08-27	-22.9803	120.247 Senna artemisioides subsp. oligophylla
Burbidge, N	1958-05-07	-23.4681	119.9533 Eriachne mucronata
Mollemans	1987-02-26	-23.29	119.6597 Polymeria
S. van Leeu	2006-05-04	-23.1175	120.5189 Aristida contorta
Walker, K.	1980-08-06	-23.65	119.7833 Ptilotus polystachyus
Coultas, S.	2020-05-08	-23.3781	119.9872 Goodeniaceae
Bean, A.R.	2006-05-02	-23.3731	120.4591 Elytrophorus spicatus
Lyons, M.N	2016-08-27	-22.9803	120.247 Polygonum plebeium
Beauglehol	1974-08-18	-23.1667	119.95 Lepidium muelleri-ferdinandi
S. van Leeu	2006-05-04	-23.1175	120.5189 Tragus australianus
S. van Leeu	2006-05-02	-23.3653	120.3448 Aristida holathera
S. van Leeu	2006-05-04	-23.1175	120.5189 Dactyloctenium radulans
Maslin, B.R	2009-05-25	-23.5408	120.0928 Acacia pteraneura
S. van Leeu	2006-05-04	-23.3627	120.2948 Ptilotus schwartzii
S. van Leeu	2006-05-03	-23.3861	120.268 Ptilotus obovatus
Lyons, M.N	2016-08-27	-22.9803	120.247 Polygonum plebeium
Maslin, B.R	2006-08-10	-23.3814	120.2519 Acacia paraneura
Speed, D.	2008-11-14	-23.1642	119.9255 Acacia aptaneura
S. van Leeu	2006-05-02	-23.3653	120.3448 Eragrostis eriopoda
Wajon, J.E.	2003-08-07	-23.2844	119.6576 Scaevola browniana subsp. browniana
S. van Leeu	2006-05-02	-23.3725	120.4586 Gomphrena lanata
S. van Leeu	2006-05-03	-23.3627	120.2948 Perotis rara
Hughes, H.	2012-08-03	-23.1	120 Themeda sp. Hamersley Station (M.E.Trudgen 11431)
S. van Leeu	2006-08-10	-23.3725	120.4586 Isotropis iophyta
Mitchell, A.	1995-08-28	-23.3514	119.9019 Lepidium pedicellosum
Walker, K.	1981-11-26	-23.25	120.0167 Acacia pruinocarpa
Mitchell, A.	1995-08-28	-22.9434	120.168 Goodenia microptera
Beard, J.S.	1963-08-13	-23.6536	120.2381 Ptilotus helipteroides
S. van Leeu	2006-05-02	-23.3725	120.4586 Euphorbia
S. van Leeu	2006-05-02	-23.4703	120.2149 Portulaca
Maslin, B.R	2009-05-25	-23.4341	119.7837 Acacia
S. van Leeu	2006-05-02	-23.3725	120.4586 Panicum australiense var. australiense
Wajon, J.E.	2003-08-04	-23.3489	119.7514 Eremophila fraseri subsp. fraseri
Walker, K.	1980-08-10	-23.3514	119.73 Sida sp. Excedentifolia (J.L.Egan 1925)
Demarz, H.	1968-11-06	-23.6	119.8 Eremophila rigida
S. van Leeu	2006-08-10	-23.3725	120.4586 Pterocaulon sphacelatum
Maslin, B.R	2004-10-11	-23.3375	119.9856 Acacia melleodora

Short, P.S.	1995-08-26	-23.7033	119.74	Rhodanthe sterilescens
Bull, J.	2006-08-11	-23.3832	119.7086	Corchorus lasiocarpus subsp. parvus
Bean, A.R.	2006-05-02	-23.3634	120.3816	Brunonia australis
Pringle, H.J	1995-08-29	-23.4953	120.4414	Iseilema membranaceum
Walker, K.	1983-11-22	-23.3514	119.73	Grevillea berryana
Leitch, E.	2016-08-07	-23.3847	120.4791	Eriachne flaccida
S. van Leeu	2006-05-02	-23.3725	120.4586	Schoenoplectiella dissachantha
Bull, J.; Wa	2015-02-24	-23.3789	119.9825	Tribulus eichlerianus
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus bifax
Wajon, J.E.	2003-08-04	-23.1821	119.7014	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Mollemans	1987-02-26	-23.2803	119.6256	Santalum lanceolatum
Bull, J.	2006-08-09	-23.3921	119.6976	Sida sp. spiciform panicles (E.Leyland s.n. 14/8/1990)
Deighton, M	1982-08-21	-23.3514	119.73	Ptilotus obovatus
George, A.S	1960-08-22	-23.1906	120.2381	Acacia pteraneura
Lyons, M.N	2016-08-27	-22.9803	120.247	Acacia distans
Bull, J.; Wa	2015-02-25	-23.3963	120.0036	Hibiscus verdcourtii
Reid, J.E.	2009-10-25	-23.2296	119.905	Acacia ayersiana
S. van Leeu	2006-05-03	-23.3627	120.2948	Sida ectogama
Maslin, B.R	2004-05-30	-23.3423	120.0075	Acacia monticola
Lyons, M.N	2016-08-27	-22.9803	120.247	Cyperus pygmaeus
Walker, K.	1980-08-20	-23.3514	119.73	Kennedia prorepens
George, A.S	1960-08-22	-23.1906	120.2381	Maireana villosa
Lyons, M.N	2016-08-27	-22.9803	120.247	Nicotiana
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus sturtii var. truncatus
Walker, K.	1980-08-20	-23.6667	119.7667	Hibiscus
Walker, K.	1980-08-04	-23.6	119.7	Senna stricta
Bean, A.R.	2006-05-03	-23.4064	120.5531	Maireana villosa
S. van Leeu	2006-05-02	-23.3725	120.4586	Iseilema vaginiflorum
Walker, K.	1980-08-03	-23.3514	119.73	Cheilanthes lasiophylla
Walker, K.	1980-08-20	-23.6667	119.8	Senna artemisioides subsp. helmsii
Lyons, M.N	2016-08-27	-22.9803	120.247	Centipeda crateriformis subsp. crateriformis
George, A.S	1960-08-22	-23.1906	120.2381	Schoenia cassiniana
Fryer, R.A.;	2016-08-03	-23.465	119.7958	Lysiana murrayi
van Leeuwe	1998-08-19	-23.33	120.0211	Corymbia hamersleyana
Mitchell, A.	1995-08-29	-23.4953	120.4414	Chrysocephalum gilesii
Hitchcock,	2013-02-23	-23.1928	119.8633	Aristida
S. van Leeu	2006-05-03	-23.384	120.4794	Cyperus concinnus
S. van Leeu	2006-08-10	-23.3595	120.4602	Senna glutinosa subsp. glutinosa
S. van Leeu	2006-05-02	-23.3725	120.4586	Isotropis iophyta
George, A.S	1960-08-22	-23.1906	120.2381	Stenopetalum anfractum
George, A.S	1960-08-22	-23.21	119.9278	Maireana melanocoma
van Leeuwe	1998-08-19	-23.33	120.0211	Triodia vanleeuwenii
Walker, K.	1980-08-06	-23.65	119.7833	Ptilotus xerophilus
Mitchell, A.	1985-08-29	-23.7697	120.0533	Macgregoria racemigera
Maslin, B.R	2009-05-25	-23.4453	119.7951	Acacia aptaneura
S. van Leeu	2006-05-07	-23.3144	119.6331	Cenchrus ciliaris
S. van Leeu	2006-08-10	-23.3725	120.4586	Alternanthera denticulata
George, A.S	1960-08-22	-23.1906	120.2381	Eremophila lanceolata
Cook, B.	2006-07-31	-23.3409	120.03	Polycarpaea holtzei
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia pyrifolia var. morrisonii

Burbidge, M	1958-05-07	-23.725	120.1786	Hakea
S. van Leeu	2006-08-09	-23.4703	120.2149	Senna symonii
Walker, K.	1980-08-03	-23.6	119.7	Sida echinocarpa
S. van Leeu	2006-05-03	-23.3913	120.5233	Cymbopogon obtectus
Walker, K.	1980-08-05	-23.25	120	Lepidium pholidogynum
George, A.S	1960-08-22	-23.1906	120.2381	Lepidium echinatum
Erickson, T.	2008-05-28	-23.3248	119.7555	Abutilon otocarpum
Maslin, B.R	2006-08-09	-23.4667	120.1761	Acacia aptaneura
Albrecht, D	2004-08-23	-23.3139	119.6339	Calocephalus pilbarensis
S. van Leeu	2006-05-02	-23.4703	120.2149	Sclerolaena cornishiana
S. van Leeu	2006-05-03	-23.3807	120.2512	Eragrostis cumingii
Bull, J.	2007-05-16	-23.3869	120.0247	Maireana georgei
S. van Leeu	2006-08-10	-23.384	120.4794	Swainsona oroboides
Marsh, D.	2006-02-07	-23.2	119.6	Eremophila magnifica subsp. magnifica
Mitchell, A.	1995-08-29	-23.4939	120.4427	Goodenia glabrata
van Leeuwe	1998-08-19	-23.2951	119.7867	Corchorus sp. Hamersley Range hilltops (S.van Leeuwen 3826
Walker, K.	1980-08-06	-23.65	119.7833	Ptilotus xerophilus
S. van Leeu	2006-05-03	-23.3627	120.2948	Ptilotus roei
Short, P.S.	1995-08-24	-23.7033	119.74	Roebuckiella similis
George, A.S	1960-08-21	-23.6969	120.2381	Kennedia prorepens
Hughes, H.	2012-08-07	-23.2	119.9	Eremophila youngii subsp. lepidota
Beauglehol	1974-08-18	-23.1733	119.9572	Sclerolaena densiflora
Butcher, R.	2011-05-23	-23.3682	119.7672	Tephrosia
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia sclerosperma subsp. sclerosperma
S. van Leeu	2006-05-04	-23.1175	120.5189	Portulaca
McCreery,	1997-08-03	-23.3861	119.6294	Triumfetta maconochieana
Beard, J.S.	1963-08-13	-23.1992	120.0956	Scaevola parvifolia subsp. pilbarae
George, A.S	1960-08-21	-23.6969	120.2381	Goodenia vilmoriniae
Coultas, S.	2020-05-07	-23.4	120	Ipomoea racemigera
Fryer, R.A.;	2016-08-01	-23.3036	119.6106	Amyema bifurcata
S. van Leeu	2006-05-02	-23.3725	120.4586	Portulaca
Maslin, B.R	2006-08-09	-23.4667	120.1761	Acacia pteraneura
S. van Leeu	2006-05-04	-23.1175	120.5189	Euphorbia australis
S. van Leeu	2006-08-09	-23.4588	120.1555	Swainsona decurrens
Wajon, J.E.	2003-08-04	-23.1821	119.7014	Solanum lasiophyllum
Butcher, R.	2011-05-24	-23.6018	119.8278	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Walker, K.	1980-07-31	-23.6	119.7	Ptilotus obovatus
Beauglehol	1974-08-18	-23.1733	119.9572	Sclerolaena diacantha
Lyons, M.N	2016-08-27	-22.9803	120.247	Acacia citrinoviridis
Leitch, E.	2016-08-07	-23.3847	120.4791	Lepidium oxytrichum
S. van Leeu	2006-08-11	-23.1175	120.5189	Solanum lasiophyllum
Mitchell, A.	2016-05-01	-23.3029	119.8608	Lepidium pedicellosum
S. van Leeu	2006-08-10	-23.3595	120.4602	Tephrosia sp. Northern (K.F.Kenneally 11950)
Wajon, J.E.	2003-08-07	-23.2834	119.6583	Isotropis atropurpurea
Walker, K.	1980-08-06	-23.65	119.7833	Ptilotus polystachyus
Bean, A.R.	2006-05-02	-23.4673	120.1922	Bidens bipinnata
Lyons, M.N	2016-08-27	-22.9803	120.247	Wahlenbergia tumidifructa
Cowie, I.D.;	2006-05-06	-23.365	119.7631	Tephrosia
S. van Leeu	2006-05-04	-23.1175	120.5189	Portulaca
S. van Leeu	2006-05-03	-23.3807	120.2512	Schizachyrium fragile

S. van Leeu	2006-08-1(	-23.3861	120.268	Ptilotus obovatus
Wajon, J.E.	2003-08-07	-23.2834	119.6583	Calotis multicaulis
S. van Leeu	2006-05-02	-23.4128	120.3175	Enteropogon ramosus
Bean, A.R.	2006-05-02	-23.4673	120.1922	Pluchea rubelliflora
Beauglehol	1974-08-18	-23.1667	119.95	Lepidium oxytrichum
Ballingall, M	1985-07-31	-23.1667	119.75	Acacia spondylophylla
S. van Leeu	2006-05-04	-23.1175	120.5189	Ptilotus nobilis subsp. nobilis
S. van Leeu	2006-05-03	-23.3861	120.268	Dysphania rhadinostachya subsp. inflata
Wajon, J.E.	2003-08-04	-23.1821	119.7014	Swainsona decurrens
Trudgen, M	1995-02-22	-23.35	119.6667	Eremophila lanceolata
Craven, L.A	2006-05-03	-23.3839	120.4486	Hibiscus brachychlaenus
Beard, J.S.	1963-08-13	-23.3664	120.2381	Ipomoea muelleri
Wajon, J.E.	2003-08-07	-23.2818	119.6555	Goodenia muelleriana
S. van Leeu	2006-05-07	-23.3144	119.6331	Eragrostis tenellula
Chua, E.	2009-05-05	-23.3167	119.6925	Hibiscus sturtii
S. van Leeu	2006-05-03	-23.3861	120.268	Bulbostylis barbata
Leitch, E.	2016-08-07	-23.4091	120.5597	Monachather paradoxus
Carroll, E.	2006-08-05	-23.3383	119.6589	Grevillea wickhamii subsp. hispidula
Burbidge, M	1958-05-07	-23.3089	119.9533	Petalostylis cassioides
Maslin, B.R	2006-08-09	-23.4667	120.1761	Acacia mulganeura
Mitchell, A.	1995-08-29	-23.4083	120.5725	Trianthema glossostigmum
Mollemans	1987-02-27	-23.4022	119.7013	Eriachne mucronata
Bull, J.; wat	2015-02-23	-23.3967	119.976	Portulaca filifolia
S. van Leeu	2006-05-03	-23.3861	120.268	Bulbostylis turbinata
S. van Leeu	2006-05-02	-23.3653	120.3448	Ptilotus nobilis subsp. nobilis
George, A.S	1960-08-22	-23.3683	119.6908	Sclerolaena cornishiana
Ecologia	1997-08-04	-23.335	119.6697	Euphorbia careyi
S. van Leeu	2006-05-02	-23.3653	120.3448	Eriachne pulchella subsp. pulchella
S. van Leeu	2006-05-02	-23.3725	120.4586	Paspalidium rarum
Wajon, J.E.	2003-08-04	-23.1821	119.718	Goodenia muelleriana
Speed, D.	2008-11-14	-23.1714	119.921	Acacia synchronicia
S. van Leeu	2006-05-02	-23.4703	120.2149	Iseilema dolichotrichum
Bean, A.R.	2006-05-02	-23.4673	120.1922	Acacia sclerosperma subsp. sclerosperma
Carroll, E.	2007-05-16	-23.3914	120.0456	Goodenia sp. Sandy Creek (R.D.Royce 1653)
Morse, G.J.	1994-11-08	-23.1964	119.7831	Acacia elachantha
S. van Leeu	2006-05-02	-23.3653	120.3448	Paraneurachne muelleri
Bean, A.R.	2006-05-02	-23.3634	120.3816	Codonocarpus cotinifolius
Wajon, J.E.	2003-08-04	-23.1821	119.718	Androcalva luteiflora
Walker, K.	1983-05-25	-23.35	120.5	Dicrastylis cordifolia
Bean, A.R.	2006-05-02	-23.3731	120.4591	Bergia pedicellaris
Leitch, E.	2016-08-07	-23.3847	120.4791	Synaptantha tillaeacea var. tillaeacea
George, A.S	1960-08-22	-23.1614	120.2381	Ptilotus calostachyus
Bean, A.R.;	2006-05-03	-23.327	120.2739	Solanum elatius
S. van Leeu	2006-08-1(	-23.3653	120.3448	Kennedia prorepens
Walker, K.	1980-08-05	-23.25	120	Lepidium pedicellosum
Carroll, E.	2011-05-30	-23.3305	119.6911	Sonchus oleraceus
McCreery,	2013-08-29	-23.4129	120.0034	Diplachne fusca subsp. muelleri
S. van Leeu	2006-05-02	-23.4703	120.2149	Sclerolaena densiflora
Mitchell, A.	1996-05-21	-23.0253	119.8217	Corchorus tectus
Bean, A.R.	2006-05-02	-23.3628	120.3152	Drosera finlaysoniana

Bull, J.	2007-05-16	-23.3883	120.0217	Hakea preissii
Bean, A.R.	2006-05-03	-23.3825	120.45	Goodenia vilmoriniae
S. van Leeu	2006-05-02	-23.3725	120.4586	Setaria verticillata
George, A.S	1960-08-22	-23.1614	120.2381	Petalostylis cassioides
Cassis, G.	1999-05-28	-23.2194	119.9033	Solanum lasiophyllum
S. van Leeu	2006-05-02	-23.4703	120.2149	Sporobolus australasicus
Bull, J.; Wa	2015-02-25	-23.3923	119.9977	Eleocharis pallens
George, A.S	1960-08-22	-23.1614	120.2381	Ptilotus rotundifolius
S. van Leeu	2006-05-07	-23.3144	119.6331	Brachyachne convergens
van Leeuwe	1998-08-19	-23.2951	119.7867	Maireana georgei
Walker, K.	1980-08-20	-23.6667	119.7667	Crotalaria medicaginea var. neglecta
Demarz, H.	1973-08-22	-23.0833	119.9833	Senna hamersleyensis
Maslin, B.R	2004-05-30	-23.3423	120.0075	Acacia melleodora
S. van Leeu	2006-05-02	-23.3595	120.4602	Tragus australianus
Maslin, B.R	1982-05-23	-23.1853	119.8178	Acacia paraneura
Leitch, E.	2016-08-07	-23.4091	120.5597	Digitaria brownii
Cole, A.	2011-02-11	-23.304	120.1151	Corchorus sidoides subsp. sidoides
Macpherso	1997-11-08	-23.3279	119.8642	Paspalidium constrictum
Edgecombe	1983-11-01	-23.3333	119.7833	Eucalyptus xerothermica
Maslin, B.R	2004-05-30	-23.3423	120.0075	Acacia bivenosa
S. van Leeu	2006-05-02	-23.3595	120.4602	Panicum decompositum
Bull, J.; Bre	2015-08-03	-23.2933	119.9763	Peplidium maritimum
Bean, A.R.	2006-05-02	-23.4673	120.1922	Chrysocephalum apiculatum subsp. pilbarense
Craven, L.A	2006-05-01	-23.4647	120.1561	Hibiscus sturtii var. platychlamys
Beauglehol	1974-08-19	-23.6667	119.75	Frankenia setosa
Walker, K.	1983-05-21	-23.35	120.4167	Maireana tomentosa
George, A.S	1960-08-22	-23.1181	120.2381	Newcastelia hexarrhena
Craven, L.A	2006-05-03	-23.3664	120.2731	Hibiscus sturtii var. truncatus
Maslin, B.R	2009-05-25	-23.5167	120.1179	Acacia pteraneura
Mitchell, A.	1995-08-28	-23.3	119.8889	Abutilon lepidum
S. van Leeu	2006-05-03	-23.3019	120.2174	Jacksonia aculeata
Bull, J.; Bre	2015-08-01	-23.3	120	Isotropis parviflora
Purvis, J.	2008-08-11	-23.3837	120.4731	Acacia pteraneura
Mitchell, A.	1996-05-06	-23.1608	119.9736	Triumfetta maconochieana
S. van Leeu	2006-05-03	-23.3019	120.2174	Acacia melleodora
S. van Leeu	2006-05-03	-23.4	120.5	Goodenia nuda
Deighton, M	1981-05-20	-23.3297	119.7847	Dampiera candicans
Beauglehol	1974-08-18	-23.1733	119.9572	Rhodanthe charsleyae
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Eremophila margarethae
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ptilotus obovatus
Stacey, C.I.	1980-08-09	-23.0667	119.9833	Newcastelia hexarrhena
George, A.S	1960-08-22	-23.4667	120.5	Ptilotus aervoides
Beauglehol	1974-08-18	-23.1733	119.9572	Scaevola parvifolia subsp. pilbarae
Walker, K.	1980-08-20	-23.7	119.8	Eremophila magnifica subsp. velutina
Mitchell, A.	1995-08-27	-22.9628	120.1694	Abutilon amplum
Wajon, J.E.	2003-08-03	-23.3321	119.8682	Calytrix carinata
Beard, J.S.	1963-08-13	-23.3642	120.2381	Senna artemisioides subsp. oligophylla
S. van Leeu	2006-05-03	-23.3627	120.2948	Aristida holathera
Deighton, M	1982-08-18	-23.3514	119.73	Trianthema glossostigmum
Stacey, C.I.	1980-08-09	-23.5833	119.7667	Malvaceae

Vincent, B.	2004-08-08	-23.2853	119.7616	Tephrosia oxalidea
S. van Leeu	2006-05-03	-23.3861	120.268	Ptilotus polystachyus
Chua, E.	2009-05-05	-23.3167	119.6925	Hibiscus sturtii
Beard, J.S.	1963-08-13	-23.1992	120.0956	Ptilotus calostachyus
S. van Leeu	2006-08-10	-23.3627	120.2948	Anthobolus leptomerioides
Deighton, M	1982-08-18	-23.3514	119.73	Ptilotus astrolasius
S. van Leeu	2006-08-10	-23.3807	120.2512	Senna artemisioides subsp. helmsii
Edinger, D.	1988-08-25	-23.35	119.6667	Trianthema glossostigmum
Beard, J.S.	1963-08-13	-23.1992	120.0956	Diplopeltis stuartii var. stuartii
Bean, A.R.	2006-05-03	-23.4064	120.5531	Nicotiana rosulata subsp. ingulba
Craven, L.A	2006-05-01	-23.4647	120.1561	Hibiscus burtonii
S. van Leeu	2006-05-03	-23.3627	120.2948	Triodia vanleeuwenii
Walker, K.	1981-05-18	-23.3514	119.73	Acacia coriacea
Bull, J.; Wa	2015-02-25	-23.4	120	Goodenia berringbinensis
Mollemans	1987-02-18	-23.3489	119.7089	Euphorbia tannensis subsp. eremophila
Walker, K.	1980-08-21	-23.2333	120	Scaevola spinescens
Bull, J.; Bre	2015-08-02	-23.2996	120.0833	Acacia corusca
S. van Leeu	2006-08-10	-23.3807	120.2512	Anthobolus leptomerioides
S. van Leeu	2006-05-02	-23.4703	120.2149	Sclerolaena eriacantha
Deighton, M	1982-08-20	-23.3514	119.73	Grevillea striata
Bull, J.; Wa	2015-02-22	-23.4	120	Ipomoea racemigera
Walker, K.	1980-08-20	-23.7	119.8	Eremophila magnifica subsp. velutina
Craven, L.A	2006-05-01	-23.4717	120.505	Hibiscus
Bean, A.R.	2006-05-04	-22.9492	120.2813	Cucumis variabilis
Maslin, B.R	2004-05-30	-23.3184	119.9141	Acacia pachyacra
S. van Leeu	2006-05-02	-23.4703	120.2149	Maireana triptera
Short, P.S.	1995-08-26	-23.6314	119.7597	Rhodanthe charsleyae
van Leeuw	1998-08-19	-23.2951	119.7867	Acacia catenulata subsp. occidentalis
Leitch, E.	2016-08-07	-23.3847	120.4791	Aristida inaequiglumis
S. van Leeu	2006-08-09	-23.4703	120.2149	Pterocaulon sphacelatum
S. van Leeu	2006-05-03	-23.3913	120.5233	Polycarpaea corymbosa
George, A.S	1960-08-22	-23.1906	120.2381	Rhodanthe charsleyae
Demarz, H.	1973-08-22	-23.0833	119.9833	Ptilotus carinatus
S. van Leeu	2006-05-02	-23.4659	120.1762	Stenopetalum decipiens
S. van Leeu	2006-05-02	-23.3653	120.3448	Eulalia aurea
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia
Deighton, M	1982-08-14	-23.3514	119.73	Swainsona decurrens
S. van Leeu	2006-05-03	-23.3913	120.5233	Triodia vanleeuwenii
George, A.S	1960-08-22	-23.1906	120.2381	Ptilotus helipteroides
S. van Leeu	2006-08-10	-23.3913	120.5233	Gompholobium polyzygum
Maslin, B.R	2006-08-10	-23.3586	120.4594	Acacia rhodophloia
Kerrigan, R	2006-05-04	-23.0336	119.9803	Polygala isingii
Bull, J.; Bre	2015-08-03	-23.2933	119.9763	Cyperus pulchellus
Demarz, H.	1973-08-22	-23.0833	119.9833	Eremophila lachnocalyx
Bean, A.R.	2006-05-03	-23.365	120.2744	Scaevola spinescens
Mollemans	1987-02-27	-23.3978	119.7205	Ptilotus helipteroides
McCreery,	2013-08-27	-23.4029	120.0976	Euphorbia porcata
Deighton, M	1982-08-18	-23.3514	119.73	Ptilotus polystachyus
McCreery,	2013-08-27	-23.4053	120.0902	Euphorbia porcata
McCreery,	2013-08-26	-23.4142	120.045	Euphorbia porcata

Wajon, J.E.	2003-08-07	-23.2834	119.6583 Trachymene oleracea
Bean, A.R.	2006-05-03	-23.365	120.2744 Cynodon prostratus
Tomanovic	2013-08-26	-23.4142	120.045 Sida sp. Kathleen Springs (A.C.Beauglehole 26934)
Bean, A.R.	2006-05-03	-23.365	120.2744 Trianthema glossostigmum
Deighton, M	1981-05-20	-23.3514	119.73 Ptilotus calostachyus
Edinger, D.	1988-08-25	-23.4333	119.7667 Newcastelia cephalantha
van Leeuw	1998-08-19	-23.2951	119.7867 Amphipogon sericeus
George, A.S	1960-08-22	-23.1906	120.2381 Goodenia prostrata
Bean, A.R.	2006-05-03	-23.327	120.2739 Chrysocephalum pterochaetum
S. van Leeu	2006-05-02	-23.3595	120.4602 Tephrosia sp. Northern (K.F.Kenneally 11950)
Carroll, E.	2006-08-05	-23.3383	119.6589 Isotropis atropurpurea
Deighton, M	1982-08-07	-23.3514	119.73 Rhodanthe sterilescens
S. van Leeu	2006-05-03	-23.3627	120.2948 Eragrostis cumingii
S. van Leeu	2006-05-02	-23.3653	120.3448 Fimbristylis dichotoma
Ballingall, M	1985-07-31	-23.1667	119.6667 Acacia bivenosa
Mollemans	1987-02-27	-23.4042	119.6888 Sporobolus australasicus
S. van Leeu	2006-08-10	-23.3861	120.268 Portulaca
Walker, K.	1980-08-20	-23.7	119.8 Seringia exastia
Walker, K.	1980-11-18	-23.25	120.0833 Acacia tumida var. pilbarensis
Pringle, H.J	1995-08-29	-23.5203	120.3308 Calandrinia stagnensis
S. van Leeu	2006-08-10	-23.3653	120.3448 Solanum centrale
S. van Leeu	2006-05-02	-23.3653	120.3448 Hakea
Maslin, B.R	2004-05-30	-22.9717	120.1791 Acacia pyrifolia var. morrisonii
S. van Leeu	2006-05-03	-23.3861	120.268 Maireana villosa
George, A.S	1960-08-22	-23.1181	120.2381 Newcastelia hexarrhena
Walker, K.	1980-08-05	-23.3514	119.73 Operculina aequisepala
S. van Leeu	2006-05-07	-23.3144	119.6331 Minuria integerrima
George, A.S	1960-08-22	-23.1906	120.2381 Chrysocephalum gilesii
Bean, A.R.	2006-05-03	-23.3825	120.45 Diplopeltis stuartii var. stuartii
Morse, G.J.	1994-11-08	-23.1964	119.7831 Acacia elachantha
Beauglehol	1974-08-18	-23.1733	119.9572 Sclerolaena cornishiana
Ballingall, M	1985-07-31	-23.1667	119.75 Gompholobium
Walker, K.	1980-08-04	-23.3514	119.73 Lepidium platypetalum
S. van Leeu	2006-05-03	-23.3913	120.5233 Amphipogon sericeus
Stacey, C.I.	1980-08-09	-23.5833	119.7667 Malvaceae
Mitchell, A.	1995-08-29	-23.5203	120.3308 Indigofera georgei
Cannon, J.F	1968-05-25	-23.35	120.1833 Grevillea juncifolia subsp. juncifolia
Bean, A.R.	2006-05-02	-23.4673	120.1922 Wahlenbergia tumidifructa
Angus, D.	2008-05-08	-23.1578	119.6549 Tephrosia supina
Deighton, M	1982-08-14	-23.3514	119.73 Euploca cunninghamii
S. van Leeu	2006-08-10	-23.3913	120.5233 Isotropis atropurpurea
Beauglehol	1974-08-18	-23.1733	119.9572 Sclerolaena costata
Coultas, S.	2020-05-07	-23.4	120 Ipomoea racemigera
Erickson, T.	2008-11-01	-23.2928	119.6491 Tephrosia densa
Bean, A.R.	2006-05-02	-23.4673	120.1922 Cynanchum floribundum
George, A.S	1960-08-21	-23.1906	120.2381 Senna artemisioides
Demarz, H.	1968-11-06	-23.7833	120.2333 Calocephalus knappii
S. van Leeu	2006-05-07	-23.3144	119.6331 Sida trichopoda
Burbidge, M	1958-05-07	-23.1931	119.9533 Nicotiana occidentalis
Coultas, S.	2020-05-07	-23.4	120 Goodenia nuda

S. van Leeu	2006-05-02	-23.4982	120.2914	Codonocarpus cotinifolius
Mitchell, A.	2016-05-01	-23.2739	119.6261	Typha domingensis
George, A.S	1960-08-22	-23.1906	120.2381	Ptilotus obovatus
Walker, K.	1980-08-04	-23.6	119.7	Senna stricta
Butcher, R.	2011-05-24	-23.6018	119.8278	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Wilson, K.L	2006-05-03	-23.3828	120.45	Haloragis gossei
George, A.S	1960-08-21	-23.6969	120.2381	Goodenia glabrata
Bull, J.; Wa	2015-02-25	-23.3923	119.9977	Diplachne fusca subsp. muelleri
S. van Leeu	2006-05-02	-23.4982	120.2914	Acacia bivenosa
Maslin, B.R	2004-05-30	-23.3184	119.9141	Acacia hilliana
Beauglehol	1974-08-19	-23.5592	119.8394	Maireana carnosa
George, A.S	1960-08-21	-23.6969	120.2381	Brunonia australis
Trudgen, M	1973-02-06	-23.35	119.6667	Hibiscus sturtii
McCreery,	2013-08-28	-23.4138	120.0746	Eleocharis pallens
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia pyrifolia var. morrisonii
Walker, K.	1980-08-20	-23.6667	119.8	Senna sp. Meekatharra (E.Bailey 1-26)
Maslin, B.R	2004-05-30	-23.3184	119.9141	Acacia pruinocarpa
Cowie, I.D.;	2006-05-06	-23.3525	119.8111	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Leitch, E.	2016-08-06	-23.366	120.3441	Aristida inaequiglumis
S. van Leeu	2006-08-11	-23.3019	120.2174	Mirbelia viminalis
Wilson, K.L	2006-05-03	-23.3828	120.45	Haloragis gossei
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia bivenosa
Demarz, H.	1973-08-22	-23.3333	119.8333	Portulaca cyclophylla
S. van Leeu	2006-05-02	-23.3653	120.3448	Chrysopogon fallax
Leitch, E.	2016-08-07	-23.3847	120.4791	Phyllanthus virgatus
Beard, J.S.	1963-08-13	-23.3642	120.2381	Gomphrena kanisii
Tomanovic	2013-08-27	-23.3991	120.0963	Sclerolaena minuta
Mollemans	1987-02-27	-23.3978	119.7206	Goodenia prostrata
Walker, K.	1980-11-02	-23.35	119.7333	Isotropis iophyta
Leitch, E.	2016-08-07	-23.3847	120.4791	Cyperus concinnus
Bean, A.R.	2006-05-02	-23.4673	120.1922	Eucalyptus socialis subsp. eucentrica
McCreery,	2011-05-17	-23.3413	120.0864	Phyllanthus erwinii
McCreery,	2013-08-28	-23.4138	120.0746	Calocephalus pilbarensis
Bean, A.R.	2006-05-02	-23.4673	120.1922	Malvastrum americanum
George, A.S	1960-08-22	-23.1906	120.2381	Euphorbia boophthona
S. van Leeu	2006-05-02	-23.4982	120.2914	Eragrostis eriopoda
Erickson, T.	2008-11-02	-23.3014	119.7725	Dodonaea coriacea
McCreery,	2013-08-27	-23.4138	120.0746	Centipeda thespidioides
Bean, A.R.	2006-05-02	-23.4673	120.1922	Centipeda minima subsp. macrocephala
Wilson, K.L	2006-05-03	-23.3853	120.4578	Bulbostylis turbinata
Tomanovic	2011-02-13	-23.3237	120.1052	Enneapogon robustissimus
S. van Leeu	2006-05-03	-23.4	120.5	Crotalaria smithiana
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ptilotus helipteroides
Bean, A.R.	2006-05-02	-23.4673	120.1922	Stemodia viscosa
Mollemans	1987-02-19	-23.3444	119.6967	Bonamia pilbarensis
Beauglehol	1974-08-18	-23.1733	119.9572	Ptilotus gomphrenoides
Edinger, D.	1988-08-25	-23.4333	119.7667	Dicrastylis kumarinensis
Walker, K.	1980-08-21	-23.6	119.7333	Amyema gibberula var. gibberula
Leitch, E.	2016-08-07	-23.4091	120.5597	Fimbristylis dichotoma
Bull, J.	2007-05-17	-23.3742	120.0211	Eriachne obtusa

Maslin, B.R	2006-08-1(	-23.3908	120.3106	Acacia ligulata
Demarz, H.	1968-11-0(	-23.2339	120.2381	Roebuckiella similis
George, A.S	1960-08-22	-23.1614	120.2381	Trianthema glossostigmum
Leitch, E.	2016-08-07	-23.4091	120.5597	Aristida inaequiglumis
Beauglehol	1974-08-18	-23.1733	119.9572	Maireana georgei
Bean, A.R.	2006-05-03	-23.365	120.2744	Goodenia connata
George, A.S	1960-08-22	-23.1614	120.2381	Sclerolaena eriacantha
Bean, A.R.	2006-05-03	-23.3839	120.4591	Blumea tenella
Leitch, E.	2016-08-07	-23.3847	120.4791	Acacia pteraneura
Erickson, T.	2008-11-01	-23.2928	119.6491	Goodenia stobbsiana
George, A.S	1960-08-22	-23.1614	120.2381	Ptilotus calostachyus
Walker, K.	1980-08-2(	-23.6667	119.8	Senna artemisioides subsp. helmsii
Cole, A.	2008-08-13	-23.4035	120.2033	Acacia pteraneura
Beauglehol	1974-08-18	-23.0917	119.7858	Rhodanthe floribunda
Wajon, J.E.	2003-08-04	-23.1821	119.718	Goodenia vilmoriniae
George, A.S	1960-08-22	-23.1906	120.2381	Goodenia tenuiloba
George, A.S	1960-08-22	-23.2833	120.1667	Trigastrotheca molluginea
Obbens, F.;	2004-05-3(	-22.9484	120.281	Calandrinia stagnensis
Demarz, H.	1970-08-13	-23.1906	120.2381	Bonamia erecta
George, A.S	1960-08-22	-23.4	119.7833	Hakea
Mitchell, A.	1995-08-29	-23.5203	120.3308	Sida cardiophylla
Macpherso	1997-11-25	-23.3158	119.8414	Scaevola acacioides
S. van Leeu	2006-05-02	-23.3653	120.3448	Aristida inaequiglumis
Beard, J.S.	1966-08-07	-23.3206	120.2381	Ptilotus helipteroides
Walker, K.	1980-07-31	-23.5167	119.75	Abutilon lepidum
van Leeuw(	1998-08-19	-23.2951	119.7867	Solanum centrale
Bull, J.	2007-05-17	-23.3744	120.0214	Wurmbea deserticola
Beard, J.S.	1963-08-13	-23.1992	120.0956	Kennedia prorepens
van Leeuw(	1998-08-19	-23.2951	119.7867	Eriachne lanata
Craven, L.A	2006-05-03	-23.385	120.4578	Hibiscus burtonii
Beard, J.S.	1963-08-13	-23.1992	120.0956	Dodonaea coriacea
Walker, K.	1980-08-2(	-23.6667	119.8	Dodonaea coriacea
Coultas, S.	2020-05-07	-23.4	120	Goodenia nuda
Ashby, A.M	1971-08-05	-23.1992	120.0956	Kennedia prorepens
Bull, J.; Bre	2015-08-03	-23.2933	119.9763	Gonocarpus ephemerus
Maslin, B.R	2006-08-09	-23.4914	120.3178	Acacia citrinoviridis
Leitch, E.	2016-08-07	-23.3847	120.4791	Alternanthera nana
Purvis, J.	2008-08-11	-23.3837	120.4731	Acacia macraneura
Maslin, B.R	2006-08-1(	-23.3908	120.3106	Acacia ligulata
Leitch, E.	2016-08-07	-23.3847	120.4791	Swainsona oroboides
Mollemans	1987-02-26	-23.3078	119.7339	Hibiscus
George, A.S	1960-08-22	-23.1906	120.2381	Dysphania kalpari
Leitch, E.	2016-08-07	-23.3847	120.4791	Alternanthera denticulata
Start, A.N.	2010-05-3(	-23.2792	119.6167	Amyema hilliana
Burbidge, N	1958-05-07	-23.1931	119.9533	Striga squamigera
Leitch, E.	2016-08-07	-23.3847	120.4791	Abutilon oxycarpum
Maslin, B.R	2006-08-09	-23.4672	120.1917	Acacia sclerosperma subsp. sclerosperma
van Leeuw(	1998-08-19	-23.2951	119.7867	Eucalyptus kingsmillii
Leitch, E.	2016-08-07	-23.3847	120.4791	Eragrostis leptocarpa
Tomanovic	2013-08-26	-23.4116	120.0924	Pluchea dunlopii

van Leeuw	1998-08-19	-23.2951	119.7867	Scrophulariaceae
Tomanovic	2013-08-27	-23.3991	120.0963	Maireana thesioides
Maslin, B.R	2006-08-10	-23.3653	120.4586	Acacia melleodora
van Leeuw	1998-08-19	-23.2951	119.7867	Triodia pungens
Erickson, T.	2008-05-30	-23.3247	119.7549	Enneapogon robustissimus
van Leeuw	1998-08-19	-23.2951	119.7867	Triodia vanleeuwenii
Angus, D.	2008-05-08	-23.1563	119.6401	Acacia tumida var. pilbarensis
van Leeuw	1998-08-19	-23.2951	119.7867	Lamarchea sulcata
van Leeuw	1998-08-19	-23.2951	119.7867	Dicrastylis cordifolia
Maslin, B.R	2009-05-25	-23.4339	119.7904	Acacia ayersiana
van Leeuw	1998-08-19	-23.2951	119.7867	Amyema gibberula var. gibberula
Wajon, J.E.	2003-08-07	-23.2834	119.6583	Goodenia microptera
Beauglehol	1974-08-18	-23.1733	119.9572	Maireana melanocoma
Wajon, J.E.	2003-08-04	-23.1821	119.7014	Cullen leucanthum
S. van Leeu	2006-05-07	-23.3144	119.6331	Calocephalus pilbarensis
S. van Leeu	2006-05-03	-23.3627	120.2948	Cleome viscosa
Sgherza, C.	2009-05-05	-23.265	119.6269	Tephrosia densa
Maslin, B.R	2009-05-25	-23.4341	119.7837	Acacia
S. van Leeu	2006-08-09	-23.4703	120.2149	Maireana melanocoma
S. van Leeu	2006-05-07	-23.3144	119.6331	Portulaca intraterranea
Wajon, J.E.	2003-08-07	-23.2834	119.6583	Wahlenbergia tumidifructa
Cole, A.	2008-08-12	-23.3867	120.3064	Acacia pteraneura
Wajon, J.E.	2003-08-07	-23.2834	119.6583	Calandrinia ptychosperma
S. van Leeu	2006-05-03	-23.3861	120.268	Abutilon
Mitchell, A.	1995-08-27	-22.9628	120.1667	Lepidium muelleri-ferdinandi
Barker, W.I	1977-08-16	-23.1681	119.9358	Sida arsiniata
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Mollenmar	1987-03-05	-23.3982	119.7108	Portulaca oleracea
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Chinnock, F	2011-09-01	-23.356	119.7575	Goodenia stobbsiana
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Chinnock, F	2004-09-02	-23.3139	119.6339	Lepidium phlebopetalum
Mollemans	1987-03-05	-23.3996	119.7061	Eremophila fraseri subsp. fraseri
Mollemans	1987-03-07	-23.2941	119.6736	Amyema bifurcata
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Mollenmar	1987-03-07	-23.2841	119.7542	Eremophila latrobei subsp. latrobei
Barlow, B.A	1970-06-23	-23.4899	120.2431	Eremophila forrestii subsp. forrestii
Chinnock, F	2004-09-03	-23.6907	119.7744	Ptilotus obovatus
Chinnock, F	2004-09-03	-23.6907	119.7744	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Tolken, H.R	1979-09-19	-23.3155	119.6344	Mirbelia viminalis
Chinnock, F	2004-09-03	-23.6907	119.7744	Abutilon sp. Dioicum (A.A.Mitchell PRP 1618)
Barlow, B.A	1970-06-23	-23.4899	120.2431	Eremophila exilifolia
Toelken, H.	1979-09-19	-23.3155	119.6344	Rhodanthe margarethae
Toelken, H.	1979-09-19	-23.3155	119.6344	Senna notabilis
Barlow, B.A	1969-06-23	-23.4899	120.2431	Eremophila forrestii subsp. forrestii
Chinnock, F	2004-09-03	-23.6907	119.7744	Vittadinia virgata
Chinnock, F	2011-09-02	-23.3	120	Goodenia hartiana
Chinnock, F	1979-09-19	-23.3155	119.6344	Eremophila exilifolia
Mollemans	1987-03-07	-23.2874	119.7594	Hibiscus
Chinnock, F	2004-09-03	-23.6907	119.7744	Ptilotus obovatus

Briggs, B.G.	1970-06-14	-23.7949	120.2431 Eremophila forrestii subsp. forrestii
Toelken, H.	1979-09-19	-23.3155	119.6344 Dysphania rhadinostachya subsp. rhadinostachya
Tolken, H.R	1979-09-19	-23.3155	119.6344 Pterocaulon sphacelatum
Mollemans	1987-03-07	-23.2888	119.7594 Solanum centrale
Toelken, H.	1979-09-19	-23.3155	119.6344 Trachymene
Chinnock, F	2004-09-03	-23.6907	119.7744 Eremophila jucunda subsp. pulcherrima
Chinnock, F	2004-09-02	-23.3113	119.6772 Eremophila forrestii subsp. forrestii
Chinnock, F	2004-09-02	-23.3127	119.635 Rhodanthe floribunda
Mitchell, A.	1996-06-23	-23.6718	120.0961 Eremophila fraseri subsp. fraseri
Mitchell, A.	1994-03-27	-23.3593	119.7311 Eremophila lanceolata
Deighton, M	1983-03-20	-23.3488	119.7344 Eremophila lachnocalyx
Toelken, H.	1979-09-19	-23.3155	119.6344 Cyperus vaginatus
Toelken, H.	1979-09-19	-23.3155	119.6344 Amaranthus mitchellii
Chinnock, F	2009-06-05	-23.3066	119.7975 Scrophulariaceae
Chinnock, F	2009-06-21	-23.3368	119.8806 Eremophila margarethae
Mitchell, A.	1995-08-31	-23	120.4 Eremophila youngii subsp. lepidota
Mollemans	1987-03-01	-23.2943	119.6717 Cajanus
Mollemans	1987-03-07	-23.29	119.7583 Solanum centrale
Chinnock, F	1986-09-05	-22.9	120 Eremophila pilosa
Toelken, H.	1979-09-19	-23.3155	119.6344 Grevillea wickhamii subsp. aprica
Mollenmar	1987-03-07	-23.3155	119.8903 Amyema preissii
Mollemans	1987-03-05	-23.3943	119.7022 Solanum diversiflorum
Deighton, M	1983-03-26	-23.3488	119.7344 Eremophila margarethae
Walker, K.	1991-09-23	-23.2	120.0667 Cullen cinereum
Mollemans	1987-03-01	-23.2852	119.6622 Dampiera candicans
Chinnock, F	2004-09-02	-23.3127	119.635 Ptilotus carinatus
Pringle, H.	1995-03-28	-23.3332	119.7839 Sida trichopoda
Toelken, H.	1979-09-19	-23.3155	119.6344 Acacia hilliana
Mollemans	1987-03-01	-23.2849	119.6539 Dicrastylis cordifolia
Lally, T.R.	1995-09-10	-23.3516	119.7178 Senna glutinosa subsp. luerssenii
Nicolle, D.	1993-10-02	-23.4511	119.7847 Corymbia candida subsp. candida
Mollemans	1987-03-02	-23.3999	119.7122 Melaleuca eleuterostachya
Mitchell, A.	1996-06-22	-23.4585	120.1472 Solanum cleistogamum
Barlow, B.A	1969-06-23	-23.7768	120.2431 Eremophila margarethae
Chinnock, F	2011-09-16	-23.3521	119.7536 Goodenia lamprosperma
Mollemans	1987-03-01	-23.2838	119.6619 Bulbostylis barbata
Mollemans	1987-03-05	-23.3155	119.6903 Scaevola acacioides
Toelken, H.	1979-09-19	-23.2141	119.73 Ptilotus fusiformis
Deighton, M	1983-04-16	-23.3102	119.9147 Eremophila latrobei subsp. latrobei
Mollemans	1987-02-27	-23.401	119.7025 Eriachne
Mitchell, A.	1996-06-21	-23.4204	120.5536 Eremophila forrestii subsp. forrestii
Walker, K.	1981-03-12	-23.3655	119.7011 Corymbia hamersleyana
Mollemans	1987-03-01	-23.2849	119.6617 Scaevola parvifolia subsp. pilbarae
Chinnock, F	2004-09-02	-23.3113	119.6772 Eremophila platycalyx subsp. pardalota
Toelken, H.	1979-09-19	-23.3155	119.6344 Scaevola browniana subsp. browniana
Chinnock, F	2011-09-16	-23.3521	119.7536 Goodenia lamprosperma
Mollemans	1987-03-07	-23.3271	119.7461 Maireana georgei
Wilson, K.L	2006-05-04	-22.9506	120.28 Cyperus squarrosus
Short, P.S.	1995-08-27	-23.3157	119.8561 Petalostylis labicheoides
Mollemans	1987-03-02	-23.4032	119.69 Amyema fitzgeraldii

Lally, T.R.	1995-09-1(	-23.3488	119.7178	Solanum lasiophyllum
Mitchell, A.	1996-06-22	-23.4585	120.1472	Cheilanthes lasiophylla
Chinnock, F	2004-09-02	-23.3127	119.635	Calandrinia schistorhiza
Chinnock, F	2009-06-05	-23.318	119.7717	Scrophulariaceae
Mitchell, A.	1996-06-22	-23.4585	120.1472	Sida brownii
Wilson, K.L	2006-05-04	-22.9506	120.28	Schoenoplectiella laevis
Barker, R.M	1995-08-27	-23.3152	119.8558	Sida fibulifera
Deighton, M	1983-04-16	-23.3488	119.7344	Eremophila exilifolia
Deighton, M	1982-07-14	-23.3488	119.7344	Eremophila longifolia
Latz, P.K.	2001-07-16	-23.6518	119.7542	Sida brownii
Mollemans	1987-03-05	-23.3863	119.7136	Aristida contorta
Burbidge, M	1958-05-07	-23.4918	119.9594	Acacia ancistrocarpa
Latz, P.K.	2001-07-16	-23.6618	119.7542	Malvaceae
Barker, R.M	1995-08-26	-23.7018	119.7411	Sida echinocarpa
Barker, R.M	1995-08-27	-23.3152	119.8558	Roepera similis
Barker, R.M	1995-08-26	-23.7018	119.7411	Sida brownii
Mitchell, A.	1995-08-28	-23.2988	119.89	Abutilon lepidum
Nordenstar	1989-10-05	-23.548	119.73	Chrysocephalum pterochaetum
Toelken, H.	1979-09-19	-23.3167	119.6333	Kennedia
Wilson, K.L	2006-05-02	-23.4686	120.1908	Cyperus bifax
Deighton, M	1983-04-16	-23.3488	119.7344	Eremophila tietkensii
Mollemans	1987-02-26	-23.2821	119.6511	Polymeria ambigua
Leeuwen, S	1998-08-19	-23.2868	119.785	Eremophila tietkensii
Barker, W.I	1977-08-16	-23.1668	119.9369	Sida arsiniata
Barker, R.M	1995-08-27	-23.3602	119.7914	Sida echinocarpa
Deighton, M	1983-04-21	-23.3488	119.7344	Scrophulariaceae
Mitchell, A.	1996-06-21	-23.3913	120.5222	Senna sericea
Symon, D.E	1975-05-15	-22.9488	120.0844	Solanum sturtianum
Leeuwen, S	1998-08-19	-23.3285	120.0219	Eucalyptus kingsmillii subsp. kingsmillii
Mitchell, A.	1979-05-16	-23.0488	120.0844	Aerva javanica
Barker, R.M	1995-08-27	-23.2466	119.9	Sida echinocarpa
Edgecombe	1983-11-02	-23.3667	119.85	Eucalyptus xerothermica
Beauglehol	1974-08-19	-23.5668	119.8236	Solanum lasiophyllum
Deighton, M	1983-04-15	-23.3488	119.7344	Eremophila tietkensii
Mollemans	1987-03-02	-23.4032	119.69	Heliotropium tanythrix
Nicolle, D.	1993-10-02	-23.4496	119.7803	Eucalyptus leucophloia subsp. leucophloia
Mollemans	1987-02-24	-23.401	119.7025	Triodia wiseana
Beauglehol	1974-08-18	-23.1796	119.9233	Maireana melanocoma
Burbidge, M	1958-05-07	-23.3141	119.9544	Jacksonia aculeata
Burbidge, M	1958-05-07	-23.4918	119.9594	Haloragis gossei
Symon, D.E	1975-05-15	-23.0821	120.0844	Solanum sturtianum
Latz, P.K.	2001-07-16	-23.6618	119.7542	Eremophila cuneifolia
Short, P.S.	1995-08-26	-23.7021	119.7411	Rhodanthe sterilescens
Burbidge, M	1958-05-07	-23.1979	119.9544	Nicotiana simulans
Jackson, E.I	1977-08-16	-23.1154	119.9178	Senna notabilis
Mitchell, A.	1995-08-29	-23.4071	120.5736	Trianthema glossostigmum
Mollemans	1987-02-18	-23.4	119.7	Triodia pascoeana
Mollemans	1987-02-27	-23.403	119.69	Sporobolus australasicus
Nicolle, D.	1993-10-02	-23.4403	119.8183	Eucalyptus xerothermica
Barker, R.M	1995-08-26	-23.7038	119.7456	Malvaceae

Mitchell, A.	1995-08-29	-23.5052	120.39	Eremophila jucunda subsp. jucunda
Mollemans	1987-02-26	-23.2791	119.6267	Trianthema pilosum
Wilson, K.L	2006-05-03	-23.29	120.1911	Fimbristylis simulans
Brooker, M	1983-07-03	-23.3585	119.73	Corymbia hamersleyana
Deighton, M	1982-07-14	-23.3488	119.7344	Eremophila maculata subsp. brevifolia
Mitchell, A.	1977-05-30	-23.3488	119.7344	Senna hamersleyensis
Leeuwen, S	1998-08-19	-23.3302	120.0208	Sida sp. Excedentifolia (J.L.Egan 1925)
Black, R.F.	1976-05-26	-23.3596	119.6792	Solanum lasiophyllum
Mollemans	1987-02-27	-23.3966	119.7217	Goodenia mimuloides
Beauglehol	1974-08-19	-23.3155	119.7511	Solanum sturtianum
Maslin, B.R	2006-08-11	-23.1157	120.52	Acacia subcontorta
Beauglehol	1974-08-18	-23.1421	119.9394	Calocephalus beardii
Deighton, M	1982-08-21	-23.3488	119.7344	Eremophila tietkensii
Leeuwen, S	1998-08-19	-23.295	119.7867	Amyema gibberula var. gibberula
Barker, W.I	1977-08-16	-23.1668	119.9369	Sida arsiniata
Wilson, K.L	2006-05-04	-22.9506	120.28	Cyperus iria
Mollemans	1987-02-27	-23.3966	119.7217	Ptilotus helipteroides
Deighton, M	1981-08-21	-23.3488	119.7344	Eremophila cuneifolia
Barker, R.M	1995-08-26	-23.7038	119.7456	Tribulus micrococcus
Leeuwen, S	1998-08-19	-23.2938	119.7878	Eucalyptus kingsmillii subsp. kingsmillii
Symon, D.E	1975-05-15	-23.0821	120.0844	Solanum centrale
Mollemans	1987-02-18	-23.3477	119.71	Triodia basedowii
Mollemans	1989-02-24	-23.3943	119.71	Triodia wiseana
Mollemans	1987-02-18	-23.3863	119.7136	Triodia brizoides
Mollemans	1987-02-18	-23.401	119.7025	Triodia wiseana
Mitchell, A.	1995-08-29	-23.5191	120.3319	Sida cardiophylla
Barker, R.M	1995-08-27	-23.3602	119.7914	Malvaceae
Beauglehol	1974-08-18	-23.1421	119.9394	Calocephalus beardii
Jackson, E.I	1977-08-16	-23.1154	119.9178	Acacia wanyu
Burbidge, M	1958-05-07	-23.2079	120.1014	Acacia coriacea subsp. pendens
Mollemans	1987-02-26	-23.3066	119.735	Hibiscus
Ashby, A.M	1971-08-05	-22.9982	120.0994	Goodenia prostrata
Barker, R.M	1995-08-27	-23.3602	119.7914	Abutilon lepidum
Deighton, M	1981-08-21	-23.3488	119.7344	Eremophila cuneifolia
Nicolle, D.	1994-08-01	-23.4496	119.7803	Eucalyptus leucophloia subsp. leucophloia
Mitchell, A.	1995-08-29	-23.5191	120.3319	Solanum centrale
David E. All	2004-09-03	-23.6919	119.7733	Dodonaea pachyneura
R. Paton	1972-11-30	-23.3141	119.7524	Eucalyptus camaldulensis subsp. refulgens
A.L. Payne	1996-06-19	-23.5172	120.1183	Vittadinia
R. Paton	1972-11-30	-23.3141	119.7524	Grevillea pyramidalis subsp. leucadendron
David E. All	2004-09-02	-23.3	119.6	Goodenia sp. East Pilbara (A.R.Mitchell PRP 727) WA Herbariu
David E. All	2004-09-02	-23.3139	119.6339	Sclerolaena densiflora
Andrew A.	1996-06-21	-23.3847	120.4717	Chrysocephalum apiculatum
K. Walker	1981-03-12	-23.3514	119.73	Corymbia hamersleyana
R.J. Chinno	2004-09-02	-23.3125	119.6761	Eremophila platycalyx
R. Paton	1972-11-30	-23.1641	119.8024	Hakea chordophylla
R.J. Chinno	1986-09-05	-22.9	120	Eremophila pilosa
David E. All	2004-09-02	-23.3139	119.6339	Calotis plumulifera
David E. All	2004-09-02	-23.3139	119.6339	Streptoglossa cylindriceps
R. Paton	1972-11-30	-23.1641	119.8024	Psydrax latifolia

David E. All	2004-09-02	-23.3139	119.6339	Swainsona leeana
R. Paton	1972-11-30	-23.1974	119.8858	Acacia tetragonophylla
Andrew A.	1994-03-27	-23.358	119.7324	Tephrosia sp. Clay soils (S.van Leeuwen et al. PBS 0273)
David E. All	2004-09-03	-23.6919	119.7733	Olearia xerophila
David E. All	2004-09-02	-23.3139	119.6339	Atriplex semilunaris
David E. All	2004-09-02	-23.3139	119.6339	Ptilotus carinatus
David E. All	2004-09-03	-23.6919	119.7733	Astrotricha hamptonii
Andrew A.	1996-06-19	-23.5022	120.0828	Tephrosia rosea var. rosea
David E. All	2004-09-02	-23.3139	119.6339	Senna hamersleyensis
Peter Latz	2001-07-16	-22.9833	120.1833	Gomphrena sordida
R.J. Chinno	2004-09-02	-23.3139	120.5314	Rhodanthe floribunda
T. Erickson	2010-12-13	-23.3662	119.7196	Eucalyptus leucophloia subsp. leucophloia
R.J. Chinno	2004-09-02	-23.3139	119.6339	Calandrinia schistorhiza
R.J. Chinno	2004-09-02	-23.3125	119.6761	Eremophila forrestii subsp. forrestii
R.J. Chinno	2004-09-02	-23.3139	119.6339	Ptilotus carinatus
R. Paton	1972-12-14	-23.2807	119.9024	Eucalyptus patellaris
F.H. Moller	1987-03-05	-23.3982	119.7127	Tephrosia
Peter Latz	2001-07-16	-23.6531	119.7531	Sida brownii
Peter Latz	2001-07-16	-23.6631	119.7531	Brachyachne prostrata
Van Vreesv	1996-06-18	-23.4861	119.8719	Chrysocephalum pterochaetum
M.K. Deigh	1983-03-26	-23.35	119.7333	Eremophila margarethae
J. (Jerome)	2014-04-24	-23.2997	120.0833	Acacia corusca
R.J. Chinno	2004-09-03	-23.6919	119.7733	Abutilon
Peter Latz	2001-07-16	-23.6631	119.7531	Frankenia
R.J. Chinno	2004-09-02	-23.3139	119.6339	Lepidium
Bruce Masl	2004-10-11	-23.315	119.874	Acacia macraneura
Andrew S. I	1979-05-16	-23.0474	120.0858	Ptilotus gomphrenoides
R.J. Chinno	2004-09-03	-23.6919	119.7733	Abutilon
R.J. Chinno	2004-09-03	-23.6919	119.7733	Eremophila jucunda subsp. pulcherrima
Steven van	2000-07-15	-23.3214	119.6033	Streptoglossa liatroides
Murray Ian	1983-07-04	-23.2807	119.7691	Corymbia deserticola
Peter Latz	2001-07-16	-23.6631	119.7531	Eremophila cuneifolia
R.J. Chinno	2004-09-03	-23.6919	119.7733	Ptilotus obovatus
Steven van	2006-05-02	-23.4982	120.2914	Codonocarpus cotinifolius
L.A. (Lyn) C	2006-05-02	-23.4908	120.3181	Cyperus difformis
David E. All	2004-09-02	-23.3139	119.6417	Goodenia muelleriana
R.J. Chinno	2004-09-03	-23.6919	119.7733	Vittadinia virgata
	1978-09-10	-23.6141	119.7691	Trachymene glaucifolia
L.S.J. Swee	2006-10-10	-23.2057	119.8805	Acacia pyrifolia
Steven van	2000-07-15	-23.3214	119.6033	Rutidosis helichrysoides
David E. All	2004-09-02	-23.35	119.7167	Ptilotus xerophilus
	1974-08-18	-23.2474	119.8024	Tragus australianus
Steven van	2006-05-01	-23.4588	120.1555	Senna glutinosa subsp. pruinosa
R. Tomano	2011-10-04	-23.3376	120.0968	Frankenia setosa
R.J. Chinno	2004-09-03	-23.6919	119.7733	Ptilotus obovatus
H.R. Toelke	1979-09-19	-23.3141	119.6358	Mirbelia viminalis
Peter Latz	2001-07-16	-23.6631	119.7531	Eremophila exilifolia
Steven van	2006-08-10	-23.3627	120.2948	Senna artemisioides subsp. oligophylla
Peter Latz	2001-07-16	-23.6631	119.7531	Enneapogon caerulescens
	1974-08-18	-23.2307	119.8691	Iseilema dolichotrichum

Raelee Ann	2006-05-04	-23.0338	119.9803	Polygala isingii
Peter Latz	2001-07-16	-23.6631	119.7531	Goodenia muelleriana
Peter Latz	2001-07-16	-23.6631	119.7531	Corchorus walcottii
Murray Ian	1974-04-20	-23.3307	119.8524	Eucalyptus pilbarensis
Peter Latz	2001-07-16	-23.6631	119.7531	Acacia rhodophloia
J. (Jerome)	2014-07-09	-23.3011	120.105	Acacia corusca
Mike Lazari	1992-04-14	-23.3	119.6833	Triodia angusta
Steven van	2006-08-09	-23.4703	120.2149	Maireana melanocoma
A.C. (Alf) B	1974-08-18	-23.2307	119.8691	Brachyachne prostrata
Mike Lazari	1992-04-14	-23.3	119.6833	Triodia wiseana
Peter Latz	2001-07-15	-23.6531	119.7733	Goodenia prostrata
K. Walker	1980-07-21	-23.3667	119.6833	Acacia hamersleyensis
Murray Ian	1983-07-04	-23.4474	119.7691	Eucalyptus
Andrew S. I	1979-05-01	-23.0807	120.3691	Trianthema cusackianum
Murray Ian	1974-04-20	-23.3307	119.8524	Eucalyptus pilbarensis
Ian Donald	2006-05-06	-23.3525	119.8112	Tephrosia sp. Newman (A.A.Mitchell PRP 29)
Ian Donald	2006-05-06	-23.3652	119.7632	Tephrosia sp. Clay soils (S.van Leeuwen et al. PBS 0273)
A.R. (Tony)	2006-05-03	-23.3831	120.2522	Androcalva luteiflora
Steven van	2006-05-03	-23.3625	120.2947	Sida ectogama
L.A. (Lyn) C	2006-05-01	-23.4647	120.1561	Hibiscus burtonii
Steven van	2000-07-15	-23.3214	119.6033	Brachyscome ciliaris
Steven van	1993-07-09	-23.3406	120.0031	Acacia sp. Jimblebar (S.van Leeuwen 1342)
L.A. (Lyn) C	2006-05-03	-23.3664	120.2731	Hibiscus sturtii var. sturtii
L.A. (Lyn) C	2006-05-03	-23.3839	120.4486	Hibiscus sturtii var. sturtii
Steven van	2006-05-02	-23.4982	120.2914	Codonocarpus cotinifolius
E.N. Jackso	1977-08-16	-23.1141	119.9191	Acacia wanyu
Steven van	1998-08-19	-23.3314	120.0197	Chrysocephalum pterochaetum
Steven van	2000-07-15	-23.3214	119.6033	Minuria integerrima
Steven van	1998-08-19	-23.33	120.0211	Waltheria virgata
Andrew S. I	1979-05-16	-23.0474	120.0858	Aerva javanica
P.E. Conricl	1983-10-31	-23.6307	119.8524	Capparis umbonata
A.C. (Alf) B	1974-08-18	-23.2141	119.8024	Eragrostis xerophila
Steven van	2006-05-03	-23.3913	120.5233	Amphipogon sericeus
Steven van	2005-08-24	-23.3627	120.2948	Senna artemisioides subsp. oligophylla
Steven van	1998-08-19	-23.33	120.0211	Eucalyptus kingsmillii
Steven van	2006-05-03	-23.3627	120.2948	Monachather paradoxus
	1974-08-18	-23.2307	119.8691	Eragrostis tenellula
Andrew A.	1995-08-28	-23.3	119.8889	Abutilon lepidum
Steven van	2006-05-01	-23.4588	120.1555	Senna glutinosa subsp. pruinosa
	1974-08-18	-23.6474	120.0858	Cymbopogon obtectus
Murray Ian	1974-05-19	-23.3307	119.8524	Eucalyptus trivalva
L.A. (Lyn) C	2006-05-01	-23.4647	120.1561	Hibiscus sturtii var. platychlamys
L.A. (Lyn) C	2006-05-03	-23.385	120.4578	Hibiscus burtonii
Steven van	1998-08-19	-23.2951	119.7867	Eucalyptus kingsmillii
David E. All	2004-08-23	-23.3139	119.6339	Calocephalus pilbarensis
J. (Jerome)	1978-07-31	-23.3923	119.9977	Diplachne fusca subsp. muelleri
Steven van	1998-08-19	-23.33	120.0211	Corymbia hamersleyana
J. (Jerome)	2015-05-24	-23.3689	119.9761	Triodia angusta
M.E. (Malc	1997-05-30	-23.3333	119.65	Tephrosia rosea
Andrew A.	1995-08-28	-22.9421	120.1691	Streptoglossa cylindriceps

Bruce Masl	2006-08-1(	-23.3897	120.5164 Acacia walkeri
L.A. (Lyn) C	2006-05-0:	-23.3839	120.4486 Hibiscus solanifolius
Fryer, R.A.	2016-08-0:	-23.465	119.7958 Lysiana murrayi
Wilson, K.L	2006-05-0:	-23.29	120.1911 Fimbristylis simulans
Hyland, B.	2004-06-2(	-23.3833	119.7667 Acacia maitlandii
Hyland, B.	2004-06-2(	-23.3833	119.7667 Corymbia candida
Hyland, B.	2004-06-2(	-23.3833	119.7667 Acacia maitlandii
Hyland, B.	2004-06-2(	-23.3833	119.7667 Corymbia candida
Hyland, B.	2002-09-07	-23.3667	119.75 Acacia citrinoviridis
Fryer, R.A.	2016-08-0:	-23.465	119.7958 Lysiana murrayi
Hyland, B.	2004-06-2(	-23.3833	119.75 Diplopeltis stuartii var. stuartii
Hyland, B.	2004-06-2(	-23.3833	119.75 Indigofera monophylla
Hyland, B.	2002-09-07	-23.3667	119.75 Acacia citrinoviridis
Wilson, K.L	2006-05-02	-23.3731	120.4578 Schoenoplectiella dissachantha
Hyland, B.	2004-06-2(	-23.3833	119.75 Indigofera monophylla
Fryer, R.A.	2016-08-01	-23.3036	119.6106 Amyema bifurcata
Mitchell, A.	1996-06-22	-23.3192	119.8708 Charophyta
Wilson, K.L	2006-05-04	-22.9506	120.28 Cyperus squarrosus
Wilson, K.L	2006-05-02	-23.4908	120.3181 Schoenoplectiella laevis
Wilson, K.L	2006-05-02	-23.4686	120.1908 Bulbostylis barbata
Wilson, K.L	2006-05-02	-23.3731	120.4578 Schoenoplectiella dissachantha
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus iria
Wilson, K.L	2006-05-0:	-23.29	120.1911 Fimbristylis simulans
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus bifax
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus vaginatus
Wilson, K.L	2006-05-04	-22.9506	120.28 Schoenoplectiella laevis
Wilson, K.L	2006-05-02	-23.4686	120.1908 Cyperus squarrosus
Mitchell, A.	2017-05-08	-23.3646	119.7601 Austrobryonia pilbarensis
Wilson, K.L	2006-05-02	-23.4686	120.1908 Lipocarpha microcephala
Wilson, K.L	2006-05-02	-23.4908	120.3181 Cyperus difformis
<a href='ht	2021-05-0:	-23.4	119.7 Ptilotus macrocephalus
<a href='ht	2021-05-2:	-23.4	119.7 Schinus molle
<a href='ht	2021-05-0:	-23.4	119.7 Trichodesma zeylanicum
<a href='ht	2021-01-0(	-23.4	119.7 Cassia
<a href='ht	2021-01-0(	-23.4	119.7 Syagrus
<a href='ht	2021-05-0:	-23.4	119.7 Ptilotus schwartzii
<a href='ht	2021-01-0(	-23.4	119.7 Plantae
<a href='ht	2021-05-0:	-23.4	119.7 Corchorus lasiocarpus
<a href='ht	2021-05-0:	-23.4	119.7 Newcastelia
<a href='ht	2021-05-0:	-23.4	119.7 Ptilotus nobilis subsp. nobilis
Wilson, K.L.|Bean, A.R		-23.29	120.1911 Fimbristylis simulans
Bean, A.R.		-23.4064	120.5531 Nicotiana rosulata
Mitchell, A.	1994-03-27	-23.3592	119.7313 Vigna sp. McDonald Downs Station (R.A.Perry 3416)
Pringle, H.	1995-03-27	-23.6817	119.7452 Digitaria ctenantha
van Leeuw(	2000-07-15	-23.3201	119.6047 Panicum decompositum var. decompositum
Mitchell, A.	1994-03-27	-23.6812	119.745 Triraphis mollis
Mitchell, A.	1995-08-31	-22.9548	120.2833 Polypogon monspeliensis
Lally, T.R.	1995-09-1(	-23.357	119.7263 Senna glutinosa subsp. luerssenii
Mitchell, A.	1994-03-27	-23.6812	119.745 Enneapogon polyphyllus
Mitchell, A.	1994-03-28	-23.3009	119.6102 Enneapogon polyphyllus

Mitchell, A.	1994-03-27	-23.3592	119.7313	Iseilema membranaceum
Brooker, M	1974-04-19	-23.582	120.2513	Corymbia terminalis
Bean, A.R.	2006-05-04	-22.9492	120.2813	Cucumis variabilis
Mitchell, A.	1996-06-22	-23.4584	120.1474	Corchorus lasiocarpus subsp. lasiocarpus
Mitchell, A.	1994-03-27	-23.6812	119.745	Enneapogon avenaceus
Mitchell, A.	1996-06-20	-23.3737	120.1938	Digitaria longiflora
Pringle, H.	1995-03-28	-23.3331	119.7841	Cymbopogon ambiguus
Pringle, H.J	1994-03-27	-23.3592	119.7313	Aristida latifolia
Fox, J.	1992-07-09	-22.907	120.1763	Eriachne ovata
van Leeuw	2000-07-15	-23.3201	119.6047	Desmodium campylocaulon
van Leeuw	1998-08-19	-23.2951	119.7867	Eriachne mucronata
van Leeuw	1997-04-12	-23.5067	120.5314	Paraneurachne muelleri
van Leeuw	2000-07-16	-23.3201	119.6047	Eragrostis setifolia
Mitchell, A.	1996-07-25	-23.0506	120.1469	Corchorus crozophorifolius
Bean, A.R.	2006-05-02	-23.3731	120.4591	Synaptantha tillaeacea var. tillaeacea
Maslin, B.R	1980-07-07	-23.4153	119.7513	Mirbelia viminalis
Mitchell, A.	1994-03-27	-23.6812	119.745	Setaria dielsii
Yen, D.E.	1988-05-10	-23.4153	119.7513	Ipomoea calobra
Bean, A.R.	2006-05-02	-23.3731	120.4591	Bergia pedicellaris
Mitchell, A.	1996-07-25	-23	120.2	Crotalaria smithiana
Maier, M.;I	2000-10-02	-23.31	119.7478	Eriachne tenuiculmis
Harrison, D	2008-11-13	-23.557	119.993	Calandrinia schistorhiza
Bean, A.R.	2006-05-07	-23.3139	119.6339	Desmodium campylocaulon
van Leeuw	1998-08-19	-23.2951	119.7867	Amphipogon
Bean, A.R.	2006-05-02	-23.3731	120.4591	Ptilotus xerophilus
Bean, A.R.	2006-05-04	-22.9492	120.2813	Peplidium
Bean, A.R.	2006-05-02	-23.4948	120.3205	Indigofera monophylla
Bean, A.R.	2006-05-03	-23.365	120.2744	Goodenia connata
Bean, A.R.	2006-05-04	-22.9492	120.2813	Peplidium
Bean, A.R.	2006-05-04	-23.0467	120.1044	Solanum lasiophyllum
Bean, A.R.	2006-05-07	-23.3139	119.6339	Sclerolaena densiflora
Bean, A.R.	2006-05-03	-23.3817	120.2536	Androcalva luteiflora
Bean, A.R.	2006-05-02	-23.3731	120.4591	Elytrophorus spicatus
Bean, A.R.	2006-05-03	-23.3839	120.4591	Blumea tenella
Bean, A.R.	2006-05-03	-23.365	120.2744	Trianthema glossostigmum
Mitchell, A.	1995-08-27	-23.1	120.4	Crotalaria smithiana
Bean, A.R.	2006-05-03	-23.3839	120.4591	Glycine canescens
Bean, A.R.	2006-05-02	-23.3634	120.3816	Gomphrena kanisii
Bean, A.R.	2006-05-03	-23.3817	120.2536	Halgania solanacea
Mitchell, A.	1995-08-29	-23.4928	120.4513	Acacia paraneura
Bean, A.R.	2006-05-02	-23.4948	120.3205	Swainsona decurrens
Bean, A.R.	2006-05-02	-23.4948	120.3205	Polygala isingii
Bean, A.R.	2006-04-30	-23.0034	119.9886	Ptilotus helipteroides
Bean, A.R.	2006-05-02	-23.3634	120.3816	Ptilotus gaudichaudii subsp. gaudichaudii
Bean, A.R.	2006-05-02	-23.3731	120.4591	Rotala diandra
van Leeuw	1998-08-19	-23.2951	119.7867	Corchorus
Bean, A.R.	2006-05-02	-23.4948	120.3205	Sclerolaena cornishiana
Bean, A.R.;	2006-05-03	-23.327	120.2739	Solanum elatius
Bean, A.R.	2006-05-07	-23.3139	119.6339	Cullen graveolens
Bean, A.R.	2006-05-04	-23.0467	120.1044	Rhynchosia minima

Bean, A.R.	2006-05-04	-23.0467	120.1044	Ptilotus astrolasius
Bean, A.R.	2006-05-03	-23.3825	120.45	Goodenia vilmoriniae
Bean, A.R.	2006-05-03	-23.327	120.2739	Chrysocephalum pterochaetum
Mitchell, A.	1996-05-21	-23.0239	119.823	Corchorus
Bean, A.R.	2006-05-02	-23.3634	120.3816	Brunonia australis
Bean, A.R.	2006-04-30	-23.0034	119.9886	Dicrastylis cordifolia
Bean, A.R.	2006-05-04	-22.9492	120.248	Ptilotus gomphrenoides
Bean, A.R.	2006-05-03	-23.405	120.5544	Nicotiana rosulata
Bean, A.R.	2006-05-04	-23.0467	120.1044	Ptilotus helipteroides
Bean, A.R.	2006-05-03	-23.3839	120.4591	Sida platycalyx
Bean, A.R.	2006-05-03	-23.365	120.2744	Brachyachne prostrata
Bean, A.R.	2006-05-03	-23.405	120.5544	Haloragis odontocarpa
Bean, A.R.	2006-05-03	-23.327	120.2739	Petalostylis cassioides
Bean, A.R.	2006-05-03	-23.405	120.5544	Hibiscus burtonii
Bean, A.R.	2006-05-02	-23.3634	120.3816	Dysphania rhadinostachya
Bean, A.R.	2006-05-02	-23.3628	120.3152	Aeschynomene indica
Beauglehol	1974-08-18	-23.3237	119.7597	Cymbopogon obtectus
Bean, A.R.	2006-05-03	-23.3839	120.4591	Rhodanthe charsleyae
Bean, A.R.	2006-04-30	-23.0034	119.9886	Solanum elatius
Bean, A.R.	2006-05-02	-23.3648	120.4161	Solanum lasiophyllum
Bean, A.R.	2006-05-02	-23.4673	120.1922	Acacia sabulosa
Bean, A.R.	2006-05-03	-23.405	120.5544	Spermacoce brachystema
Bean, A.R.	2006-05-03	-23.3825	120.45	Solanum centrale
Bean, A.R.	2006-04-30	-23.0034	119.9886	Ptilotus nobilis subsp. nobilis
Bean, A.R.	2006-05-03	-23.405	120.5544	Ptilotus schwartzii
Bean, A.R.	2006-05-04	-22.9492	120.2813	Aeschynomene indica
Bean, A.R.	2006-05-02	-23.3634	120.3816	Codonocarpus cotinifolius
Bean, A.R.	2006-05-02	-23.4673	120.1922	Rutidosis helichrysoides subsp. helichrysoides
Bean, A.R.	2006-05-02	-23.4673	120.1922	Stemodia viscosa
Bean, A.R.	2006-05-02	-23.4673	120.1922	Wahlenbergia tumidifructa
Bean, A.R.	2006-05-03	-23.3825	120.45	Diplopeltis stuartii var. stuartii
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ptilotus obovatus
Bean, A.R.	2006-05-02	-23.4673	120.1922	Chrysocephalum apiculatum
Pringle, H.J	1995-08-29	-23.4939	120.4427	Iseilema membranaceum
Bean, A.R.	2006-05-02	-23.3634	120.3816	Areocleome oxalidea
Bean, A.R.	2006-05-03	-23.405	120.5544	Maireana villosa
Bean, A.R.	2006-05-02	-23.3628	120.3152	Drosera finlaysoniana
Bean, A.R.	2006-05-02	-23.4	120.4	Gomphrena pusilla
Bean, A.R.	2006-05-04	-23.0467	120.1044	Solanum elatius
Bean, A.R.	2006-05-02	-23.4123	120.3166	Sclerolaena convexula
Bean, A.R.	2006-05-02	-23.4673	120.1922	Bidens bipinnata
Bean, A.R.	2006-05-03	-23.365	120.2744	Scaevola spinescens
Bean, A.R.	2006-05-02	-23.4673	120.1922	Cynanchum floribundum
Bean, A.R.	2006-05-03	-23.405	120.5544	Roebuckiella similis
Bean, A.R.	2006-05-02	-23.4123	120.3166	Lepidium echinatum
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ipomoea muelleri
Bean, A.R.	2006-05-02	-23.4673	120.1922	Malvastrum americanum
Bean, A.R.	2006-05-02	-23.4673	120.1922	Pluchea rubelliflora
Bean, A.R.	2006-05-02	-23.3628	120.3152	Calandrinia quadrivalvis
Bean, A.R.	2006-05-02	-23.4673	120.1922	Centipeda minima subsp. macrocephala

Bean, A.R.	2006-05-02	-23.3628	120.3152	Peplidium
Bean, A.R.	2006-05-02	-23.4123	120.3166	Acacia tetragonophylla
Bean, A.R.	2006-05-02	-23.4673	120.1922	Ammannia multiflora
Mitchell, A.	1996-05-06	-23.1595	119.9749	Triumfetta maconochieana
Bean, A.R.	2006-05-02	-23.4123	120.3166	Streptoglossa liatroides
Beauglehol	1974-08-18	-23.082	119.918	Eragrostis tenellula
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ptilotus aervoides
Bean, A.R.	2006-05-03	-23.405	120.5544	Ptilotus polystachyus
Beauglehol	1974-08-18	-23.3237	119.7597	Brachyachne prostrata
Mitchell, A.	1996-05-06	-23.1595	119.9749	Digitaria brownii
Bean, A.R.	2006-05-03	-23.405	120.5544	Alternanthera denticulata
Bean, A.R.	2006-05-02	-23.4123	120.3166	Sclerolaena lanicuspis
Bean, A.R.	2006-05-02	-23.4673	120.1922	Eucalyptus socialis subsp. eucentrica
Beauglehol	1974-08-19	-23.2737	119.5763	Eragrostis leptocarpa
Bean, A.R.	2006-05-02	-23.4123	120.3166	Ptilotus helipteroides
Cemone He	2017-01-26	-23.2439	119.6246	Capparis lasiantha
Robert Bro	2020-09-19	-23.2995	120.2129	Ptilotus obovatus
Tim Hamm	2015-08-13	-23.224	119.905	Ptilotus schwartzii
Robert Bro	2020-05-26	-23.3485	120.1244	Grevillea wickhamii
Robert Bro	2020-05-27	-23.3513	120.1228	Bidens subalternans
		-23.1833	120	Crotalaria cunninghamii
Walker, K.	1980-06-15	-23.3514	119.73	Goodenia muelleriana
Simmons, J	1989-06-21	-23.3	119.65	Acacia monticola
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Toelken, H.	1979-09-19	-23.3167	119.6333	Acacia hilliana
Simmons, J	1989-06-21	-23.35	119.8333	Acacia maitlandii
McDonald,	2001-03-11	-23.2317	119.9128	Eucalyptus
Pringle, H.	1995-03-28	-23.3172	119.8358	Eucalyptus leucophloia subsp. leucophloia
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Lally, T.R.	1995-09-10	-23.35	119.7167	Senna glutinosa subsp. luerssenii
Albrecht, D	2004-09-03	-23.6919	119.7733	Astrotricha hamptonii
Walker, K.	1980-06-15	-23.3514	119.73	Goodenia muelleriana
Maslin, B.R	1980-07-07	-23.3	119.65	Acacia aptaneura
Blake, T.		-23.6333	119.7833	Stylidium desertorum
Simmons, J	1994-07-21	-23.3667	119.8333	Acacia xiphophylla
Chinnock, F	1986-09-05	-22.9	120	Eremophila pilosa
Simmons, J	1989-06-21	-23.3	119.65	Acacia tumida var. tumida
Leeuwen, S	2000-07-15	-23.3202	119.6044	Lepidium phlebopetalum
Sweedman	2006-07-21	-23.1789	119.7297	Acacia adoxa var. adoxa
Mitchell, A.	1995-08-31	-22.9561	120.2819	Calocephalus knappii
Simmons, J	1997-07-27	-23.1408	119.8392	Acacia wanyu
Blake, T.		-23.1333	119.9	Dicrastylis cordifolia
Leeuwen, S	2004-09-02	-23.3144	119.6331	Calocephalus pilbarensis
Beauglehol	1978-09-10	-23.75	119.9167	Eremophila cuneifolia
Leeuwen, S	1997-10-14	-23.3144	119.855	Triodia longiceps
Simmons, J	1994-07-21	-23.3336	119.8472	Acacia pachyacra
Brooker, M	1983-07-06	-23.45	119.7833	Corymbia aspera
Leeuwen, S	2000-07-15	-23.3202	119.6044	Lepidium phlebopetalum
Nordenstar	1989-10-05	-23.5	119.7667	Streptoglossa decurrens
Payne, A.L.	1996-06-19	-23.5022	120.0828	Tephrosia rosea

Leeuwen, S	2004-09-02	-23.3144	119.6331 Calocephalus pilbarensis
Pringle, H.	1995-03-28	-23.3344	119.7828 Sida fibulifera
Mitchell, A.	1995-04-08	-22.9283	120.1325 Corymbia candida
Brooker, M	1983-04-09	-23.75	120.2 Eucalyptus phaenophylla subsp. interjacens
Wilson, K.L	2006-05-04	-22.9506	120.28 Cyperus iria
Leeuwen, S	1993-07-09	-23.3231	119.9375 Acacia sp. Jimblebar (S.van Leeuwen 1342)
Simmons, J	1994-07-21	-23.3336	119.8472 Acacia pachyacra
Cusack, W.H.		-23.6	119.6667 Seringia nephrosperma
Leeuwen, S	1997-10-14	-23.3178	119.7103 Triodia angusta
Mitchell, A.	1995-03-28	-23.3181	119.7028 Triodia wiseana
Simmons, J	1997-07-29	-23.4333	119.7167 Acacia aneura
Sweedman	2006-10-10	-23.2072	119.8819 Acacia dictyophleba
Simmons, J	1997-07-29	-23.5814	119.7728 Acacia pyrifolia
Simmons, J	1997-07-27	-23.1408	119.8392 Acacia wanyu
Brooker, M	1983-07-03	-23.3333	119.8833 Eucalyptus socialis
Brooker, M	1983-07-03	-23.3667	119.7167 Corymbia hamersleyana
Brooker, M	1983-07-03	-23.2833	119.7 Corymbia ferriticola
Leeuwen, S	1993-07-09	-23.3231	119.9375 Acacia sp. Jimblebar (S.van Leeuwen 1342)
Foote, H.N.		-23.35	119.7333 Cullen cinereum
Nordenstar	1989-10-05	-23.55	119.7167 Chrysocephalum pterochaetum
Brooker, M	1983-07-06	-23.25	119.6 Corymbia hamersleyana
Erickson, T.	2008-07-16	-23.2972	119.7669 Senna venusta
Brooker, M	1983-07-03	-23.3833	119.8833 Corymbia aspera
Wilson, K.L	2006-05-02	-23.3731	120.4578 Schoenoplectiella dissachantha
Newbey, K.	1984-04-05	-23.3333	119.6667 Eremophila longifolia
Chinnock, F	2011-09-16	-23.3521	119.7536 Goodenia lamprosperma
Simmons, J	1994-07-21	-23.3161	119.8697 Acacia citrinoviridis
Nordenstar	1989-10-05	-23.55	119.7167 Chrysocephalum pterochaetum
Shepherd, I	2002-08-13	-22.9833	120 Solanum sturtianum
Wilson, K.L	2006-05-03	-23.29	120.1911 Fimbristylis simulans
Simmons, J	1997-07-29	-23.4333	119.7167 Acacia aneura
Brooker, M	1983-07-04	-23.45	119.7667 Corymbia ferriticola
Simmons, J	1997-07-28	-23.3667	119.7167 Acacia citrinoviridis
Johnson, L.	1991-07-29	-23.25	119.6667 Eucalyptus xerothermica
Simmons, J	1997-07-29	-23.5814	119.7728 Acacia pyrifolia
Brooker, M	1983-07-03	-23.4167	119.8667 Eucalyptus camaldulensis subsp. obtusa
Maslin, B.R	2004-05-30	-23.1147	120.51 Acacia subcontorta
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia monticola
Brooker, M	1983-07-03	-23.3	119.7167 Eucalyptus gamophylla
Maslin, B.R	2004-10-11	-23.3422	120.0078 Acacia trudgeniana
Maslin, B.R	2004-05-30	-22.9842	120.3364 Acacia dictyophleba
Backhouse,	1988-06-09	-23.3667	119.7167 Acacia tumida var. tumida
Brooker, M	1983-07-03	-23.3667	119.7167 Eucalyptus xerothermica
Beauglehol	1974-08-19	-23.3667	119.7833 Goodenia tenuiloba
Short, P.S.	1995-08-24	-23.7033	119.74 Roebuckiella similis
Maslin, B.R	2006-08-10	-23.3897	120.5164 Acacia walkeri
Maslin, B.R	2004-05-30	-23.1147	120.51 Acacia subcontorta
Simmons, J	1994-07-21	-23.3667	119.8333 Acacia xiphophylla
Short, P.S.	1995-08-27	-23.3614	119.7897 Roebuckiella similis
Leeuwen, S	2000-07-15	-23.3202	119.6044 Eragrostis setifolia

Simmons, J	1997-07-28	-23.3667	119.7167 Acacia citrinoviridis
Leeuwen, S	1998-08-19	-23.3297	120.0208 Calytrix carinata
Mitchell, A.	1995-08-28	-22.9447	120.1667 Rhodanthe sterilescens
Mitchell, A.	1995-08-28	-22.9447	120.1667 Rhodanthe charsleyae
Simmons, J	2000-08-10	-23.3225	119.7247 Acacia catenulata
Bean, A.R.	2006-04-30	-23.0035	119.9883 Dicrastylis cordifolia
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia adsurgens
Maslin, B.R	2004-10-11	-23.3422	120.0078 Acacia trudgeniana
Walker, K.	1980-07-21	-23.3667	119.6667 Acacia hamersleyensis
Craven, L.A	2006-05-03	-23.385	120.4578 Hibiscus burtonii
Beauglehol	1974-08-18	-23.1833	119.9 Stenopetalum nutans
Simmons, J	2000-08-09	-23.6764	119.7433 Acacia rhodophloia
Simmons, J	2000-08-10	-23.3225	119.7247 Acacia catenulata
Short, P.S.	1995-08-24	-23.7033	119.74 Actinobole drummondianum
Maslin, B.R	2006-08-10	-23.3897	120.5164 Acacia walkeri
Simmons, J	1994-07-21	-23.3161	119.8697 Acacia citrinoviridis
Leeuwen, S	2006-08-09	-23.4128	120.3172 Senna artemisioides subsp. helmsii
Short, P.S.	1995-08-24	-23.7033	119.74 Calocephalus knappii
Beauglehol	1974-08-18	-23.25	119.8833 Dysphania rhadinostachya subsp. inflata
Beauglehol	1974-08-18	-23.1	119.75 Stenopetalum anfractum
Short, P.S.	1995-08-26	-23.7033	119.74 Rhodanthe sterilescens
Short, P.S.	1995-08-26	-23.6314	119.7597 Rhodanthe charsleyae
Brooker, M	1983-07-03	-23.3333	119.8833 Eucalyptus leucophloia subsp. leucophloia
Short, P.S.	1995-08-27	-23.1667	119.9 Calotis multicaulis
Maslin, B.R	2006-08-09	-23.4672	120.1917 Acacia pyrifolia var. morrisonii
Ashby, A.M	1971-08-04	-23.6667	119.75 Acacia tumida var. pilbarensis
Mitchell, A.	1995-08-29	-23.4953	120.4414 Chrysocephalum gilesii
Brooker, M	1983-07-03	-23.3	119.7167 Eucalyptus trivalva
Brooker, M	1983-07-06	-23.25	119.6 Eucalyptus trivalva
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia melleodora
Bull, J. | W	2015-02-25	-23.3923	119.9977 Eleocharis pallens
Brooker, M	1983-07-04	-23.2667	119.7667 Corymbia hamersleyana
Short, P.S.	1995-08-27	-23.3169	119.855 Petalostylis labicheoides
Mitchell, A.	1995-08-29	-23.5203	120.3308 Chrysocephalum pterochaetum
Jackson, E.I	1977-08-16	-23.1167	119.9167 Acacia wanyu
Brooker, M	1983-07-04	-23.2667	119.7667 Eucalyptus kingsmillii subsp. kingsmillii
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia tenuissima
Craven, L.A	2006-05-03	-23.3664	120.2731 Hibiscus sturtii var. sturtii
Maslin, B.R	2006-08-10	-23.3653	120.4586 Acacia melleodora
Simmons, J	2000-08-10	-23.3225	119.7247 Acacia catenulata
Maslin, B.R	2004-05-30	-23.3422	120.0072 Acacia bivenosa
Craven, L.A	2006-05-03	-23.3839	120.4486 Hibiscus sturtii var. sturtii
Ashby, A.M	1971-08-05	-23.4167	119.8 Lepidium phlebopetalum
Cowie, I.D.	2006-05-06	-23.365	119.7631 Tephrosia sp. Clay soils (S.van Leeuwen et al. PBS 0273)
Simmons, J	2000-08-09	-23.6764	119.7433 Acacia rhodophloia
Shepherd, I	2002-08-30	-23.4167	119.8 Amyema fitzgeraldii
Craven, L.A	2006-05-01	-23.4717	120.505 Hibiscus coatesii
Short, P.S.	1995-08-27	-23.1667	119.9 Rhodanthe floribunda
Mitchell, A.	1995-08-29	-23.4083	120.5725 Calytrix carinata
Beauglehol	1974-08-18	-23.1	119.75 Ptilotus aervoides

	2008-12-22	-23.3	119.6 Lepidium catapycnon
	2009-11-08	-23.3	119.6 Lepidium catapycnon
	1999-11-15	-23.3	119.6 Lepidium catapycnon
Fensom, G.	1995-07-31	-23.3314	119.7331 Ptilotus nobilis subsp. nobilis
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Eriachne aristidea
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Brunonia australis
Errington, (	1995-06-28	-23.585	119.7733 Gomphrena kanisii
Cuneo, P.V	1995-06-28	-23.5222	119.7678 Dicrastylis
Wilson, D.I	1995-07-31	-23.3314	119.7331 Gomphrena kanisii
	2012-09-23	-23.1289	120.4899 Eriachne
	2012-09-23	-22.9432	120.1835 Acacia sp. (NEQ)
	2012-09-22	-22.9425	120.1433 Senna
	2012-09-23	-22.9441	120.2367 Sclerolaena
	2012-09-23	-23.038	120.4528 Acacia inaequilatera
	2012-09-23	-23.1289	120.4899 Acacia inaequilatera
	2012-09-22	-22.9425	120.1433 Acacia sp. (NEQ)
	2012-09-23	-22.9432	120.1835 Grevillea sp. (Peak Charles)
	2016-08-04	-23.3147	119.6325 Pterocaulon
	2012-09-23	-23.1289	120.4899 Acacia aneura
	2012-09-23	-23.1289	120.4899 Aristida contorta
	2012-09-23	-23.038	120.4528 Eragrostis eriopoda
	2012-09-23	-22.9441	120.2367 Grevillea sp. (Peak Charles)
	2012-09-23	-22.9432	120.1835 Eriachne
	2012-09-23	-22.9432	120.1835 Acacia victoriae
	2012-09-23	-22.9448	120.2744 Eucalyptus
	2012-09-23	-22.9441	120.2367 Eriachne
	2012-09-23	-22.9448	120.2744 Acacia victoriae
	2012-09-22	-22.9425	120.1433 Hakea
	2016-08-04	-23.3147	119.6325 Santalum
	2012-09-23	-23.1289	120.4899 Sclerolaena
	2012-09-23	-22.9448	120.2744 Senna
	2012-09-23	-22.9448	120.2744 Eriachne benthamii
	2016-08-04	-23.3147	119.6325 Goodenia pascua
	2012-09-23	-23.038	120.4528 Swainsonia
	2012-09-23	-22.9448	120.2744 Acacia aneura
	2016-08-04	-23.3147	119.6325 Senna hamersleyensis
	2012-09-23	-22.9448	120.2744 Ipomaea
	2012-09-23	-23.1289	120.4899 Senna
	2012-09-23	-22.9432	120.1835 Sclerolaena
	2012-09-23	-22.9441	120.2367 Acacia victoriae
	2016-08-04	-23.3147	119.6325 Poaceae
	2016-08-04	-23.3147	119.6325 Aristida latifolia
	2016-08-04	-23.3147	119.6325 Chrysopogon fallax
	2016-08-04	-23.3147	119.6325 Rhynchosia minima
	2016-08-04	-23.3147	119.6325 Sida fibulifera
	2016-08-04	-23.3147	119.6325 Calotis hispidula
	2016-08-04	-23.3147	119.6325 Brachyachne convergens
	2016-08-04	-23.3147	119.6325 Cenchrus ciliaris
	2016-08-04	-23.3147	119.6325 Desmodium campylocaulon
	2016-08-04	-23.3147	119.6325 Themeda triandra

	2016-08-0	-23.3147	119.6325	Rhagodia eremaea
	2016-08-0	-23.3147	119.6325	Astrebla
	2016-08-0	-23.3147	119.6325	Eragrostis xerophila
Wilson, K.L	2006-05-0	-23.3731	120.4578	Schoenoplectiella dissachantha

Row Labels	COUNT
Animalia	**25352**
AMPHI	**2154**
Cyclorana maini	17
Cyclorana platycephala	2
Litoria rubella	1043
Neobatrachus kunapalari	4
Notaden nichollsi	3
Platyplectrum spenceri	53
Pseudophryne douglasi	13
Uperoleia russelli	1003
Uperoleia saxatilis	16
BIRD	**11219**
Acanthagenys rufogularis	217
Acanthiza apicalis	13
Acanthiza chrysorrhoa	15
Acanthiza robustirostris	17
Acanthiza uropygialis	88
Accipiter cirrocephalus	13
Accipiter fasciatus	20
Acrocephalus australis	28
Acrocephalus australis subsp. gouldi	1
Actitis hypoleucos	13
Aegotheles cristatus	21
Amytornis striatus	19
Amytornis striatus subsp. whitei	3
Anas gracilis	55
Anas rhynchotis	2
Anas superciliosa	46
Anhinga novaehollandiae	64
Anseranas semipalmata	1
Anthus australis	23
Anthus australis subsp. australis	2
Aphelocephala leucopsis	1
Aphelocephala nigricincta	1
Aquila audax	43
Aquila morphnoides	6
Ardea alba subsp. modesta	1
Ardea ibis	2
Ardea intermedia	3
Ardea modesta	49
Ardea novaehollandiae	5
Ardea pacifica	32
Ardeotis australis	50
Artamus cinereus	169
Artamus cyanopterus	1
Artamus minor	38
Artamus personatus	16
Artamus superciliosus	1

Aythya australis	27
Barnardius zonarius	66
Biziura lobata	1
Burhinus grallarius	5
Cacatua roseicapilla	191
Cacatua roseicapilla subsp. assimilis	47
Cacatua sanguinea	307
Cacomantis pallidus	43
Calidris acuminata	5
Calidris ferruginea	1
Calidris melanotos	1
Calidris ruficollis	2
Calidris subminuta	2
Centropus phasianinus	2
Certhionyx niger	17
Certhionyx variegatus	12
Charadrius melanops	8
Charadrius ruficapillus	6
Chenonetta jubata	13
Cheramoeca leucosterna	7
Cheramoeca leucosternus	11
Chroicocephalus novaehollandiae	4
Chrysococcyx basalis	16
Chrysococcyx osculans	2
Cincloramphus cruralis	10
Cincloramphus mathewsi	93
Cinclosoma castaneothorax	3
Circus approximans	1
Circus assimilis	16
Cladorhynchus leucocephalus	3
Climacteris melanura	2
Climacteris melanura subsp. wellsi	1
Colluricincla harmonica	266
Colluricincla harmonica subsp. rufiventris	7
Coracina maxima	7
Coracina novaehollandiae	210
Coracina novaehollandiae subsp. subpallida	3
Corvus bennetti	52
Corvus orru	111
Corvus orru subsp. cecilae	2
Coturnix pectoralis	2
Coturnix ypsilophora	6
Cracticus nigrogularis	564
Cracticus tibicen	40
Cracticus torquatus	34
Cuculus pallidus	25
Cygnus atratus	49
Dacelo leachii	72
Daphoenositta chrysoptera	1
Dendrocygna arcuata	5

Dendrocygna eytoni	1
Dicaeum hirundinaceum	56
Dromaius novaehollandiae	19
Egretta garzetta	13
Egretta novaehollandiae	26
Elanus axillaris	21
Elanus caeruleus	4
Elseyornis melanops	58
Emblema pictum	106
Eolophus roseicapillus	57
Ephippiorhynchus asiaticus	1
Epthianura aurifrons	2
Epthianura tricolor	37
Eremiornis carteri	16
Eurostopodus argus	6
Falco berigora	96
Falco berigora subsp. berigora	2
Falco cenchroides	88
Falco cenchroides subsp. cenchroides	1
Falco longipennis	26
Falco longipennis subsp. longipennis	1
Falco peregrinus	7
Fulica atra	37
Gallirallus philippensis	1
Gavicalis virescens	78
Gelochelidon nilotica	4
Geopelia cuneata	117
Geopelia humeralis	1
Geopelia striata	72
Geophaps plumifera	101
Gerygone fusca	33
Gerygone fusca subsp. mungi	2
Grallina cyanoleuca	229
Haliaeetus leucogaster	4
Haliastur sphenurus	185
Hamirostra melanosternon	24
Hieraaetus morphnoides	11
Himantopus himantopus	17
Hirundo ariel	12
Hirundo neoxena	7
Hirundo nigricans	2
Hydroprogne caspia	3
Lacustroica whitei	2
Lalage tricolor	76
Larus novaehollandiae subsp. novaehollandiae	1
Lichenostomus keartlandi	62
Lichenostomus penicillatus	259
Lichenostomus virescens	230
Lichmera indistincta	180
Lophoictinia isura	2

Malacorhynchus membranaceus	17
Malurus lamberti	171
Malurus leucopterus	69
Malurus splendens	13
Malurus splendens subsp. musgravi	5
Manorina flavigula	270
Megalurus gramineus	4
Megalurus gramineus subsp. gramineus	2
Melanodryas cucullata	6
Melithreptus gularis	20
Melopsittacus undulatus	487
Merops ornatus	253
Microcarbo melanoleucos	57
Milvus migrans	50
Mirafra javanica	14
Neochmia ruficauda	22
Neochmia ruficauda subsp. clarescens	22
Neophema bourkii	4
Neopsephotus bourkii	1
Ninox connivens	7
Ninox novaeseelandiae	57
Ninox novaeseelandiae subsp. boobook	1
Nycticorax caledonicus	15
Nymphicus hollandicus	156
Ocyphaps lophotes	252
Oreoica gutturalis	116
Oreoica gutturalis subsp. pallescens	31
Pachycephala rufiventris	249
Pachycephala rufiventris subsp. rufiventris	1
Pardalotus rubricatus	72
Pardalotus striatus	57
Pardalotus striatus subsp. murchisoni	1
Pelecanus conspicillatus	40
Petrochelidon ariel	31
Petrochelidon nigricans	70
Petroica cucullata	9
Petroica goodenovii	54
Phalacrocorax carbo	7
Phalacrocorax melanoleucos	1
Phalacrocorax sulcirostris	70
Phalacrocorax varius	3
Phaps chalcoptera	47
Phylidonyris albifrons	1
Platalea flavipes	23
Platalea regia	2
Platycercus zonarius	80
Platycercus zonarius subsp. zonarius	6
Plegadis falcinellus	7
Podargus strigoides	10
Podiceps cristatus	32

Poliocephalus poliocephalus	11
Pomatostomus superciliosus	6
Pomatostomus temporalis	220
Pomatostomus temporalis subsp. rubeculus	2
Porphyrio porphyrio	3
Porzana pusilla	2
Porzana tabuensis	5
Psophodes occidentalis	1
Ptilonorhynchus guttatus	13
Ptilonorhynchus maculatus	14
Ptilonorhynchus maculatus subsp. guttatus	115
Ptilotula keartlandi	2
Ptilotula penicillatus	38
Purnella albifrons	3
Pyrrholaemus brunneus	3
Recurvirostra novaehollandiae	4
Rhipidura albicauda	1
Rhipidura albiscapa	3
Rhipidura fuliginosa	2
Rhipidura leucophrys	622
Rhipidura leucophrys subsp. leucophrys	2
Smicrornis brevirostris	189
Stictonetta naevosa	3
Stiltia isabella	2
Stipiturus ruficeps	5
Sugomel niger	4
Tachybaptus novaehollandiae	39
Tadorna tadornoides	24
Taeniopygia guttata	764
Taeniopygia guttata subsp. castanotis	3
Threskiornis molucca	10
Threskiornis spinicollis	52
Todiramphus pyrrhopygia	17
Todiramphus pyrrhopygius	55
Todiramphus sanctus	45
Tribonyx ventralis	7
Tringa glareola	2
Tringa hypoleucos	1
Tringa nebularia	4
Tringa stagnatilis	1
Tringa totanus	1
Turnix velox	64
Tyto alba	1
Tyto alba subsp. delicatula	2
Vanellus tricolor	1
FISH	**99**
Leiopotherapon unicolor	25
Melanotaenia australis	74
INVERT	**7823**
Ablabesmyia notabilis	1

Acariformes sp.	730
Acarina indet.	45
Acarina sp. 1 (KMS)	1
Achnanthes exigua Grun.	1
Achnanthes exilis K??ï¿½tz.	1
Acrogenys hirsuta	4
Adelotopus laevis	2
Adotela sp1	2
Aeolosoma sp. 1 (PSS)	1
Aeolosoma sp. 2 (PSS)	1
Aganippe sp. MYG384-DNA	1
Aganippe 'sp. MYG384-DNA'	1
Agraptocorixa eurynome	1
Agraptocorixa parvipunctata	2
Ainudrilus sp. WA27 (PSS)	1
Allodessus bistrigatus	5
Allonais pectinata	1
Alona cf. verrucosa	3
Alona clathrata	1
Alona rigidicaudis	1
amphipod cf. sp. 2 (PSS)	2
amphipod gen. nov. 1 `AMP001`	1
amphipod indet.	42
amphipod nr sp 10 (PSS)	2
amphipod sp 2 (PSS)	1
amphipod sp.	8
amphipod sp. 6 (PSS)	1
amphipod sp. B38	2
amphipod sp. OB1	3
amphipod sp. OB1 (B33)	15
amphipod sp. OB2	2
amphipod sp. OB3	7
amphipod sp. OB3 (gen 2 B13)	2
Amphipoda sp.	4
Amphora ovalis (K??ï¿½tz.) K??ï¿½tz.	1
Ampullacypris sp.	1
Aname aragog	1
Aname mellosa	12
Aname sp.7	2
Anax papuensis	3
Anisops hackeri	2
Anisops nasutus	2
Anisops stali	2
Anopheles annulipes s.l.	5
ant indet.	11
ant sp.	553
Antichiropus `OB35_1 female`	10
Antichiropus `OB35_1 juv.`	2
Antichiropus `ob35_1`	14
Antichiropus `OB35_2 female`	3

Antichiropus `ob35_2`	1
Antichiropus `sp. indet. (juv.)`	2
Antichiropus sp. indet. (juv.)	2
Antiporus bakewelli	1
Antiporus sp.	1
Araneae indet.	9
Arcella megastoma	1
Arcella sp.	3
Archinitocrella newmanensis	5
Areacandona cf. 'iuno' (PSS)	1
Areacandona 'scanlonii' (PSS)	1
Areacandona sp.	1
Areacandona sp. 7' (PSS)	2
Argiocnemis rubescens	1
Argiope protensa	1
Armatalona macrocopa	1
Arrenurus (Arrenurus) balladoniensis	1
Arrenurus (Arrenurus) ensifer	1
Arrenurus (Dividuacarus) tripartitus	1
Asadipus yundamindra	2
Ascomorpha sp.	1
Asplanchna brightwelli	1
Asplanchna sieboldi	2
Australiobates queenslandensis	1
Australobolbus pseudobscurius	1
Australospilus elongatus	2
Australutica sp.1	4
Australutica sp.2	1
Australutica sp.3	1
Austroagrion pindrina/Ischnura heterosticta	1
Austrodytes insularis	1
Austroepigomphus (Xerogomphus) gordoni	4
Austrolestes analis	1
Austrolestes aridus	2
Austrolimnius WA sp. 2 (= adult sp WA 2) (PSW)	2
Austropeplea lessoni	2
Austrostrophus stictopygus	12
Axonopsella nr truza (PSW)	1
Axonopsella sp. P2 (PSW)	1
Baetidae sp.	2
Bathynella sp.	2
Bdelloidea sp. 2:2	5
beetle indet.	10
beetle sp.	190
beetle sp. B01	2
beetle sp. C	1
Bennelongia barangaroo lineage	2
Bennelongia coondinerensis	1
Bennelongia FVS type 2 s.l.	1
Bennelongia nimala	3

Berosus approximans	1
Berosus dallasae	3
Berosus pulchellus	1
Bezzia sp. P4 (PSW) (=Ceratopogon?)	1
Bidessodes denticulatus	1
Bigenditia sp.1	2
Blackburnium neocavicolle	2
Boeckella triarticulata	4
Bolboleaus truncatus	2
Bolborhachium inclinatum	1
Boreosaragus sp1	20
Bosmina meridionalis	1
Brachionus angularis	5
Brachionus bidentatus	1
Brachionus dichotomus	3
Brachionus falcatus	1
Brachionus quadridentatus	5
Brachionus urceolaris s.l.	1
Branchinella halsei	1
Brithysternum nodosum	1
Buddelundia 10nm	49
Buddelundia '10nm'	49
Buddelundia 14cr	99
Buddelundia '14cr'	99
Buddelundia 15	3
Buddelundia '15'	3
Buddelundia 16nm	88
Buddelundia '16nm'	88
Buddelundia 36nm	3
Buddelundia '36nm'	3
Buddelundia 49	69
Buddelundia '49'	69
Buddelundia 78	47
Buddelundia '78'	47
Buddelundia 79	3
Buddelundia '79'	3
Buddelundia 80	1
Buddelundia '80'	1
Buddelundia sp.	28
Buddelundia sp. B01	1
Buddelundia sp. indet.	53
Bursaria sp.	1
Caedius sp3	1
Calamoecia baylyi (Cue form) (ex nr lucasi CB)	1
Calamoecia sp. B01	2
Calamoecia sp. B1	2
Calanoida sp.	1
Calomyrmex ANIC sp. 1 (JDM 190)	1
Caloneis silicula (Ehr.) Cl.	1
Calosoma oceanicum	2

Calosoma schayeri	1
Camponotus capito Mayr	1
Camponotus cf. evae Forel (sp. JDM 1116)	1
Camponotus claripes complex JDM 939	1
Camponotus crozieri McArthur & Ley	1
Camponotus discors complex sp. JDM 1183	1
Camponotus discors Forel	11
Camponotus fieldeae Forel	2
Camponotus lownei Forel	1
Camponotus novaehollandiae Mayr	2
Camponotus tricaloratus Clark	1
Camponotus wiederkehri Forel	4
Candonocypris fitzroyi	1
Carabidae sp.	1
Carenum nr. emarginatum sp2	1
Carenum nr. rectangulare sp1	1
Carenum nr. speciosum sp1	2
Carenum nr. speciosum sp2	1
Carenum nr. subcyaneum sp2	1
Carenum sp17	1
Carenum sp8	1
Carenum venustum	1
Cavisternum clavatum	1
Cephalodella biungulata	1
Cephalodella cf forficula	1
Cephalodella gibba	3
Cephalodella nr misgurnus (PSW)	1
Ceratopogonidae sp.	1
Cercyon sp.	1
Ceriodaphnia cornuta	2
Ceriodaphnia n. sp. a (Berner sp.#3) (SAP)	1
Cerotalis sp1	1
Cethegus fugax	1
Chaoborus punctilliger	2
Chironominae sp.	2
Chironomus aff. alternans (V24) (CB)	4
Chironomus tepperi	3
Chlaenius australis	9
Chydaekata sp.	12
Chydorus eurynotus	2
Cladopelma curtivalva	1
Clivina sp1 (australasiae-gr. - nr. sellata 1)	1
Clivina sp2 (australasiae-gr. - nr. sculpticeps)	1
Clivina sp4 (heterogena-gr. - nr. bovillae 1)	1
Clivina sp5 (procera-gr. - nr. obscuripes)	1
Cloeon sp.	6
Clynotis sp. 1	1
Coelopynia pruinosa	3
Conochilus sp.	1
Conochironomus cygnus	1

Conopterum leai	3
Conopterum pyripenne	2
Corduliidae sp.	1
Corixidae sp.	2
Cormocephalus strigosus	1
Crematogaster queenslandica gilberti Emery	1
Cryptochironomus griseidorsum	5
Cryptoerithrus sp.5	2
Cryptoerithrus sp.8	7
Cryptoerithrus sp.9	1
Culex (Culex) annulirostris	1
Culex crinicauda	1
Culex palpalis	2
Culicidae sp.	3
Culicoides sp.	1
Cybister tripunctatus	3
Cylotella menghiniana K??ï¿½tz.	1
Cylotella stelligera Cl. & Grun.	1
Cymbella affinis K??ï¿½tz.	1
Cymbella aspera (Ehr.) Cl.	1
Cymbella delicatula K??ï¿½tz.	1
Cypretta ?lutea	1
Cypretta 'reticulata' (PSW)	3
Cypretta sp PSW074	1
Cypretta sp. 863 (FVS)	1
Cypretta sp. 865 (FVS)	1
Cypretta sp. 872 (FVS)	1
Cypricercus sp. 422 (CB)	1
Cypricercus sp. 444/885 (CB)	1
Cypricercus sp. 911 (FVS)	1
Daphnia projecta	1
Dasyheleinae sp. P1 (PSW)	2
Dero furcata	1
Dero nivea	2
Diacyclops cf. sobeprolatus	7
Diacyclops cockingi	4
Diacyclops humphreysi	99
Diacyclops humphreysi humphreysi	35
Diacyclops humphreysi humphyresi	5
Diacyclops humphreysi_humphreysi	31
Diacyclops sobeprolatus	19
Diaphanosoma excisum	2
Diaphanosoma unguiculatum	1
Dicrotendipes jobetus	4
Difflugia capreolata	1
Difflugia corona	1
Difflugia gramen	1
Difflugia sp. c (tiny spherical) FVS	1
Difflugia sp. d [med, geoid.] FVS	1
Difflugia sp. P1	2

	Dineutus australis	1
	Diplacodes bipunctata	2
	Diplacodes haematodes	2
	Diploneis ovalis (Hilse) Cl.	1
	Diptera sp.	1
	Doleromyrma rottnestensis (Wheeler)	2
	Dolichopodidae sp.	1
	Draculoides neoanthropus	1
	Dytiscidae sp.	2
	earthworm sp.	333
	earthworm sp. indet.	1
	Ecnomus pilbarensis	3
	Ecnomus sp.	1
	Enchytraeidae sp.	1
	Enchytraeus Pilbara sp. 1 (PSS)	1
	Enteroplea cf. lacustris (PSW)	1
	Entomoneis paludosa (W. Sm.) Reimer	1
	Eodiaptomus lumholtzi	3
	Eosphora najas	1
	Ephemeroporus barroisi s.l.	1
	Ephydridae sp.	2
	Ephydridae sp. 6 (SAP)	1
	Epistylis sp	2
	Epithemia adnata (K??ï¿½tz.) Br??ï¿½b.	1
	Epithemia smithii Carruthers	1
	Eretes australis	3
	Ethmostigmus curtipes	1
	Euasteron carnarvon	1
	Euasteron sp.1	4
	Euchlanis dilatata	4
	Euchlanis oropha	1
	Eucyclops australiensis	2
	Euglypha sp.	2
	Euoniticellus intermedius	1
	Euryscaphus waterhousei	1
	Eurysticta coolawanyah	4
	Eylais sp.	1
	Filinia longiseta	2
	Flosculariidae sp.	1
	fly indet.	10
	fly sp.	630
	fly sp. A (SAP)	1
	fly sp. B01	1
	Fragilaria nanana Lange-Bertalot	1
	Fragilaria ulna (Nitz.) Lange Bertalot	1
	Gamasomorpha sp.1	3
	Gamasomorpha sp.2	2
	Gamasomorpha sp.6	1
	Gastrotricha sp.	2
	Gelastocoridae sp.	1

Gigadema bostocki	1
Gnaphalopoda lugubris	1
Gnathaphanus aridus	6
Gnathaphanus multipunctatus	2
Gomphodella 'hirsuta' (PSS)	3
Gonocephalum sp4	1
Grayenulla australensis	2
Grayenulla sp. 2	2
Grayenulla waldockae	1
Grymeus sp.10	2
Grymeus sp.2	1
Guineaxonopsis sp. S1 (PSS)	1
Gyraulus hesperus	2
Gyrinidae sp.	1
Habronestes sp.2	1
Habronestes sp.5	3
Habronestes sp.6	1
Habronestes sp.8	1
Haliplus halsei	1
Haliplus pinderi	2
Hantzschia amphioxys (Ehr.) Grun.	1
Harnischia sp. P1 (PSW)	1
Harpacticoida sp	5
Helea sp3	1
Helea sp5	5
Hellyethira sp.	2
Helochares/E mastersi larvae	1
Hemicordulia tau	3
Hemicypris megalops	2
Hemiptera indet.	12
Hemiptera sp. B01	9
Hemiptera sp. B02 (=Fulgoridae sp. S01)	8
Hemiptera sp. B02 (=Fulgoridae sp. S1)	10
Hemiptera sp. B03	1
Hemiptera sp. B1	16
Hemiptera sp. B2	10
Hemiptera sp. B2 (=Fulgoridae sp. S1)	10
Hemiptera sp. B3	2
Heteroceridae sp.	1
Heteronyx beltanae/frenchi	1
Heteronyx sp. nr. bidentatus	1
Hexarthra cf brandorffi (PSW)	1
Hexarthra intermedia	2
Hexarthra mira	2
Hexarthra sp.	1
Hoggicosa castanea	1
Holconia nigrigularis	2
Holoplatys sp. 6	1
Hydaticus consanguineus	1
Hydaticus daemeli	1

Hydra sp.	2
Hydrachna sp.	2
Hydrachna sp. 4/5 (PSW)	1
Hydraena barbipes	2
Hydraena cf. rudallensis (PSW)	1
Hydraena sp.	1
Hydraenidae sp.	1
Hydrochus eurypleuron	3
Hydrochus group 3 "black" (PSW)	2
Hydrochus interioris	1
Hydrochus obscuroaeneus	2
Hydrodroma sp.	3
Hydroglyphus grammopterus (=trilineatus)	3
Hydroglyphus leai	1
Hydroglyphus orthogrammus	2
Hydrophilidae sp.	3
Hydrophilus brevispina	1
Hydrovatus weiri	2
Hypaulax ?orcus	1
Hypharpax sp1	1
Hypharpax sp2	5
Hypharpax sp3	2
Hyphydrus elegans	3
Hyphydrus lyratus	3
Hyphydrus sp.	1
Ictinogomphus dobsoni	3
Ilyocypris sp. 835 (=sp. 468?)	1
Ilyodromus viridulus	2
Indolpium indet.	13
Indolpium sp.	180
Indolpium sp. indet.	17
Iridomyrmex bicknelli azureus Viehmeyer	3
Iridomyrmex chasei complex sp. JDM 1157	1
Iridomyrmex chasei concolor Forel	9
Iridomyrmex chasei Forel	2
Iridomyrmex discors Forel	1
Iridomyrmex hartmeyeri Forel	3
Iridomyrmex hartmeyeri gp sp. JDM 327	5
Iridomyrmex mattiroloi splendens Clark	1
Iridomyrmex nr. rufoniger suchieri Forel (sp. JDM 314)	3
Iridomyrmex rufoniger domesticus Forel	1
Iridomyrmex rufoniger suchieri Forel	1
Iridomyrmex sanguineus Forel	2
Iridomyrmex sp. JDM 133	2
Iridomyrmex sp. JDM 137 (incl. '315')	4
Iridomyrmex viridiaeneus Viehmeyer	3
Ischnura aurora aurora	3
Isidorella egraria	2
Isidorella sp.	1
Isopoda sp.	2

Itura deridderae	1
Keratella procurva	4
Keratella tropica	5
Kwonkan `myg006`	4
Kymberlia sp.1	1
Laccophilus clarki	1
Laccophilus sharpi	2
Laccophilus sp.	1
Lacinularia cf. racemovata	1
Lagynochthonius `pse040`	1
Lagynochthonius sp. B03	1
Lagynochthonius sp. B3	2
Lampona sp.3	4
Lampona whaleback	1
Lanatomyia sp.	2
Larsia albiceps	5
Leberis cf. diaphanus	2
Lecane batillifer	2
Lecane bulla	4
Lecane cf. crepida (PSW)	1
Lecane crepida	1
Lecane curvicornis	1
Lecane grandis	1
Lecane hornemanni	1
Lecane luna	3
Lecane papuana	5
Lecane subtilis	1
Lecane ungulata	1
Lepadella (H.) ehrenbergii	1
Lepadella (H.) heterostyla	2
Lepadella patella	2
Lepadella triptera	1
Leptocerus sp. AV2 (atsou?) (PSW)	1
Lesquereusia spiralis	2
Libellulidae sp.	2
Limbodessus compactus	1
Limnadopsis tatei	1
Limnebius sp.	1
Limnesia parasolida	1
Limnesia sp. 4 (PSW)	4
Limnichidae sp. P1	1
Limnichidae sp. P4	1
Limnocythere stationis	2
Liparetrus sp. nov. nr. badius	1
Liparetrus sp. nov. nr. simulator	2
Liparetrus sp. nr. rufipennis	1
Liparochrus rufus	1
Longrita whaleback	2
Lophocharis n. sp. (psw079)	1
Lophocharis salpina	1

Loxandrus laevigatus	1
Loxandrus micantior	1
Lychas `hairytail group`	10
Lychas `harveyi`	3
Lychas `waldockae`	5
Lychas adonis	3
Lychas 'adonis'	3
Lychas annulatus	5
Lychas bituberculatus	15
Lychas hairy tail group	18
Lychas 'hairy tail group'	45
Lychas hairytail group	27
Lychas sp.	3
Lychas sp. 2	3
Lychas sp. 3	2
Lychas sp. 4	2
Lychas sp. 5	2
Lychas sp. 8	2
Lychas sp. 'hairy tail'	3
Lychas sp. 'harveyi'	2
Lychas sp. indet.	4
Lycidas sp. 11	1
Lycidas sp. 2	3
Lycidas sp. 6	2
'Maarka etheli'	2
Macrochaetus altamirai	2
Macrothrix breviseta	1
Macrothrix indistincta	1
Mastogloia elliptica (Ag.) Cl.	1
Mastogloia smithii Thwaites	1
Meedo yarragin	1
Megacephala cylindrica	1
Megacephala marginicollis	1
Melitidae sp.	1
Melophorus bagoti Lubbock	1
Melophorus froggatti Forel	1
Melophorus mjobergi gp. sp. JDM 899	1
Melophorus sp. JDM 176	1
Melophorus turneri Forel	3
Melophorus turneri perthensis Wheeler	2
Melophorus wheeleri Forel	1
Meranoplus cf. dimidiatus F. Smith	2
Meranoplus dimidiatus forma smith	2
Meranoplus duyfkeni Forel	1
Meranoplus sp. JDM 1147	1
Meranoplus taurus Schï¿½ï¿½ï¿½dl	2
Meridiescandona cf. facies (PSS)	3
Meridiescandona lucerna (PSS)	1
Meridiescandona sp. 3' (PSS)	1
Mesocyclops brooksi	4

Mesocyclops darwini	1
Mesomorphus sp1	2
Mesovelia hungerfordi	1
Mesovelia sp.	1
Mesovelia vittigera	1
Microcerberidae sp.	2
Microchironomus 'K1' (PSW)	1
Microcyclops varicans	4
Micronecta adelaidae	2
Micronecta micra	2
Micronecta n. sp. P1 (PSW)	3
Micronecta n. sp. P3 (PSW)	1
Microvelia (Austromicrovelia) peramoena	3
Microvelia sp.	1
Minasteron minusculum	7
Miralona victoriensis	1
Missulena occatoria	1
Missulena rutraspina	1
Missulena sp.3	1
Moina micrura s.l.	4
Monohelea sp. P1 (PSW)	1
Monomorium disetigerum Heterick	11
Monomorium fieldi Forel	7
Monomorium laeve Mayr	8
Monomorium punctulatum Heterick	1
Monomorium rothsteini Forel	8
Monomorium silaceum Heterick	1
Monomorium sordidum Forel	2
Myrmecia desertorum Wheeler	2
Myrmopopaea sp.10	1
Myrmopopaea sp.18	2
Myrmopopaea sp.19	2
Myrmopopaea sp.6	2
Mytilina ventralis macracantha	1
Naididae (ex Tubificidae)	1
Nais variabilis	1
Navicula cryptocephala K??ï¿½tz.	1
Navicula duerrenbergiana Hust.	1
Navicula radiosa K??ï¿½tz.	1
Navicula rhynchocephala K??ï¿½tz.	1
Navicula subrhynchocephala Hust.	1
Necterosoma regulare	5
Nematoda sp.	5
Nematoda sp. P2/P4 (PSW)	3
Nematoda sp. P6 (PSW)	1
Nematoda sp. P8 (PSW)	1
Neocarenum sp2	1
Neon sp. 3	1
Neostorena sp.5	2
Nilobezzia sp. P1 (PSW)	1

Nitocrella sp. 1 (PSS)	2
Nitzschia acicularis (K??ï¿½tz.) W. Sm.	1
Nitzschia amphibia Grun.	1
Nitzschia angustata Grun.	1
Nitzschia frustulum (K??ï¿½tz.) Grun.	1
Nitzschia gracilis Hantz.	1
Nitzschia microcephala Grun.	1
Nitzschia obtusa W. Sm	1
Nitzschia palea (K??ï¿½tz.) W. Sm.	1
No invertebrates	5
Nocticola `bla001`	12
Nocticola indet.	4
Nocticola sp.	47
Nocticola sp. B01 (=Nocticola sp. S3)	12
Nocticola sp. B1	10
Nocticola sp. B1 (=Nocticola sp. S3)	11
Nomindra leeuwenii	7
Notommata cf. pachyura (PSW)	1
Notonectidae sp.	2
Nototarus angusticollis	1
Nototarus sp. nov. 57 (MB)	1
Nototarus sp. nov. 68 (MB)	1
Notsodipus meedo	2
Nyctozoilus sp1	3
Ochthebius sp. P1 (PSW)	1
Ocrisiona yakatunyae	1
Oecetis sp.	1
Oecetis sp. Pilbara 2 (PSW)	1
Oecetis sp. Pilbara 4 (PSW)	1
Oecetis sp. Pilbara 5 (PSW)	3
Oligochaeta sp.	2
Onthophagus consentaneus	5
Onthophagus gazella	1
Onthophagus margaretensis	8
Onthophagus pugnacior	6
Onthophagus sloanei	1
Onthophagus sp. nov. rubescens gr	2
Onychohydrus atratus	1
Opisthopsis haddoni rufoniger Forel	4
Opisthopsis rufithorax Emery	3
Opopaea sp.17	4
Opopaea sp.19	1
Opopaea sp.2	2
Opopaea sp.4	3
Opopaea sp.5	1
Opopaea sp.7	4
Opopaea sp.8	1
Opopaea sp.9	1
Oribatida group 5 (PSS)	2
Origocandona gratia	1

Origocandona inanitas	1
Orthetrum caledonicum	2
Ostracoda (unident.)	3
Oxus orientalis	3
Ozestheria packardi	3
Pantala flavescens	1
Paracladopelma M1 [SFM)	1
Paracyclops intermedius	1
Paracyclops sp. 8 (PSW)	2
Paracymus spenceri	1
Paramelitidae sp.	2
Paramelitidae sp. 2 (PSS)	1
Paramerina sp. D (PSW)	2
Paramerina sp.A (parva?) (SAP)	1
Paranacaena horni	1
Paranyctiophylax sp AV5 (KIM-UWA)	2
Paraplea sp.	1
Parastenocarididae sp.	1
Parastenocaris jane	6
Paratanytarsus sp. P1 (PSW)	1
Paratanytarsus sp. P2 (PSW)	1
Paratanytarsus sp. P3 (PSW)	1
Paratendipes sp. 'K1' (PSW)	1
Paratrechina braueri glabrior (Forel)	7
Pellenes bitaeniata	2
Perileptus cylindricollis	2
Pescecyclops sp. P1	1
Phaeochrous australicus	2
Pheidole ampla perthensis Crawley	1
Pheidole deserticola Forel	1
Pheidole mjobergi Forel	6
Pheidole sp. JDM 1134	2
Pheidole sp. JDM 280	1
Pheidole sp. JDM 337	2
Pheidole sp. JDM 536	3
Phorticosomus ?felix	2
Phorticosomus gularis	4
Phorticosomus sp1	2
Phorticosomus sp2	2
Phorticosomus sp3	2
Phreodrilid with dissimilar ventral chaetae	8
Phreodrilid with similar ventral chaetae	1
Phryssonotus novaehollandiae	3
Pilbaracandona colonia	5
Pilbaracandona eberhardi	8
Pilbaracandona 'kosmos' (PSS)	5
Pilbaracandona 'temporaria' (PSS)	3
Pilbarus millsi	1
Pinnularia subrostrata (A. Cl.) Cl.-Euler	1
Piona cumberlandensis	3

Piona sp. P2 (nr australica) (PSW)	1
planthopper indet.	2
planthopper sp.	143
planthopper sp. B03 (winged, remnent eyes)	10
planthopper sp. B04 (small eyes, faint pigment)	1
planthopper sp. B09	2
planthopper sp. B3 (remnent eyes)	10
planthopper sp. B3 (winged, remnent eyes)	10
Plationus patulus	1
Platyias quadricornis	1
Platynectes decempunctatus var decempunctatus	2
Pleurosigma elongatum W. Sm.	1
Polyarthra dolichoptera	2
Polyarthra sp.	1
Polypedilum leei	2
Polypedilum nr vespertinus (M2) (SAP)	1
Polypedilum nubifer	4
Polypedilum sp. S1 (PSW)	1
Polyrhachis (Campomyrma) inconspicua Emery	1
Polyrhachis (Campomyrma) nr. creusa Emery (sp. JDM 1009)	1
Polyrhachis (Chariomyrma) 'aurea' sp. A	2
Procladius paludicola	5
Prodidomus sp.1	2
Pseudagrion microcephalum	1
Pseudocloeon hypodelum (ex Baetid genus3 WA sp. 2) (PSW)	1
Pseudohydryphantes sp. P1 (PSW)	2
pseudoscorpion ` indet. (juv.)`	70
pseudoscorpion indet. (juv.)	76
pseudoscorpion sp.	17
Psychodidae sp.	1
Pterohelaeus sp7	1
Ptygura sp.	1
Pygolabis humphreysi	6
Pygolabis sp.	3
Pyralidae Pilbara sp 2 (PSW)	1
Ranatra diminuta	3
Recifella sp.	1
Regimbartia attenuata	1
Rhantaticus congestus	1
Rheotanytarsus trivittatus	2
Rhopalodia gibba (Ehr.) O. Mull.)	1
Rhytidoponera crassinoda (Forel)	4
Rhytidoponera taurus Forel	1
Rhytidoponera tyloxys Brown & Douglas	1
Rhytidoponera violacea (Forel)	2
Rhytisternus large sp2	2
Scaridium bostjani	1
Sciomyzidae sp.	1
Scirtidae sp.	2
Scolopendra laeta	4

Scolopendra morsitans	3
Sinantherina semibullata	1
Skusella subvittata	2
Sobas ?minor	2
Speleostrophus sp. B01	2
spider com. B1 sp B2	2
spider com. B1 sp B3	4
spider sp.	115
spider sp. Jim 1	3
Spinasteron knowlesi	1
Spinasteron sp.1	1
Spinasteron sp.3	10
Spongillidae sp.	1
springtail indet.	48
springtail sp.	1319
Staphylinidae sp.	3
Stenocypris cf. bolieki	1
Sternolophus australis	1
Sternolophus immarginatus	1
Sternolophus marginicollis	1
Sternopriscus multimaculatus	2
Sternopriscus pilbarensis	3
Sternopriscus sp.	1
Stilobezzia sp.	1
Stratiomyidae sp.	4
Supunna sp.1	11
Supunna sp.15	1
Supunna sp.2	3
Syncarida sp.	1
Synothele sp.4	1
Synothele sp.5	1
Synothele sp.6	1
Tabanidae sp.	2
Tanypodinae sp.	3
Tanytarsus fuscithorax/semibarbitarsus	3
Tanytarsus nr sp. P9 (PSW)	1
Tanytarsus sp. P12 (PSW)	2
Tapinoma sp. JDM 78	3
Tasmanocoenis arcuata	6
Tesserodon granulatum	1
Tesserodon novaehollandiae	4
Testudinella amphora	1
Testudinella patina	4
Tetramorium impressum (Viehmeyer)	1
Tetramorium sjostedti Forel	3
Tetramorium spininode Bolton	6
Tetramorium striolatum gp. sp. JDM 142	1
Tetramorium striolatum Viehmeyer	3
Thereuopoda lesueurii	1
Thermocyclops decipiens	7

Thorictosoma sp3	1
Thorictosoma sp6	1
Tiporus sp.	1
Tiporus tambreyi	2
Tipulidae sp.	1
Trachyspina mundaring	1
Triaenodes sp.	1
Trichocerca braziliensis	1
Trichocerca cf. bicristata	1
Trichocerca pusilla	3
Trichocerca similis	3
Trichocerca sp.	1
Trichocerca weberi	1
Trichocyclus nigropunctatus	1
Trichocyclus warianga	9
Triops australiensis australiensis	1
Triplectides australicus	1
Triplectides australis	1
Triplectides sp.	1
Tropocyclops confinis (ex Paracyclops sp. 6)	1
Tubificidae stygo type 1A	4
Turbellaria sp.	2
Tyrannochthonius `pse059`	1
Tyrannochthonius `sp. indet. (juvenile)`	2
Tyrannochthonius aridus	48
Tyrannochthonius indet. (juv.)	2
Tyrannochthonius sp. B02	3
Tyrannochthonius sp. B05	3
Tyrannochthonius sp. B06	1
Tyrannochthonius sp. B09	3
Tyrannochthonius sp. B1	2
Tyrannochthonius sp. B11	3
Tyrannochthonius sp. B2	6
Tyrannochthonius sp. B20	2
Tyrannochthonius sp. B21	2
Tyrannochthonius sp. B28	2
Tyrannochthonius sp. B5	6
Tyrannochthonius sp. B6	2
Tyrannochthonius sp. B9	4
Unidentati genus 5 sp. 1	5
Unixenus mjoebergi	1
Urodacus sp. 4	1
Urodacus sp. 9	5
Vestalenula marmonieri	1
Wesmaldra hirsti	1
white ant indet.	1
white ant sp.	350
Wydundra kennedy	1
Wydundra sp.2	3
Yilgarnia sp.3	1

Zebraplatys keyserlingi	3
Zenodorus orbiculatus	1
Zenodorus sp. 1	1
MAMMAL	**1692**
Bos taurus	41
Camelus dromedarius	10
Canis lupus	4
Canis lupus subsp. dingo	43
Chaerephon jobensis	20
Chalinolobus gouldii	39
Dasycercus blythi	19
Dasycercus cristicauda	4
Dasycercus sp.	1
Dasykaluta rosamondae	33
Equus asinus	1
Felis catus	42
Lagorchestes conspicillatus subsp. leichardti	1
Macroderma gigas	12
Macropus robustus	280
Macropus robustus subsp. erubescens	13
Macropus rufus	18
Macrotis lagotis	3
Mormopterus beccarii	27
Mus musculus	49
Ningaui timealeyi	49
Notomys alexis	15
Nyctophilus geoffroyi	14
Oryctolagus cuniculus	5
Petrogale lateralis subsp. lateralis	4
Petrogale rothschildi	169
Petrogale sp.	1
Planigale sp.	8
Planigale Sp.1 (WAM)	7
Pseudantechinus roryi	1
Pseudantechinus woolleyae	13
Pseudomys chapmani	39
Pseudomys desertor	10
Pseudomys hermannsburgensis	92
Rhinonicteris aurantia	8
Rhinonicteris aurantia (Pilbara)	140
Rhinonicteris aurantius	6
Saccolaimus flaviventris	12
Scotorepens balstoni	1
Scotorepens greyii	39
Sminthopsis crassicaudata	4
Sminthopsis longicaudata	4
Sminthopsis macroura	39
Sminthopsis ooldea	12
Sminthopsis youngsoni	25
Tachyglossus aculeatus	1

Tadarida australis	10
Taphozous georgianus	41
Taphozous hilli	17
Vespadelus finlaysoni	46
Zyzomys argurus	200
REPTILE	**2365**
Acanthophis wellsi	1
Amphibolurus longirostris	23
Anilios ganei	2
Antaresia perthensis	9
Antaresia stimsoni	3
Antaresia stimsoni subsp. stimsoni	3
Aspidites melanocephalus	1
Brachyurophis approximans	7
Caimanops amphiboluroides	4
Carlia munda	18
Carlia triacantha	22
Chelodina steindachneri	12
Cryptoblepharus buchananii	2
Cryptoblepharus ustulatus	8
Ctenophorus caudicinctus	53
Ctenophorus caudicinctus subsp. caudicinctus	35
Ctenophorus isolepis	61
Ctenophorus isolepis subsp. gularis	6
Ctenophorus isolepis subsp. isolepis	10
Ctenophorus maculatus	1
Ctenophorus nuchalis	18
Ctenophorus reticulatus	58
Ctenotus ariadnae	11
Ctenotus duricola	39
Ctenotus duricola/piankai	13
Ctenotus grandis	18
Ctenotus grandis subsp. titan	1
Ctenotus helenae	123
Ctenotus leonhardii	26
Ctenotus pantherinus	69
Ctenotus pantherinus subsp. ocellifer	19
Ctenotus quattuordecimlineatus	6
Ctenotus rubicundus	2
Ctenotus rutilans	4
Ctenotus saxatilis	184
Ctenotus schomburgkii	3
Ctenotus uber	16
Ctenotus uber subsp. johnstonei	4
Ctenotus uber subsp. uber	5
Cyclodomorphus melanops	10
Cyclodomorphus melanops subsp. melanops	4
Delma butleri	2
Delma desmosa	2
Delma elegans	2

Delma haroldi	4
Delma nasuta	8
Delma pax	32
Delma tincta	1
Demansia psammophis	10
Demansia psammophis subsp. cupreiceps	4
Demansia rufescens	2
Diplodactylus conspicillatus	117
Diplodactylus mitchelli	1
Diplodactylus pulcher	6
Diplodactylus savagei	9
Diplodactylus stenodactylus	4
Diplodactylus wombeyi	1
Diporiphora amphiboluroides	1
Diporiphora valens	1
Diporiphora winneckei	1
Egernia cygnitos	3
Egernia depressa	4
Egernia formosa	9
Eremiascincus richardsonii	10
Eremiascincus sp.	2
Furina ornata	5
Gehyra pilbara	3
Gehyra punctata	74
Gehyra variegata	86
Gehyra variegata/purpurascens	5
Heteronotia binoei	49
Heteronotia planiceps	5
Heteronotia spelea	5
Lerista bipes	34
Lerista flammicauda	1
Lerista macropisthopus subsp. remota	4
Lerista muelleri	18
Lerista neander	33
Lerista sp.	1
Lerista timida	15
Lerista timida/amicorum	17
Lerista zietzi	94
Lialis burtonis	6
Liasis olivaceus subsp. barroni	4
Liopholis striata	1
Lophognathus longirostris	1
Lucasium stenodactylum	42
Lucasium wombeyi	19
Lucasium 'woodwardi'	20
Menetia greyii	29
Menetia surda subsp. surda	3
Moloch horridus	3
Morethia ruficauda	11
Morethia ruficauda subsp. exquisita	17

Nephrurus wheeleri subsp. cinctus	11
Notoscincus ornatus	1
Notoscincus ornatus subsp. ornatus	1
Oedura marmorata	10
Parasuta monachus	3
Pogona minor	15
Pogona minor subsp. minor	8
Pseudechis australis	5
Pseudonaja mengdeni	8
Pseudonaja modesta	6
Pseudonaja nuchalis	3
Pygopus nigriceps	2
Ramphotyphlops ammodytes	3
Ramphotyphlops ganei	8
Ramphotyphlops grypus	19
Ramphotyphlops hamatus	19
Ramphotyphlops pilbarensis	1
Rhynchoedura ornata	28
Strophurus elderi	13
Strophurus jeanae	2
Strophurus wellingtonae	49
Suta fasciata	6
Suta punctata	4
Tiliqua multifasciata	10
Varanus acanthurus	35
Varanus brevicauda	2
Varanus bushi	1
Varanus caudolineatus	4
Varanus eremius	6
Varanus giganteus	132
Varanus gouldii	11
Varanus panoptes	20
Varanus panoptes subsp. rubidus	1
Varanus pilbarensis	149
Varanus tristis	11
Varanus tristis subsp. tristis	1
Vermicella snelli	2
Fungi	**4**
FUNGUS	**3**
Anthracocystis tumefaciens	1
Phyllachora sp.	2
LICHEN	**1**
Acarospora citrina	1
Plantae	**2745**
DICOT	**2225**
Abutilon amplum	5
Abutilon cunninghamii	1
Abutilon fraseri	2
Abutilon lepidum	5
Abutilon macrum	1

Abutilon malvifolium	2
Abutilon otocarpum	1
Abutilon oxycarpum subsp. Prostrate (A.A. Mitchell PRP 1266)	1
Abutilon sp. Dioicum (A.A. Mitchell PRP 1618)	4
Abutilon sp. Pilbara (W.R. Barker 2025)	1
Acacia abrupta	2
Acacia acradenia	4
Acacia adoxa var. adoxa	4
Acacia adsurgens	8
Acacia ampliceps	1
Acacia ancistrocarpa	11
Acacia aneura	12
Acacia aneura group (hybrid)	1
Acacia aneura var. aneura	3
Acacia aptaneura	20
Acacia aptaneura x paraneura	1
Acacia arida	2
Acacia atkinsiana	1
Acacia ayersiana	3
Acacia ayersiana hybrid	1
Acacia balsamea	1
Acacia bivenosa	23
Acacia bivenosa weeping variant	1
Acacia bivenosa x sclerosperma subsp. sclerosperma	1
Acacia catenulata subsp. occidentalis	9
Acacia citrinoviridis	15
Acacia clelandii	7
Acacia colei var. colei	1
Acacia colei var. ileocarpa	1
Acacia coriacea	1
Acacia coriacea subsp. pendens	3
Acacia coriacea subsp. sericophylla	1
Acacia corusca	12
Acacia cuspidifolia	1
Acacia dictyophleba	8
Acacia dictyophleba / melleodora	1
Acacia dictyophleba/melleodora	1
Acacia distans	1
Acacia elachantha	3
Acacia elachantha (Golden hairy variant)	1
Acacia elachantha (Silvery hairy variant)	3
Acacia eriopoda	1
Acacia fuscaneura / pteraneura group	2
Acacia hamersleyensis	8
Acacia hilliana	8
Acacia inaequilatera	7
Acacia kempeana	1
Acacia ligulata	2
Acacia macraneura	8
Acacia macraneura hybrid	1

Acacia macraneura x paraneura	4
Acacia maitlandii	7
Acacia marramamba	2
Acacia melleodora	9
Acacia monticola	10
Acacia mulganeura	4
Acacia orthocarpa	1
Acacia pachyacra	5
Acacia pachycarpa	2
Acacia paradoxa	1
Acacia paraneura	17
Acacia pruinocarpa	14
Acacia pteraneura	13
Acacia ptychophylla	2
Acacia pyrifolia var. morrisonii	5
Acacia pyrifolia var. pyrifolia	4
Acacia ramulosa var. linophylla	1
Acacia rhodophloia	6
Acacia sclerosperma	3
Acacia sclerosperma subsp. sclerosperma	9
Acacia section Juliflorae	1
Acacia sericata	1
Acacia sericophylla	4
Acacia sibirica	8
Acacia sp. Jimblebar (S. van Leeuwen 1342)	7
Acacia sp. Juliflorae Pilbara Region	2
Acacia sp.Juliflorae - Pilbara	2
Acacia spondylophylla	2
Acacia subcontorta	7
Acacia synchronicia	8
Acacia tenuissima	11
Acacia tetragonophylla	10
Acacia trachycarpa	1
Acacia trudgeniana	5
Acacia tumida var. pilbarensis	3
Acacia victoriae	1
Acacia walkeri	2
Acacia wanyu	5
Acetosa vesicaria	1
Aenictophyton reconditum subsp. macrophyllum	1
Aerva javanica	1
Aeschynomene indica	1
Alternanthera angustifolia	1
Alternanthera denticulata	4
Alternanthera nana	1
Alternanthera nodiflora	3
Alternanthera pungens	1
Amaranthus centralis	2
Amaranthus cuspidifolius	2
Amaranthus induratus	1

Amaranthus mitchellii	2
Amaranthus undulatus	3
Ammannia multiflora	3
Amyema bifurcata	1
Amyema fitzgeraldii	4
Amyema gibberula var. gibberula	3
Amyema hilliana	2
Amyema preissii	2
Androcalva luteiflora	8
Anthobolus leptomerioides	8
Astrotricha hamptonii	3
Atriplex codonocarpa	3
Atriplex semilunaris	3
Bergia pedicellaris	2
Bidens bipinnata	6
Bidens pilosa	3
Bidens subalternans var. araneosa	1
Blumea tenella	1
Boerhavia coccinea	2
Boerhavia gardneri	1
Boerhavia repleta	2
Bonamia erecta	3
Bonamia pilbarensis	1
Bonamia rosea	1
Brachyscome cheilocarpa	1
Brachyscome rudallensis	1
Brunonia australis	6
Buchnera linearis	1
Cajanus marmoratus	1
Calandrinia balonensis	2
Calandrinia ptychosperma	2
Calandrinia reticulata	2
Calandrinia schistorhiza	2
Calandrinia stagnensis	2
Calandrinia tepperiana	2
Calocephalus beardii	1
Calocephalus knappii	2
Calocephalus pilbarensis	4
Calocephalus sp. Wittenoom (A.S. George 1082)	2
Calotis hispidula	2
Calotis latiuscula	2
Calotis multicaulis	3
Calotis plumulifera	2
Calytrix carinata	8
Capparis lasiantha	1
Capparis spinosa	1
Capparis umbonata	1
Cassytha capillaris	2
Centipeda crateriformis subsp. crateriformis	2
Centipeda minima	2

Centipeda minima subsp. macrocephala	3
Centipeda thespidioides	2
Chenopodium cristatum	1
Chenopodium melanocarpum	1
Chrysocephalum apiculatum	1
Chrysocephalum apiculatum subsp. pilbarense	2
Chrysocephalum gilesii	2
Chrysocephalum pterochaetum	10
Citrullus amarus	3
Cleome oxalidea	3
Cleome viscosa	15
Clerodendrum floribundum var. angustifolium	1
Codonocarpus cotinifolius	5
Convolvulus clementii	2
Conyza bonariensis	2
Corchorus crozophorifolius	5
Corchorus elachocarpus	1
Corchorus laniflorus	1
Corchorus lasiocarpus	1
Corchorus lasiocarpus subsp. lasiocarpus	4
Corchorus lasiocarpus subsp. parvus	2
Corchorus sidoides	1
Corchorus sidoides subsp. sidoides	1
Corchorus sp. Hamersley Range hilltops (S. van Leeuwen 3826)	1
Corchorus tectus	1
Corchorus tridens	2
Corymbia aspera	4
Corymbia candida	4
Corymbia candida subsp. dipsodes	6
Corymbia deserticola subsp. deserticola	3
Corymbia ferriticola	3
Corymbia hamersleyana	8
Corymbia opaca	3
Crotalaria medicaginea var. neglecta	1
Crotalaria novae-hollandiae	2
Crotalaria smithiana	4
Cryptandra monticola	2
Cucumis melo	2
Cucumis melo subsp. agrestis	1
Cucumis sp.	1
Cucumis variabilis	1
Cullen cinereum	2
Cullen graveolens	1
Cullen lachnostachys	1
Cullen leucanthum	2
Cullen leucochaites	3
Cullen pogonocarpum	1
Cynanchum floribundum	2
Dampiera candicans	9
Dampiera cinerea	1

Daucus glochidiatus	2
Desmanthus sp.	1
Desmanthus virgatus	1
Desmodium campylocaulon	1
Desmodium filiforme	1
Dicladanthera forrestii	3
Dicrastylis cordifolia	10
Dicrastylis georgei	4
Dicrastylis kumarinensis	1
Diplopeltis stuartii	1
Diplopeltis stuartii var. stuartii	4
Dipteracanthus australasicus	1
Dipteracanthus australasicus subsp. australasicus	1
Dodonaea coriacea	9
Dodonaea pachyneura	2
Dodonaea petiolaris	3
Dodonaea viscosa	1
Drosera finlaysoniana	4
Drosera indica	1
Duperreya commixta	2
Dysphania kalpari	3
Dysphania melanocarpa	2
Dysphania rhadinostachya subsp. inflata	2
Dysphania rhadinostachya subsp. rhadinostachya	2
Enchylaena tomentosa	7
Enchylaena tomentosa var. tomentosa	1
Eremophila canaliculata	3
Eremophila capricornica	3
Eremophila clarkei	2
Eremophila compacta	2
Eremophila cuneifolia	4
Eremophila exilifolia	7
Eremophila forrestii	5
Eremophila forrestii subsp. forrestii	3
Eremophila forrestii subsp. inland (A.A. Mitchell PRP 1175)	1
Eremophila fraseri	2
Eremophila fraseri subsp. fraseri	3
Eremophila jucunda subsp. jucunda	1
Eremophila jucunda subsp. pulcherrima	1
Eremophila lachnocalyx	3
Eremophila lanceolata	10
Eremophila latrobei	5
Eremophila latrobei subsp. filiformis	2
Eremophila latrobei subsp. glabra	2
Eremophila latrobei subsp. latrobei	6
Eremophila longifolia	5
Eremophila maculata subsp. brevifolia	3
Eremophila maculata subsp. maculata	1
Eremophila magnifica subsp. magnifica	1
Eremophila magnifica subsp. velutina	2

Eremophila margarethae	12
Eremophila oppositifolia subsp. angustifolia	2
Eremophila pilosa	1
Eremophila platycalyx subsp. Neds Creek (N.H. Speck 1228)	3
Eremophila rigida	1
Eremophila sp. Hamersley Range (K. Walker KW 136)	1
Eremophila youngii subsp. lepidota	2
Erodium cygnorum	1
Eucalyptus camaldulensis subsp. obtusa	2
Eucalyptus camaldulensis subsp. refulgens	2
Eucalyptus gamophylla	2
Eucalyptus kingsmillii	4
Eucalyptus leucophloia	2
Eucalyptus leucophloia subsp. leucophloia	8
Eucalyptus lucasii	2
Eucalyptus repullulans	1
Eucalyptus socialis	5
Eucalyptus socialis subsp. eucentrica	2
Eucalyptus trivalva	5
Eucalyptus victrix	4
Eucalyptus victrix x xerothermica	1
Eucalyptus xerothermica	8
Euphorbia australis var. subtomentosa	3
Euphorbia biconvexa	1
Euphorbia bicovexa/coghlanii	3
Euphorbia boophthona	6
Euphorbia careyi	3
Euphorbia coghlanii	3
Euphorbia inappendiculata var. inappendiculata	1
Euphorbia porcata	3
Euphorbia tannensis	1
Euphorbia tannensis subsp. eremophila	2
Evolvulus alsinoides	3
Evolvulus alsinoides var. decumbens	1
Evolvulus alsinoides var. villosicalyx	3
Flaveria trinervia	2
Frankenia setosa	8
Genus B sp.3	1
Genus C sp.11	1
Genus C sp.9	1
Genus D sp.2	2
Genus E sp.3	2
Genus G sp.1	1
Glinus lotoides	1
Glycine canescens	3
Glycine sp.	1
Gnephosis arachnoidea	2
Gompholobium karijini x oreophilum	1
Gompholobium oreophilum	6
Gompholobium polyzygum	2

Gomphrena canescens	6
Gomphrena connata	1
Gomphrena cunninghamii	3
Gomphrena kanisii	10
Gomphrena lanata	3
Gomphrena sordida	1
Gonocarpus ephemerus	3
Goodenia armitiana	2
Goodenia azurea	3
Goodenia azurea subsp. hesperia	1
Goodenia berringbinensis	1
Goodenia forrestii	3
Goodenia hartiana	10
Goodenia lamprosperma	5
Goodenia microptera	6
Goodenia muelleriana	11
Goodenia nuda	7
Goodenia omearana	2
Goodenia prostrata	15
Goodenia ramelii	1
Goodenia sp.	2
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727)	1
Goodenia sp. Sandy Creek (R.D. Royce 1653)	2
Goodenia stobbsiana	11
Goodenia tenuiloba	7
Goodenia trichophylla	2
Goodenia triodiophila	6
Goodenia vilmoriniae	5
Gossypium australe	1
Gossypium hirsutum	1
Gossypium sturtianum var. sturtianum	2
Grevillea juncifolia subsp. juncifolia	3
Grevillea pyramidalis	1
Grevillea stenobotrya	1
Grevillea striata	4
Grevillea wickhamii subsp. aprica	1
Grevillea wickhamii subsp. hispidula	1
Gymnanthera cunninghamii	3
Hakea chordophylla	1
Hakea lorea	7
Hakea lorea subsp. lorea	4
Hakea lorea subsp. suberea	1
Hakea preissii	2
Halgania erecta	3
Halgania solanacea var. Mt Doreen (G.M. Chippendale 4206)	4
Haloragis gossei	5
Haloragis gossei var. gossei	4
Haloragis maierae	4
Helichrysum luteoalbum	2
Heliotropium cunninghamii	3

Heliotropium heteranthum	5
Heliotropium inexplicitum	2
Heliotropium pachyphyllum	3
Heliotropium tanythrix	1
Heliotropium tenuifolium	1
Hibiscus arenicola	1
Hibiscus austrinus var. austrinus	1
Hibiscus brachysiphonius	1
Hibiscus burtonii	12
Hibiscus campanulatus	3
Hibiscus coatesii	2
Hibiscus haynaldii	1
Hibiscus sp.	3
Hibiscus sturtii	7
Hibiscus sturtii var. grandiflorus	2
Hibiscus sturtii var. truncatus	4
Hibiscus verdcourtii	1
Hybanthus aurantiacus	8
Hypertelis cerviana	1
Indigofera colutea	3
Indigofera georgei	5
Indigofera gilesii	2
Indigofera linnaei	1
Indigofera monophylla	11
Indigofera rugosa	1
Indigofera trita	1
Ipomoea costata	1
Ipomoea muelleri	8
Ipomoea pes-caprae subsp. brasiliensis	1
Ipomoea plebeia	2
Ipomoea racemigera	3
Isotropis atropurpurea	3
Isotropis parviflora	6
Isotropis sp. Arid zone (G. Byrne 2775)	5
Jacksonia aculeata	1
Kennedia prorepens	9
Lactuca saligna	1
Lamarchea sulcata	4
Lawrencia sp.	2
Leiocarpa semicalva subsp. semicalva	1
Lepidium catapycnon	17
Lepidium echinatum	6
Lepidium muelleri-ferdinandii	3
Lepidium oxytrichum	3
Lepidium pedicellosum	3
Lepidium phlebopetalum	8
Lepidium pholidogynum	1
Lepidium platypetalum	2
Lepidium sp.	2
Leptosema chambersii	1

Lotus cruentus	4
Lysiana casuarinae	1
Macgregoria racemigera	3
Maireana amoena	1
Maireana carnosa	1
Maireana georgei	7
Maireana melanocoma	6
Maireana planifolia	6
Maireana pyramidata	1
Maireana thesioides	1
Maireana tomentosa	2
Maireana triptera	1
Maireana villosa	4
Malvastrum americanum	3
Melaleuca bracteata	1
Melaleuca glomerata	3
Melaleuca sp.	1
Mimulus gracilis	2
Mimulus sp.	1
Minuria integerrima	6
Mirbelia ramulosa	1
Mirbelia viminalis	4
Mitrasacme connata	1
Muelleranthus trifoliolatus	2
Mukia maderaspatana	5
Myoporum montanum	1
Myriocephalus oldfieldii	1
Neptunia dimorphantha	1
Newcastelia cephalantha	2
Newcastelia hexarrhena	8
Newcastelia spodiotricha	1
Nicotiana benthamiana	3
Nicotiana occidentalis	2
Nicotiana occidentalis subsp. obliqua	2
Nicotiana rosulata subsp. ingulba	1
Oldenlandia crouchiana	3
Oldenlandia galioides	2
Olearia stuartii	1
Operculina aequisepala	2
Peplidium aithocheilum	1
Peplidium maritimum	1
Peplidium sp.	2
Peripleura arida	1
Peripleura virgata	2
Petalostylis cassioides	7
Petalostylis labicheoides	6
Phyllanthus erwinii	1
Phyllanthus maderaspatensis	3
Phyllanthus virgatus	1
Pluchea dentex	1

Pluchea dunlopii	3
Pluchea ferdinandi-muelleri	1
Pluchea rubelliflora	3
Plumbago zeylanica	1
Podolepis capillaris	1
Podolepis eremaea	2
Polycarpaea corymbosa	3
Polycarpaea corymbosa var. corymbosa	1
Polycarpaea holtzei	2
Polycarpaea involucrata	3
Polycarpaea longiflora	7
Polygala glaucifolia	2
Polygala isingii	1
Polygonum plebeium	2
Polymeria calycina	1
Polymeria sp.	2
Portulaca conspicua	1
Portulaca cyclophylla	2
Portulaca decipiens	1
Portulaca filifolia	1
Portulaca intraterranea	1
Portulaca oleracea	16
Portulaca pilosa	11
Portulaca sp.	5
Pseudognaphalium luteoalbum	1
Psydrax latifolia	4
Psydrax suaveolens	3
Pterocaulon sphacelatum	8
Pterocaulon sphaeranthoides	1
Ptilotus aervoides	9
Ptilotus aphyllus	5
Ptilotus astrolasius	7
Ptilotus auriculifolius	5
Ptilotus axillaris	2
Ptilotus calostachyus	14
Ptilotus carinatus	8
Ptilotus clementii	5
Ptilotus exaltatus	6
Ptilotus gaudichaudii	6
Ptilotus gomphrenoides	11
Ptilotus helichrysoides	2
Ptilotus helipteroides	19
Ptilotus incanus	1
Ptilotus macrocephalus	4
Ptilotus nobilis	11
Ptilotus obovatus	25
Ptilotus polystachyus	12
Ptilotus roei	3
Ptilotus rotundifolius	9
Ptilotus schwartzii	6

Rhagodia eremaea	3
Rhagodia sp. Hamersley (M. Trudgen 17794)	3
Rhodanthe charsleyae	8
Rhodanthe floribunda	4
Rhodanthe margarethae	7
Rhodanthe polakii	1
Rhodanthe sterilescens	3
Rhodanthe stricta	1
Rhyncharrhena linearis	1
Rhynchosia minima	3
Roebuckiella similis	7
Rostellularia adscendens var. clementii	2
Rotala diandra	1
Rumex vesicarius	2
Rutidosis helichrysoides	6
Rutidosis helichrysoides subsp. helichrysoides	2
Salsola australis	1
Salsola tragus	5
Santalum lanceolatum	6
Santalum spicatum	1
Scaevola acacioides	4
Scaevola browniana	2
Scaevola browniana subsp. browniana	2
Scaevola parviflora	1
Scaevola parvifolia	4
Scaevola parvifolia subsp. pilbarae	7
Scaevola sp. Mt Nameless (P.A.S. Wurm 1443)	1
Scaevola spinescens	7
Schoenia cassiniana	1
Sclerolaena convexula	2
Sclerolaena cornishiana	6
Sclerolaena costata	3
Sclerolaena cuneata	1
Sclerolaena densiflora	4
Sclerolaena diacantha	1
Sclerolaena eriacantha	4
Sclerolaena lanicuspis	4
Sclerolaena minuta	3
Senna artemisioides	2
Senna artemisioides subsp. filifolia	2
Senna artemisioides subsp. helmsii	16
Senna artemisioides subsp. oligophylla	17
Senna artemisioides subsp. x artemisioides	1
Senna glutinosa	2
Senna glutinosa subsp. glutinosa	9
Senna glutinosa subsp. pruinosa	6
Senna glutinosa subsp. x luerssenii	11
Senna hamersleyensis	6
Senna notabilis	8
Senna occidentalis	1

Senna oligoclada	1
Senna sericea	1
Senna sp. Billabong (J.D. Alonzo 721)	1
Senna sp. Meekatharra (E. Bailey 1-26)	1
Senna stricta	2
Senna symonii	3
Senna venusta	3
Seringia elliptica	2
Seringia nephrosperma	2
Sesbania cannabina	3
Sida arenicola	3
Sida arsiniata	1
Sida atrovirens	3
Sida brownii	2
Sida calyxhymenia	2
Sida cardiophylla	2
Sida echinocarpa	4
Sida ectogama	3
Sida fibulifera	10
Sida kingii	1
Sida physocalyx	1
Sida platycalyx	3
Sida sp. dark green fruits (S. van Leeuwen 2260)	2
Sida sp. Excedentifolia (J.L. Egan 1925)	4
Sida sp. L (A.M. Ashby 4202)	1
Sida sp. Pilbara (A.A. Mitchell PRP 1543)	1
Sida sp. Rabbit Flat (B.J. Carter 626)	1
Sida sp. Shovelanna Hill (S. van Leeuwen 3842)	2
Sida sp. spiciform panicles (E. Leyland s.n. 14/8/90)	3
Sida sp. tiny glabrous fruit (A.A. Mitchell PRP1152)	4
Sida sp. verrucose glands (F.H. Mollemans 2423)	1
Sida trichopoda	1
Solanum austropiceum	2
Solanum centrale	8
Solanum cleistogamum	2
Solanum elatius	5
Solanum horridum	3
Solanum lasiophyllum	16
Solanum morrisonii	1
Solanum nigrum	2
Solanum piceum	1
Sonchus oleraceus	3
Spermacoce brachystema	1
Stackhousia intermedia	1
Stackhousia muricata subsp. annual (W.R. Barker 2172)	1
Stackhousia sp. swollen gynophore (W.R. Barker 2041)	2
Stemodia grossa	3
Stemodia viscosa	3
Stenopetalum anfractum	1
Stenopetalum decipiens	6

Stenopetalum velutinum	1
Streptoglossa bubakii	1
Streptoglossa cylindriceps	2
Streptoglossa decurrens	4
Streptoglossa liatroides	3
Streptoglossa macrocephala	3
Streptoglossa odora	1
Striga squamigera	1
Stylidium desertorum	1
Swainsona decurrens	8
Swainsona formosa	1
Swainsona kingii	1
Swainsona leeana	1
Swainsona oroboides	2
Swainsona paucifoliolata	1
Symphyotrichum squamatum	2
Synaptantha tillaeacea	1
Synostemon rhytidospermus	2
Tecticornia disarticulata	1
Tephrosia densa	4
Tephrosia oxalidea	2
Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	3
Tephrosia sp. clay soils (S. van Leeuwen et al. PBS 0273)	3
Tephrosia sp. deserts (J.R. Maconochie 1403)	1
Tephrosia sp. Newman (A.A. Mitchell PRP 29)	6
Tephrosia sp. Northern (K.F. Kenneally 11950)	3
Tephrosia sp. NW Eremaean (S. van Leeuwen et al. PBS 0356)	2
Tephrosia sp. Willowra (G.M. Chippendale 4809)	1
Tephrosia supina	1
Trachymene bialata	2
Trachymene oleracea	1
Trachymene oleracea subsp. oleracea	5
Trachymene pilbarensis	1
Trianthema glossostigmum	8
Trianthema pilosum	2
Trianthema triquetrum	2
Tribulus eichlerianus	2
Tribulus hirsutus	2
Tribulus macrocarpus	1
Tribulus occidentalis	1
Tribulus sp.	2
Tribulus suberosus	7
Tribulus terrestris	1
Trichodesma zeylanicum	6
Trichodesma zeylanicum var. zeylanicum	3
Trigastrotheca molluginea	1
Triumfetta leptacantha	1
Triumfetta maconochieana	5
Velleia connata	3
Velleia glabrata	4

Velleia sp.	1
Ventilago viminalis	1
Vigna lanceolata var. lanceolata	1
Vigna sp. Hamersley Clay (A.A. Mitchell PRP 113)	2
Vittadinia sp.	1
Vittadinia sp. Coondewanna Flats (S. van Leeuwen 4684)	1
Wahlenbergia tumidifructa	7
Waltheria virgata	1
Zygophyllum iodocarpum	1
FERN	**18**
Cheilanthes austrotenuifolia	1
Cheilanthes brownii	1
Cheilanthes lasiophylla	4
Cheilanthes sieberi	1
Cheilanthes sieberi subsp. pseudovellea	1
Cheilanthes sieberi subsp. sieberi	3
Cheilanthes tenuifolia	2
Marsilea costulifera	1
Marsilea exarata	1
Marsilea hirsuta	2
Marsilea spp.	1
LIVERWORT	**1**
Riccia crinita	1
MONOCOT	**500**
Acrachne racemosa	1
Alloteropsis cimicina	1
Amphipogon caricinus	4
Amphipogon sericeus	3
Aristida contorta	19
Aristida holathera	10
Aristida inaequiglumis	2
Aristida jerichoensis var. subspinulifera	4
Aristida latifolia	2
Aristida sp.	2
Astrebla elymoides	1
Astrebla pectinata	1
Bulbostylis barbata	10
Bulbostylis turbinata	5
Cenchrus ciliaris	9
Cenchrus setiger	3
Chloris pectinata	1
Chloris pumilio	2
Chloris sp.	2
Chrysopogon fallax	8
Corynotheca pungens	1
Cymbopogon ambiguus	5
Cymbopogon obtectus	3
Cymbopogon procerus	2
Cynodon convergens	1
Cynodon dactylon	1

Cynodon prostratus	3
Cyperus betchei subsp. commiscens	1
Cyperus bifax	3
Cyperus concinnus	1
Cyperus cunninghamii	1
Cyperus difformis	2
Cyperus iria	4
Cyperus ixiocarpus	2
Cyperus pulchellus	1
Cyperus pygmaeus	1
Cyperus squarrosus	3
Cyperus tenuiflorus	1
Cyperus vaginatus	8
Dactyloctenium radulans	4
Dichanthium fecundum	1
Dichanthium sericeum	2
Dichanthium sericeum subsp. humilius	2
Dichanthium sericeum subsp. sericeum	1
Digitaria brownii	1
Digitaria ctenantha	2
Digitaria longiflora	1
Diplachne fusca subsp. muelleri	1
Echinochloa colona	2
Eleocharis pallens	2
Elytrophorus spicatus	3
Enneapogon avenaceus	1
Enneapogon caerulescens	15
Enneapogon lindleyanus	2
Enneapogon polyphyllus	13
Enneapogon robustissimus	4
Eragrostis cumingii	18
Eragrostis dielsii	3
Eragrostis elongata	4
Eragrostis eriopoda	4
Eragrostis lanipes	1
Eragrostis leptocarpa	3
Eragrostis olida	2
Eragrostis pergracilis	2
Eragrostis rigidiuscula	1
Eragrostis setifolia	2
Eragrostis sp.	1
Eragrostis speciosa	3
Eragrostis tenella	1
Eragrostis tenellula	8
Eragrostis xerophila	2
Eriachne aristidea	14
Eriachne benthamii	3
Eriachne lanata	4
Eriachne mucronata	7
Eriachne obtusa	2

Eriachne ovata	3
Eriachne pulchella	10
Eriachne pulchella subsp. dominii	1
Eriachne pulchella subsp. pulchella	1
Eriachne tenuiculmis	3
Eriochloa pseudoacrotricha	2
Eulalia aurea	5
Fimbristylis dichotoma	12
Fimbristylis elegans	2
Fimbristylis eremophila	1
Fimbristylis microcarya	3
Fimbristylis simulans	2
Fimbristylis sp.	1
Iseilema dolichotrichum	1
Iseilema eremaeum	1
Iseilema membranaceum	2
Iseilema vaginiflorum	1
Isolepis congrua	1
Leptochloa digitata	2
Leptochloa fusca subsp. muelleri	1
Lipocarpha microcephala	2
Monachather paradoxus	2
Panicum decompositum	3
Panicum effusum	1
Panicum sp.	1
Paraneurachne muelleri	11
Paspalidium clementii	1
Paspalidium constrictum	4
Paspalidium rarum	2
Perotis rara	15
Polypogon monspeliensis	1
Ruppia polycarpa	1
Schizachyrium fragile	1
Schoenoplectiella dissachantha	2
Schoenoplectiella laevis	3
Schoenoplectus dissachanthus	1
Setaria dielsii	4
Setaria surgens	1
Setaria verticillata	1
Sorghum plumosum	2
Sorghum plumosum var. plumosum	1
Sporobolus actinocladus	2
Sporobolus australasicus	12
Themeda sp. Hamersley Station (M.E. Trudgen 11431)	2
Themeda sp. Mt Barricade (M.E. Trudgen 2471)	1
Themeda triandra	7
Thyridolepis xerophila	1
Tragus australianus	6
Triglochin nana	1
Triodia angusta	8

Triodia basedowii	6
Triodia brizoides	3
Triodia longiceps	3
Triodia melvillei	1
Triodia pungens	13
Triodia schinzii	5
Triodia sp. Mt Ella (M.E. Trudgen 12739)	6
Triodia vanleeuwenii	7
Triodia wiseana	4
Tripogonella loliiformis	1
Triraphis mollis	2
Typha domingensis	2
Urochloa occidentalis var. occidentalis	1
Urochloa piligera	1
Urochloa subquadripara	1
Wurmbea deserticola	3
Xerochloa imberbis	1
Yakirra australiensis	7
Yakirra australiensis var. australiensis	2
MOSS	**1**
Eccremidium arcuatum	1
Grand Total	**28101**

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Appendix D: Vegetation Classification and Condition Scales, Fauna Habitat Condition Scale and MNES Likelihood Criteria

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Table D.1: BHP Vegetation Classification System (based on Specht (1970) as modified by Aplin (1979) and Trudgen (2002).

Stratum	70-100% cover	30-70% cover	10-30% cover	2-10% cover	<2% cover
Trees > 30 m	High Closed Forest	High Open Forest	High Woodland	High Open Woodland	Scattered Tall Trees
Trees 10-30 m	Closed Forest	Open Forest	Woodland	Open Woodland	Scattered Trees
Trees < 10 m	Low Closed Woodland	Low Open Forest	Low Woodland	Low Open Woodland	Scattered Low Trees
Mallee	Closed Mallee	Mallee	Open Mallee	Very Open Mallee	Scattered Mallee
Shrubs > 2 m	Closed Scrub	Open Scrub	High Shrubland	High Open Shrubland	Scattered Tall Shrubs
Shrubs 1-2 m	Closed Heath	Open Heath	Shrubland	Open Shrubland	Scattered Shrubs
Shrubs < 1 m	Low Closed Heath	Low Open Heath	Low Shrubland	Low Open Shrubland	Low Scattered Shrubs
Hummock Grass	Closed Hummock Grassland	Hummock Grassland	Open Hummock Grassland	Very Open Hummock Grassland	Scattered Hummock Grass
Tussock Grass	Closed Tussock Grassland	Tussock Grassland	Open Tussock Grassland	Very Open Tussock Grassland	Scattered Tussock Grass
Bunch Grass	Closed Bunch Grassland	Bunch Grassland	Open Bunch Grassland	Very Open Bunch Grassland	Scattered Bunch Grass
Sedges	Closed Sedges	Sedges	Open Sedges	Very Open Sedges	Scattered Sedges
Herbs	Closed Herbs	Herbs	Open Herbs	Very Open Herbs	Scattered Herbs

Table D.2: Vegetation condition scale as adapted from Trudgen (1988).

Vegetation condition	Condition description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Degraded	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Table D.3: Fauna habitat condition scale (Thompson and Thompson 2010).

Habitat condition	Condition description
High Quality Fauna Habitat (1.0)	These areas closely approximate the vegetation mix and quality that would have been in the area prior to any human induced disturbance. The habitat has connectivity with other habitats and is likely to support the most natural vertebrate fauna assemblage.
Very Good Fauna Habitat (0.8)	These areas show minimal signs of human induced disturbance (e.g. grazing, clearing, fragmentation, weeds) and retain almost all of the characteristics of the habitat had it not been disturbed. The habitat has connectivity with other habitats, and fauna assemblages in these areas are likely to be minimally effected by disturbance.
Good Fauna Habitat (0.6)	These areas show signs of human induced disturbance (e.g. grazing, clearing, fragmentation, weeds) but generally retain many of the characteristics of the habitat had it not been disturbed. The habitat still retains some connectivity with other habitats but fauna assemblages in these areas are likely to be affected by disturbance. Fauna assemblages in these areas are likely to be similar to what might be expected in this habitat.
Disturbed Fauna Habitat (0.4)	These areas show signs of human induced significant disturbance (e.g. mining, clearing, tracks and roads). Many of the trees, shrubs and undergrowth have died or have been cleared. These areas may be in the early succession and regeneration stages. Areas may show signs of significant grazing, contain an abundance of weeds or have been damaged by vehicles or machinery. Habitats are fragmented or have limited connectivity with other fauna habitats. Fauna assemblages in these areas are likely to differ significantly from what might be expected in the area had the disturbance not occurred.
Highly Degraded Fauna Habitat (<0.2)	These areas often have a significant human induced loss of vegetation, and / or a large number of vehicle tracks and / or have been completely cleared, and / or areas have been heavily grazed or farmed. There is limited or no fauna habitat connectivity. Fauna assemblages in these areas are likely to differ significantly from what existed prior to the disturbance, and are often depleted compared to what existed prior to the disturbance.

Table D.4: Suitability/significance of habitat ranking criteria for the target Matters of National Environmental Significance (MNES) species based on DAWE (2022) and BHP Billiton Iron Ore (2022).

Species	Critical habitat	Supporting habitat	Limited habitat
Great desert skink *(Liopholis kintorei)*	Incomplete distribution data make it currently impossible to define critical habitat, it is possible to describe commonalities in the habitats occupied by known populations. • Generally, occur on hummock grass sandplains and some adjacent dunefield swales. • Tanami Desert and parts of the Great Sandy Desert; paleodrainage lines characterised by lateritic soils, giant termite mounds, and tea tree (*Melaleuca* spp.) shrubs. • Watarru (in northern South Australia) was located in an area of open mulga (*Acacia aneura*) and minyura (*Acacia minyura*) woodland over woollybutt grass (*Eragrostis eriopoda*) and spinifex. • Habitat that has been burnt within the previous 3- 15 years.	Habitat that is under 3 years since burnt and over 15 years burnt.	Habitat that has limited sheltering and foraging capacity.
Bilby *(Macrotis lagotis*)	• Denning and foraging within the home range (18 ha (female) to 316 ha (male) of stony sandplain, sandplain and/ or recently burnt sandplain. • Denning and foraging within the home range of interdune corridors or stony plains dominated by *Triodia* spp. and *Acacias*. • Denning and foraging within the home range surrounding salt lakes that are dominated with samphire and or *Melaleuca* habitats. • Denning and foraging within the home range of paleo-drainage systems habitat.	Habitat important for foraging including: • Open tussock grasslands on uplands and hills. • Mulga woodland/ shrubland growing on ridges and rises. • Hummock grassland growing on sand plains and dunes, drainage systems, saltlake systems and other alluvial areas. • Laterite and rock feature substrates that support *Acacia kempeana*, *Acacia hilliana* and *Acacia rhodophylla* shrub species and spinifex hummocks with open runways between the hummocks for easy movements.	Habitat that has limited burrowing capacity for the greater bilby.

Species	Critical habitat	Supporting habitat	Limited habitat
Pilbara olive python (*Liasis olivaceus barroni*)	Rocky outcrops in proximity to deep gorges, gullies, and water holes within home range (88 – 450 ha).	• Deep gorges, gullies, waterholes, drainage lines and watercourses. • Under rock piles, on top of rocks or under spinifex to ambush prey.	Habitat that has limited sheltering and foraging capacity with no permanent or semi-permanent water.
Northern quoll *(Dasyurus hallucatus)*	• Denning and foraging habitat within the home range (35 hectares (ha) to >100 ha in breeding season) of low rocky hills, gorges, escarpments, ranges, breakaways and boulder fields. • Denning and foraging within the home range of major drainage lines and tree lined creeks. • Denning and foraging within the home range of structurally diverse woodland or forest. • Offshore islands.	• Variable foraging habitats within the home range and dispersal habitats that include: o Drainage lines that act as dispersal corridors. o Basalt hills, mesas, high and low plateaus and lower slopes. o Stony plains supporting hard or soft spinifex grasslands. o Sandstone and dolomite hills and ridges, shrublands, sandy plains, clay pans and tussock grasslands. o Coastal fringes including dunes islands and beaches.	Habitat that has limited sheltering and foraging capacity and not connected to potential denning/shelter and foraging habitat.

Species	Critical habitat	Supporting habitat	Limited habitat
Ghost bat (*Macroderma gigas*)	• Category 1 - Maternity/Diurnal roost caves with permanent Ghost bat occupancy. These may be abandoned underground mines. • Category 2 - Maternity/Diurnal roost caves with regular (but not continuous) Ghost bat occupancy that is capable of supporting one or more reproducing females and their habitat. These may be abandoned underground mines. • Category 3 - Diurnal roost caves with occasional occupancy if adjacent to one or Diurnal roost caves with occasional occupancy if adjacent to one or more Category 2 cave(s). These may be abandoned underground mines. • Rocky outcrops in geological formations such as the following: o Brockman and Marra Mamba banded iron formation (BIF) o Robe Pisolite channel iron deposit (CID) geology o ironstone geology and granite rockpiles. • Foraging habitat within 12 km radius of these caves or 1,200 ha of habitat surrounding each of these caves.	• Category 3 - Diurnal roost caves with occasional occupancy if isolated from Category 1 and 2 caves. • Category 4 – shallow caves, shelters and deep overhangs that support opportunistic usage for resting and feeding. • Productive plain areas with thin mature woodland over patchy or clumped tussock or hummock grass (*Triodia* spp.) on sand or stony ground. • Isolated trees and trees on the edge of thin thickets on the plains. • Trees along the edges of watercourse woodlands. • Prefer gully or gorge system that opens onto a plain or riparian line.	Habitat that has limited ecological value but may provide capacity for transitory movement across the landscape and/or limited foraging potential.

Species	Critical habitat	Supporting habitat	Limited habitat
Pilbara Leaf-nosed bat (*Rhinonicteris aurantia*)	• Roosting habitat o Category 1 Cave - Permanent diurnal roost and maternity roost with seasonal presence of young. o Category 2 – Permanent/semi-permanent possible breeding roosts that are used during some part of the breeding cycle (but without the proven presence of young). o Category 3 - Transitory diurnal roosts, occupied part of the year only, outside the breeding season (i.e. April-June) that facilitate long distance dispersal. • Permanent water sources within 8.7 km of a known Priority/Category 1-3 roosts. • Foraging habitat within 10 km (1,000 ha) radius of these caves that include: o Plain and low hill habitat that includes watercourses and other sites with semi-permanent or permanent surface water (natural or anthropogenic). Three layers in vegetation structure. o Mesa side or long ridge line with south, east or west facing, deeply incised gullies with vertical walls. Semi-permanent or permanent water pools present. Vegetation is complex. Also north facing gullies with permanent water. o Deep wet 'open' gorge with hills to the side. Wet 'closed' gorge with one or 2 vertical walls. Complex 3-layer, dense vegetation structure. Semi-permanent or permanent water pools present. (priority 1 foraging habitat type.) • Rocky outcrop geological formations such as the following: o banded Iron Formations (Hamersley Group ironstone terrain). o dolerite/gabbro formations. • granite top rockpiles in the eastern Pilbara	• Priority/Category 4- Nocturnal refuge that are occupied at night for resting, feeding or other purpose, with perching not a requirement, which can be moderately deep caves and shallow abandoned mines. • Plains and low hills with three-layer, complex vegetation structure. Or moderate two-layer non-complex vegetation structure. Includes ephemeral watercourse. • Mesa side or long ridge line with north facing deeply incised gullies with vertical walls. Or Mesa side or long ridge line with deeply incised gullies in weathered strata (45º sloping walls). Caves and overhangs present. Shrubs and thin tree cover in gully base. Ephemeral watercourse in gully or nearby. (priority 2 foraging habitat). • Dry deeply incised gorge into a ridge or mountain. Complex 3 layer vegetation structure. Ephemeral water course. (priority 1 foraging habitat). Large watercourses, around rocky outcrop, gullies, gorges and over pools. • Rocky outcrop areas of exposed rock at the top of rocky outcrop and mesa hills that contain caves and overhangs, and boulder piles in the granite terrains (priority 3 foraging habitat). • Major watercourses that support riparian vegetation on flat land plus the main gravelly or sandy channel of the river bed, sometimes containing pools that persist for weeks or months, and generally supporting higher productivity of biomass than the surrounding habitats. (priority 4 foraging habitat). • Open grassland and woodland dominated by *Triodia*, on lowland plains, colluvial slopes and hilltops. (priority 5 foraging habitat). • Large watercourses, around rocky outcrop, gullies, gorges and over pools.	Habitat that has limited ecological value but may provide capacity for transitory movement across the landscape and/or limited foraging potential.

Species	Critical habitat	Supporting habitat	Limited habitat
Night parrot (*Pezoporus occidentalis*)	• Nesting and foraging in areas that can support multiple to many occurrences of dense roosting habitat such as old-growth dense hummock-forming spinifex (*Triodia* spp.), thickets of lignum, or dense shrubby samphire. • Nesting and foraging in old-growth spinifex (*Triodia* spp.) in close proximity to ephemeral water sources, which may be associated with the following: o Hummock grasslands (unburnt) in stony or sandplain environments. o Paleo-drainage features in a landscape mosaic with spinifex (*Astrebla* spp.) and *Acacia aneura* (Mulga) woodland, o Treeless areas and bare gibber.	• Areas that are likely to be of relatively high vegetative or seed productivity such as run-on areas, floodplains, salt or clay pans, salt-lake margins. • Paleo-drainage systems, salt lakes and pans. • Permanent or ephemeral sources of free water, or areas where high soil moisture ephemerally or permanently support vegetation that offers a source of water. • Flyways varying from river and creek drainage systems, surrounding dune-fields, forb–grasslands on mainly ironstone gravel-covered plains, low ranges and low dissected tablelands supporting sparse shrublands, undulating stony clay plains supporting Mitchell Grass, and Gidgee.	Habitat that has limited roosting and foraging potential for the night parrot.
Grey falcon (*Falco hypoleucos*)	• Major drainage habitats with suitably size Eucalypts (*Eucalyptus camaldulensis*, *E. coolabah*) as potential nesting habitat, often in the abandoned nest of a raptor or corvid in trees.	• Timbered lowland plains, particularly *Acacia* shrublands that are crossed by tree-lined water courses. • The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland.	Habitat that has limited nesting and foraging potential for the grey falcon.

Species	Critical habitat	Supporting habitat	Limited habitat
Southern whiteface (*Aphelocephala leucopsis castaeiventris*)	• Habitat within the 'known or likely' modelled distribution consisting of: o Relatively undisturbed open woodlands and shrublands with an understorey of grasses or shrubs, or both. o Habitat with low tree densities and an herbaceous understorey litter cover which provides essential foraging habitat. o Living and dead trees with hollows and crevices which are essential for roosting and nesting.	• Habitat within the 'may occur' modelled distribution consisting of: o Relatively undisturbed open woodlands and shrublands with an understorey of grasses or shrubs, or both. o Habitat with low tree densities and an herbaceous understorey litter cover which provides essential foraging habitat. o Living and dead trees with hollows and crevices which are essential for roosting and nesting.	Habitat that has limited nesting and foraging potential for the southern whiteface.

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Appendix E: Fauna Survey Sampling Sites

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

HA18 HA22 HA10 HA19 HA20 HA09 HA02 Cam46 HA03 BD01 Cam53 HA08 HA04 HA01 HA14 HA16 HA24 HA15 HA13 HA17 HA05 HA21 HA07 HA06 HA12 HA11 AC01 HA23

Survey Area

Survey Site

- Bird Census
- Camera (active)
- Echolocation Recording
- Habitat Assessment

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure E.1: Fauna survey sampling sites

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

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Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigE1_FaunaSites

Table E.1: Fauna sampling locations.

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-01	201412	7414090	Habitat Assessment	08/03/2023	Drainage Area/Floodplain	0.6, Good	Mining exploration	Soft soils (burrows), leaf litter	
HA-02	203043	7414422	Habitat Assessment	08/03/2023	Breakaway/Cliff	1, Excellent	Mining exploration	Caves, crevices, overhangs, rock piles	
HA-03	202915	7414349	Habitat Assessment	08/03/2023	Minor Drainage Line	0.8, Very good	Cattle grazing	Tree hollows, thick undergrowth, old *Triodia*, leaf litter	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-04	202999	7414121	Habitat Assessment	08/03/2023	Gorge/Gully	1, Excellent	Mining exploration	Overhangs, crevices, rock piles, leaf litter	
HA-05	202944	7413930	Habitat Assessment	08/03/2023	Gorge/Gully	0.8, Very good	Mining exploration	Overhangs, tree hollows, crevices, leaf litter	
HA-06	202888	7413560	Habitat Assessment	08/03/2023	Hillcrest/Hillslope	0.8, Very Good	Mining exploration	Rock piles	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-07	203137	7413624	Habitat Assessment	08/03/2023	Gorge/Gully	0.8, Very good	Mining exploration	Overhangs, tree hollows, crevices, leaf litter	
HA-08	202802	7414185	Habitat Assessment	08/03/2023	Breakaway/Cliff	0.8, Very good	Mining exploration	Overhangs, crevices	
HA-09	202931	7414441	Habitat Assessment	08/03/2023	Breakaway/Cliff	0.8, Very good	Mining exploration	Overhangs, crevices	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-10	202909	7415328	Habitat Assessment	08/03/2023	Sand Plain	0.8, Very good	Mining exploration	Soft soil (burrows), old *Triodia*, leaf litter	
HA-11	200285	7413480	Habitat Assessment	09/03/2023	Mulga Woodland	0.6, Good	Mining exploration	Thick undergrowth, leaf litter	
HA-12	200084	7413495	Habitat Assessment	09/03/2023	Drainage Area/Floodplain	0.4, Poor	Mining exploration, road/access track, rubbish/litter	Soft soils (burrows)	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-13	200000	7413896	Habitat Assessment	09/03/2023	Stony Plain	0.8, Very good	Mining exploration, road/access track, rubbish/litter	Old *Triodia*, leaf litter	
HA-14	199778	7414034	Habitat Assessment	09/03/2023	Hillcrest/Hillslope	0.6, Good	Road/access tracks	Rock piles	
HA-15	199807	7413873	Habitat Assessment	09/03/2023	Mulga Woodland	0.6, Good	Mining exploration	Thick undergrowth, leaf litter	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-16	199429	7413934	Habitat Assessment	09/03/2023	Mulga Woodland	0.6, Good	Mining exploration, rubbish/litter, weed invasion	Soft soil (burrows), leaf litter	
HA-17	201603	7413957	Habitat Assessment	10/03/2023	Stony Plain	0.4, Poor	Road/access track, rubbish/litter, weed invasion	Rock piles, leaf litter	
HA-18	199350	7415349	Habitat Assessment	09/03/2023	Sand Plain	0.6, Good	Cattle grazing, mining exploration, road/access track	Tree hollows, soft soil (burrows), leaf litter	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-19	202678	7414681	Habitat Assessment	10/03/2023	Minor Drainage Line	0.8, Very good	Road/access track	Tree hollows, leaf litter	
HA-20	201859	7414423	Habitat Assessment	10/03/2023	Minor Drainage Line	0.6, Good	Mining exploration, road/access track, rubbish/litter	Tree hollows, old *Triodia*, leaf litter	
HA-21	201656	7413778	Habitat Assessment	10/03/2023	Hillcrest/Hillslope	0.6, Good	Road/access track	Rock piles	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
HA-22	199083	7415279	Habitat Assessment	09/03/2023	Sand Plain	0.6, Good	Cattle grazing, mining exploration, road/access tracks	Tree hollows, soft soil (burrows), leaf litter	No Photo Availabe
HA-23	201865	7413489	Habitat Assessment	10/03/2023	Stony Plain	0.4, Poor	Road/access track, rubbish/litter, weed invasion	Rock piles, leaf litter	No Photo Available
HA-24	199366	7413870	Habitat Assessment	09/03/2023	Drainage Area/Floodplain	0.6, Good	Mining exploration	Soft soil (burrows), leaf litter	No Photo Available
AC-01	200286	7413489	Avifauna Census	09/03/2023	Mulga Woodland	0.6, Good	Mining Exploration	Thick undergrowth, leaf litter	

Site ID	MGA Zone 51 K		Sampling method	Date	Habitat	Condition^	Disturbance	Microhabitats	Photo
	Easting (mE)	Northing (mN)							
BD-01	202887	7414312	Echolocation Recording (Bat Detector)	08/03/2023 – 10/03/2023	Minor Drainage Line	0.8, Very good	Cattle grazing, mining exploration	Tree hollows, thick undergrowth, old *Triodia*, leaf litter	
CAM46	203066	7414409	Motion Camera	08/03/2023 – 10/03/2023	Breakaway/Cliff	1, Excellent	Mining exploration	Caves, overhangs, crevices, rock piles, leaf litter	
CAM53	203004	7414227	Motion Camera	08/03/2023 – 10/03/2023	Gorge/Gully	0.8, Very good	Mining exploration	Caves, overhangs, crevices, thick undergrowth, leaf litter	

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Appendix F: Threatened and Priority Flora and Fauna Species Likelihood of Occurrence

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Table F.1: Likelihood of occurrence of significant flora recorded within 50 km of the survey area (Protected Matters Search Tool (Department of Climate Change, Energy, the Environment and Water 2023), Threatened and Priority Flora Database (Department of Biodiversity, Conservation and Attractions 2023a), WA Herbarium Flora Database (Department of Biodiversity, Conservation and Attractions 2023b), NatureMap (Department of Biodiversity, Conservation and Attractions 2023c) and BHP WAIO Significant Flora Database Custom Search (BHP WAIO 2023)).

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Priority 1							
Acacia corusca	Rounded shrub or small tree to 1.5 to 5 m high. Flowering April to August (Bull et al. 2019).	Perennial	Red-brown sandy loam soils on hill crest, ridges and minor drainage lines and low undulating stony hills. Rarely grows on hill summits.	4.5	WAHerb BHP NatureMap	Likely	Unlikely
Eremophila capricornica	Short domed shrub 0.5-0.75 m high. Predominantly flowers between June and August but may flower in response to rainfall (Buirchell and Brown 2016).	Perennial	Grows in sandy clay loams in open mulga shrubland with an understory of *Triodia* spp. and other grasses (Buirchell and Brown 2016).	5.7	TPFL WAHerb BHP Data NatureMap	Likely	Unlikely
Eremophila pilosa	Small dense shrub 0.5 m to 0.9 m high, with broad, grey, felty leaves. Flowers purple in June – July and September (Buirchell and Brown 2016).	Perennial	Found between Jigalong and Roy Hill, growing in loamy soil with *Eremophila cuneifolia, Senna* and *Acacia* species and native grasses (Buirchell and Brown 2016).	44.6	TPFL WAHerb NatureMap	Unlikely	Unlikely
Hibiscus campanulatus	Woody shrub 1.8-3 m high. Flowering from February to November.	Perennial	Within incised ironstone gullies, protected areas below cliffs, rocky creeklines and below breakaways, often with underlying loamy to skeletal ironstone soils.	Not supplied	NatureMap	Unlikely	Unlikely
Priority 2							

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Euphorbia inappendiculata var. *inappendiculata*	Spreading procumbent herb, to 0.1 m high. Flowers May and August (Halford, D.A. and Harris W.K, 2012).	Short-lived Perennial	Cracking clay (gilgai) flats and depressions. Heavy clay soils on open plains or gentle slopes (Halford, D.A. and Harris W.K, 2012).	4.1	WAHerb NatureMap BHP	Likely	Potential
Goodenia hartiana	Erect to spreading, multi-stemmed perennial, herb or shrub. Flowers in September.	Perennial	Sand dune swales, sandhills. Acacia shrubland over hummock grass. Growing with *Senna* on red-brown stony clay loam.	5.8	TPFL WAHerb NatureMap	Likely	Unlikely
Ipomoea racemigera	Pilose creeping herb or climber. Ovate leaves, glabrous upper surface. Flowers white, March to August.	Annual	Flats with brown silty loam soil, major drainage. Creek lines. Sandy soils along watercourses.	8.7	WAHerb NatureMap	Likely	Unlikely
Priority 3							
Amaranthus centralis	Erect herb to 0.6 m high. Stems angular and sometimes reddish. Flowers green, throughout the year Palmer 2009).	Annual	Grows in red sand in ephemeral watercourses, sandy to clayey loam on river banks and edges of permanent pools in eucalypt lined channels, or *Acacia* shrubland. It also occurs in areas of permanent watering e.g. bore overflows, gardens and cultivation (Palmer 2009).	27.9	TPFL WAHerb	Unlikely	Unlikely
Aristida jerichoensis var. *subspinulifera*	A compactly tufted grass-like or herb with lemma groove muricate. 0.3 m to 0.8 m high. Leaf blade wire-like.	Perennial	Hardpan plains, cracking clay, floodplain with red brown clay loam.	0.3	TPFL WAHerb BHP	Likely	Potential

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Crotalaria smithiana	Herb to 0.4 m high. Flowers yellow, June.	Annual	Floodplains and banks of small creeks, orange brown loams.	19.6	WAHerb	Potential	Unlikely
Eremophila magnifica subsp. *velutina*	Aromatic shrub to 1.3 m high. Velutinous. Flowers blue/purple, June to September.	Perennial	Skeletal soils on the slopes and summits of ironstone hills in the Hamersley Range area.	43.3	WAHerb	Unlikely	Unlikely
Eremophila naaykensii	Erect shrub, 1 - 3.5 m high. Flowers June to October.	Perennial	High in the landscape, cliff tops, gorge tops, steep rocky slopes, gullies and rock faces associated with large hills and cliffs. Skeletal red-brown soils.	28.0	WAHerb	Unlikely	Unlikely
Eremophila rigida	Erect, very rigid shrubs to 1.2 m high with rigid to leathery ovate leaves. Flowers cream, June to September.	Perennial	Red sand alluvium, hardpan plains, stony clay depressions with *Acacia* and *Eremophila* spp.	35.2	WAHerb	Unlikely	Unlikely
Goodenia sp. East Pilbara (A.A. Mitchell PRP 727)	Small rosetted herb (with spathulate leaves), to 0.2 m high. Flowers yellow, March to September.	Annual or short-lived perennial	Red-brown clay soil, calcrete pebbles. Low undulating plain, swampy plains, stony plains, hill slopes.	23.5	WAHerb	Unlikely	Unlikely
Gymnanthera cunninghamii	An erect woody shrub, 1 – 2 m high. Leaves somewhat leathery, lanceolate to elliptic. Exudes a milky latex when injured. Flowers cream-yellow-green, January to December.	Perennial	Red/brown/white sand in and adjacent to drainage lines, riverine brown loam-clay, ironstone scree slopes adjacent to drainage lines, floodplains with sandy soil, foot of low limestone ridge adjacent to mudflats, beach sand.	20.2	TPFL WAHerb	Potential	Unlikely

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Indigofera gilesii	Shrub to 1.5 m high. Leaflets green with white margin. Flowers purple-pink, June to October.	Perennial	Open shrub mallee dominated by *Eucalyptus gamophylla*, usually high in the landscape on skeletal soils overlaying massive ironstones of the Brockman Iron Formation.	43.3	WAHerb	Unlikely	Unlikely
Isotropis parviflora	Shrub, 0.1 m high. Flowers white/pink, March.	Perennial	Valley slope of ironstone plateau. Hillslopes. Associated with mallee on slopes or hard spinifex on ironstone.	5.2	TPFL WAHerb NatureMap BHP	Likely	Unlikely
Rhagodia sp. Hamersley (M. Trudgen 17794)	Shrub, 2.5 m high, leaves small lanceolate, not aromatic. Flowers yellow, from May. Fruit small red drupelets.	Perennial	Mulga plains. Alluvial plains. Red brown clay to loamy clay. Occasionally on slopes.	5.7	TPFL WAHerb NatureMap BHP	Likely	Unlikely
Streptoglossa sp. Cracking clays (S. van Leeuwen et al. PBS 7353)	Multi-stemmed erect herb to. Flowers pink to dark pink, June and September.	Annual	Cracking clays. Colluvial and alluvial gravels in fan or floodplain.	43.3	WAHerb	Unlikely	Unlikely
Swainsona thompsoniana	Prostrate herb to 0.1 m. Flowers Mauve/cream/yellow, August to September.	Annual	Open flood plains on heavy clay soils. From gibber plains, crabhole plains and gilgai, usually at some elevation and in association with tussock grasses.	35.0	WAHerb	Unlikely	Unlikely
Themeda sp. Hamersley Station (M.E. Trudgen 12739)	Tussocky grass, 0.9-1.8 m high. Flowers late in the season after rains, August.	Perennial	Drainage lines, clay flats, crabhole flats and dark, self-mulching clays.	24.4	WAHerb	Unlikely	Unlikely

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Triodia sp. Mt Ella (M.E. Trudgen 12739)	Hummock grass to 0.5 m high. Foliage copiously resinous, leaf sheath surface glabrous. Flowers February.	Perennial	Light orange-brown, pebbly loam. Amongst rocks and outcrops, gully slopes. Ephemeral creek banks, flow lines, skeletal soil over massive ironstone.	0	WAHerb NatureMap BHP	Previously recorded	Recorded – current survey
Vittadinia sp. Coondewanna Flats (S. van Leeuwen 4684)	Erect-branched herb or subshrub to 1 m high. Flowers cream, July.	Annual/ Short-lived perennial	Major drainage/floodplain in valley between ranges. Flat plain, clays, cracking clay, gilgai, low in landscape, red sandy clay loam with some stone. Dark reddish brown sandy loam.	4.8	TPFL WAHerb NatureMap BHP	Likely	Unlikely
Priority 4							
Eremophila magnifica subsp. *magnifica*	Aromatic shrub to 1.3 m high. Glabrous. Flowers blue/purple, June to September.	Perennial	Skeletal soils on the slopes and summits of ironstone hills in the Hamersley Range area.	36.7	WAHerb	Unlikely	Unlikely
Eremophila youngii subsp. *lepidota*	Erect, much branched shrub to 4 m high. Flowers purple/red, January to September.	Perennial	Mulga woodlands/shrublands often associated with Chenopodiaceous shrubs. Drainage lines subject to periodic flooding, floodplains or on the margins of clay depressions, on red-brown soils or occasionally on stony flats.	18.5	WAHerb	Potential	Unlikely
Goodenia berringbinensis	Erect herb to 30 cm high. Flowers yellow with purplish auricles; October (Barker 1984).	Annual	Red sandy loam and along watercourses. Moist clay depression.	7.2	NatureMap BHP	Likely	Unlikely

Species	Habit and flowering information[1]	Life form[1]	Habitat[1]	Distance of nearest record (km)[2]	Source	Likelihood of occurrence	
						Pre-survey	Post-survey
Lepidium catapycnon	An open, woody herb or shrub with zigzag stems. It grows 0.20 to 0.30 m in height. Flowers white, October.	Perennial	A pioneer ephemeral, occurring on skeletal soils in open woodland in usually hilly areas, more frequent on south facing slopes. Also found on road-verges and cuttings.	41.0	TPFL	Unlikely	Unlikely

[1] – Information sourced from Florabase (Western Australian Herbarium 1998-2023), unless otherwise stated.

[2] – A distance of zero (0) indicates that the species has been previously recorded within the survey area. Distances sourced from TPFL (Department of Biodiversity, Conservation and Attractions 2023a), WAHerb (Department of Biodiversity, Conservation and Attractions 2023b) and BHP WAIO Significant Flora Custom Database Search (BHP WAIO 2023).

Table F.2: Likelihood of occurrence of conservation listed vertebrate fauna species listed as potentially occurring in the vicinity of the survey area.

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Reptiles						
Ctenotus uber johnstonei			P2	This subspecies is only known from chenopod shrubland at the base of a sandstone hill, near Balgoo. One record from 2018, ~6.2 km from the survey area (Department of Biodiversity, Conservation and Attractions 2023d).	High	Low
Gilled slender blue-tongue (*Cyclodomorphus branchialis*)		VU		Semi-arid shrublands on heavy red soils from Irwin River to Murchison River and inland to Yalgoo. The survey area is outside of the known distribution for this species. One record from 1995 and after taxonomic review is now likely to represent *Cyclodomorphu melanops*, which is not listed as significant.	Low	Low
Lerista macropisthopus remota			P2	Acacia shrublands and woodlands in the central interior. Shelters in loose soil under leaf litter at the base of shrubs. Records from NatureMap within 50 km of the survey area.	Moderate	Moderate
Great desert skink (*Liopholis kintorei*)	VU	VU		Red sandplains and sand ridges. Prefers a mosaic landscape of different aged vegetation and inhabit sites that have been burnt (3-15 years). Sparsely distributed across arid sand flats and clay-based or loamy soils vegetated with spinifex. Two records from 34 km from the survey area from 2010 (Department of Biodiversity, Conservation and Attractions 2023d).	Moderate	Low
Anilios ganei			P1	Little information is available on this species, but it is believed to be associated with moist gorges and gullies. Nearest record is 3.9 km to the north-west of the survey area (BHP 2023c).	High	High
Pilbara olive python (*Liasis olivaceus barroni*)	VU	VU		Generally rocky habitats in close association to permanent and semi-permanent water sources. Nearest record is 5.5 km to the north-west of the survey area (BHP 2023c).	High	Moderate

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Birds						
Garganey (*Spatula querquedula*)	MI	MI		Highly migratory, breeding widely across Western Eurasia and wintering within the northern tropics. In the breeding season this species frequents small, shallow ponds and lakes with abundant floating, emergent and fringing vegetation. One record from 2013, 4.9 km south of the survey area (BHP 2023c).	High	Low
Glossy ibis (*Plegadis falcinellus*)	MI	MI		Wetland habitats such as freshwater marshes at the edges of lakes, rivers and wet swamp areas. This species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes and coastal lagoons. Seven records from 2001 – 2013 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Red goshawk (*Erythrotriorchis radiatus*)	VU	VU		The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia. Riparian vegetation also provided significant nesting and foraging opportunities. No suitable habitat is present within the survey area.	Low	Low
Greater sand plover (*Charadrius leschenaultii*)	VU/MI	VU/MI		Mainly sandy beaches and tidal mud, reef and sand flats. Vagrant to Australia.	Low	Low
Oriental plover (*Charadrius veredus*)	MI	MI		Breeding habitat includes arid grasslands, saltpans; non-breeding habitat includes grasslands, salt-fields, and coastal regions. No suitable habitat is present within the survey area.	Low	Low
Australian painted snipe (*Rostratula australis*)	EN	EN		Inhabits shallow terrestrial freshwater wetlands, lakes, swamps and claypans. Also found in waterlogged grassland and saltmarsh. Typical sites include areas with emergent tussocks of grass, sedges or samphire; often scattered with clumps of lignum *Muehlenbeckia*, or canegrass or sometimes with tea-tree (*Melaleuca*). No suitable habitat is present within the survey area.	Low	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Common sandpiper (*Actitis hypoleucos*)	MI	MI		Non-breeding migrant to a wide variety of habitats, such as riverbanks, estuaries, freshwater seeps on coastal shores, tidal creeks, mangrove swamps and saltmarshes. Eleven records from 1999 – 2013 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Sharp-tailed sandpiper (*Calidris acuminata*)	MI	MI		Muddy edges of shallow fresh/brackish wetlands with emergent sedges, saltmarsh, grass and low vegetation. Two records from 2001 and 2009 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Curlew sandpiper (*Calidris ferruginea*)	CR/MI	CR/MI		This species mainly occurs on intertidal mudflats in sheltered coastal areas and also around non-tidal swamps, lakes and lagoons near the coast. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. One record from 2005 was identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Pectoral sandpiper (*Calidris melanotos*)	MI	MI		Mainly swamps, lagoons, river pools, irrigation channels and sewerage ponds. Also in samphire flats around estuaries and salt lakes. No suitable habitat is present within the survey area.	Low	Low
Red-necked stint (*Calidris ruficollis*)	MI	MI		The edge of sheltered waters including estuaries, beaches, near-coastal salt lakes, swamps, lakes, sewerage ponds and bore overflows. Two records from 2005 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Long-toed stint (*Calidris subminuta*)	MI	MI		Generally found in coastal environments such as coastal margins, lagoons, beaches and tidal flats. One record from 2001 was identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Wood sandpiper (*Tringa glareola*)	MI	MI		Generally open areas such as the margins of inland freshwater lakes and reservoirs. This species rarely occurs in coastal habitats, but may be found along the creeks of saltmarshes and mangrove swamps. One record from 2007 was identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Common greenshank (*Tringa nebularia*)	MI	MI		A variety of freshwater, marine and artificial wetlands, including swamps, open muddy or rocky shores of lakes and large rivers, sewage farms, saltworks, muddy coastal flats, mangroves and estuaries. Three records from 2007 – 2016 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Marsh sandpiper (*Tringa stagnatilis*)	MI	MI		Found at the margins of inland freshwater and brackish wetlands such as rice paddy-fields, swamps, salt-pans, salt-marshes, sewage works and marshy lake-edges, and although it is rare on open coastlines it can occasionally be found on estuaries, lagoons and intertidal mudflats. One record from 2005 was identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Common redshank (*Tringa tetanus*)	MI	MI		Found at sheltered coastal wetlands such as bays, river estuaries, lagoons, inlets and saltmarsh (with bare open flats and banks of mud or sand). They are also found around saltlakes, freshwater lagoons, artificial wetlands and saltworks and sewage farms. No suitable habitat is present within the survey area.	Low	Low
Gull-billed tern (*Gelochelidon nilotica*)	MI	MI		Shallow sheltered seas close to land, estuaries, tidal creeks, near-coastal salt lakes, samphire flats, swamps, lagoons, river pools, claypans, dams and over grain crops. Four records from 1999 – 2008 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Caspian tern (*Hydroprogne caspia*)	MI	MI		Mainly sheltered seas, estuaries and tidal creeks. Three records from 2004 – 2008 were identified within 20 km from the survey area on DBCA's Threatened and Priority database search.	High	Low
Fork-tailed swift (*Apus pacificus*)	MI	MI		Largely aerial species independent of the terrestrial environment. Two recent (2015) fauna records from under 5 km from the survey area.	High	High
Grey falcon (*Falco hypoleucos*)	VU	VU		Open habitats: semi-deserts, grassy inland plains, timbered watercourses, pastoral lands. This species has a broad range throughout Australia and suitable foraging habitat present in the survey. The EPBC Act protected matters report assessed that this species or species habitat is likely to occur within the survey area.	Moderate	High
Peregrine falcon (*Falco peregrinus*)		OS		Cosmopolitan, will hunt in any habitat, soaring at height or from a perch;,often near cliffs. Nests on rocky ledges in tall, vertical cliff faces and tall trees associated with drainage lines. Nine records within 40 km from the survey area and suitable foraging habitat is present within the survey area (Department of Biodiversity, Conservation and Attractions 2023d, BHP 2023c).	High	High
Night parrot (*Pezoporus occidentalis*)	EN	CR		Most habitat records are from *Triodia* grasslands and/or chenopod shrublands in the arid and semi-arid zones. *Astrebla* spp. (Mitchell grass), shrubby samphire and chenopod associations, scattered trees and shrubs, *Acacia aneura* (Mulga) woodland, treeless areas and bare gibber as associated with sightings of the species. No suitable habitat is present within the survey area. Although the survey area overlaps an area where species habitat may be present according to the Protected Matters Search Tool, no suitable habitat is present within the survey area.	Low	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Princess parrot (*Polytelis alexandrae*)	VU		P4	Inhabits sand dunes and sand flats in the arid zone. Occurs in savanna woodlands and shrublands that usually consist of scattered stands of *Eucalyptus* spp., *Casuarina/Allocasuarina* trees, an understorey of shrubs and a ground cover dominated by *Triodia* spp. No suitable habitat is present within the survey area.	Low	Low
Southern whiteface (*Aphelocephala leucopsis castaneiventris)*	VU			Inhabits a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by Acacias or Eucalypts on ranges, foothills and lowlands, and plains. Survey area is within the modelled 'may occur' distribution of the PMST and a record from BHP Vertebrate Observations dataset is within 8 km from 2020.	High	High
Barn swallow (*Hirundo rustica*)	MI	MI		Coastal open country generally, especially near surface water and man-made structures such as bridges and power wires. No suitable habitat is present within the survey area.	Low	Low
Yellow wagtail (*Motacilla tschutschensis*)	MI	MI		Mainly banks and rocks in fast-running freshwater habitats such as rivers, creeks, streams and around waterfalls. No suitable habitat is present within the survey area.	Low	Low
Grey wagtail (*Motacilla cinerea*)	MI	MI		Damp short-grass flats, rice stubbles and edge of swamps, sewage ponds, bore overflows, grazed or mowed grass and irrigated areas. No suitable habitat is present within the survey area.	Low	Low
Mammals						
Long-tailed dunnart (*Sminthopsis longicaudata*)			P4	Found in rocky scree and plateau areas, generally with little vegetation or in areas of spinifex hummock grassland, shrubs and open woodland. Four fauna records (both recent and historic) were detailed on the DBCA threatened and priority fauna database search results, with the nearest record 37 km from the survey area.	Low	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Brush-tailed mulgara, ampurta (*Dasycercus blythi*)			P4	Common in a range of habitats – tussock / hummock grasslands and sparse shrubs and low open woodlands on ridge tops, cliffs, scree slopes, hills and valley floors. 81 fauna records (both recent and historic) within 50 km of the survey area, with records 5 km the survey area coming from previous fauna surveys (Department of Biodiversity, Conservation and Attractions 2023d, BHP 2023c).	High	High
Northern quoll (*Dasyurus hallucatus*)	EN	EN		Northern Quoll habitat generally encompasses some form of rocky area for denning purposes with surrounding vegetated habitats used for foraging and dispersal. Potential critical and supporting habitats occur within the survey area, but it is highly unlikely to support an important population. One scat record from 2021 was identified 2.4 km from the survey area.	High	Moderate
Bilby, dalgyte (*Macrotis lagotis*)	VU	VU		Sand or sandy-loam in hummock grassland (*Triodia* species) and or *Acacia* shrublands. Three records from 1979, 1980 and 2018. The more recent record is 28 km from the survey area.	Moderate	Low
Spectacled hare-wallaby (mainland) (*Lagorchestes conspicillatus leichardti*)			P4	Tussock or hummock grassland with mid-dense/ sparse tree and shrub cover. Scattered records exist of this species from the Kimberley and Pilbara regions of Western Australia. Drastic decline in numbers in the Pilbara mean that it is rare in the Pilbara region. One record 16 km south-east of the survey area (Department of Biodiversity, Conservation and Attractions 2023d).	Low	Low
Black-footed rock-wallaby (*Petrogale lateralis lateralis*)	EN	EN		Occurs in cliffs, rock-piles, talus or escarpment refuge and other steep substrates with grassland feeding habitat nearby. Also occurs on limestone outcrops, coastal cliffs and granite outcrops. Drastic decline in numbers in the Pilbara mean that it is rare in the Pilbara region. Four records 23 km from the survey area from 1975.	Low	Low

Common name (Scientific name)	Conservation codes			Preferred habitat	Likelihood of occurrence	
	EPBC Act	BC Act	DBCA		Pre-survey	Post survey
Western pebble-mound mouse (*Pseudomys chapmani*)			P4	Gentle rocky slopes, hills and spurs with small pebble surface cover and sparse vegetation. One record within the survey area and an additional 186 records within 50 km of the survey area (Department of Biodiversity, Conservation and Attractions 2023d, BHP 2023c).	**Recorded**	High
Pilbara leaf-nosed bat (*Rhinonicteris aurantia* (Pilbara form))	VU	VU		Roosts in deep warm, humid caves or rock cracks, especially in proximity to water pools. Forages while flying low along watercourses and gorges and over Triodia grassland. 153 fauna records (both recent and historic) were detailed on the DBCA threatened and priority fauna database search results, with the nearest record 34 km from the survey area.	Moderate	Moderate
Ghost bat (*Macroderma gigas*)	VU	VU		A wide range from rainforest, monsoon and vine scrub in the tropics to open woodlands and arid areas. 25 fauna records (both recent and historic) within 50 km of the survey area, with records 2.8km the survey area coming from previous fauna surveys (Department of Biodiversity, Conservation and Attractions 2023d, BHP 2023c).	High	High

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Appendix G: Significant Flora and Introduced Flora Locations

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

*Bidens bipinnata
*Cenchrus ciliaris

*Bidens bipinnata
*Cenchrus ciliaris

*Cenchrus ciliaris
*Aerva javanica

Triodia sp. Mt Ella
(M.E. Trudgen 12739) P3

*Cenchrus ciliaris

*Cenchrus ciliaris

Triodia sp. Mt Ella
(M.E. Trudgen 12739) P3

*Bidens bipinnata

Survey Area

Significant Flora Species

Triodia sp. Mt Ella (M.E. Trudgen 12739) P3 (this survey)

Triodia sp. Mt Ella (M.E. Trudgen 12739) P3 (Onshore 2014d)

Introduced Flora Species

**Aerva javanica*

**Bidens bipinnata*

**Cenchrus ciliaris*

**Vachellia farnesiana*

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure G.1: Significant flora and introduced flora (weeds) recorded within the survey area

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

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Author: N. Cadd | Drawn: C. Dyde | Date: 23-05-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230523_FigG1_Flora

Table G.1: Significant flora locations.

Species name	Cover (%)	Abundance	Easting (mE)	Northing (mN)
Triodia sp. Mt Ella (M.E. Trudgen 12739)	1	100	203176	7413696
Triodia sp. Mt Ella (M.E. Trudgen 12739)	1	50	203181	7413715
Triodia sp. Mt Ella (M.E. Trudgen 12739)	2	100	202926	7413888
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5	200	203074	7413996
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5	200	203111	7414009
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5	200	203110	7414014
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5	200	203130	7414018
Triodia sp. Mt Ella (M.E. Trudgen 12739)	25	150	202997	7414062
Triodia sp. Mt Ella (M.E. Trudgen 12739)	1	50	203145	7414075
Triodia sp. Mt Ella (M.E. Trudgen 12739)	10	100	202963	7414096
Triodia sp. Mt Ella (M.E. Trudgen 12739)	1	100	202997	7414112
Triodia sp. Mt Ella (M.E. Trudgen 12739)	10	500	202932	7414163
Triodia sp. Mt Ella (M.E. Trudgen 12739)	6	150	202964	7414205
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5	200	203007	7414222
Triodia sp. Mt Ella (M.E. Trudgen 12739)	10	100	202987	7414262
Triodia sp. Mt Ella (M.E. Trudgen 12739)	10	500	202982	7414188
Hibiscus aff. *campanulatus ?P1*	0.1	6	202943	7413765
Hibiscus aff. *campanulatus ?P1*	0.1	5	202659	7414606
Hibiscus aff. *campanulatus ?P1*	0.5	10	202997	7414062
Hibiscus aff. *campanulatus ?P1*	0.1	12	203177	7413685
Hibiscus aff. *campanulatus ?P1*	0.1	12	203186	7413723
Hibiscus aff. *campanulatus ?P1*	1	45	203099	7414022
Hibiscus aff. *campanulatus ?P1*	1	50	203084	7414016
Hibiscus aff. *campanulatus ?P1*	1	20	203075	7413998
Hibiscus aff. *campanulatus ?P1*	1	40	202938	7413740
Hibiscus aff. *campanulatus ?P1*	1	15	202927	7413698
Hibiscus aff. *campanulatus ?P1*	1	40	202888	7413625
Hibiscus aff. *campanulatus ?P1*	1	2	202856	7413579
Hibiscus aff. *campanulatus ?P1*	0.1	2	203019	7413963
Hibiscus aff. *campanulatus ?P1*	0.1	12	202934	7413917
Hibiscus aff. *campanulatus ?P1*	0.1	50	202929	7413884
Hibiscus aff. *campanulatus ?P1*	0.1	15	202935	7413830
Hibiscus aff. *campanulatus ?P1*	0.1	15	202942	7413800
Hibiscus aff. *campanulatus ?P1*	0.1	15	202946	7413784
Hibiscus aff. *campanulatus ?P1*	0.1	7	203134	7413572
Hibiscus aff. *campanulatus ?P1*	0.1	7	203143	7413615

Species name	Cover (%)	Abundance	Easting (mE)	Northing (mN)
Hibiscus aff. *campanulatus ?P1*	0.1	7	203137	7413624
Hibiscus aff. *campanulatus ?P1*	1	30	202948	7414221

Table G.2: Introduced flora locations.

Species name	Cover (%)	Abundance	Easting (mE)	Northing (mN)
**Aerva javanica*	0.5	20	201911	7414037
**Bidens bipinnata*	1.0	500	199431	7413929
**Bidens bipinnata*	0.1	200	202997	7414062
**Bidens bipinnata*	1.0	300	199323	7414436
**Cenchrus ciliaris*	30.0	500	201638	7413563
**Cenchrus ciliaris*	5.0	100	201887	7413761
**Cenchrus ciliaris*	1.0	50	199431	7413929
**Cenchrus ciliaris*	0.5	20	201885	7414045
**Cenchrus ciliaris*	0.5	20	199899	7414037
**Cenchrus ciliaris*	10.0	200	202973	7414277
**Cenchrus ciliaris*	0.1	50	201859	7414424
**Cenchrus ciliaris*	4.0	200	199323	7414436
**Cenchrus ciliaris*	0.1	1	202659	7414606
**Cenchrus ciliaris*	2.0	300	199399	7414712
**Cenchrus ciliaris*	2.0	50	199381	7415066
**Vachellia farnesiana*	0.1	2	199366	7413870

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/threatened-plants

TAXON: *Triodia* sp. Mt Ella (M.E. Trudgen 12739) **TPFL Pop. No:**

OBSERVATION DATE: 08/03/2023 **CONSERVATION STATUS:** P3 **New population** ☐

OBSERVER/S: Lucy Dadour, Jean Dorrington **PHONE** 9421 9600

ROLE: Botanists **ORGANISATION:** Astron Environmental Services

EMAIL:

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

31 km east of Newman

Reserve No:

DBCA DISTRICT: Pilbara **LGA:** Shire of East Pilbara Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached spreadsheet
Long / Easting:
ZONE:

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: ____ Map used: _____
Boundary polygon captured: ☐ Map scale: _____

LAND TENURE:

Nature reserve ☐	Timber reserve ☐	Private property ☐	Rail reserve ☐	Shire road reserve ☐
National park ☐	State forest ☐	Pastoral lease ☒	MRWA road reserve ☐	Other Crown reserve ☐
Conservation park ☐	Water reserve ☐	UCL ☒	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT: Edge survey ☐ Partial survey ☐ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☐ Extrapolation ☐ Estimate ☒ Count method: _____
(Refer to field manual for list)

WHAT COUNTED: Plants ☒ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	2900			
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. ___ Size _____ Data attached ☒ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☐ Flower ☒
Immature fruit ☐ Fruit ☐ Dehisced fruit ☒ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• Weeds	L	L	M
• Introduced Fauna	L	L	M
• Mining	L	H	M

Please return completed form to **Species And Communities Program** DBCA,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

HABITAT INFORMATION:

LANDFORM:
Crest ☒
Hill ☒
Ridge ☐
Outcrop ☐
Slope ☒
Flat ☐
Open depression ☐
Drainage line ☐
Closed depression ☐
Wetland ☐

ROCK TYPE:
Granite ☐
Dolerite ☐
Laterite ☐
Ironstone ☒
Limestone ☐
Quartz ☐
Specify other:
BIF

LOOSE ROCK:
(on soil surface; eg gravel, quartz fields)
0-10% ☐
10-30% ☐
30-50% ☐
50-100% ☐

SOIL TYPE:
Sand ☐
Sandy loam ☐
Loam ☐
Clay loam ☐
Light clay ☐
Peat ☐
Specify other:
Sandy clay loam

SOIL COLOUR:
Red ☒
Brown ☒
Yellow ☐
White ☐
Grey ☐
Black ☐
Specify other:

DRAINAGE:
Well drained ☐
Seasonally inundated ☐
Permanently inundated ☐
Tidal ☐

Specific **Landform** Element: Gorge, Gully
(Refer to field manual for additional values)

CONDITION OF SOIL: Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐

VEGETATION CLASSIFICATION*:
Eg: **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) ; **3**. Isolated clumps of sedges (M.tetragona)

1. See data attached
2.
3.
4.

ASSOCIATED SPECIES:

Other (non-dominant) spp

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☒ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☒ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☒ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

FLORA AUTHORISATION / LICENCE No: FB62000216-4, FB62000206-4 Note if only observing plants (i.e. no specimens or plant matieral is taken) then no authorisation/licence is required. For further information on authorisation and licening requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under authorisations/licences should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: _____ WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other: _____

LODGEMENT: WA Herb Lodgement No: _____

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☒ Field notes ☒ Other: _____

COPY SENT TO: Regional Office ☐ District Office ☐ Other: _____

Submitter of Record: Sarah Hayler Role: Environmental Scientist Signed: SH Date: 19/04/2023

Please return completed form to **Species And Communities Program** DBCA,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

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Appendix H: Fauna Species Lists

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Table H.1: Amphibian species list – results of database searches, literature reviews and Astron survey results.

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Pelodryadidae												
Cyclorana maini	Sheep frog					x			x	x	x	
Cyclorana occidentalis	Western water-holding frog					x			x		x	
Litoria rubella	Little red tree frog					x			x			
Limnodynastidae												
Neobatrachus kunapalari	Kunapalari frog					x				x		
Notaden nichollsi	Desert spadefoot					x			x			
Platyplectrum spenceri	Centralian burrowing frog					x			x	x		
Myobatrachidae												
Pseudophryne douglasi	Gorge toadlet					x				x		
Uperoleia russelli	Northwest toadlet					x				x		
Uperoleia saxatilis	Pilbara toadlet					x			x	x		

Table H.2: Reptile species list – results of database searches, literature reviews and Astron survey results.

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Chelidae												
Chelodina steindachneri	Flat-shelled turtle					x			x			
Carphodactylidae												
Nephrurus wheeleri	Southern banded knob-tailed gecko					x				x		
Diplodactylidae												
Diplodactylus bilybara	Western fat-tailed gecko								x			
Diplodactylus conspicillatus	Variable fat-tailed gecko					x			x	x	x	
Diplodactylus laevis	Desert fat-tailed gecko								x			
Diplodactylus mitchelli						x			x			
Diplodactylus pulcher						x			x			
Diplodactylus savagei	Southern Pilbara beak-faced gecko					x			x	x	x	
Lucasium stenodactylus						x			x		x	
Lucasium wombeyi						x			x	x	x	
Oedura fimbria	Western marbled velvet gecko					x					x	
Rhynchoedura ornata	Western beaked gecko					x			x		x	
Strophurus elderi						x			x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Strophurus jeanae						x			x	x	x	
Strophurus wellingtonae						x			x	x	x	
Gekkonidae												
Christinus marmoratus	Marbled gecko								x			
Gehyra crypta	Western cryptic gehyra								x			
Gehyra fenestrula	Hamersley Range spotted gehyra								x			
Gehyra micra	Small Pilbara spotted rock gehyra								x			
Gehyra montium									x	x		
Gehyra pilbara						x			x		x	
Gehyra punctata						x			x	x	x	
Gehyra purpurascens									x			
Gehyra variegata						x			x		x	
Heteronotia binoei	Bynoe's gecko					x			x		x	
Heteronotia planiceps						x			x			
Heteronotia spelea	Pilbara cave gecko					x			x		x	
Pygopodidae												
Delma butleri						x			x	x	x	
Delma desmosa						x						
Delma elegans						x			x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Delma nasuta						x			x	x	x	
Delma pax						x			x	x	x	
Delma tincta						x					x	
Lialis burtonis						x			x	x		
Pygopus nigriceps						x			x	x		
Agamidae												
Ctenophorus caudicinctus	Western ring-tailed dragon					x			x		x	x
Ctenophorus isolepis citrinus	Yellowy military dragon					x						
Ctenophorus isolepis gularis	Central military dragon					x						
Ctenophorus isolepis isolepis	Central military dragon					x			x		x	x
Ctenophorus maculatus badius						x						
Ctenophorus nuchalis	Central netted dragon					x			x	x	x	
Ctenophorus reticulatus	Western netted dragon					x			x	x	x	
Diporiphora amphiboluroides	Mulga dragon					x			x	x		
Diporiphora valens	Southern Pilbara tree dragon					x					x	
Gowidon longirostris	Long-nosed dragon					x			x		x	x

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Lophognathus gilberti	Gilbert's dragon								x			
Moloch horridus	Thorny devil					x			x	x		
Pogona minor minor	Western bearded dragon					x			x		x	
Tympanocryptis diabolicus	Hamersley pebble-mimic dragon								x			
Scincidae												
Carlia munda						x			x			
Carlia triacantha						x			x	x	x	
Cryptoblepharus buchananii						x				x	x	
Cryptoblepharus plagiocephalus											x	
Cryptoblepharus ustulatus						x			x			
Ctenotus ariadnae						x			x	x	x	
Ctenotus duricola	Eastern Pilbara lined ctenotus					x			x	x	x	
Ctenotus grandis grandis						x			x		x	
Ctenotus helenae						x			x	x	x	
Ctenotus inornatus									x	x		
Ctenotus leonhardii						x			x		x	
Ctenotus pallasotus	Western Pilbara lined ctenotus								x			

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Ctenotus pantherinus						x			x		x	
Ctenotus quattuordecimlineatus						x			x		x	
Ctenotus rubicundus						x			x	x		
Ctenotus rutilans						x			x	x	x	
Ctenotus saxatilis	Rock ctenotus					x				x	x	x
Ctenotus schomburgkii						x				x	x	
Ctenotus serventyi										x		
Ctenotus uber johnstonei					P2			x			x	
Ctenotus uber uber						x			x	x	x	
Cyclodomorphus branchialis				VU							x	
Cyclodomorphus melanops elongatus										x		
Cyclodomorphus melanops melanops						x			x		x	
Egernia cygnitos	Western Pilbara spiny-tailed skink					x			x	x		
Egernia depressa	Southern pygmy spiny-tailed skink					x			x			
Egernia formosa						x			x	x		
Eremiascincus richardsonii	Broad-banded sand swimmer					x			x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Lerista bipes						x			x	x		
Lerista chalybura						x			x	x	x	
Lerista flammicauda						x					x	
Lerista jacksoni											x	
Lerista macropisthopus remota					P2	x						
Lerista muelleri						x			x	x	x	
Lerista neander						x			x		x	
Lerista timida						x			x		x	
Liopholis kintorei	Great desert skink		VU	VU			x	x				
Liopholis striata	Night skink					x						
Menetia greyii						x			x	x	x	
Menetia surda surda						x			x			
Morethia ruficauda exquisita						x			x	x	x	
Notoscincus ornatus ornatus						x			x			
Tiliqua multifasciata	Central bluetongue					x			x	x	x	
Varanidae												
Varanus acanthurus	Spiny-tailed goanna					x			x	x	x	
Varanus brevicauda	Short-tailed pygmy goanna					x			x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Varanus bushi	Pilbara mulga goanna					x			x			
Varanus caudolineatus						x			x	x	x	
Varanus eremius	Pygmy desert goanna					x			x	x	x	
Varanus giganteus	Perentie					x				x	x	
Varanus gouldii	Bungarra or sand goanna					x			x	x	x	
Varanus hamersleyensis	Southern Pilbara rock goanna								x	x		
Varanus panoptes rubidus						x			x	x	x	
Varanus pilbarensis	Northern Pilbara rock goanna					x			x	x	x	
Varanus tristis	Racehorse goanna					x			x		x	
Typhlopidae												
Anilios ammodytes						x				x	x	
Anilios ganei					P1	x		x	x		x	
Anilios grypus						x			x	x	x	
Anilios hamatus						x			x			
Anilios pilbarensis						x						
Anilios waitii										x		
Pythonidae												
Antaresia childreni	Children's python					x			x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Antaresia perthensis	Pygmy python					x			x	x	x	
Aspidites melanocephalus	Black-headed python					x			x	x		
Liasis olivaceus barroni	Pilbara Olive python		VU	VU		x	x	x	x		x	
Elapidae												
Acanthophis wellsi	Pilbara death adder					x			x			
Brachyurophis approximans						x			x	x	x	
Demansia psammophis cupreiceps						x			x		x	
Demansia rufescens	Rufous whipsnake					x			x	x	x	
Furina ornata	Moon snake					x			x	x		
Pseudechis australis	Mulga snake					x			x	x		
Pseudonaja mengdeni	Western brown snake					x			x	x	x	
Pseudonaja modesta	Ringed brown snake					x			x			
Pseudonaja nuchalis	Gwardar, northern brown snake					x						
Suta fasciata	Rosen's snake					x			x	x	x	
Suta gaikorstorum									x			
Suta monachus						x						
Suta punctata	Spotted Snake					x			x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Vermicella snelli						x			x		x	

Table H.3: Bird species list – results of database searches, literature reviews and Astron survey results.

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Dromaiidae													
Dromaius novaehollandiae	Emu					x			x	x	x	x	
Anseranatidae													
Anseranas semipalmata	Magpie goose					x			x	x			
Anatidae													
Anas gracilis	Grey teal					x			x	x	x		
Spatula querquedula	Garganey	V	MI	MI								x	
Spatula rhynchotis	Australasian shoveler					x			x	x			
Anas superciliosa	Pacific black duck					x			x	x	x		
Aythya australis	Hardhead					x			x	x	x		
Biziura lobata	Musk duck					x			x	x			
Chenonetta jubata	Australian wood duck					x			x	x	x		
Cygnus atratus	Black swan					x			x	x	x		
Dendrocygna arcuata	Wandering whistling duck					x			x	x	x	x	
Dendrocygna eytoni	Plumed whistling duck					x			x	x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Malacorhynchus membranaceus	Pink-eared duck					x			x	x	x		
Stictonetta naevosa	Freckled duck					x			x	x	x		
Tadorna tadornoides	Australian shelduck					x			x	x	x		
Phasianidae													
Coturnix pectoralis	Stubble quail					x				x		x	
Synoicus ypsilophorus	Brown quail					x			x	x			x
Podicipedidae													
Podiceps cristatus	Great crested grebe					x			x	x	x		
Poliocephalus poliocephalus	Hoary-headed grebe					x			x	x	x		
Tachybaptus novaehollandiae	Australasian grebe (black-throated grebe)					x			x	x	x		
Ciconiidae													
Ephippiorhynchus asiaticus	Black-necked stork					x			x	x			
Threskiornithidae													
Platalea regia	Royal spoonbill					x			x	x	x		
Platalea flavipes	Yellow-billed spoonbill					x			x	x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Plegadis falcinellus	Glossy ibis		MI	MI		x		x	x	x			
Threskiornis moluccus	Australian white ibis					x			x	x			
Threskiornis spinicollis	Straw-necked ibis					x			x	x	x		
Ardeidae													
Bubulcus coromandus	Cattle egret					x	x		x	x			
Ardea intermedia	Intermediate egret					x			x	x			
Ardea alba	Eastern great egret					x			x	x			
Ardea pacifica	White-necked heron					x			x	x	x		
Egretta garzetta	Little egret					x			x	x	x		
Egretta novaehollandiae	White-faced heron					x			x	x			
Nycticorax caledonicus	Nankeen night-heron					x			x	x			
Pelecanidae													
Pelecanus conspicillatus	Australian pelican					x			x	x	x		
Phalacrocoracidae													
Microcarbo melanoleucos	Little pied cormorant					x			x	x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Phalacrocorax carbo	Great cormorant					x			x	x	x		
Phalacrocorax sulcirostris	Little black cormorant					x			x	x	x		
Phalacrocorax varius	Pied cormorant (Australian pied cormorant)					x			x	x			
Anhingidae													
Anhinga novaehollandiae	Australasian darter					x			x	x			
Accipitridae													
Accipiter cirrocephalus	Collared sparrowhawk					x			x	x	x		x
Accipiter fasciatus	Brown goshawk					x			x	x	x	x	
Aquila audax	Wedge-tailed eagle					x			x	x	x	x	x
Circus approximans	Swamp harrier					x			x	x			
Circus assimilis	Spotted harrier					x			x	x	x	x	x
Elanus axillaris	Australian black-shouldered kite					x			x	x		x	
Erythrotriorchis radiatus	Red goshawk		VU	VU			x						
Haliaeetus leucogaster	White-bellied sea-eagle					x			x	x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Haliastur sphenurus	Whistling kite					x			x	x	x	x	x
Hamirostra melanosternon	Black-breasted buzzard					x			x	x	x	x	
Hieraaetus morphnoides	Little eagle					x			x	x			
Lophoictinia isura	Square-tailed kite					x			x	x			
Milvus migrans	Black kite					x			x	x	x	x	
Otididae													
Ardeotis australis	Australian bustard					x			x	x	x	x	x
Rallidae													
Fulica atra	Eurasian coot					x			x	x	x		
Gallinula tenebrosa	Dusky moorhen									x			
Hypotaenidia philippensis	Buff-banded rail					x			x				
Porphyrio melanotus	Purple swamphen					x			x	x	x		
Porzana fluminea	Australian spotted crake									x			
Zapornia pusilla	Baillon's crake					x			x	x			
Zapornia tabuensis	Spotless crake					x			x	x	x		
Tribonyx ventralis	Black-tailed native-hen					x			x	x			

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Turnicidae													
Turnix velox	Little button-quail					x			x	x	x	x	
Burhinidae													
Burhinus grallarius	Bush stone-curlew					x			x	x	x	x	
Recurvirostridae													
Cladorhynchus leucocephalus	Banded stilt					x			x	x			
Himantopus himantopus	Black-winged stilt					x				x	x		
Himantopus himantopus leucocephalus									x				
Recurvirostra novaehollandiae	Red-necked avocet					x			x	x			
Charadriidae													
Charadrius leschenaultii	Greater sand plover		VU & MI	VU & MI						x			
Charadrius ruficapillus	Red-capped plover					x			x	x			
Charadrius veredus	Oriental plover		MI	MI			x	x		x			
Elseyornis melanops	Black-fronted dotterel					x			x	x			
Erythrogonys cinctus	Red-kneed dotterel								x	x	x		

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Vanellus tricolor	Banded lapwing					x							
Vanellus miles	Masked lapwing									x			
Rostratulidae													
Rostratula australis	Australian painted snipe		EN	EN			x						
Scolopacidae													
Actitis hypoleucos	Common sandpiper		MI	MI		x	x	x	x	x		x	
Calidris acuminata	Sharp-tailed sandpiper		MI	MI		x	x	x	x	x			
Calidris ferruginea	Curlew sandpiper		CR & MI	CR & MI		x	x	x	x	x			
Calidris melanotos	Pectoral sandpiper		MI	MI		x	x	x		x			
Calidris ruficollis	Red-necked stint			MI		x		x	x	x			
Calidris subminuta	Long-toed stint		MI	MI		x		x	x	x			
Tringa glareola	Wood sandpiper		MI	MI		x		x	x	x			
Tringa nebularia	Common greenshank		MI	MI		x		x	x	x			
Tringa stagnatilis	Marsh sandpiper		MI	MI		x		x	x	x			
Tringa totanus	Common redshank		MI	MI		x		x					
Glareolidae													

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Stiltia isabella	Australian pratincole					x			x	x	x		
Laridae													
Chlidonias hybrida	Whiskered tern								x	x	x		
Chroicocephalus novaehollandiae	Silver gull					x			x	x	x		
Chroicocephalus novaehollandiae novaehollandiae						x							
Gelochelidon nilotica	Gull-billed tern		MI	MI		x		x		x			
Gelochelidon macrotarsa	Australian gull-billed tern								x				
Hydroprogne caspia	Caspian tern		MI	MI		x		x	x	x			
Columbidae													
Geopelia cuneata	Diamond dove					x			x	x	x	x	x
Geopelia humeralis	Bar-shouldered dove					x			x	x			
Geopelia striata placida	Peaceful dove					x			x	x		x	
Geophaps plumifera	Spinifex pigeon					x			x	x		x	x
Ocyphaps lophotes	Crested pigeon					x			x	x	x	x	x

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Phaps chalcoptera	Common bronzewing					x			x	x	x	x	
Cuculidae													
Cacomantis flabelliformis	Fan-tailed cuckoo											x	
Heteroscenes pallidus	Pallid cuckoo					x			x	x	x	x	
Chalcites basalis	Horsfield's bronze cuckoo					x			x	x	x	x	
Chalcites osculans	Black-eared cuckoo					x	x		x	x	x	x	
Centropus phasianinus	Pheasant coucal					x			x	x			
Tytonidae													
Tyto javanica	Eastern barn owl					x			x	x			
Strigidae													
Ninox connivens	Barking owl					x				x			
Ninox boobook	Southern boobook					x			x	x		x	
Podargidae													
Podargus strigoides	Tawny frogmouth					x			x	x		x	
Caprimulgidae													

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Eurostopodus argus	Spotted nightjar					x			x	x	x	x	
Aegothelidae													
Aegotheles cristatus	Australian owlet-nightjar					x			x	x	x	x	x
Apodidae													
Apus pacificus	Fork-tailed swift (pacific swift)		MI	MI			x					x	
Coraciidae													
Eurystomus orientalis	Dollarbird									x			
Alcedinidae													
Dacelo leachii	Blue-winged kookaburra					x			x	x			
Todiramphus pyrrhopygius	Red-backed kingfisher					x			x	x	x	x	
Todiramphus sanctus	Sacred kingfisher					x			x	x	x	x	
Meropidae													
Merops ornatus	Rainbow bee-eater					x	x		x	x	x	x	x
Falconidae													
Falco berigora	Brown falcon					x			x	x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Falco cenchroides	Australian kestrel (nankeen kestrel)					x			x	x	x	x	x
Falco hypoleucos	Grey falcon			VU			x			x			
Falco longipennis	Australian hobby					x			x	x			
Falco peregrinus	Peregrine falcon			OS		x		x	x	x		x	
Cacatuidae													
Cacatua sanguinea	Little corella					x			x	x	x	x	x
Calyptorhynchus banksii	Red-tailed black cockatoo									x			
Eolophus roseicapilla	Galah					x			x	x	x	x	x
Nymphicus hollandicus	Cockatiel					x			x	x	x	x	
Psittacidae													
Barnardius zonarius zonarius	Australian ringneck					x			x	x	x	x	x
Melopsittacus undulatus	Budgerigar					x			x	x	x	x	
Neopsephotus bourkii	Bourke's parrot					x			x	x	x		
Pezoporus occidentalis	Night parrot		EN	CR			x						
Polytelis alexandrae	Princess parrot		VU		P4		x			x			

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Psephotus varius	Mulga parrot									x			
Ptilonorhynchidae													
Chlamydera guttatus	Western bowerbird					x			x	x		x	x
Chlamydera maculata	Spotted bowerbird					x					x		
Climacteridae													
Climacteris melanurus	Black-tailed treecreeper					x			x	x			
Maluridae													
Amytornis whitei whitei	Rufous grass wren					x			x	x	x	x	
Malurus assimilis	Purple-backed fairy-wren					x			x	x		x	x
Malurus leucopterus	White-winged fairy-wren					x			x	x	x	x	
Malurus splendens	Splendid fairy-wren					x			x	x	x		
Stipiturus ruficeps	Rufous-crowned emu-wren					x			x	x	x		
Meliphagidae													
Acanthagenys rufogularis	Spiny-cheeked honeyeater					x			x	x	x	x	x
Certhionyx variegatus	Pied honeyeater					x			x	x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Epthianura aurifrons	Orange chat					x				x			
Epthianura tricolor	Crimson chat					x			x	x	x	x	x
Gavicalis virescens	Singing honeyeater					x			x	x	x	x	x
Lacustroica whitei	Grey honeyeater					x			x	x			
Lichmera indistincta	Brown honeyeater					x			x	x	x	x	
Manorina flavigula	Yellow-throated miner					x			x	x	x	x	x
Melithreptus gularis	Black-chinned honeyeater					x			x	x			
Ptilotula keartlandi	Grey-headed honeyeater					x			x	x	x	x	x
Ptilotula penicillata	White-plumed honeyeater					x			x	x	x	x	
Ptilotula plumula	Grey-fronted honeyeater									x			
Purnella albifrons	White-fronted honeyeater					x			x	x		x	
Stomiopera unicolor	White-gaped honeyeater								x				
Sugomel niger	Black honeyeater					x			x	x		x	
Pardalotidae													

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Pardalotus rubricatus	Red-browed pardalote					x			x	x	x	x	
Pardalotus striatus	Striated pardalote					x			x	x	x		
Acanthizidae													
Acanthiza apicalis	Broad-tailed thornbill (inland thornbill)					x			x	x	x	x	
Acanthiza chrysorrhoa	Yellow-rumped thornbill					x			x	x	x	x	
Acanthiza robustirostris	Slaty-backed thornbill					x			x	x	x		
Acanthiza uropygialis	Chestnut-rumped thornbill					x			x	x	x		
Aphelocephala leucopsis	Southern whiteface		VU			x				x	x		
Aphelocephala nigricincta	Banded whiteface					x				x			
Calamanthus campestris	Rufous fieldwren												x
Gerygone fusca	Western gerygone					x			x	x	x	x	
Pyrrholaemus brunneus	Redthroat					x			x	x			
Smicrornis brevirostris	Weebill					x			x	x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Pomatostomidae													
Pomatostomus superciliosus	White-browed babbler					x			x	x	x	x	
Pomatostomus temporalis	Grey-crowned babbler					x			x	x	x	x	
Psophodidae													
Cinclosoma clarum	Western chestnut quail-thrush (copperback quail-thrush)										x		
Cinclosoma marginatum	Western quail-thrush					x			x	x			
Psophodes occidentalis	Western wedgebill (chiming wedgebill)					x			x	x			
Artamidae													
Artamus cinereus	Black-faced woodswallow					x			x	x	x	x	
Artamus cyanopterus	Dusky woodswallow					x			x	x			
Artamus minor	Little woodswallow					x			x	x	x	x	
Artamus personatus	Masked woodswallow					x			x	x	x		x

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Artamus superciliosus	White-browed woodswallow					x			x	x	x		
Cracticus nigrogularis	Pied butcherbird					x			x	x	x	x	x
Cracticus torquatus	Grey butcherbird					x			x	x	x	x	
Gymnorhina tibicen	Australian magpie					x			x	x	x	x	
Campephagidae													
Coracina maxima	Ground cuckoo-shrike					x			x	x	x		
Coracina novaehollandiae	Black-faced cuckoo-shrike					x			x	x	x	x	
Lalage leucomela	Varied triller										x		
Lalage tricolor	White-winged triller					x			x	x	x	x	x
Neosittidae													
Daphoenositta chrysoptera	Varied sittella					x				x			
Oreoidae													
Oreoica gutturalis	Crested bellbird					x			x	x	x	x	x
Pachycephalidae													
Colluricincla harmonica	Grey shrike-thrush					x			x	x	x	x	

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Pachycephala rufiventris	Rufous whistler					x			x	x	x	x	
Rhipiduridae													
Rhipidura albiscapa	Grey fantail					x			x	x			
Rhipidura leucophrys	Willie wagtail					x			x	x	x	x	x
Monarchidae													
Grallina cyanoleuca	Magpie-lark					x			x	x	x	x	x
Corvidae													
Corvus bennetti	Little crow					x			x	x	x		
Corvus orru	Torresian crow					x			x	x	x	x	
Petroicidae													
Melanodryas cucullata	Hooded robin					x			x	x	x	x	x
Petroica goodenovii	Red-capped robin					x			x	x	x		
Alaudidae													
Mirafra javanica	Horsfield's bushlark					x			x	x	x		
Hirundinidae													
Cheramoeca leucosterna	White-backed swallow					x			x	x			

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Hirundo neoxena	Welcome swallow					x			x	x			
Hirundo rustica	Barn swallow		MI	MI			x						
Petrochelidon ariel	Fairy martin					x			x	x		x	
Petrochelidon nigricans	Tree martin					x			x	x			
Acrocephalidae													
Acrocephalus australis	Australian reed warbler					x			x	x	x		
Locustellidae													
Cincloramphus cruralis	Brown songlark					x			x	x		x	
Cincloramphus mathewsi	Rufous songlark					x			x	x		x	x
Poodytes carteri	Spinifexbird					x			x	x	x	x	
Poodytes gramineus	Little grassbird					x			x	x			
Nectariniidae													
Dicaeum hirundinaceum	Mistletoebird					x			x	x	x	x	
Estrildidae													
Emblema pictum	Painted finch					x			x	x	x	x	x
Neochmia ruficauda	Star finch					x			x	x			

Scientific Name	Common Name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	Birdata	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Prioirty Fauna List								
Taeniopygia castanotis	Zebra finch					x			x	x	x	x	x
Motacillidae													
Motacilla tschutschensis	Yellow wagtail		MI	MI			x						
Motacilla cinerea	Grey wagtail		MI	MI			x						
Anthus australis	Australian pipit					x			x	x	x	x	x

Table H.4: Mammal species list – results of database searches, literature reviews and Astron survey results.

Scientific Name	Common name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Tachyglossidae												
Tachyglossus aculeatus acanthion	Short-beaked echidna					x						
Dasyuridae												
Antechinomys longicaudata	Long-tailed dunnart				P4			x	x			
Dasycercus blythi	Brush-tailed mulgara, ampurta				P4	x		x			x	
Dasykaluta rosamondae	Kaluta					x			x	x	x	
Dasyurus hallucatus	Northern quoll		EN	EN			x				x	
Ningaui timealeyi	Pilbara ningaui					x			x	x	x	
Planigale maculata	Common planigale										x	
Planigale species 1'	Pilbara planigale					x					x	
Pseudantechinus macdonnellensis	Fat-tailed pseudantechinus					x			x		x	
Pseudantechinus woolleyae	Woolley's pseudantechinus					x			x	x		
Sminthopsis crassicaudata	Fat-tailed dunnart					x				x		
Sminthopsis dolichura	Little long-tailed dunnart					x						
Sminthopsis macroura	Stripe-faced dunnart								x	x		
Sminthopsis ooldea	Ooldea dunnart					x			x	x		
Sminthopsis youngsoni	Lesser hairy-footed dunnart					x			x	x	x	

Scientific Name	Common name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Thylacomyidae												
Macrotis lagotis	Greater bilby, dalgyte		VU	VU		x	x	x				
Macropodidae												
Lagorchestes conspicillatus leichardti	Spectacled hare-wallaby (mainland)				P4	x		x	x			
Osphranter robustus erubescens	Euro, biggada					x			x		x	
Osphranter rufus	Red kangaroo, marlu					x			x		x	
Petrogale lateralis lateralis	Black-footed rock-wallaby		EN	EN		x		x	x			
Petrogale rothschildi	Rothschild's rock-wallaby					x			x	x	x	
Muridae												
Mus musculus	House mouse	*				x			x	x	x	
Notomys alexis alexis	Spinifex hopping-mouse					x			x	x	x	
Pseudomys chapmani	Western pebble-mound mouse				P4	x		x	x		x	
Pseudomys desertor	Desert mouse					x			x	x	x	
Pseudomys hermannsburgensis	Sandy inland mouse					x			x	x	x	
Zyzomys argurus	Common rock-rat					x			x	x	x	
Leporidae												
Oryctolagus cuniculus	Rabbit	*				x			x	x		x

Scientific Name	Common name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Rhinonycteridae												
Rhinonicteris aurantia (Pilbara form)	Pilbara leaf-nosed bat		VU	VU		x	x	x				
Megadermatidae												
Macroderma gigas	Ghost bat		VU	VU		x	x	x	x		x	
Emballonuridae												
Saccolaimus flaviventris	Yellow-bellied sheath-tailed bat					x				x	x	
Taphozous georgianus	Common sheath-tailed bat					x			x	x	x	
Taphozous hilli	Hill's sheath-tailed bat					x			x	x		
Molossidae												
Austronomus australis	White-striped free-tailed bat					x					x	
Chaerephon jobensis	Northern free-tailed bat					x			x		x	
Ozimops lumsdenae	Northern free-tailed bat								x		x	
Setirostris eleryi	Bristle-faced free-tailed bat								x			
Vespertilionidae												
Chalinolobus gouldii	Gould's wattled bat					x			x	x	x	x
Nyctophilus daedalus	Northwestern long-eared bat									x		

Scientific Name	Common name	Introduced	Conservation Codes			NatureMap	EPBC PMST	DBCA T and P	ALA	Dandjoo	Previous Surveys	Current Survey
			EPBC Act	BC Act	DBCA Priority Fauna List							
Nyctophilus geoffroyi geoffroyi	Lesser long-eared bat					x				x	x	
Scotorepens balstoni	Inland broad-nosed bat					x				x		
Scotorepens greyii	Little broad-nosed bat					x			x	x	x	x
Vespadelus finlaysoni	Finlayson's cave bat					x			x	x	x	x
Canidae												
Canis familiaris	Dog/Dingo	*				x			x		x	
Vulpes vulpes	Red fox	*									x	
Felidae												
Felis catus	Cat	*				x				x	x	
Equidae												
Equus asinus	Donkey	*				x				x		
Equus caballus	Horse	*								x		
Suidae												
Sus scrofa	Pig	*							x			
Camelidae												
Camelus dromedarius	Dromedary, camel	*				x			x	x	x	
Bovidae												
Bos taurus	European cattle	*				x			x	x	x	x

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Appendix I: Broad Floristic Formation and Vegetation Association Mapping

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MGR17 MGR22 MGR20 MGR18 MGR15 MGR16 MGR13 MGR14 MGMJ03 MGMJ04 MGR08 MGMJ02 MGR11 MGR10 MGML02 MGR12 MGMJ01 MGR09 MGR07

MGMJ13 MGMJ12 MGMJ11 MGMJ10 MGML03 MGR23 MGR24 MGR01 MGMJ06 MGR26 MGMJ07 MGR21 MGMJ08

MGR06 MGR05 MGR04 MGR02 MGR19 MGR03 MGML01

Survey Area

Survey Site

Mapping Note

Relevé

Broad Floristic Formation

Acacia Low Woodland

Acacia Open Shrubland

Acacia Shrubland

Eragrostis Tussock Grassland

Eulalia Tussock Grassland

Themeda Open Tussock Grassland

Triodia Hummock Grassland

Triodia Open Hummock Grassland

Previously Disturbed

Cleared

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure I.1: Broad floristic formations mapped within the survey area

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

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Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigI1_BFF

199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Survey Site

Mapping Note

Relevé

Vegetation Association

1a 1b 2a 2b 3a 3b 4a 4b 4c 4d 4e 4f 4g 5a 5b 5c 5d 5e 6a 7a 8a 9a Cleared

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure I.2: Vegetation associations mapped within the survey area

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigI2_Veg

Acacia Low Woodland

1a FP AaAprAci RheAa CcChfArin

Low Woodland of *Acacia aptaneura, Acacia pruinocarpa* and *Acacia catenulata* subsp. *occidentalis* over Open Shrubland of *Eremophila forrestii* subsp. *forrestii, Dodonaea petiolaris* and *Sida ectogama* over Open Tussock Grassland of *Aristida contorta, Digitaria ammophila* and *Aristida inaequiglumis* on red orange clay loam on floodplains.

1b FP ApAaApr AsyErffPto CcAriArc

Low Woodland of *Acacia paraneura, Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Acacia synchronicia, Eremophila forrestii* subsp. *forrestii* and *Ptilotus obovatus* over Open Tussock Grassland of **Cenchrus ciliaris, Aristida inaequiglumis* and *Aristida contorta* on red brown loam on floodplains.

Acacia Shrubland

2a ME EvAci AmApyp

Low Open Woodland of *Eucalyptus victrix* and *Acacia citrinoviridis* over High Open Shrubland of *Acacia monticola* and *Acacia pyrifolia* var. *pyrifolia* on brown loamy sand on medium drainage lines.

2b MI AmoAanPl ChEl TtAin

Shrubland of *Acacia monticola, Acacia ancistrocarpa* and *Petalostylis labicheoides* with Scattered Low Trees of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over Open Tussock Grassland of *Themeda triandra* and *Aristida inaequilatera* on red loamy sand on minor drainage lines.

Acacia Open Shrubland

3a HS AteAprSegg TbrTp

Scattered Shrubs of *Acacia tetragonophylla, Acacia pruinocarpa* and *Senna glutinosa* subsp. *glutinosa* x *stricta* over Scattered Tussock Grasses of *Triodia brizoides* and *Triodia pungens* on stony hillslopes.

3b SP AaAp ArcAri TbTp

High Open Shrubland of *Acacia aptaneura* and *Acacia paraneura* over Scattered Tussock Grasses of *Aristida contorta* and *Aristida inaequiglumis* and Scattered Hummock Grasses of *Triodia basedowii* and *Triodia pungens* on red clay loam on flats and stony plains

Triodia Hummock Grassland

4a HS TbrTw AiAprHc EfrEpl

Hummock Grassland of *Triodia brizoides* and *Triodia wiseana* with High Open Shrubland of *Acacia inaequilatera, Acacia pruinocarpa* and *Hakea chordophylla* over Open Shrubland of *Eremophila fraseri* and *Eremophila platycalyx* subsp. *pardalota* on red loamy sand on lower hill slopes and footslopes.

4b HS TbrTw El AbPoSgg

Hummock Grassland of *Triodia brizoides* and *Triodia wiseana* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* over Scattered Low Shrubs of *Acacia bivenosa, Ptilotus obovatus* and *Senna glutinosa* subsp. *glutinosa* on brown silty loam on scree slopes.

4c HS TsTwTp EllCh AhiAaa

Hummock Grassland of *Triodia vanleeuwenii*, *Triodia wiseana* and *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over Low Open Shrubland of *Acacia hilliana* and *Acacia adoxa* var. *adoxa* on red brown sandy loam on hill slopes.

4d SP TbTp HlAanAi Ch

Hummock Grassland of *Triodia basedowii* and *Triodia pungens* with High Open Shrubland of *Hakea lorea* subsp. *lorea, Acacia ancistrocarpa* and *Acacia inaequilatera* and Scattered Low Trees of *Corymbia hamersleyana* on red brown loamy sand on stony plains.

4e SP TpTb Eg PlAbAan

Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Open Mallee of *Eucalyptus gamophylla* and Shrubland of *Petalostylis labicheoides*, *Acacia bivenosa* and *Acacia ancistrocarpa* on red brown loamy sand on stony plains and footslopes.

4f SP TpTwTs ErfrSegpSeao

Hummock Grassland of *Triodia pungens, Triodia wiseana* and *Triodia* sp. Shovelanna Hill with Open Shrubland of *Eremophila fraseri, Senna glutinosa* subsp. *pruinosa* and *Senna artemisioides* subsp. *oligophylla* on red brown loamy sand on stony plains and hill slopes.

4g SA Tbr AMAancGrw

Hummock Grassland of *Triodia brizoides* with Open Shrubland of *Acacia monticola*, *Acacia ancistrocarpa* and *Grevillea wickhamii* on sandy plains.

BHP Western Australia Iron Ore
Mesa Gap Corridors – Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Legend: Vegetation Unit Mapping

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Author: J. Dorrington | Drawn: C. Dyde | Date: 21/04/2023 | Figure Ref: 2400-010-23-BIDR-1RevA_230421

Triodia Open Hummock Grassland

5a	GG Tp CfFibAcao DopAh	Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia ferriticola, Ficus brachypoda* and *Acacia catenulata* subsp. *occidentalis* over High Open Shrubland of *Dodonaea pachyneura* and *Acacia hamersleyensis* on red sandy clay loam in gullies and on breakaways.
5b	HS Tbr Hc Efrs	Very Open Hummock Grassland of *Triodia brizoides* with Scattered Tall Shrubs of *Hakea chordophylla* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* on stony hillslopes.
5c	HS Tp AaApr ErfrAmarSegl	Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Eremophila fraseri, Acacia marramamba* and *Senna glutinosa* subsp. x *luerssenii* on red brown loam on hills.
5d	HS TpTb EllAaAcao SesSeglErcu	Open Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia, Acacia aptaneura* and *Acacia catenulata* subsp. occidentalis over Open Shrubland of *Senna stricta, Senna glutinosa* subsp. x *luerssenii* and *Eremophila cuneifolia* on orange sandy loam on hill slopes.
5e	SP Tl AancApa ApAprCh	Open Hummock Grassland of *Triodia lanigera* with Open Shrubland of *Acacia ancistrocarpa* and *Acacia pachyacra* and Scattered Low Trees of *Acacia paraneura*, *Acacia pruinocarpa* and *Corymbia hamersleyana* on red sandy loam on stony plains.

Eragrostis Tussock Grassland

6a	GP ExeEbCf AsyAteVf NdTc	Tussock Grassland of *Eragrostis xerophila, Eriachne benthamii* and *Chrysopogon fallax* with Open Shrubland of *Acacia synchronicia*, *Acacia tetragonophylla* and **Vachellia farnesiana* over Very Open Herbs of *Neptunia dimorphantha* and *Tephrosia clementii* on red light clay on gilgai plains.

Eulalia Tussock Grassland

7a	MI EuaPamuAri Aanc ColpHisc	Tussock Grassland of *Eulalia aurea, Paraneurachne muelleri* and *Aristida inaequiglumis* with High Shrubland of *Acacia ancistrocarpa* over Low Scattered Shrubs of *Corchorus lasiocarpus* subsp. *parvus* and *Hibiscus sturtii* var. *platychlamys* in a minor drainage line.

Themeda Open Tussock Grassland

8a	ME TtAinCa ChEl AmoPlAlu	Open Tussock Grassland of *Themeda triandra, Aristida inaequiglumis* and *Cymbopogon ambiguus* with Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* over Open Shrubland of *Acacia monticola, Petalostylis labicheoides* and *Androcalva luteiflora* on red brown alluvium on minor and medium drainage lines.

Previously disturbed

9a	Previously disturbed	Previously disturbed vegetation currently regenerating naturally but not yet representative of the surrounding undisturbed vegetation.

Cleared

BHP Western Australia Iron Ore
Mesa Gap Corridors – Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Legend: Vegetation Unit Mapping

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Author: J. Dorrington | Drawn: C. Dyde | Date: 21/04/2023 | Figure Ref: 2400-010-23-BIDR-1RevA_230421

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Appendix J: Flora Sample Site Data

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Site: MGMJ01

Type: Mapping Note

Date: 9 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 199936.0m E 7413806.02m N

Habitat: Drainage Area/ Floodplain

Soil: Brown

Vegetation: Low Woodland of *Acacia paraneura*, *A. aptaneura* and *A. pruinocarpa* over Very Open Tussock Grassland of *Eragrostis eriopoda*, *Aristida inaequiglumis* and *Paraneurachne muelleri* with Open Shrubland of *Acacia synchronicia*, *Eremophila forrestii* subsp. *forrestii* and *Ptilotus obovatus* on drainage areas and floodplains

Mapping Units: 1 Acacia Low Woodland; 1a FP AaAprAci RheAa CcChfArin

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ01

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	5.0	2.8
Acacia paraneura	5.0	3.0
Acacia pruinocarpa	3.0	3.2
Acacia synchronicia	2.0	1.8
Aristida contorta	0.1	0.2
Aristida inaequiglumis	0.5	0.8
Eragrostis eriopoda	4.0	0.7
Eremophila forrestii subsp. *forrestii*	1.0	1.4
Ptilotus obovatus var. *obovatus*	1.0	1.1

Site: MGMJ02

Type: Mapping Note

Date: 9 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 199846.05m E 7414056.49m N

Habitat: Hillcrest/ Upper Hillslope

Soil: Red, sandy clay loam.

Rock Type: BIF, Ironstone, Quartz

Vegetation: Open Shrubland of *Acacia tetragonophylla* with Scattered Tall Shrubs of *A. bivenosa* over Low Scattered Shrubs of *Eremophila forrestii* and *Senna artemisioides* subsp. *oligophylla* over Scattered Hummock Grasses of *Triodia vanleeuwenii* with Scattered Tussock Grasses on upper slopes and hillcrests

Mapping Units: 3 Acacia Open Shrubland; 3a HS AteAprSegg TbrTp

Vegetation Condition: Average

Fire Age: Old (6+ yr)



Mapping Note MGMJ02

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	1.0	2.2
Acacia tetragonophylla	3.0	1.5
Eremophila forrestii subsp. *forrestii*	1.0	0.8
Senna artemisioides subsp. *oligophylla*	1.0	0.7
Senna glutinosa subsp. *glutinosa x stricta*	0.5	1.3
Senna glutinosa subsp. *x luerssenii*	0.5	2.5
Triodia vanleeuwenii	1.0	0.3

Site: MGMJ03

Type: Mapping Note

Date: 9 March 2023

Described by: Jean Dorrington

Waypoint: 51K 199806.0m E 7414097.02m N

Habitat: Hillcrest/ Upper Hillslope

Vegetation: Scattered Hummock Grasses of *Triodia brizoides* and *T. pungens* with Scattered Shrubs of *Acacia pruinocarpa* on upper slopes and hillcrests

Mapping Units: 3 Acacia Open Shrubland; 3a HS AteAprSegg TbrTp

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ03

Species List

Name	Cover (%)	Height (m)
Acacia pruinocarpa	0.5	1.6
Acacia tetragonophylla	0.1	1.2
Eremophila forrestii subsp. *forrestii*	0.1	0.9
Senna glutinosa subsp. *glutinosa x stricta*	0.1	1.5
Triodia brizoides	1.0	0.3
Triodia pungens	0.5	0.4

Site: MGMJ04

Type: Mapping Note

Date: 9 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 199565.00m E 7414064.02m N

Habitat: Drainage Area/ Floodplain

Soil: Brown

Vegetation: Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* over Very Open Tussock Grassland of *Chrysopogon fallax* with Scattered Tall Shrubs of *Acacia pruinocarpa* and *A. aptaneura* on drainage areas and floodplains

Mapping Units: 1 Acacia Low Woodland; 1a FP AaAprAci RheAa CcChfArin

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ04

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.0	2.5
Acacia pruinocarpa	1.0	3.0
Chrysopogon fallax	3.0	1.2
Eucalyptus leucophloia subsp. *leucophloia*	3.0	7.0
Triodia pungens	15.0	0.5

Site: MGMJ06

Type: Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 201911.00m E 7414037.02m N

Habitat: Stony Plain

Soil: Brown/Red, sandy clay loam

Rock Type: BID, Ironstone, Quartz

Vegetation: Very Open Bunch Grassland of *Enneapogon polyphyllus* with Scattered Shrubs of *Acacia ancistrocarpa* and *Eremophila fraseri* subsp. *fraseri* over Scattered Hummock Grasses of *Triodia pungens* on stony plains

Mapping Units: 9a Previously Disturbed

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Relevé MGMJ06

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	0.5	1.8
Aerva javanica	0.5	0.6
Cenchrus ciliaris	0.5	0.6
Enneapogon caerulescens	0.5	0.3
Enneapogon polyphyllus	2.0	0.3
Eremophila fraseri subsp. *fraseri*	1.0	1.3
Grevillea wickhamii	0.1	3.0
Salsola australis	0.5	0.6
Senna glutinosa subsp. *pruinosa*	0.5	1.2
Senna glutinosa subsp. *x luerssenii*	0.5	1.2
Triodia angusta	0.1	0.4
Triodia pungens	0.5	0.4

Site: MGMJ07

Type: Mapping Note

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201886.82m E 7413760.72m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, clay loam

Vegetation: Open Tussock Grassland of *Aristida inaequiglumis*, *Cymbopogon ambiguus* and **Cenchrus ciliaris* with Very Open Hummock Grassland of *Triodia pungens* with High Open Shrubland of *Acacia aptaneura* and *A. ancistrocarpa* over Open Shrubland of *Grevillea wickhamii* on drainage areas and floodplains

Mapping Units: 8 Themeda Open Tussock Grassland; 8a ME TtAinCa ChEl AmoPlAlu

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ07

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	2.0	3.5
Acacia sp. indet (sterile *aptaneura*)	3.0	4.5
Acacia tetragonophylla	0.1	1.7
Aristida inaequiglumis	10.0	1.0
Cenchrus ciliaris	5.0	0.5
Chrysopogon fallax	0.5	0.7
Corchorus elachocarpus	0.5	1.0
Cymbopogon ambiguus	10.0	0.7
Eucalyptus leucophloia subsp. *leucophloia*	0.5	4.5
Grevillea wickhamii	2.0	1.6
Paraneurachne muelleri	2.0	0.3
Triodia pungens	5.0	0.6

Site: MGMJ08

Type: Relevé

Date: 10 March 2023

Described by: Jean Dorrington

Habitat: Stony Plain

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia brizoides* with Scattered Tall Shrubs of *Hakea chordophylla* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* on stony plains

Mapping Units: 5 Triodia Open Hummock Grassland; 5b HS Tbr Hc Efrs

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Relevé MGMJ08

Species List

Name	Cover (%)	Height (m)
Eremophila fraseri subsp. *fraseri*	1.0	1.7
Hakea chordophylla	1.0	3.0
Triodia brizoides	5.0	0.4

Site: MGMJ10

Type: Mapping Note

Date: 10 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 201721.36m E 7414643.19m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Open Hummock Grassland of *Triodia brizoides* (and *T. pungens*) with Scattered Tall Shrubs of *Acacia bivenosa*, *A. pruinocarpa* and *Hakea loreus* subsp. *loreus* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* over Low Scattered Shrubs of *Senna artemisioides* subsp. *oligophylla* over Scattered Bunch Grasses of *Aristida contorta* on low hills and hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4a HS TbrTw AiAprHc EfrEpl

Vegetation Condition: 0.2-Very Poor

Fire Age: Old (6+ yr)



Mapping Note MGMJ10

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	1.0	2.5
Acacia pruinocarpa	0.5	2.7
Aristida contorta	0.5	0.3
Eremophila fraseri subsp. *fraseri*	0.5	1.3
Hakea loreus subsp. *loreus*	0.5	2.8
Senna artemisioides subsp. *oligophylla*	0.5	0.8
Triodia brizoides	12.0	0.4
Triodia pungens	1.0	0.5

Site: MGMJ11

Type: Mapping Note

Date: 10 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 201818.69m E 7414713.6m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Hummock Grassland of *Triodia brizoides* (and *T. pungens*) with Scattered Tall Shrubs of *Acacia bivenosa*, *A. pruinocarpa* and *Hakea loreus* subsp. *loreus* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* over Low Scattered Shrubs of *Senna artemisioides* subsp. *oligophylla* over Scattered Bunch Grasses of *Aristida contorta* on low hills and hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4a HS TbrTw AiAprHc EfrEpl

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ11

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.5	3.0
Acacia inaequilatera	0.1	2.8
Acacia pruinocarpa	1.0	2.7
Aristida contorta	0.5	0.2
Eremophila fraseri subsp. *fraseri*	0.5	1.6
Goodenia sp. indet.	0.1	0.1
Hakea loreus subsp. *loreus*	0.5	2.7
Senna artemisioides subsp. *oligophylla*	1.0	0.6
Triodia brizoides	32.0	0.4
Triodia pungens	2.0	0.6

Site: MGMJ12

Type: Mapping Note

Date: 10 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 201738.00m E 7414743.02m N

Habitat: Hillslope/Hillcrest

Soil: Brown

Vegetation: Open Hummock Grassland to Scattered Hummock Grasses of *Triodia brizoides* with Scattered Tall Shrubs of *Acacia bivenosa* over Low Scattered Shrubs of *Senna artemisioides* subsp. *oligophylla* on upper slopes and hillcrests

Mapping Units: 4 Triodia Hummock Grassland; 4b HS TbrTw El AbPoSgg

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ12

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.5	2.5
Maireana sp. indet.	0.1	0.2
Senna artemisioides subsp. *oligophylla*	0.5	0.5
Triodia brizoides	3.0	0.4

Site: MGMJ13

Type: Mapping Note

Date: 10 March 2023 **Described by:** Jean Dorrington

Waypoint: 51K 201662.00m E 7414777.02m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, clay loam

Vegetation: Open Mallee of *Eucalyptus gamophylla* with Scattered Tall Shrubs of *Acacia aptaneura* over Very Open Hummock Grassland of *Triodia pungens* with Very Open Tussock Grassland in a minor drainage line

Note: this drainage line clipped the edge of the survey area and the vegetation on the edges is not representative of that closer to the drainage channel.

Mapping Units: 5 Triodia Open Hummock Grassland; 5e SP Tl AancApa ApAprCh

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Mapping Note MGMJ13

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.0	2.1
Eucalyptus gamophylla	12.0	3.2
Senna glutinosa subsp. *pruinosa*	0.1	1.2
Triodia pungens	9.0	0.6

Site: MGML01

Type: Mapping Note

Date: 8 March 2023 **Described by:** Lucy Dadour

Waypoint: 51K 202942.96m E 7413764.67m N

Habitat: Gorge/Gully

Vegetation: Open Hummock Grassland of *Triodia pungens* with Low Open Woodland of *Corymbia ferriticola*, *Ficus brachypoda* and *Acacia pruinocarpa* over High Open Shrubland of *A. hamersleyensis* in gorges and gullies

Mapping Units: 5 Triodia Open Hummock Grassland; 5a GG Tp CfFibAcao DopAh

Vegetation Condition: 1-Excellent

Fire Age: Old (6+ yr)



Mapping Note MGML01

Species List

Name	Cover (%)	Height (m)
Acacia hamersleyensis	2.0	3.5
Acacia pruinocarpa	1.0	6.0
Corymbia ferriticola	3.0	6.0
Dodonaea petiolaris	0.1	1.2
Ficus brachypoda	1.0	3.0
Hibiscus aff. *campanulatus*	0.1	2.2
Triodia pungens	12.0	0.6

Site: MGML02

Type: Mapping Note

Date: 9 March 2023 **Described by:** Lucy Dadour

Waypoint: 51K 199702.17m E 7413939.84m N

Habitat: Floodplain

Soil: Brown, sandy clay loam

Vegetation: High Shrubland of *Acacia sibirica* with a Low Woodland of *A. aptaneura* and *A. catenulata* subsp. *occidentalis* over Very Open Hummock Grassland of *Triodia pungens* on drainage areas and floodplains

Mapping Units: 1 Acacia Low Woodland; 1b FP ApAaApr AsyErffPto CcAriArc

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Mapping Note MGML02

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	10.0	2.6
Acacia catenulata subsp. *occidentalis*	5.0	2.5
Acacia paraneura	1.0	3.5
Acacia sibirica	20.0	2.3
Eremophila cuneifolia	1.0	0.6
Triodia pungens	4.0	0.4

Site: MGML03

Type: Mapping Note

Date: 10 March 2023

Described by: Lucy Dadour

Waypoint: 51K 201783.02m E 7414508.97m N

Habitat: Hillslope

Vegetation: *Hakea chordophylla* scattered tall shrubs over *Eremophila fraseri* subsp. *fraseri* scattered shrubs over *Triodia brizoides* very open hummock grassland

Mapping Units: 5 Triodia Open Hummock Grassland; 5b HS Tbr Hc Efrs

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Mapping Note MGML03

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.0	2.5
Acacia tetragonophylla	1.0	1.6
Eremophila fraseri subsp. *fraseri*	0.5	1.3
Hakea chordophylla	0.5	2.7
Triodia brizoides	8.0	0.4

Site: MGR01

Type: Relevé

Date: 7 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201405.41m E 7414078.21m N

Habitat: Minor Drainage Line

Soil: Red brown, clay loam

Vegetation: Tussock Grassland of *Eulalia aurea*, *Paraneurachne muelleri* and *Aristida inaequiglumis* with High Shrubland of *Acacia ancistrocarpa* over Low Scattered Shrubs of *Corchorus lasiocarpus* and *Hibiscus sturtii* var. *platychlamys* in a minor drainage line

Mapping Units: 7 Eulalia Tussock Grassland; 7a MI EuaPamuAri Aanc ColpHisc

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR01

Species List

Name	Cover (%)	Height (m)
Abutilon amplum	0.1	0.3
Acacia ancistrocarpa	12.0	2.6
Acacia trudgeniana	0.1	3.0
Afrohybanthus aurantiacus	0.1	0.4
Aristida inaequiglumis	8.0	0.6
Arivela viscosa	0.1	0.2
Corchorus lasiocarpus	0.5	0.5
Cymbopogon obtectus	1.0	1.2
Digitaria brownii	2.0	0.6
Duperreya commixta	0.1	0.2
Eragrostis eriopoda	0.1	0.5
Eulalia aurea	18.0	0.8
Evolvulus alsinoides var. *decumbens*	0.1	0.3
Gomphrena canescens subsp. *canescens*	0.1	0.4
Hakea loreus subsp. *loreus*	0.5	2.5

Species List continued

Name	Cover (%)	Height (m)
Hibiscus sturtii var. *platychlamys*	0.5	1.0
Isotropis atropurpurea	0.1	0.5
Paraneurachne muelleri	12.0	0.5
Paspalidium rarum	0.1	0.3
Perotis rara	0.1	0.2
Ptilotus astrolasius	0.1	0.2
Ptilotus exaltatus	0.1	0.2
Ptilotus obovatus var. *obovatus*	0.1	0.5
Rhynchosia minima	0.1	0.2
Senna artemisioides subsp. *helmsii*	0.1	0.4
Senna artemisioides subsp. *oligophylla*	0.1	0.5
Senna glutinosa subsp. *x luerssenii*	0.1	1.6
Sida fibulifera	0.1	0.3
Triodia basedowii	0.1	0.3
Triodia pungens	2.0	1.0

Site: MGR02

Type: 50 x 50 m Relevé

Date: 8 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 202907.23m E 7414050.16m N

Habitat: Hillcrest/ Upper Hillslope

Soil: Brown, clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Open Hummock Grassland of *Triodia vanleeuwenii* and *T. pungens* with High Open Shrubland of *Acacia pruinocarpa* and *Hakea chordophylla* over Low Open Shrubland of *A. hilliana* on upper slopes and hillcrests

Mapping Units: 4 Triodia Hummock Grassland; 4c HS TsTwTp EllCh AhiAaa

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR02

Species List

Name	Cover (%)	Height (m)
Acacia hilliana	1.0	0.3
Acacia inaequilatera	0.5	2.3
Acacia pruinocarpa	1.0	2.3
Anthobolus leptomerioides	0.1	1.9
Cymbopogon ambiguus	0.1	0.7
Hakea chordophylla	1.0	2.1
Senna glutinosa subsp. *glutinosa*	0.5	2.2
Solanum lasiophyllum	0.1	0.5
Triodia pungens	5.0	0.5
Triodia vanleeuwenii	20.0	0.2

Site: MGR03

Type: Relevé

Date: 8 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 203175.24m E 7414018.3m N

Habitat: Hillcrest/ Upper Hillslope

Soil: Red, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia vanleeuwenii* with a High Open Shrubland of *Acacia pruinocarpa* and *Hakea loreus* subsp. *loreus* over Low Scattered Shrubs of *Gompholobium oreophilum* and *Halgania gustafsenii* var. *gustafsenii* on upper slopes and hillcrests

Mapping Units: 4 Triodia Hummock Grassland; 4c HS TsTwTp EllCh AhiAaa

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR03

Species List

Name	Cover (%)	Height (m)
Acacia pruinocarpa	2.0	3.0
Gompholobium oreophilum	0.5	0.5
Hakea loreus subsp. *loreus*	3.0	2.1
Halgania gustafsenii var. *gustafsenii*	0.5	0.2
Petalostylis labicheoides	0.1	2.2
Triodia vanleeuwenii	7.0	0.2

Site: MGR04

Type: 50 x 50 m Relevé

Date: 8 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 202743.04m E 7414252.03m N

Habitat: Stony Plain

Soil: Brown, sandy clay loam

Vegetation: Very Open Hummock Grassland of *Triodia vanleeuwenii*, *T. wiseana* and *T. pungens* on a stony plain

Mapping Units: 4 Triodia Hummock Grassland; 4f SP TpTwTs ErfrSegpSeao

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)

Notes: Highly disturbed



Relevé MGR04

Species List

Name	Cover (%)	Height (m)
Amphipogon sericeus	0.1	0.1
Bulbostylis barbata	0.1	0.0
Eremophila fraseri subsp. *fraseri*	0.1	0.5
Ptilotus calostachyus	0.1	0.6
Senna artemisioides subsp. *helmsii*	0.1	1.3
Senna artemisioides subsp. *oligophylla*	0.1	0.9
Senna glutinosa subsp. *glutinosa*	0.1	1.5
Trianthema glossostigmum	0.1	0.0
Tribulus macrocarpus	0.1	0.9
Triodia pungens	0.5	0.6
Triodia vanleeuwenii	5.5	0.2
Triodia wiseana	1.0	0.6

Site: MGR05

Type: 50 x 50 m Relevé

Date: 8 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 202659.2m E 7414606.16m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, clay loam

Rock Type: BIF, Ironstone

Vegetation: High Shrubland of *Acacia monticola* and *A. pyrifolia* var. *pyrifolia* over an Open Tussock Grassland of *Paraneurachne muelleri*, *Eulalia aurea* and *Aristida inaequiglumis* with a Low Open Woodland of *Corymbia hamersleyana* in a minor drainage line and on floodplains

Mapping Units: 2 Acacia Shrubland; 2a ME EvAci AmApyp

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR05

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	0.5	2.5
Acacia bivenosa	0.1	2.1
Acacia monticola	10.0	3.5
Acacia pyrifolia var. *pyrifolia*	3.0	2.1
Afrohybanthus aurantiacus	0.1	0.2
Androcalva luteiflora	0.1	0.1
Aristida inaequiglumis	2.0	0.9
Cenchrus ciliaris	0.1	1.4
Chrysopogon fallax	0.1	0.6
Corchorus elachocarpus	0.1	0.4
Corymbia hamersleyana	4.0	7.0
Cymbopogon ambiguus	0.1	1.2
Duperreya commixta	0.1	1.3
Enneapogon polyphyllus	0.1	0.4

Species List continued

Name	Cover (%)	Height (m)
Eriachne mucronata	0.1	0.2
Eulalia aurea	3.0	0.6
Evolvulus alsinoides var. *decumbens*	0.1	0.2
Gomphrena canescens subsp. *canescens*	0.1	0.2
Gossypium robinsonii	0.5	2.1
Hibiscus aff. *campanulatus*	0.1	1.3
Indigofera monophylla	0.1	0.3
Paraneurachne muelleri	10.0	0.3
Petalostylis labicheoides	0.1	0.4
Rhynchosia minima	0.1	0.0
Santalum lanceolatum	0.1	1.2
Senna artemisioides subsp. *helmsii*	0.1	0.6
Solanum lasiophyllum	0.1	0.2
Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	1.0	0.3
Themeda triandra	1.0	0.9
Triodia pungens	2.0	0.5
Triodia sp. Mt Ella (M.E. Trudgen 12739)	5.0	0.5

Site: MGR06

Type: 50 x 50 m Relevé

Date: 8 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 202897.17m E 7415302.76m N

Habitat: Sand Plain

Soil: Red sand

Rock Type: BIF, Ironstone

Vegetation: Hummock Grassland of *Triodia brizoides* with Scattered Shrubs of *Acacia monticola* on a sandy plain

Mapping Units: 4 Triodia Hummock Grassland; 4g SA Tbr AmAancGrw

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR06

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	0.5	2.5
Acacia monticola	1.0	1.8
Acacia pachyacra	0.1	2.5
Afrohybanthus aurantiacus	0.1	0.5
Bonamia erecta	0.1	0.5
Cassytha capillaris	0.1	0.3
Codonocarpus cotinifolius	0.1	0.1
Dampiera candicans	0.1	0.3
Dicrastylis cordifolia	0.1	0.3
Grevillea wickhamii	0.5	1.7
Hakea loreus subsp. *loreus*	0.5	3.5
Scaevola parvifolia	0.1	0.3
Sida sp. *Pilbara* (A.A. Mitchell PRP 1543)	0.1	1.0
Sida sp. indet.	0.1	0.9
Solanum morrisonii	0.1	0.7

Species List continued

Name	Cover (%)	Height (m)
Triodia sp. indet. (sterile *brizoides*)	35.0	0.5

Site: MGR07

Type: 50 x 50 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 200326.81m E 7413405.4m N

Habitat: Stony Plain

Soil: Red brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Low Open Woodland of *Acacia paraneura* and *A. aptaneura* over Low Scattered Shrubs of *Eremophila forrestii* subsp. *forrestii* and *Tribulus suberosus* on a stony plain

Mapping Units: 1 Acacia Low Woodland; 1b FP ApAaApr AsyErffPto CcAriArc

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR07

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.0	2.5
Acacia paraneura	1.0	2.4
Areocleome oxalidea	0.1	0.0
Eremophila forrestii subsp. *forrestii*	0.5	0.6
Hibiscus sturtii var. *truncatus*	0.1	0.3
Maireana tomentosa	0.1	0.2
Ptilotus calostachyus	0.5	0.3
Ptilotus roei	0.1	0.0
Senna glutinosa subsp. *glutinosa x stricta*	0.1	1.3
Tribulus suberosus	0.5	0.5

Site: MGR08

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199777.46m E 7414033.84m N

Habitat: Hillslope

Soil: Red, sandy clay loam

Rock Type: Ironstone

Vegetation: Open Hummock Grassland of *Triodia pungens* and *T. basedowii* with a Low Woodland of *Acacia catenulata* subsp. *occidentalis* and *A. aptaneura* over an Open Shrubland of *A. tetragonophylla* and *Scaevola acacioides* on a hillslope

Mapping Units: 5 Triodia Open Hummock Grassland; 5d HS TpTb EllAaAcao SesSeglErcu

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR08

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	2.0	3.2
Acacia catenulata subsp. *occidentalis*	9.0	3.4
Acacia tetragonophylla	1.0	1.2
Amyema fitzgeraldii	0.1	0.8
Eremophila cuneifolia	0.1	0.8
Eremophila latrobei subsp. *latrobei*	0.1	1.3
Eriachne mucronata	0.1	0.1
Eucalyptus leucophloia subsp. *leucophloia*	0.1	0.8
Hibiscus coatesii	0.1	0.4
Lepidium pedicellosum	0.1	0.4
Paraneurachne muelleri	0.1	0.2
Ptilotus obovatus var. *obovatus*	0.1	0.3
Scaevola acacioides	1.0	1.2
Senna glutinosa subsp. *pruinosa*	0.5	1.6

Species List continued

Name	Cover (%)	Height (m)
Senna glutinosa subsp. *x luerssenii*	0.1	1.1
Senna stricta	0.1	0.4
Sida sp. *Excedentifolia* (J.L. Egan 1925)	0.1	0.2
Tribulus macrocarpus	0.1	0.6
Triodia basedowii	8.0	0.2
Triodia pungens	8.0	0.3

Site: MGR09

Type: 50 x 50 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199852.49m E 7413574.34m N

Habitat: Stony Plain

Soil: Red, sandy clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Scattered Tall Shrubs of *Acacia aptaneura* over Scattered Shrubs of A. *tetragonophylla* and *Eremophila fraseri* subsp. *fraseri* over Scattered Tussock Grasses of *Aristida inaequiglumis* on a stony plain

Mapping Units: 3 Acacia Open Shrubland; 3b SP AaAp ArcAri TbTp

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Relevé MGR09

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.5	4.5
Acacia marramamba	0.1	2.2
Acacia tenuissima	0.5	1.2
Acacia tetragonophylla	1.5	1.8
Aristida inaequiglumis	0.5	1.2
Arivela viscosa	0.1	0.1
Boerhavia repleta	0.1	0.1
Dactyloctenium radulans	0.1	0.0
Eremophila fraseri subsp. *fraseri*	0.5	1.7
Eulalia aurea	0.1	0.7
Gomphrena canescens subsp. *canescens*	0.1	0.2
Hakea loreus subsp. *loreus*	0.5	1.7
Maireana tomentosa	0.1	0.1
Psydrax latifolia	0.1	1.2

Species List continued		
Name	**Cover (%)**	**Height (m)**
Ptilotus helipteroides	0.1	0.2
Ptilotus obovatus var. *obovatus*	0.1	0.3
Rhagodia eremaea	0.1	1.3
Senna artemisioides subsp. *oligophylla*	0.5	1.0

Site: MGR10

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199431.31m E 7413929.24m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, hard setting, clay loam

Vegetation: Low Woodland of *Acacia aptaneura* over a Very Open Tussock Grassland of *Eulalia aurea* and *Aristida inaequiglumis* with a Low Open Shrubland of *Ptilotus obovatus* and *Abutilon macrum* on a floodplain

Mapping Units: 1 Acacia Low Woodland; 1a FP AaAprAci RheAa CcChfArin

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR10

Species List

Name	Cover (%)	Height (m)
Abutilon macrum	1.0	0.6
Acacia aptaneura	25.0	4.0
Aristida inaequiglumis	3.0	0.5
Arivela viscosa	0.1	0.1
Bidens bipinnata	1.0	0.2
Cenchrus ciliaris	1.0	0.3
Chrysopogon fallax	1.0	0.8
Dichanthium sericeum subsp. *humilius*	0.1	0.1
Digitaria brownii	0.1	0.3
Duperreya commixta	1.0	0.3
Eulalia aurea	5.0	0.5
Evolvulus alsinoides var. *villosicalyx*	1.0	0.1
Goodenia prostrata	0.1	0.1
Ipomoea calobra	0.1	0.1

Species List continued

Name	Cover (%)	Height (m)
Isotropis iophyta	0.1	0.3
Paspalidium clementii	3.0	0.2
Portulaca oleracea	0.1	0.1
Psydrax latifolia	0.1	0.6
Ptilotus obovatus var. *obovatus*	1.0	0.3
Sida sp. L (A.M. Ashby 4202)	0.1	0.1
Vigna sp. Hamersley Clay (A.A. Mitchell PRP 113)	0.1	0.1

Site: MGR11

Type: 25 x 100 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199899.35m E 7414037.07m N

Habitat: Hillslope

Soil: Red, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Open Hummock Grassland of *Triodia pungens* and *T. brizoides* over a Very Open Bunch Grassland of *Aristida contorta* with Scattered Tall Shrubs of *Acacia inaequilatera*, *Grevillea wickhamii* and *Hakea chordophylla* on a low hillslope

Mapping Units: 4 Triodia Hummock Grassland; 4a HS TbrTw AiAprHc EfrEpl

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR11

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.1	2.5
Acacia inaequilatera	1.0	2.5
Acacia tetragonophylla	0.1	0.5
Aristida contorta	4.0	0.2
Cenchrus ciliaris	0.5	0.6
Corchorus lasiocarpus	1.0	0.9
Corchorus lasiocarpus subsp. *lasiocarpus*	0.1	0.3
Cymbopogon ambiguus	0.1	0.9
Enneapogon caerulescens	0.5	0.1
Eremophila fraseri subsp. *fraseri*	2.0	1.8
Grevillea wickhamii	0.5	3.2
Hakea chordophylla	0.5	2.5
Indigofera monophylla	0.1	0.4
Rhynchosia minima	0.1	0.4

Species List continued		
Name	**Cover (%)**	**Height (m)**
Senna artemisioides subsp. *helmsii*	0.1	0.6
Senna artemisioides subsp. *oligophylla*	0.1	1.1
Senna glutinosa subsp. *x luerssenii*	0.1	1.2
Tribulus suberosus	0.5	0.2
Triodia brizoides	7.0	0.6
Triodia pungens	8.0	0.4

Site: MGR12

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199366.09m E 7413869.84m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, crabhole/gilgai, clay loam

Rock Type: Ironstone

Vegetation: Very Open Tussock Grassland of *Eriachne benthamii* and *Aristida latifolia* with an Open Shrubland of *Acacia synchronicia* and *A. tetragonophylla* over Low Scattered Shrubs of *Senna artemisioides* subsp. *oligophylla* on drainage areas and floodplains

Mapping Units: 6 Eragrostis Tussock Grassland; 6a GP ExeEbCf AsyAteVf NdTc

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



***Aristida latifolia* in Relevé MGR12**

Species List

Name	Cover (%)	Height (m)
Acacia synchronicia	1.0	1.2
Acacia tetragonophylla	1.0	1.5
Aeschynomene indica	0.1	0.2
Aristida latifolia	3.0	0.5
Arivela viscosa	0.1	0.2
Cynodon convergens	2.0	0.3
Eriachne benthamii	6.0	0.4
Euphorbia coghlanii	0.1	0.1

Species List continued

Name	Cover (%)	Height (m)
Iseilema eremaeum	0.5	0.1
Neptunia dimorphantha	1.0	0.1
Portulaca oleracea	0.1	0.1
Rhynchosia minima	1.0	0.1
Senna artemisioides subsp. *oligophylla*	1.0	0.6
Sida fibulifera	2.0	0.1
Vachellia farnesiana	0.1	0.3

Site: MGR13

Type: 50 x 50 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199156.7m E 7414408.81m N

Habitat: Hillcrest/ Upper Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia brizoides* and *T. pungens* with a High Open shrubland of *Acacia tetragonophylla* and *A. aptaneura* with an Open Shrubland of *Ptilotus obovatus* var. *obovatus* on hillcrests and hillslopes

Mapping Units: 5 Triodia Open Hummock Grassland; 5c HS Tp AaApr ErfrAmarSegl

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR13

Species List

Name	Cover (%)	Height (m)
Acacia aptaneura	1.0	3.5
Acacia pruinocarpa	0.1	3.5
Acacia tetragonophylla	1.0	2.2
Afrohybanthus aurantiacus	0.1	0.2
Corchorus elachocarpus	0.1	0.8
Cymbopogon ambiguus	0.1	1.1
Duperreya commixta	0.1	2.0
Eriachne mucronata	0.5	0.2
Evolvulus alsinoides var. *villosicalyx*	0.1	0.1
Hibiscus coatesii	0.1	1.1
Ptilotus obovatus var. *obovatus*	1.0	1.2
Santalum lanceolatum	0.5	1.2
Senna glutinosa subsp. *x luerssenii*	0.5	1.5
Sida sp. indet.	0.1	0.3

Species List continued

Name	Cover (%)	Height (m)
Tephrosia sp. Newman (A.A. Mitchell PRP 29)	0.1	0.2
Tribulus suberosus	0.1	0.7
Triodia brizoides	2.0	0.3
Triodia pungens	1.0	0.3

Site: MGR14

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199323.01m E 7414436.39m N

Habitat: Drainage Area/ Floodplain

Vegetation: Low Woodland of *Acacia aptaneura*, *A. catenulata* subsp. *occidentalis* and *A. pruinocarpa* over an Open Tussock Grassland of *Eulalia aurea*, **Cenchrus ciliaris* and *Chrysopogon fallax* with a Very Open Bunch Grassland of *Digitaria brownii* and *Paspalidium clementii* on a floodplain

Mapping Units: 1 Acacia Low Woodland; 1a FP AaAprAci RheAa CcChfArin

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR14

Species List

Name	Cover (%)	Height (m)
Abutilon macrum	0.1	0.2
Acacia aptaneura	24.0	4.1
Acacia catenulata subsp. *occidentalis*	3.0	4.0
Acacia pruinocarpa	2.0	3.0
Aeschynomene indica	0.1	0.2
Aristida inaequiglumis	1.0	0.2
Bidens bipinnata	1.0	0.2
Cenchrus ciliaris	4.0	0.5
Chrysopogon fallax	1.0	0.7
Digitaria brownii	4.0	0.5
Duperreya commixta	0.1	0.2
Eucalyptus xerothermica	1.0	4.0
Eulalia aurea	12.0	0.6
Evolvulus alsinoides var. *villosicalyx*	0.1	0.1
Ipomoea calobra	1.0	0.1

Species List continued		
Name	**Cover (%)**	**Height (m)**
Isotropis iophyta	2.0	0.6
Paspalidium clementii	2.0	0.2
Senna notabilis	0.1	0.1
Sida sp. L (A.M. Ashby 4202)	0.1	0.2
Themeda triandra	0.1	0.4
Triodia pungens	0.1	0.3
Vigna sp. Hamersley Clay (A.A. Mitchell PRP 113)	0.1	0.1

Site: MGR15

Type: 50 x 50 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199268.08m E 7414581.41m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia brizoides* and *T. pungens* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* over Scattered Tall Shrubs of *Acacia bivenosa* on stony hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4b HS TbrTw El AbPoSgg

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR15

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.5	2.1
Eremophila longifolia	0.1	0.6
Eucalyptus leucophloia subsp. *leucophloia*	1.5	4.0
Senna glutinosa subsp. *pruinosa*	0.1	1.3
Senna glutinosa subsp. *x luerssenii*	0.1	1.2
Triodia brizoides	5.0	0.1
Triodia pungens	0.5	0.5

Site: MGR16

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199467.94m E 7414553.99m N

Habitat: Hillslope

Vegetation: Very Open Hummock Grassland of *Triodia basedowii* and *T. pungens* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* over Scattered Tall Shrubs of *Acacia bivenosa* on stony hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4b HS TbrTw El AbPoSgg

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR16

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	1.0	2.5
Eucalyptus leucophloia subsp. *leucophloia*	1.0	3.0
Ptilotus exaltatus	0.1	0.1
Senna glutinosa subsp. *pruinosa*	0.1	0.6
Senna glutinosa subsp. *x luerssenii*	0.1	1.2
Triodia basedowii	4.0	0.2
Triodia pungens	2.0	0.3

Site: MGR17

Type: 50 x 50 m Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199081.67m E 7415276.47m N

Habitat: Stony Plain

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Open Hummock Grassland of *Triodia basedowii* with Scattered Tall Shrubs of *Acacia ancistrocarpa* and Scattered Low Trees of *Corymbia hamersleyana* on stony plains

Mapping Units: 4 Triodia Hummock Grassland; 4d SP TbTp HlAanAi Ch

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR17

Species List

Name	Cover (%)	Height (m)
Acacia adsurgens	0.1	1.3
Acacia ancistrocarpa	1.5	2.1
Chrysopogon fallax	0.1	0.6
Corymbia hamersleyana	1.0	5.0
Eulalia aurea	0.5	0.5
Grevillea wickhamii	0.1	1.1
Hakea loreus subsp. *loreus*	1.0	1.0
Paraneurachne muelleri	0.5	0.3
Ptilotus astrolasius	0.1	0.2
Ptilotus calostachyus	0.1	0.5
Senna artemisioides subsp. *oligophylla*	0.1	0.9
Solanum morrisonii	0.1	1.1
Triodia basedowii	15.0	0.5

Site: MGR18

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199418.89m E 7414704.53m N

Habitat: Drainage Area/ Floodplain

Vegetation: Open Hummock Grassland of *Triodia basedowii* with a Very Open Mallee of *Eucalyptus gamophylla* over a High Open Shrubland of *Acacia monticola* and *A. ancistrocarpa* in drainage areas and floodplains

Mapping Units: 4 Triodia Hummock Grassland; 4e SP TpTb Eg PlAbAan

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)



Relevé MGR18

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	1.0	2.1
Acacia monticola	1.0	3.0
Eucalyptus gamophylla	4.0	3.0
Eulalia aurea	0.1	0.3
Triodia basedowii	15.0	0.5

Site: MGR19

Type: 30 x 83 m Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 202997.26m E 7414062.11m N

Habitat: Gorge

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Open Hummock Grassland of *Triodia* sp. Mt Ella (M.E. Trudgen 12739) and *T. pungens* with a Low Open Woodland of *Corymbia ferriticola*, *C. hamersleyana* and *Ficus brachypoda* over an Open Shrubland of *Acacia ancistrocarpa*, *Grevillea wickhamii* and *Santalum lanceolatum* in gorges

Mapping Units: 5 Triodia Open Hummock Grassland; 5a GG Tp CfFibAcao DopAh

Vegetation Condition: 1-Excellent

Fire Age: Old (6+ yr)



Relevé MGR19

Species List

Name	Cover (%)	Height (m)
Acacia ancistrocarpa	1.0	1.7
Acacia monticola	3.0	2.1
Acacia pruinocarpa	0.1	2.1
Acacia pyrifolia var. *pyrifolia*	0.5	1.3
Afrohybanthus aurantiacus	0.1	0.3
Bidens bipinnata	0.1	0.0
Chrysocephalum eremaeum	0.1	0.5
Corchorus lasiocarpus	0.1	0.1
Corymbia deserticola	0.1	1.8
Corymbia ferriticola	4.0	7.0
Corymbia hamersleyana	3.0	5.0
Cymbopogon ambiguus	0.5	0.6
Dodonaea pachyneura	0.1	1.5

Species List continued

Name	Cover (%)	Height (m)
Duperreya commixta	0.1	1.0
Eremophila longifolia	0.1	1.8
Eriachne mucronata	1.0	0.2
Evolvulus alsinoides var. *villosicalyx*	0.1	0.3
Ficus brachypoda	1.0	3.5
Gossypium robinsonii	0.1	1.2
Grevillea wickhamii	1.0	1.2
Hibiscus aff. *campanulatus*	0.5	1.1
Perotis rara	0.1	0.1
Petalostylis labicheoides	0.5	3.0
Santalum lanceolatum	1.0	1.3
Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	1.0	0.9
Themeda triandra	0.5	0.6
Triodia pungens	2.0	0.4
Triodia sp. Mt Ella (M.E. Trudgen 12739)	25.0	0.5

Site: MGR20

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199656.31m E 7414938.25m N

Habitat: Hillslope

Soil: Red, sandy clay loam

Rock Type: Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia brizoides* with Scattered Low Trees of *Eucalyptus leucophloia* subsp. *leucophloia* and Low Scattered Shrubs of *Ptilotus rotundifolius* on stony hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4b HS TbrTw El AbPoSgg

Vegetation Condition: 0.8-Very Good

Fire Age: Old (6+ yr)

Notes: All the *Acacia hilliana* appears to be dead



Relevé MGR19

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.1	2.5
Acacia hilliana	0.1	0.2
Amphipogon sericeus	0.1	0.2
Corymbia deserticola	0.1	2.2
Dampiera candicans	0.1	0.2
Eucalyptus leucophloia subsp. *leucophloia*	1.0	3.0
Grevillea wickhamii	0.1	2.0
Paraneurachne muelleri	0.1	0.3
Ptilotus rotundifolius	1.0	0.6
Senna glutinosa subsp. *x luerssenii*	0.1	1.5
Triodia sp. indet. (sterile *brizoides*)	9.0	0.2

Site: MGR21

Type: Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201790.65m E 7413654.22m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone

Vegetation: Very Open Hummock Grassland of *Triodia brizoides* with Scattered Tall Shrubs of *Hakea chordophylla* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* on stony hillslopes

Mapping Units: 5 Triodia Open Hummock Grassland; 5b HS Tbr Hc Efrs

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Relevé MGR21

Species List

Name	Cover (%)	Height (m)
Corchorus elachocarpus	0.1	0.2
Eremophila fraseri subsp. *fraseri*	1.0	1.3
Grevillea berryana	0.1	0.9
Hakea chordophylla	1.0	2.5
Ptilotus astrolasius	0.1	0.3
Ptilotus calostachyus	0.1	0.5
Ptilotus exaltatus	0.1	0.1
Senna artemisioides subsp. *helmsii*	0.1	0.5
Senna glutinosa subsp. *pruinosa*	0.1	1.2
Senna glutinosa subsp. *x luerssenii*	0.1	0.5
Solanum morrisonii	0.1	0.7
Tribulus suberosus	0.1	0.5
Triodia sp. indet. (sterile *brizoides*)	5.0	0.2

Site: MGR22

Type: Relevé

Date: 9 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 199386.00m E 7415084.02m N

Habitat: Drainage Area/ Floodplain

Soil: Brown, sandy clay loam

Rock Type: Ironstone

Vegetation: Closed Tussock Grassland of *Themeda triandra*, *Eulalia aurea* and *Aristida inaequiglumis* with a High Open Shrubland of *Acacia ancistrocarpa* and *A. monticola* and a Low Open Woodland of *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* on drainage areas and floodplains

Mapping Units: 2 Acacia Shrubland; 2b MI AmoAanPl ChEl TtAin

Vegetation Condition: 0.6- Good

Fire Age: Old (6+ yr)



Relevé MGR22

Species List

Name	Cover (%)	Height (m)
Abutilon macrum	0.1	0.3
Abutilon otocarpum	0.1	0.2
Acacia ancistrocarpa	2.0	2.1
Acacia bivenosa	0.1	2.1
Acacia monticola	1.0	2.1
Androcalva luteiflora	0.1	1.2
Aristida inaequiglumis	3.0	0.5
Arivela viscosa	0.1	0.2
Boerhavia coccinea	0.1	0.2
Cenchrus ciliaris	2.0	0.6
Chrysocephalum eremaeum	0.1	0.2
Corchorus tridens	0.1	0.2
Corymbia hamersleyana	1.0	3.0

Species List continued

Name	Cover (%)	Height (m)
Digitaria brownii	0.1	0.3
Enneapogon lindleyanus	0.1	0.5
Enneapogon polyphyllus	0.1	0.2
Eucalyptus leucophloia subsp. *leucophloia*	1.0	2.5
Eulalia aurea	10.0	0.6
Evolvulus alsinoides var. *villosicalyx*	0.1	0.1
Ipomoea diamantinensis	0.1	0.1
Isotropis iophyta	0.1	0.3
Paraneurachne muelleri	0.1	0.3
Paspalidium clementii	0.1	0.2
Ptilotus exaltatus	0.1	0.1
Sida sp. L (A.M. Ashby 4202)	0.1	0.1
Themeda triandra	55.0	0.6

Site: MGR23

Type: 50 x 50 m Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201493.89m E 7414472.81m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: BIF, Ironstone, Quartz

Vegetation: Hummock Grassland of *Triodia brizoides* (and *T. pungens*) with Scattered Tall Shrubs of *Acacia bivenosa*, *A. pruinocarpa* and *Hakea loreus* subsp. *loreus* over Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* on stony hillslopes

Mapping Units: 4 Triodia Hummock Grassland; 4a HS TbrTw AiAprHc EfrEpl

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR23

Species List

Name	Cover (%)	Height (m)
Acacia bivenosa	0.5	3.5
Acacia colei	0.1	1.5
Acacia pruinocarpa	0.5	2.5
Aristida contorta	0.5	0.3
Corchorus elachocarpus	0.1	0.6
Eremophila fraseri subsp. *fraseri*	0.5	1.3
Eriachne mucronata	0.1	0.6
Gomphrena canescens subsp. *canescens*	0.1	0.2
Hakea loreus subsp. *loreus*	0.5	2.5
Indigofera monophylla	0.1	0.6
Ptilotus astrolasius	0.1	0.3
Ptilotus exaltatus	0.1	0.2
Salsola australis	0.1	0.3
Senna artemisioides subsp. *helmsii*	0.1	0.2

Species List		
Name	**Cover (%)**	**Height (m)**
Senna artemisioides subsp. *oligophylla*	0.5	0.5
Senna glutinosa subsp. *pruinosa*	0.1	0.9
Sida echinocarpa	0.1	0.3
Solanum lasiophyllum	0.1	0.6
Tribulus suberosus	0.5	0.5
Trichodesma zeylanicum var. *zeylanicum*	0.1	0.2
Triodia brizoides	30.0	0.4
Triodia pungens	0.5	0.3

Site: MGR24

Type: Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201859.46m E 7414423.77m N

Habitat: Minor Drainage Line

Soil: Brown, sandy clay loam

Rock Type: Ironstone

Vegetation: Tussock Grassland of *Themeda triandra* and *Eulalia aurea* with a High Shrubland of *Acacia ancistrocarpa*, *A. colei* var. *colei* and *A. pruinocarpa* over a Very Open Bunch Grassland of *Digitaria brownii* in minor drainage lines

Mapping Units: 8 Themeda Open Tussock Grassland; 8a ME TtAinCa ChEl AmoPlAlu

Vegetation Condition: 0.6-Good

Fire Age: Old (6+ yr)



Relevé MGR24

Species List

Name	Cover (%)	Height (m)
Acacia adsurgens	2.0	2.3
Acacia ancistrocarpa	5.0	2.5
Acacia aptaneura	1.0	3.0
Acacia colei	2.0	2.5
Acacia monticola	0.1	1.8
Acacia pruinocarpa	2.0	2.5
Acacia tenuissima	0.1	1.8
Afrohybanthus aurantiacus	0.1	0.3
Androcalva luteiflora	0.1	1.2
Aristida inaequiglumis	0.1	0.7
Arivela viscosa	0.1	0.1
Boerhavia coccinea	0.1	0.1
Cenchrus ciliaris	0.1	0.4
Chrysopogon fallax	1.0	1.3

Species List continued

Name	Cover (%)	Height (m)
Corchorus lasiocarpus	0.1	0.3
Corymbia ferriticola	0.1	2.6
Corymbia hamersleyana	1.0	3.0
Crotalaria medicaginea var. *neglecta*	0.1	0.1
Cymbopogon obtectus	0.1	0.2
Dactyloctenium radulans	0.1	0.1
Digitaria brownii	3.0	0.6
Digitaria ctenantha	0.1	0.3
Eragrostis eriopoda	0.1	0.3
Eulalia aurea	9.0	0.6
Evolvulus alsinoides var. *decumbens*	0.1	0.1
Evolvulus alsinoides var. *villosicalyx*	0.1	0.1
Glinus lotoides	0.1	0.1
Glycine canescens	0.1	0.3
Gomphrena canescens subsp. *canescens*	0.1	0.2
Gossypium robinsonii	0.1	2.5
Grevillea wickhamii	0.1	1.9
Hakea loreus subsp. *loreus*	1.0	2.5
Hibiscus sturtii var. *platychlamys*	0.1	0.4
Isotropis atropurpurea	0.1	0.4
Melhania oblongifolia	0.1	0.3
Paraneurachne muelleri	0.1	0.3
Paspalidium clementii	0.1	0.2
Perotis rara	0.1	0.1
Portulaca oleracea	0.1	0.1
Ptilotus obovatus var. *obovatus*	0.1	0.3
Rhynchosia minima	0.1	0.3
Senna artemisioides subsp. *oligophylla*	1.0	1.2
Sida sp. L (A.M. Ashby 4202)	0.1	0.1
Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)	1.0	0.4
Themeda triandra	30.0	0.6
Tribulopis angustifolia	0.1	0.2
Trichodesma zeylanicum var. *zeylanicum*	0.1	0.2

Site: MGR26

Type: Relevé

Date: 10 March 2023 **Described by:** Jean Dorrington and Lucy Dadour

Waypoint: 51K 201658.72m E 7413767.59m N

Habitat: Hillslope

Soil: Brown, sandy clay loam

Rock Type: Ironstone, Quartz

Vegetation: Scattered Shrubs of *Eremophila fraseri* subsp. *fraseri* over Scattered Hummock Grasses of *Triodia pungens* and *T. vanleeuwenii* on a stony hillslope

Mapping Units: 5 Triodia Open Hummock Grassland; 5c HS Tp AaApr ErfrAmarSegl

Vegetation Condition: 0.4-Poor

Fire Age: Old (6+ yr)



Relevé MGR26

Species List

Name	Cover (%)	Height (m)
Aristida contorta	0.1	0.1
Boerhavia coccinea	0.1	0.1
Enneapogon caerulescens	0.1	0.1
Eremophila fraseri subsp. *fraseri*	1.0	1.1
Portulaca oleracea	0.1	0.1
Salsola australis	0.1	0.2
Senna glutinosa subsp. *x luerssenii*	0.5	1.1
Tribulus macrocarpus	0.1	0.6
Triodia pungens	0.5	0.2
Triodia vanleeuwenii	0.5	0.2

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Appendix K: Vegetation Condition Mapping

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

MGR17 MGR22 MGR20 MGR18 MGR15 MGR16 MGR13 MGR14 MGR10 MGR12 MGR09 MGR07 MGR06 MGR05 MGR04 MGR02 MGR19 MGR03 MGR01 MGR23 MGR24 MGR26 MGR21

MGMJ03 MGMJ04 MGMJ02 MGMJ01 MGMJ13 MGMJ12 MGMJ11 MGMJ10 MGMJ06 MGMJ07 MGMJ08

MGR08 MGR11 MGML02 MGML03 MGML01

Survey Area

Survey Site

Mapping Note

Relevé

Vegetation Condition

Excellent

Very Good

Good

Poor

Completely Degraded

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure K.1: Vegetation condition mapped within the survey area

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

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astron an ecocene company

Author: N. Cadd Drawn: C. Dyde Date: 24-04-2023 Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigK1_VegCond

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Appendix L: Vascular Flora Species List and Broad Floristic Formation by Species Matrix

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Table L.1: Vascular flora species recorded within the survey area.

Family Name	Species Name	Conservation Status	Weed
Aizoaceae	*Trianthema glossostigmum*		
Amaranthaceae	**Aerva javanica*		*
	Gomphrena canescens subsp. *canescens*		
	Ptilotus astrolasius		
	Ptilotus calostachyus		
	Ptilotus exaltatus		
	Ptilotus helipteroides		
	Ptilotus obovatus var. *obovatus*		
	Ptilotus roei		
	Ptilotus rotundifolius		
Asteraceae	**Bidens bipinnata*		*
	Chrysocephalum eremaeum		
Boraginaceae	*Halgania gustafsenii* var. *gustafsenii*		
	Trichodesma zeylanicum var. *zeylanicum*		
Brassicaceae	*Lepidium pedicellosum*		
Caryophyllaceae	*Polycarpaea corymbosa* var. *corymbosa*		
Chenopodiaceae	*Maireana* sp. indet.		
	Maireana tomentosa		
	Rhagodia eremaea		
	Salsola australis		
Cleomaceae	*Areocleome oxalidea*		
	Arivela viscosa		
Convolvulaceae	*Bonamia erecta*		
	Duperreya commixta		
	Evolvulus alsinoides var. *decumbens*		
	Evolvulus alsinoides var. *villosicalyx*		
	Ipomoea calobra		
	Ipomoea sp. indet. (possibly *I.diamantinensis* (sterile))		
Cyperaceae	*Bulbostylis barbata*		
	Fimbristylis dichotoma		
Euphorbiaceae	*Euphorbia australis* var. *subtomentosa*		
	Euphorbia coghlanii		
Fabaceae	**Vachellia farnesiana*		*
	Acacia adsurgens		
	Acacia ancistrocarpa		
	Acacia aptaneura		
	Acacia bivenosa		
	Acacia catenulata subsp. *occidentalis*		

Family Name	Species Name	Conservation Status	Weed
	Acacia colei		
	Acacia hamersleyensis		
	Acacia hilliana		
	Acacia inaequilatera		
	Acacia marramamba		
	Acacia monticola		
	Acacia pachyacra		
	Acacia paraneura		
	Acacia pruinocarpa		
	Acacia pyrifolia var. *pyrifolia*		
	Acacia sibirica		
	Acacia sp. indet. (possibly *A. aptaneura* (sterile))		
	Acacia synchronicia		
	Acacia tenuissima		
	Acacia tetragonophylla		
	Acacia trudgeniana		
	Aeschynomene indica		
	Crotalaria medicaginea var. *neglecta*		
	Glycine canescens		
	Gompholobium oreophilum		
	Indigofera monophylla		
	Isotropis atropurpurea		
	Isotropis iophyta		
	Neptunia dimorphantha		
	Petalostylis labicheoides		
	Rhynchosia minima		
	Senna artemisioides subsp. *helmsii*		
	Senna artemisioides subsp. *oligophylla*		
	Senna glutinosa subsp. *glutinosa*		
	Senna glutinosa subsp. *glutinosa* x *stricta*		
	Senna glutinosa subsp. *pruinosa*		
	Senna glutinosa subsp. x *luerssenii*		
	Senna notabilis		
	Senna stricta		
	Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)		
	Tephrosia sp. Newman (A.A. Mitchell PRP 29)		
	Vigna sp. Hamersley Clay (A.A. Mitchell PRP 113)		
Goodeniaceae	*Dampiera candicans*		

Family Name	Species Name	Conservation Status	Weed
	Goodenia prostrata		
	Goodenia sp. indet.		
	Scaevola acacioides		
	Scaevola parvifolia		
Gyrostemonaceae	*Codonocarpus cotinifolius*		
Lamiaceae	*Dicrastylis cordifolia*		
Lauraceae	*Cassytha capillaris*		
Loranthaceae	*Amyema fitzgeraldii*		
Malvaceae	*Abutilon amplum*		
	Abutilon macrum		
	Abutilon otocarpum		
	Androcalva luteiflora		
	Corchorus elachocarpus		
	Corchorus lasiocarpus		
	Corchorus lasiocarpus subsp. *lasiocarpus*		
	Corchorus tridens		
	Gossypium robinsonii		
	Hibiscus aff. *campanulatus*		
	Hibiscus burtonii		
	Hibiscus coatesii		
	Hibiscus sturtii var. *platychlamys*		
	Hibiscus sturtii var. *truncatus*		
	Melhania oblongifolia		
	Sida echinocarpa		
	Sida fibulifera		
	Sida sp. Excedentifolia (J.L. Egan 1925)		
	Sida sp. indet.		
	Sida sp. L (A.M. Ashby 4202)		
	Sida sp. Pilbara (A.A. Mitchell PRP 1543)		
Molluginaceae	*Glinus lotoides*		
Moraceae	*Ficus brachypoda*		
Myrtaceae	*Corymbia deserticola*		
	Corymbia ferriticola		
	Corymbia hamersleyana		
	Eucalyptus gamophylla		
	Eucalyptus leucophloia subsp. *leucophloia*		
	Eucalyptus xerothermica		
Nyctaginaceae	*Boerhavia coccinea*		
	Boerhavia repleta		

Family Name	Species Name	Conservation Status	Weed
Poaceae	**Cenchrus ciliaris*		*
	Amphipogon sericeus		
	Aristida contorta		
	Aristida inaequiglumis		
	Aristida latifolia		
	Chrysopogon fallax		
	Cymbopogon ambiguus		
	Cymbopogon obtectus		
	Cynodon convergens		
	Dactyloctenium radulans		
	Dichanthium sericeum subsp. *humilius*		
	Digitaria brownii		
	Digitaria ctenantha		
	Enneapogon caerulescens		
	Enneapogon lindleyanus		
	Enneapogon polyphyllus		
	Eragrostis eriopoda		
	Eriachne benthamii		
	Eriachne mucronata		
	Eulalia aurea		
	Iseilema eremaeum		
	Paraneurachne muelleri		
	Paspalidium clementii		
	Paspalidium rarum		
	Perotis rara		
	Themeda triandra		
	Triodia angusta		
	Triodia basedowii		
	Triodia brizoides		
	Triodia pungens		
	Triodia sp. indet. (possibly *T. brizoides* (sterile))		
	Triodia sp. Mt Ella (M.E. Trudgen 12739)	P3	
	Triodia vanleeuwenii		
	Triodia wiseana		
Portulacaceae	*Portulaca oleracea*		
Proteaceae	*Grevillea berryana*		
	Grevillea wickhamii		
	Hakea chordophylla		
	Hakea loreus subsp. *loreus*		

Family Name	Species Name	Conservation Status	Weed
Pteridaceae	*Cheilanthes sieberi* subsp. *sieberi*		
Rubiaceae	*Psydrax latifolia*		
Santalaceae	*Anthobolus leptomerioides*		
	Santalum lanceolatum		
Sapindaceae	*Dodonaea pachyneura*		
	Dodonaea petiolaris		
Scrophulariaceae	*Eremophila clarkei*		
	Eremophila cuneifolia		
	Eremophila forrestii subsp. *forrestii*		
	Eremophila fraseri subsp. *fraseri*		
	Eremophila latrobei subsp. *latrobei*		
	Eremophila longifolia		
Solanaceae	*Solanum lasiophyllum*		
	Solanum morrisonii		
Violaceae	*Afrohybanthus aurantiacus*		
Zygophyllaceae	*Tribulopis angustifolia*		
	Tribulus macrocarpus		
	Tribulus suberosus		

Table L.2: Broad floristic formation by species matrix.

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Species\ Site(s)	MGMJ01, MGMJ04, MGML02, MGR07, MGR10, MGR14	MGR05, MGR22	MGMJ02, MGMJ03, MGR09	MGMJ10, MGMJ11, MGMJ12, MGR02, MGR03, MGR04, MGR06, MGR11, MGR15, MGR16, MGR17, MGR18, MGR20, MGR23	MGMJ08, MGMJ13, MGML01, MGML03, MGR08, MGR13, MGR19, MGR21	MGR12	MGR01	MGMJ07, MGR24	MGMJ06
Abutilon amplum							+		
Abutilon macrum	+	+							
Abutilon otocarpum		+							
Acacia adsurgens				+				+	
Acacia ancistrocarpa		+		+	+		+	+	+
Acacia aptaneura	+		+		+			+	
Acacia bivenosa		+	+	+					
Acacia catenulata subsp. *occidentalis*	+				+				
Acacia colei				+				+	
Acacia hamersleyensis					+				
Acacia hilliana				+					
Acacia inaequilatera				+					
Acacia marramamba			+						
Acacia monticola		+		+	+			+	
Acacia pachyacra				+					
Acacia paraneura	+								
Acacia pruinocarpa	+		+	+	+			+	
Acacia pyrifolia var. *pyrifolia*		+			+				
Acacia sibirica	+								
Acacia sp. indet. (possibly *A. aptaneura* (sterile))								+	
Acacia synchronicia	+					+			
Acacia tenuissima			+					+	
Acacia tetragonophylla			+	+	+	+		+	
Acacia trudgeniana							+		
**Aerva javanica*									+
Aeschynomene indica	+					+			
Afrohybanthus aurantiacus		+		+	+		+	+	
Amphipogon sericeus				+					

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Amyema fitzgeraldii					+				
Androcalva luteiflora		+						+	
Anthobolus leptomerioides				+					
Areocleome oxalidea	+								
Aristida contorta	+			+	+				
Aristida inaequiglumis	+	+	+				+	+	
Aristida latifolia						+			
Arivela viscosa	+	+	+			+	+	+	
**Bidens bipinnata*	+				+				
Boerhavia coccinea		+			+			+	
Boerhavia repleta			+						
Bonamia erecta				+					
Bulbostylis barbata				+					
Cassytha capillaris				+					
**Cenchrus ciliaris*	+	+		+				+	+
Chrysocephalum eremaeum		+			+				
Chrysopogon fallax	+	+		+				+	
Codonocarpus cotinifolius				+					
Corchorus elachocarpus		+		+	+			+	
Corchorus lasiocarpus				+	+		+	+	
Corchorus lasiocarpus subsp. *lasiocarpus*				+					
Corchorus tridens		+							
Corymbia deserticola				+	+				
Corymbia ferriticola					+			+	
Corymbia hamersleyana		+		+	+			+	
Crotalaria medicaginea var. *neglecta*								+	
Cymbopogon ambiguus		+		+	+			+	
Cymbopogon obtectus							+	+	
Cynodon convergens						+			
Dactyloctenium radulans			+					+	
Dampiera candicans				+					
Dichanthium sericeum subsp. *humilius*	+								
Dicrastylis cordifolia				+					

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Digitaria brownii	+	+					+	+	
Digitaria ctenantha								+	
Dodonaea pachyneura					+				
Dodonaea petiolaris					+				
Duperreya commixta	+	+			+		+		
Enneapogon caerulescens				+	+				+
Enneapogon lindleyanus		+							
Enneapogon polyphyllus		+							+
Eragrostis eriopoda	+						+	+	
Eremophila cuneifolia	+				+				
Eremophila forrestii subsp. *forrestii*	+		+						
Eremophila fraseri subsp. *fraseri*			+	+	+				+
Eremophila latrobei subsp. *latrobei*					+				
Eremophila longifolia				+	+				
Eriachne benthamii						+			
Eriachne mucronata		+		+	+				
Eucalyptus gamophylla				+	+				
Eucalyptus leucophloia subsp. *leucophloia*	+	+		+	+			+	
Eucalyptus xerothermica	+								
Eulalia aurea	+	+	+	+			+	+	
Euphorbia coghlanii						+			
Evolvulus alsinoides var. *decumbens*		+					+	+	
Evolvulus alsinoides var. *villosicalyx*	+	+			+			+	
Ficus brachypoda					+				
Glinus lotoides								+	
Glycine canescens								+	
Gompholobium oreophilum				+					
Gomphrena canescens subsp. *canescens*		+	+	+			+	+	
Goodenia prostrata	+								
Goodenia sp. indet.				+					
Gossypium robinsonii		+			+			+	
Grevillea berryana					+				
Grevillea wickhamii				+	+			+	+

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Hakea chordophylla				+	+				
Hakea loreus subsp. *loreus*			+	+			+	+	
Halgania gustafsenii var. *gustafsenii*				+					
Hibiscus aff. *campanulatus*		+			+				
Hibiscus coatesii					+				
Hibiscus sturtii var. *platychlamys*							+	+	
Hibiscus sturtii var. *truncatus*	+								
Indigofera monophylla		+		+					
Ipomoea calobra	+								
Ipomoea sp. indet. (possibly *I. diamantinensis* (sterile))		+							
Iseilema eremaeum						+			
Isotropis atropurpurea							+	+	
Isotropis iophyta	+	+							
Lepidium pedicellosum					+				
Maireana sp. indet.				+					
Maireana tomentosa	+		+						
Melhania oblongifolia								+	
Neptunia dimorphantha						+			
Paraneurachne muelleri		+		+	+		+	+	
Paspalidium clementii	+	+						+	
Paspalidium rarum							+		
Perotis rara					+		+	+	
Petalostylis labicheoides		+		+	+				
Portulaca oleracea	+				+	+		+	
Psydrax latifolia	+		+						
Ptilotus astrolasius				+	+		+		
Ptilotus calostachyus	+			+	+				
Ptilotus exaltatus		+		+	+		+		
Ptilotus helipteroides			+						
Ptilotus obovatus var. *obovatus*	+		+		+		+	+	
Ptilotus roei	+								
Ptilotus rotundifolius				+					

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Rhagodia eremaea			+						
Rhynchosia minima		+		+		+	+	+	
Salsola australis				+	+				+
Santalum lanceolatum		+			+				
Scaevola acacioides					+				
Scaevola parvifolia				+					
Senna artemisioides subsp. *helmsii*		+		+	+		+		
Senna artemisioides subsp. *oligophylla*			+	+		+	+	+	
Senna glutinosa subsp. *glutinosa*				+					
Senna glutinosa subsp. *glutinosa x stricta*	+		+						
Senna glutinosa subsp. *pruinosa*				+	+				+
Senna glutinosa subsp. *x luerssenii*			+	+	+		+		+
Senna notabilis	+								
Senna stricta					+				
Sida echinocarpa				+					
Sida fibulifera						+	+		
Sida sp. Excedentifolia (J.L. Egan 1925)					+				
Sida sp. indet.				+	+				
Sida sp. L (A.M. Ashby 4202)	+	+						+	
Sida sp. Pilbara (A.A. Mitchell PRP 1543)				+					
Solanum lasiophyllum		+		+					
Solanum morrisonii				+	+				
Tephrosia rosea var. Fortescue creeks (M.I.H. Brooker 2186)		+			+			+	
Tephrosia sp. Newman (A.A. Mitchell PRP 29)					+				
Themeda triandra	+	+			+			+	
Trianthema glossostigmum				+					
Tribulopis angustifolia								+	
Tribulus macrocarpus				+	+				
Tribulus suberosus	+			+	+				
Trichodesma zeylanicum var. *zeylanicum*				+				+	
Triodia angusta									+

Broad Floristic Formation	1. Acacia Low Woodland	2. Acacia Shrubland	3. Acacia Open Shrubland	4. Triodia Hummock Grassland	5. Triodia Open Hummock Grassland	6. Eragrostis Tussock Grassland	7. Eulalia Tussock Grassland	8. Themeda Open Tussock Grassland	9. Previously Disturbed
Triodia basedowii				+	+		+		
Triodia brizoides			+	+	+				
Triodia pungens	+	+	+	+	+		+	+	+
Triodia sp. indet. (possibly *T. brizoides* (sterile))				+	+				
Triodia sp. Mt Ella (M.E. Trudgen 12739) P3		+			+				
Triodia vanleeuwenii			+	+	+				
Triodia wiseana				+					
**Vachellia farnesiana*						+			
Vigna sp. Hamersley Clay (A.A. Mitchell PRP 113)	+								

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Appendix M: Fauna Habitat Mapping

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

HA18 HA22 HA10 HA19 HA20 HA09 HA02 Cam46 HA03 BD01 Cam53 HA08 HA04 HA01 HA17 HA05 EP01 HA21 HA07 EP02 HA14 HA16 HA24 HA15 HA13 HA06 HA12 AC01 HA11 HA23

Temporary ephemeral pool
Survey Area

Survey Site
- Bird Census
- Camera (active)
- Echolocation Recording
- Habitat Assessment

Habitat Mapping
- Breakaway/ Cliff
- Gorge/ Gully
- Hillcrest/ Hillslope
- Minor Drainage Line
- Drainage Area/ Floodplain
- Mulga Woodland
- Sand Plain
- Stony Plain
- Cleared/ Disturbed

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure M.1: Fauna habitat mapped within the survey area

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigM1_Hab

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Appendix N: MNES Fauna Habitat Suitability Mapping

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199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Grey Falcon Habitat Suitability

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.1: Grey falcon habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN1_GF

199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Southern whiteface Habitat Suitability

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.2: Southern whiteface habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

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Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN2_SWF

199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Ghost Bat Habitat Suitability

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.3: Ghost bat habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN3_GB

199000 200000 201000 202000 203000

7415000

7414000

7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Pilbara Olive Python Habitat Suitability

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.4: Olive python habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

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an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN4_POP

199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Pilbara Leaf-nosed Bat Habitat Suitability

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.5: Pilbara leaf-nosed bat habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN5_PLNB

199000 200000 201000 202000 203000

7415000 7414000 7413000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

Northern Quoll Habitat Suitability

Critical Habitat

Supporting Habitat

Limited Habitat

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure N.6: Northern quoll habitat suitability mapping

Scale: 1:12,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 200 400 600 800 1,000 Metres

N

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Author: N. Cadd | Drawn: C. Dyde | Date: 13-06-2023 | Figure Ref: 2400-10-22-BIDR-1Rev0_230613_FigN6_NQ

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Appendix O: Previously Recorded Significant Vertebrate Fauna Species Locations

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180000 190000 200000 210000 220000

7420000

7410000

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Survey Area

BHP - Fauna Record

- Brush-tailed Mulgara
- Fork-tailed Swift
- Garganey
- Ghost Bat
- Northern Quoll
- Peregrine Falcon
- Pilbara Flat-headed Blind-snake
- Pilbara Olive Python
- Spotted Ctenotus
- Western Pebble-mound Mouse or Ngadji

DBCA - Fauna Record

- Brush-tailed Mulgara
- Caspian Tern
- Common Sandpiper
- Common Greenshank
- Curlew Sandpiper
- Gane's Blind Snake (Pilbara)
- Ghost Bat
- Glossy Ibis
- Gull-billed Tern
- Long-toed Stint
- Marsh Sandpiper
- Pilbara Olive Python
- Red-necked Stint
- Sharp-tailed Sandpiper
- Spotted Ctenotus (northeast)
- Western Pebble-mound Mouse
- Wood Sandpiper

BHP Western Australian Iron Ore

Mesa Gap Corridors Reconnaissance Vegetation and Flora, and Basic Fauna Survey

Figure O: Previously recorded significant vertebrate fauna species

Scale: 1:110,000 at A3

Coordinate System: GDA 1994 MGA Zone 51

0 2 4 6 8 10 Kilometres

N

astron an ecocene company

Author: N. Cadd | Drawn: C. Dyde | Date: 24-04-2023 | Figure Ref: 2400-10-22-BIDR-1RevA_230424_FigO_PrevFauna

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