



Area C West to Yandi Level 2 Flora and Vegetation Survey

Prepared for BHP Billiton Iron Ore Pty Ltd
May 2014



Document Status						
Rev No.	Authors	Reviewer/s	Date	Approved for Issue		
				Name	Distributed To	Date
1	D.Brearley, J.Waters, E.Palmer	D.Brearley	10/09/13	D.Brearley	T.Carroll	14/03/14
2	D.Brearley	T.Carroll	27/03/14	D.Brearley	T.Carroll	14/04/14
3	D.Brearley	T.Carroll	05/05/14	D.Brearley	T.Carroll	21/05/14



Onshore Environmental Consultants Pty Ltd
ACN 095 837 120
PO Box 227
YALLINGUP WA 6282
Telephone / Fax (08) 9756 6206
E-mail: onshoreenv@westnet.com.au

COPYRIGHT: The concepts and information contained in this document are the property of Onshore Environmental Consultants Pty Ltd. Use or copying of this document in whole or in part without the written permission of Onshore Environmental Consultants Pty Ltd constitutes an infringement of copyright.

DISCLAIMER: This report has been undertaken solely for BHP Billiton Iron Ore Pty Ltd. No responsibility is accepted to any third party who may come into possession of this report in whatever manner and who may use or rely on the whole or any part of this report. If any such third party attempts to rely on any information contained in this report such party should obtain independent advice in relation to such information.

EXECUTIVE SUMMARY

In May 2011 BHP Billiton Iron Ore Pty Ltd (BHP Billiton Iron Ore) commissioned Onshore Environmental Consultants Pty Ltd (Onshore Environmental) to undertake a two-season Level 2 flora and vegetation survey of a proposed access corridor extending from the north-west corner of the Area C Mine tenement to the western side of the Yandi (Marillana Creek) Mine tenement, herein referred to as the 'study area'. The study area is situated approximately 90 km north-west of the Newman townsite in the Central Pilbara region of Western Australia.

The field survey component was completed across three site visits; 21st May to 3rd June 2011, 19th July to 1st August 2012, and 20th to 29th August 2013. Seasonal conditions were very good for all three field assessments.

A total number of 428 plant taxa (including varieties and subspecies) from 58 families and 174 genera were recorded from the study area. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, Myrtaceae, Amaranthaceae and Euphorbiaceae families, which is typical for the Pilbara Bioregion. The most speciose genus was *Acacia* followed by *Senna*, *Sida*, *Euphorbia*, *Eriachne* and *Goodenia*.

None of the plant taxa were gazetted as Threatened Flora pursuant to subsection (2) of section 23F of the *Wildlife Conservation Act (1950)* (WC Act) or listed under the *Environment Protection and Biodiversity Conservation Act (1999)* (EPBC Act).

A total of 13 currently listed Priority flora taxa were recorded from the study area; *Acacia bromilowiana* (Priority 4), *Acacia effusa* (Priority 3), *Acacia subtiliformis* (Priority 3), *Aristida jerichoensis* var. *subspinulifera* (Priority 1), *Gymnanthera cunninghamii* (Priority 3), *Goodenia nuda* (Priority 4), *Goodenia* sp. East Pilbara (Priority 3), *Rostellularia adscendens* var. *latifolia* (Priority 3), *Rhynchosia bungarensis* (Priority 4), *Sauropus* sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213) (Priority 1), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3), *Spartothamnella puberula* (Priority 2) and *Vittadinia* sp. Coondewanna Flats (s. Van Leeuwen 4684) (Priority 1).

There were 12 introduced (weed) species recorded from the study area. None of these taxa are listed as Declared Pests under the *Biosecurity and Agriculture Management Act (2007)* (BAM Act).

A total of 23 vegetation associations were described and mapped from the study area. The vegetation associations were classified into eight Broad Floristic Formations on the basis of the dominant vegetation stratum. The field survey confirmed that none of the vegetation associations recorded from the study area were affiliated with any current Federal or State listed Threatened Ecological Communities (TECs), or State listed Priority Ecological Communities (PECs).

Vegetation condition within the study area ranged from excellent to very good, with reduced vegetation condition typically associated with edge effects along cleared infrastructure corridors. Vegetation condition also declined slightly within medium and large drainage lines and associated flood plain habitats, where grazing by domestic cattle was concentrated.

ABBREVIATIONS

Abbreviation	Definition
BAM Act	<i>Biosecurity and Agriculture Management Act (2007)</i>
BHP Billiton Iron Ore	BHP Billiton Iron Ore Pty Ltd
DPaW	Department of Parks and Wildlife
DEWHA	Department of the Environment, Water, Heritage and the Arts
DoE	Department of Environment Department of Sustainability, Environment, Water, Population and Communities
DSEWPaC	
EP Act	<i>Environmental Protection Act (1986)</i>
EPA	Environmental Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act (1999)</i>
ha	hectares
IUCN	International Union for Conservation of Nature
km	kilometre
m	metre
P1	Priority 1
P2	Priority 2
P3	Priority 3
P4	Priority 4
PECs	Priority Ecological Communities
T	Threatened Flora
TECs	Threatened Ecological Communities
WA	Western Australia
WC Act	<i>Wildlife Conservation Act (1950)</i>

TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
ABBREVIATIONS	II
TABLE OF CONTENTS	III
1.0 INTRODUCTION.....	1
1.1 PREAMBLE.....	1
1.2 PREVIOUS SURVEYS	1
1.3 CLIMATE	3
1.4 BIOGEOGRAPHIC REGIONS.....	4
1.5 EXISTING LAND USE.....	4
1.5.1 Pastoral.....	4
1.5.2 Mining.....	4
1.5.3 Tourism.....	5
1.6 LANDFORMS	5
1.7 SOILS.....	5
1.8 GEOLOGY.....	6
1.9 FLORA AND VEGETATION.....	7
1.10 LAND SYSTEMS.....	8
2.0 METHODOLOGY.....	12
2.1 LEGISLATION AND GUIDANCE STATEMENTS.....	12
2.2 DESKTOP SEARCHES	12
2.3 FIELD SURVEY METHODOLOGY.....	12
2.3.1 Timing and Personnel.....	12
2.3.2 Sampling of Study Sites.....	13
2.3.3 Targeted Searches for Conservation Significant Species.....	15
2.3.4 Weed Survey and Mapping	15
2.3.5 Vegetation Association Mapping	15
2.3.6 Vouchering.....	15
2.3.7 Field Survey Constraints.....	15
2.3.8 Assessment of Conservation Significance.....	17
3.0 RESULTS.....	18
3.1 DESKTOP REVIEW.....	18
3.1.1 Previous Flora Surveys.....	18
3.1.2 Threatened Flora Listed under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act).....	22
3.1.3 Threatened Flora listed under the WA Wildlife Conservation (Rare Flora) Notice.....	22
3.1.4 Priority Flora recognised by the DPaW.....	22
3.1.5 Threatened Ecological Communities (TECs) listed under State and Federal Legislation.....	24
3.1.6 Priority Ecological Communities (PECs) recognised by DPaW.....	24
3.1.7 Proposed Conservation Reserves.....	25
3.2 FLORA SPECIES	28
3.3 SIGNIFICANT FLORA SPECIES	29
3.3.1 Threatened Flora	29
3.3.2 Priority Flora	29
3.4 INTRODUCED FLORA	40
3.5 TECs AND PECs.....	48
3.6 VEGETATION	48

3.7 VEGETATION CONDITION	99
4.0 SUMMARY	101
5.0 STUDY TEAM	102
6.0 REFERENCES	103

APPENDIX 1	
Conservation Codes for Western Australian Flora	108
APPENDIX 2	
Conservation categories for flora described under the EPBC Act	110
APPENDIX 3	
Vegetation Classification for the Pilbara based on Specht (1970), as modified by Aplin (1979) and Trudgen (2009) ..	112
APPENDIX 4	
Vegetation condition scale (as developed by Keighery 1994)	114
APPENDIX 5	
Summary of previous flora and vegetation surveys completed in the vicinity of the study area	116
APPENDIX 6	
Total flora list from the study area	124
APPENDIX 7	
Chain of Custody Forms	140
APPENDIX 8	
Records of conservation significant flora from the study area	148
APPENDIX 9	
Records for introduced weed species recorded from the study area	154
APPENDIX 10	
Site sheets summarising raw data for quadrats within the study area	157

LIST OF TABLES

Table 1	Pre-European Extent of Vegetation Associations occurring over the study area (Shepherd <i>et al.</i> 2002).	8
Table 2	Land systems occurring within the study area (Shepherd <i>et al.</i> 2002).....	8
Table 3	Relevance of constraints, as identified by EPA (2004), to the flora and vegetation survey.....	16
Table 4	Summary of data from previous flora and vegetation surveys completed within, or in close proximity to, the study area.	19
Table 5	Significant flora previously recorded from a 50 km search radius of the study area, and their likely occurrence within the study area. ¹ SCC - State Conservation Code (WC Act) and DPaW (2013), ² FCC – Federal Conservation Code (EPBC Act).	22
Table 6	PEC's occurring within a 50 km radius of the study area.	24
Table 7	Statistics for total flora recorded from the study area.	28
Table 8	Priority flora recorded from the study area. ¹ SCC - State Conservation Code (WC Act) and DPaW (2013).....	29
Table 9	Significant flora recorded from the study area.....	30
Table 10	Introduced weed species recorded within the study area. * Introduced weed species.....	40
Table 11	Description and occurrence detail for 12 introduced weed species recorded from the study area.	41
Table 12	The 23 vegetation associations described and mapped from the study area, with vegetation condition and area (ha) covered by each association (with proportion in brackets).	48

LIST OF FIGURES

Figure 1	Location of the study area.	2
Figure 2	Climatic data for Newman (Bureau of Meteorology, Newman 2009) with rainfall figures from the Yandi mine site 2010 – 2013 (BHP Billiton Iron Ore 2013).	3
Figure 3	Beard (1975) vegetation complexes occurring within the study area.	10
Figure 4	Land Systems occurring within the study area (descriptions from Van Vreeswyk <i>et al.</i> 2004).....	11
Figure 5	Location of study sites (quadrats) established and assessed within the study area between May 2011 and August 2013.	14
Figure 6	Location of known PECs in relation to the study area.	26

Figure 7	Proposed Mulgalands Conservation Reserve and Juna Downs Pastoral Lease Exclusion Zone 2015.	27
Figure 8	Location of Priority flora species recorded within the study area.	39
Figure 9	Location of introduced (weed) species within the study area.	47
Figure 10	Vegetation map for the study area.	52
Figure 11	Vegetation condition within the study area.	100

1.0 INTRODUCTION

1.1 Preamble

Onshore Environmental Consultants Pty Ltd (Onshore Environmental) was commissioned by BHP Billiton Iron Ore Pty Ltd (BHP Billiton Iron Ore) to undertake a two season Level 2 flora and vegetation survey for an access corridor linking the north-west corner of the tenement supporting their Area C Mine, with the western side of the tenement supporting their Yandi (Marillana Creek) Mine. The corridor is situated on Juna Downs Pastoral Lease and includes the existing rail line servicing Rio Tinto's Yandicoogina Mine (Figure 1). Herein the access corridor surveyed will be referred to as the study area. The study area is situated in the Central Pilbara region of Western Australia, approximately 90 km north-west of the Newman townsite.

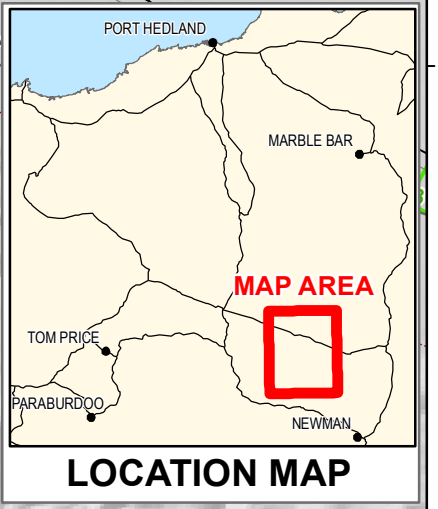
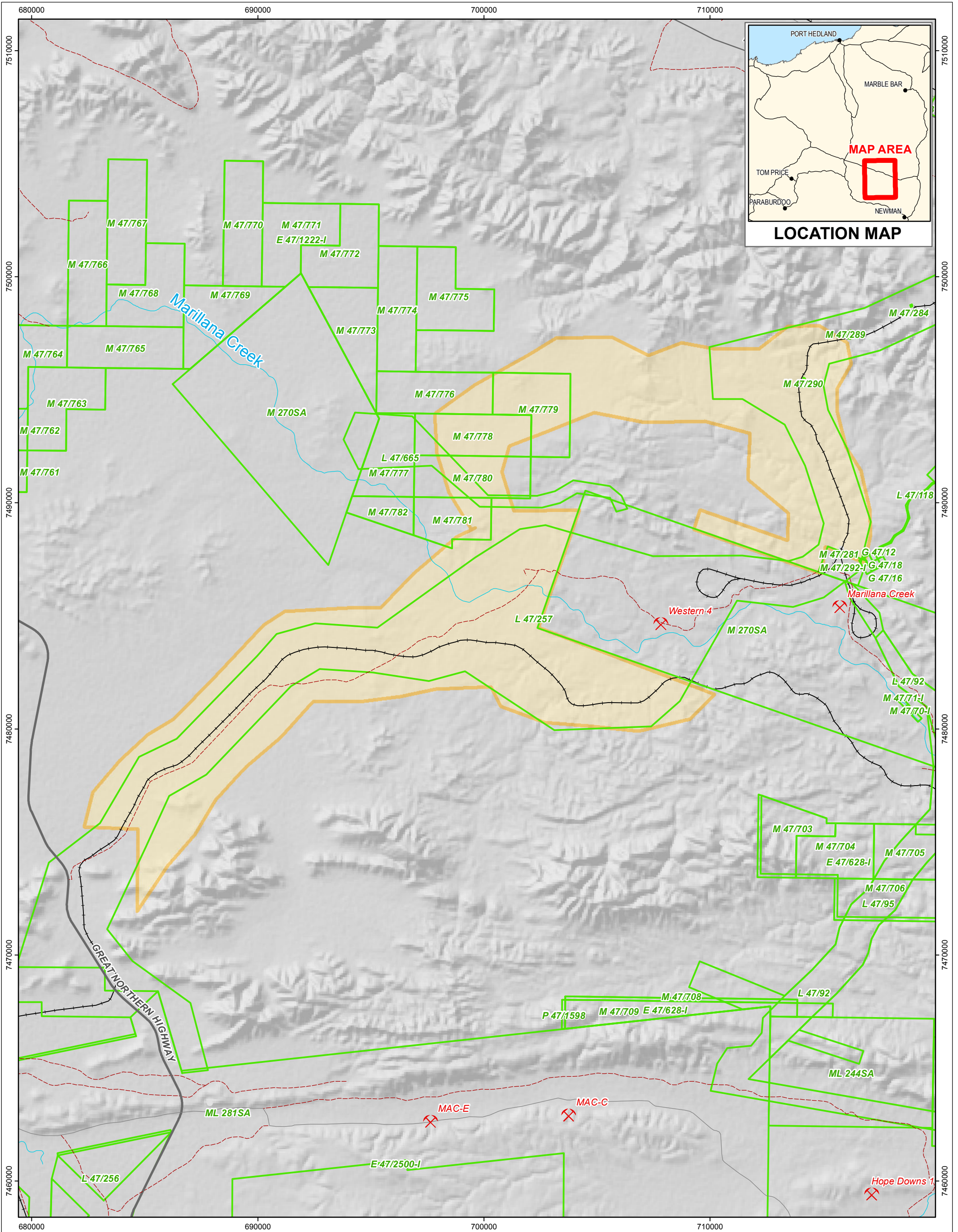
1.2 Previous Surveys

A survey by Halpern Glick Maunsell (HGM) in August 1999 incorporated a large portion of the current study area. The survey covered the route for a proposed rail corridor, referred to as the Western Access Corridor, linking BHP Billiton Iron Ore's Mining Area C and Yandi operations.

- Halpern Glick Maunsell (1999) *Marillana Creek Western Access Corridor Biological Assessment*.

There have been additional surveys completed at surrounding exploration areas. These are listed below and summarised in more detail in Section 3.1.1.

- Ecologia (2005) *Upper Marillana Exploration Project Biological Survey*;
- Ecologia Environment (2006a) *Ministers North Biological Survey*;
- ENV (2007c) *Upper Marillana Exploration Lease Flora and Vegetation Assessment*;
- ENV (2008a) *Ministers North Flora and Vegetation Assessment*;
- ENV (2008a) *Alligator Jaws Exploration Lease Flora and Vegetation Assessment*;
- Pilbara Flora (2009) *Priority and Rare Flora Survey Mudlark Well Area*;
- ENV (2009e) *Munjina Exploration Lease Flora and Vegetation Assessment*;
- ENV (2010) *Area C West NVCP Flora, Vegetation and Fauna Assessment*;
- Onshore Environmental (2010) *Packsaddle East Survey Area Level 2 Flora and Vegetation Survey*;
- Onshore Environmental (2011b) *Area C and Surrounds Study Area - Review of Flora and Vegetation*;
- Onshore Environmental (2011e) *Southern Flank Study Area Level 2 Flora and Vegetation Survey*;
- Onshore Environmental (2011d) *Camp Hill Study Area Level 2 Flora and Vegetation Survey*;
- Onshore Environmental (2011d) *Yandi Flora and Vegetation Survey*; and
- Onshore Environmental (2011e) *Jinidi Study Area - Review of Flora and Vegetation*.



GRIFFIN
SPATIAL & MAPPING

PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

LOCATION MAP
AREA C WEST TO YANDI

0 2 4 6 8 10
Kilometers
1:150,000
Datum: GDA94
Projection: MGA Zone 50

ONSHORE
ENVIRONMENTAL

Figure:	1	Date:	23/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
		Internal Reference:	ACW_YANDI_Loc

Legend

- Study Area -Area C West to Yandi
- BHP Tenements
- Highway
- Secondary Road
- Minor Road
- Track
- Operating Minesites

1.3 Climate

The climate of the Central Pilbara is arid-tropical with hot summers extending from October to April and mild winters from May to September. The climate is dry and rainfall is variable and unreliable. Rainfall occurs in both summer and winter months with the major falls received during summer. Cyclones that develop over the Indian Ocean bring heavy summer rainfall, especially from January to March. Winter rainfall is generally lighter and typically associated with cold fronts extending from southern parts into the Pilbara region. Annual average rainfall for the Pilbara ranges from 180 millimeters (mm) to over 400 mm (Beard 1975) with a long-term average of 313 mm for the town of Newman (Bureau of Meteorology, 2013).

Average maximum summer temperatures are typically between 35°C to 40°C, and winter maximum temperatures are between 22°C and 30°C. Summer temperatures can reach 49°C with frosts occurring occasionally during winter months. The prevailing wind direction for Newman is east south-east between May and August, with stronger west north-west winds dominant between September and March.

The annual rainfall for the Yandi Mine for the four years from 2010 to 2013 ranged from 189 mm for 2010 to 468 mm for 2013 (Figure 2). The absence of summer rainfall during 2009/10 contributed to the low annual total. The following three years from 2011-2013 were consistently higher with annual averages ranging from 445 mm to 468 mm, compared to the long term average of 313 mm. Rainfall was summer dominated, with August and September being the driest months for all three years (BHP Billiton 2013).

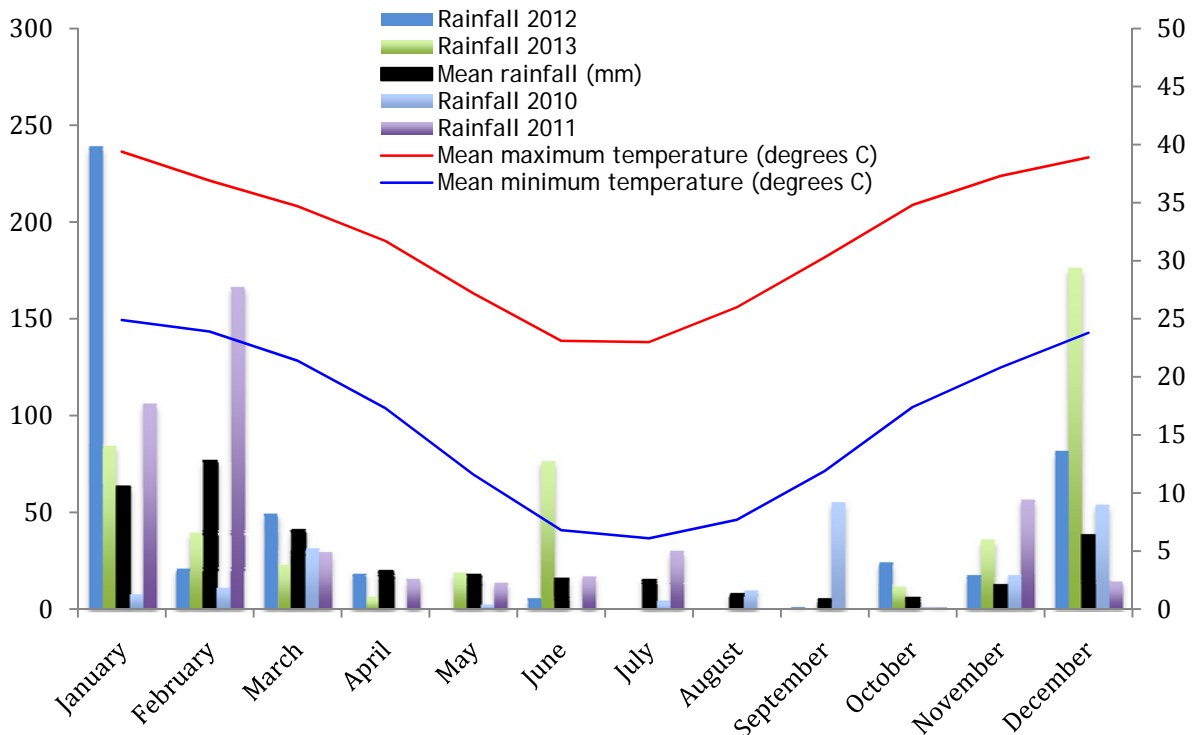


Figure 2 Climatic data for Newman (Bureau of Meteorology, Newman 2009) with rainfall figures from the Yandi mine site 2010 - 2013 (BHP Billiton Iron Ore 2013).

1.4 Biogeographic Regions

The Interim Biogeographic Regionalisation for Australia (IBRA) describes a system of 85 'biogeographic regions' (bioregions) and 403 subregions covering the entire Australian continent (Thackway and Cresswell 1995). Bioregions are defined on the basis of climate, geology, landforms, vegetation and fauna. The study area is situated in the Hamersley subregion (PIL3) of the Pilbara bioregion (Thackway and Cresswell 1995), which is located in the southern section of the Pilbara Craton (Kendrick 2001). The PIL3 subregion is 6,215,092 hectares (ha) in size and is described as:

"Mountainous area of proterozoic sedimentary ranges and plateaux, dissected by gorges (basalt, shale and dolerite). Mulga low woodland over bunch grasses on fine textured soils in valley floors, and *Eucalyptus leucophloia* over *Triodia brizoides* on skeletal soils of the ranges. The climate is semi-desert tropical, average 300 mm rainfall, usually in summer cyclonic or thunderstorm events. Winter rain is not uncommon. Drainage into either the Fortescue (to the north), the Ashburton to the south, or the Robe to the west."

The Hamersley subregion (PIL3) is characterised by mountain ranges and plateaux of Proterozoic sedimentary rock, dissected by gorges (Kendrick 2001; Australian Natural Resource Atlas [ANRA] 2008). Beard (1975) described the Hamersley subregion as "rounded hills and ranges, mainly of jaspilite and dolomite with some shale, siltstone and volcanics". This plateau supports mulga (*Acacia aneura*) low woodland over bunch grasses on fine textured soils, and snappy gum (*Eucalyptus leucophloia*) over hummock grass (*Triodia brizoides*) on skeletal sandy soils of the ranges (IBRA Revision 5.1, Environment Australia 2000).

1.5 Existing Land Use

Land tenure in the Pilbara region consists of Aboriginal and leasehold reserves, national parks and reserves and crown land which fall under a range of pastoral and mining leases. The dominant types of land use in the Pilbara are pastoralism (cattle grazing), mining, conservation (and associated tourism), unallocated crown land, crown reserves and urban areas (Kendrick 2001).

1.5.1 Pastoral

The pastoral industry in the Pilbara has become increasingly reliant on overseas export of live cattle through Port Hedland, with a progressive decline in sheep numbers. Many of the pastoral leases in the Central Pilbara are held by mining companies to ensure security of access to land adjacent to mines and infrastructure. The study area crosses the Juna Downs pastoral lease, which is still an active cattle station.

1.5.2 Mining

The first mining exploration in the Pilbara commenced in the early 1800s and currently the Pilbara region provides the majority of WA's petroleum, gas and iron ore export, while gold mining is also an important industry (ANRA 2007). Manganese, asbestos and tin have also previously been mined in the Pilbara area.

The Central Pilbara region generates the majority of WA's iron ore production, with a number of existing and new mines located in close vicinity to the study area, including Yandicoogina, Yandi, Mining Area C, Hope Downs, and West Angelas. Development of iron ore deposits was accelerated in the 1960's after the Commonwealth lifted the export embargo on iron ore. The iron ore industry in the region has historically focused on the exploitation of high grade (65-66% Fe) Brockman ores, but more recently there has been

exploration and mining of pisolitic channel iron deposits and Marra Mamba ore. The current Yandi mine has been in operation since 1991.

1.5.3 Tourism

Besides mining and pastoral activities, tourism provides the only other significant economic driver in the Central Pilbara. The tourism industry is small but developing rapidly, with Karijini National Park and other conservation reserves as the primary tourism focus. The Hamersley subregion has 14.1% of its total area reserved under some form of conservation, including the majority of Karijini National Park (Kendrick 2001).

1.6 Landforms

The study area lies within the Hamersley Range on the Hamersley Plateau, which is surrounded to the north, east and west by escarpments. Rounded hills and ranges dominate the landscape in the area. The Hamersley and Ophthalmia Ranges are characterised by long strike ridges rising from valley floors reaching a height of up to 300m. The flat valley floors consist of Cainozoic sediments.

In a survey of the Karijini (Hamersley Range) National Park, Dawe and Dunlop (1983) developed a classification system for landforms and vegetation of the area. Nine units were described, as well as number of sub-units based on geology, soil, slope and drainage patterns. Halpern Glick Maunsell (1999) identified six of these landform classes that are present in the study area:

- 1) High hills and ridges: ridges and hills rising above the surrounding plains. The surface is largely covered with skeletal soils, with areas of exposed rock. This landform unit occurs mainly in the southern portion of the study area.
- 2) Low hills and ridges: The predominant landform in the study area, particularly in the northern section.
- 3) Valley floor: Well drained valleys with slopes rarely exceeding 5° and relief less than 20 m. Occurs in the southern section of the study area adjacent to Mining Area C.
- 4) Outwash plains (OP): Gravelly colluvial plains of low relief, dissected by minor drainage lines. Occurs in the central southern section of the study area in association with a minor drainage line.
- 5) Minor drainage lines (Dm): Generally shallow eroded channels with a sandy or gravelly wash line with associated outwash areas.
- 6) Major creek lines (C): Heavy gravel in channels, sandy banks and islands. These generally feature eroded earth banks 1-3 m high with a sandy or gravelly wash line and have a minor associated flood plain. Marillana Creek is the major drainage line within the study area.

1.7 Soils

The soils of the Pilbara Region have been defined and mapped at a scale of 1:2,000,000 by Bettenay *et al.* (1967). The study area is mainly covered by coherent and porous red loam soils with weak pedologic development. This soil type is most commonly present in areas of spinifex steppe with *Eucalyptus leucophloia*.

Tille (2006) collated the most recent and detailed mapping of Western Australia's Rangelands and Arid Interior into a hierarchy of soil-landscape mapping units. The study

area falls within the Fortescue Province, an area that occupies approximately 160,050 km² (6.3% of Western Australia) and includes the towns of Port Hedland, Karratha, Dampier, Roebourne, Newman, Tom Price, Paraburdoo, Pannawonica, Marble Bar, Nullagine and Jigalong. Soils and landforms for the Fortescue Province are described as "Hills and ranges (with stony plains and some alluvial plains and sandplains) on the volcanic, granitic and sedimentary rocks of the Pilbara Craton. Stony soils with red loamy earths and red shallow loams (and some red/brown non-cracking clays, red deep sandy duplexes and red deep sands)" (Tille 2006). The Fortescue Province is divided into ten soil-landscape zones:

- Nullagine Hills Zone;
- De Grey-Roebourne Lowlands Zone;
- Chichester Ranges Zone;
- Abydos Plains and Hills Zone;
- Fortescue Valley Zone;
- Hamersley Plateaux Zone;
- Karratha Coast Zone;
- Warrawagine Hills Zone;
- Jigalong Plains Zone; and
- Harding Hills and Plains Zone.

The study area occurs within the Hamersley Plateaux Zone. The dominant landform features within this zone are rocky ranges / hills and stony plains (Tille 2006). Rugged hills, ridges, dissected plateaux and mountains occur on the basalt, banded iron formation and sandstone of the Hamersley Basin, the most notable examples being the Chichester and Hamersley Ranges. The study area occurs within the central Hamersley Ranges, which together with the Ophthalmia Range comprise the majority of the Hamersley Plateau.

Hills and ridges occurring within the study area support areas with shallow, or in some cases, a complete lack of soil cover. These regions are the surface expression of the Robe Pisolite; where soils are present they are shallow and skeletal. Soil formed in these areas is generally transported to lower valleys and plains due to the lack of vegetation cover and erosion from heavy rainfall events. The hill slopes support uniform medium or fine textured soils consisting of loams and sands that are generally shallow, stony and lack nutrients. On the plains soil are better developed and deeper, represented most commonly as hard alkaline red loams. A layer of quartz and jaspilite gravel may cover the surface in some areas. The soils in the major drainage channels, including Marillana Creek, are alluvial sands with banks formed by a combination of alluvial sands and duplex soils. Minor drainage channels have soil consisting primarily of duplex soils.

1.8 Geology

The geology of Western Australia is dominated by the ancient continental Western Shield. The Pilbara region makes up a portion of the Western Shield and consists of pre-Cambrian, Proterozoic and Archaean rocks. The area contains some of the earth's oldest rock formations, thought to be around 3.5 billion years old (ANRA 2008). Important mineral reserves, including iron ore, which is prevalent in the Pilbara, are associated with these rock formations.

The Pilbara Craton lies beneath the Proterozoic rocks of the Hamersley and Bangemall Basins. The Hamersley Basin covers the majority of the southern part of the Pilbara Craton

and is separated into three stratigraphic groups; the Fortescue, Hamersley and Turee Creek Groups.

The Fortescue Group consists mainly of basalt with beds of siltstone, mudstone, shale, dolomite and jaspilite. These rocks form the Chichester Plateau, which lies beneath the Hamersley Plateau. The Turee Creek Group consists of interbedded mudstone, siltstone, sandstone, conglomerate and carbonate. These rocks are the youngest of the three groups and are exposed mainly in the Ashburton Valley.

The Hamersley Group is the most relevant to the study area as it contains both the Brockman Iron Formation and the Marra Mamba Iron Formation, which together provide most of the major iron ore deposits in the Pilbara (O'Brien and Associates 1992). This group forms the Hamersley Ranges and Plateau and consists of jaspilite and dolomite. The jaspilite produces deposits of haematite and limonite, which are mined for iron ore.

The main geological features of the Roy Hill area have been described by Thorne and Tyler (1991). The main geological units within the study area are:

- The Weeli Wolli Formation (*Phj*): comprised of banded jaspilite with interbedded shale and intruded by medium-grained dolerite;
- The Tertiary Robe Pisolite Formation (*Tp*): associated with the ancient Marillana Creek, is composed of pisolitic limonite deposits with fossil wood fragments. This is the main source of iron ore mined at Yandi;
- The Tertiary Colluvium Formation (*Tc*): this formation is partially cemented valley-fill deposits with boulders of limonite;
- Calcrete (*Czk*): sheet carbonate, found along major drainage lines;
- Alluvium and colluvium (*Qw*): red brown sandy and clayey soil on low slopes and sheetwash areas;
- Quaternary Alluvium (*Qa*): unconsolidated silt, sand and gravel in drainage lines and on adjacent floodplains; and
- Colluvium (*Czc*): partly consolidated quartz and rock fragments in silt and sand matrix in old valley fill deposits.

1.9 Flora and Vegetation

Historical systematic flora surveys of the Pilbara are limited to work completed by Burbidge (1959) and Beard (1975), and further refining of the original Beard mapping by Shepherd *et al.* (2002). Beard (1975) mapped vegetation of the Pilbara at a scale of 1:1,000,000. The most common vegetation associations within the study area were Low Woodlands of Mulga (*Acacia aneura*) and *Eucalyptus leucophloia* (snappy gum) and *Triodia wiseana* (hard spinifex) tree steppe occurring on hills. Tall woodlands of *Eucalyptus camaldulensis*, *Eucalyptus victrix* and *Melaleuca argentea* also occur along major drainage lines such as Marillana Creek.

The original vegetation mapping undertaken by Beard (1975) was refined by Shepherd *et al.* (2002), who confirmed the same two vegetation associations were present within the study area (Figure 3). While the Pre-European extent for each vegetation association is greater than 99.9%, less than ten percent of each association occurs within formal or informal reserves (Table 1).

Table 1 Pre-european extent of vegetation associations occurring over the study area (Shepherd *et al.* 2002).

Vegetation Sub-Association	Description	Pre-Euro. Extent Remaining	% remaining IUCN Class I-IV Reserves	% remaining Other Reserves	% remaining DPaW Managed PL
82.3	Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i>	100.0	8.9	0.2	1.0
18.11	Low woodland; mulga (<i>Acacia aneura</i>)	99.9	2.0	0.3	2.5

A comprehensive and systematic field review of the entire Pilbara's regional flora, fauna, aquatic life and ecosystems is currently in preparation by DPaW. The biological survey has included 800 study sites distributed across the entire Pilbara region between 2002 and 2007.

The resources boom in the Pilbara over the past decade has resulted in a significant number of site-specific biological surveys being completed as part of the formal environmental approvals process. One previous survey has been completed covering most of the current study area. However since 1991, 28 flora and vegetation assessments have been completed at the Yandi Mine and numerous other surveys have been completed at other areas in close proximity (described in more detail in Section 3.1.1). These fine-scale surveys have contributed greatly to the identification of locally significant flora and vegetation values.

1.10 Land Systems

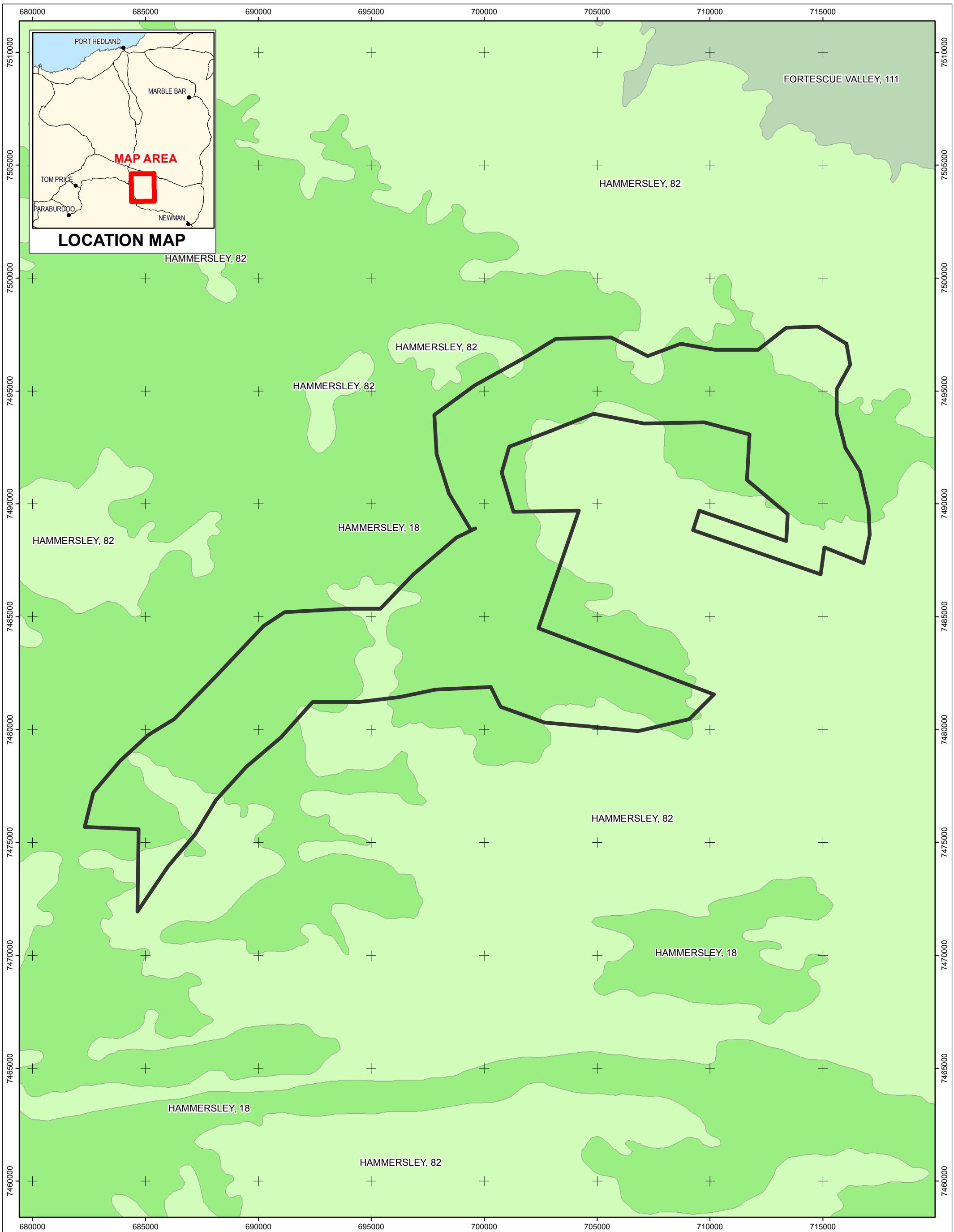
The Department of Agriculture has conducted inventory and condition surveys of the Pilbara (van Vreeswyk *et al.* 2004) using an integrated survey method involving the land system approach to rangeland description and evaluation. The primary objective of the surveys was to provide comprehensive descriptions and mapping of the biophysical resources of the region as well as an evaluation on the condition of soils and vegetation. The mapping is based on patterns in topography, soils and vegetation.

A total of 102 land systems were defined in the Pilbara at a scale of 1:250,000 (van Vreeswyk *et al.* 2004), with seven land systems occurring within the study area (Table 2, Figure 4). The dominant land systems are the Boolgeeda in the south and the north-west, the Platform Land System in the north-east and central areas and the McKay Land System in the central parts of the study area.

Table 2 Land systems occurring within the study area (descriptions from Van Vreeswyk *et al.* 2004).

Land System	Representation in the Pilbara	Description
Boolgeeda	7,748 km ² or 4.3%	Stony plains with hard spinifex grasslands or mulga shrublands. The geology is quarternary colluvium.
Newman	14,580 km ² or 8.0%	Rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands.

Land System	Representation in the Pilbara	Description
McKay	4,202km ² or 2.3%	Hills, ridges, plateaux remnants and breakaways of meta sedimentary rocks supporting hard spinifex grasslands.
Oakover	1,529k m ² or 0.8%	Breakaways, mesas, plateaux and stoney plains of calcrete supporting hard spinifex grasses.
Robe	865km ² or 0.5%	Low limonite mesas and buttes supporting soft spinifex (and occasionally hard Spinifex) grasslands.
Calcrete	1,444km ² or 0.8%	Low calcrete platforms and plains supporting shrubby hard spinifex grasslands.
Platform	1,570km ² or 0.9%	Dissected slopes and raised plains supporting hard spinifex grasslands.



GRIFFIN
SPATIAL & MAPPING

PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI

Beard (1975) vegetation complexes represented within the study area

0 2 4 6 8 10
Kilometers

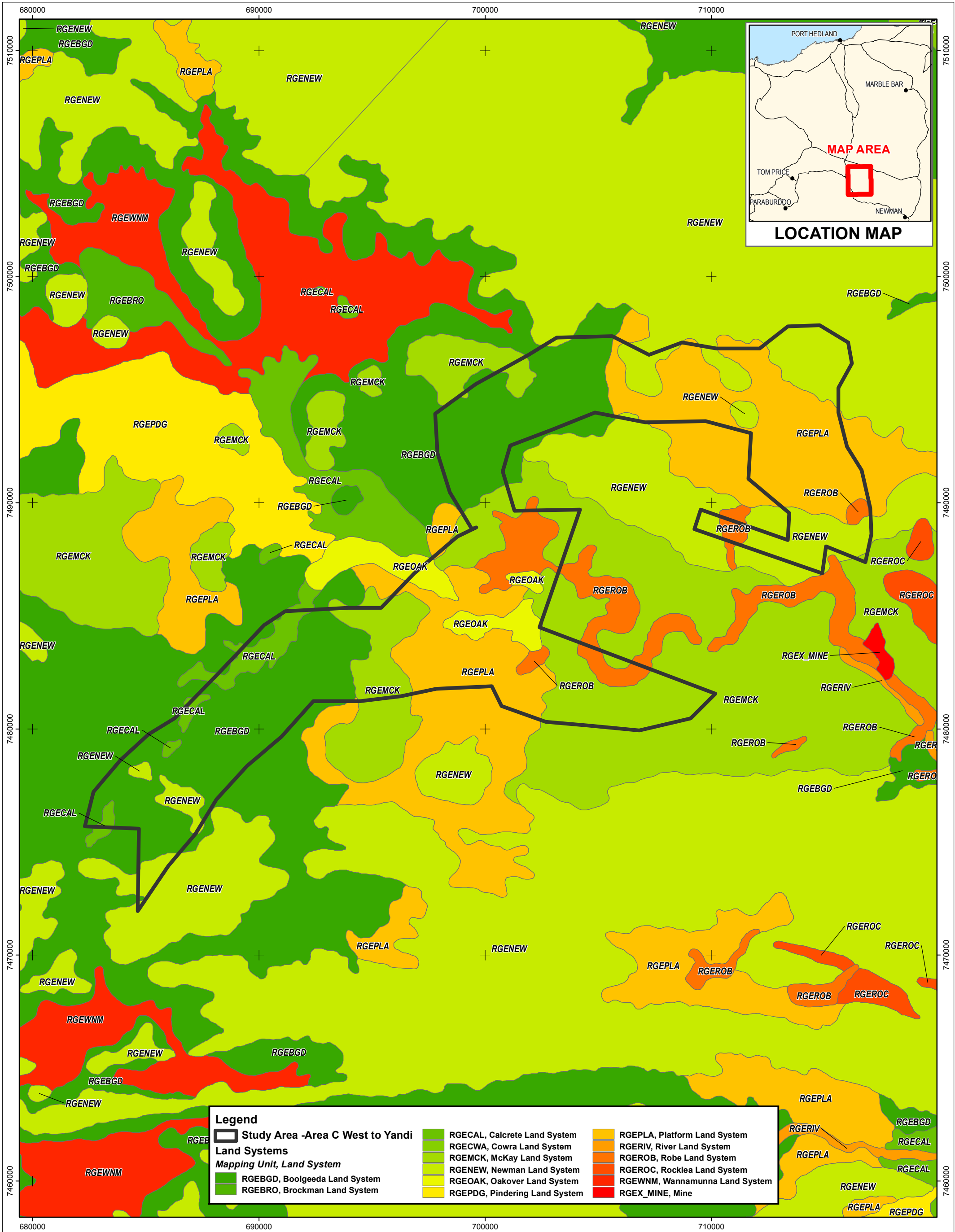
1:150,000
Datum: GDA94
Projection: MGA Zone50

ONSHORE
ENVIRONMENTAL

Figure:	3	Date:	23/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
		Internal Reference:	ACW_YANDI_Beard

Legend

- Study Area - Area C West to Yandi
- Pre-European Vegetation (Beard 1975) System, Vegetation Association**
- FORTESCUE VALLEY, 111
- HAMMERSLEY, 18
- HAMMERSLEY, 82



Legend	
	Study Area -Area C West to Yandi
Land Systems	
Mapping Unit, Land System	
	RGEBGD, Boolgeeda Land System
	RGEBRO, Brockman Land System
	RGECAL, Calcrete Land System
	RGECWA, Cowra Land System
	RGEMCK, McKay Land System
	RGENEW, Newman Land System
	RGEOAK, Oakover Land System
	RGEPDG, Pindering Land System
	RGEPLA, Platform Land System
	RGERIV, River Land System
	RGEROB, Robe Land System
	RGEROC, Rocklea Land System
	RGEWNM, Wannamunna Land System
	RGEX_MINE, Mine

GRIFFIN
SPATIAL & MAPPING

PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI

Land Systems occurring within the study Area (descriptions from Van Vreeswy et al. 2004)

Figure:	4	Date:	23/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
Internal Reference:	ACW_YANDI_Lands		

0 2 4 6 8 10
Kilometers
1:150,000
Datum: GDA94
Projection: MGA Zone50

2.0 METHODOLOGY

2.1 Legislation and Guidance Statements

The flora and vegetation survey was carried out in a manner that was compliant with Environmental Protection Authority (EPA) requirements for the environmental surveying and reporting of flora and vegetation in Western Australia:

- *Environmental Protection of Native Vegetation in Western Australia: Clearing of Native Vegetation with Particular Reference to Agricultural Areas. Position Statement No. 2* (EPA 2000);
- *Terrestrial Biological Surveys as an Element of Biodiversity Protection. Position Statement No. 3* (EPA 2002); and
- *EPA Guidance for the Assessment of Environmental Factors: Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia No. 51* (EPA 2004).

The survey was also conducted in accordance with BHP Billiton Iron Ore's *Guidance for Flora and Vegetation Surveys in the Pilbara* (BHP Billiton Iron Ore 2010).

2.2 Desktop Searches

Three desktop searches were undertaken for information relating to rare flora, Threatened Ecological Communities (TECs) and Priority Ecological Communities (PECs) previously collected or described within, or in close proximity to, the study area. The database search included a 50 km radius around the central point of the study area; 50K 713000E 7484000N (GDA94). The State database search investigated three DPaW databases:

1. The DPaW Threatened Flora Database;
2. The DPaW Declared Rare and Priority Flora List; and
3. The Western Australian Herbarium Specimen Database for priority species opportunistically collected in the area of interest.

A search of the EPBC Act Protected Matters database was undertaken (DSEWPaC 2013), as well as a search of the International Union for Conservation of Nature (IUCN) database (IUCN 2013).

2.3 Field Survey Methodology

2.3.1 *Timing and Personnel*

A two season Level 2 flora and vegetation survey was completed by Onshore Environmental. The first season survey was completed by four botanists between the 21st May and 3rd June 2011, with a second season survey completed between the 19th July and 1st August 2012. A third field trip, completed by two botanists between the 20th and 29th August 2013, was aimed at finalising vegetation mapping and confirming boundaries for populations of significant flora. Personnel involved in the field survey included Senior Botanists Dr Jerome Bull, Dr Darren Brearley and Ms Ellen Palmer, and Field Botanists Ms Jessica Waters, Mr Daniel Roberts, Mr Glyn Hopkinson and Mr Peter Sweeny.

2.3.2 *Sampling of Study Sites*

Field surveys across the study area involved systematic sampling using quadrats. Relevé vegetation descriptions were made to increase the accuracy of vegetation mapping and targeted searches were completed in areas supporting significant plant taxa, or within habitats where it was anticipated significant flora may occur.

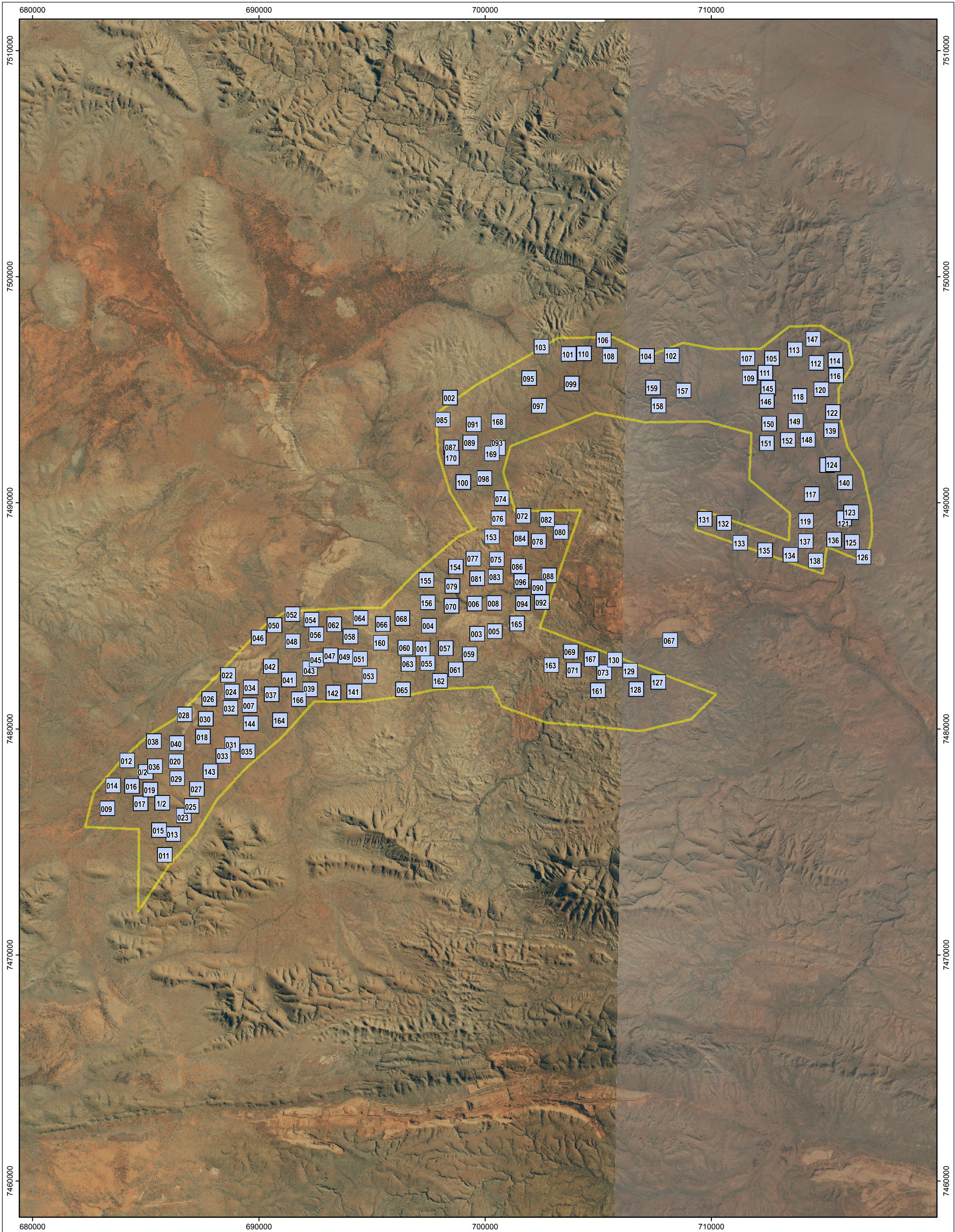
Quadrats were generally 50 m by 50 m; however along narrow associations such as minor drainage lines an equivalent area (2,500 m²) was surveyed. The area sampled for each quadrat is standard for the Pilbara bioregion. The number of study sites sampled was determined by the size and heterogeneity of the study area, with a minimum density of one quadrat per square kilometre. For the study area a total of 170 quadrats were formally assessed. The locations of all quadrats sampled are provided in Figure 5.

The sampling sites were assessed to provide a list of the total flora occurring within the study area and a description of the vegetation structure. Data collected covered a range of environmental parameters including:

- Landform and habitat;
- Aspect;
- Soil colour and soil type;
- Rock type;
- Slope (angle);
- Percentage of bare ground, logs, twigs and leaves;
- Vegetation condition;
- Disturbance (caused by fire, clearing, grazing etc);
- Age since fire;
- Broad floristic formation;
- Vegetation association description; and
- Height, form, presence of flowers, and percentage ground cover for individual plant taxa.

Other parameters recorded for each study site were:

- Study site number and date of assessment;
- Names of the botanists undertaking the assessment;
- Waypoint - coordinate (GDA94) using a handheld GPS;
- Quadrat dimensions; and
- Photograph number.



GRIFFIN
SPATIAL & MAPPING

PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI
Location of study sites (quadrats)
within the study area

0 2 4 6 8 10
Kilometers

1:150,000

Datum: GDA94
Projection: MGA Zone 50




Figure:	5	Date:	23/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
		Internal Reference:	Fig5_StudySites

Legend

- Study Area -Area C West to Yandi
- Study Sites (Quadrants)

N



2.3.3 Targeted Searches for Conservation Significant Species

The location of current Threatened and Priority flora within the study area were identified during the desktop search and literature review. The exact location of previous records was re-visited in the field to confirm the occurrence and distribution of these taxa. The entire study area was ground truthed at less than 1 km intervals during the survey. This ground coverage provided the opportunity to record opportunistic locations for significant flora and undertake closer examination of specific landforms where these flora may be expected to occur. These landforms included medium and large drainage lines, floodplains, calcrete hills and rises and areas supporting outcropping mudstone/siltstone.

2.3.4 Weed Survey and Mapping

Two introduced (weed) species had previously been recorded from the study area. These records were re-visited to confirm occurrence and update distribution of populations. Additional opportunistic records for weed species were made while moving around the study area, and targeted searches were completed in high moisture habitats including medium and large drainage lines and flood plains.

2.3.5 Vegetation Association Mapping

The vegetation mapping utilised high-resolution aerial photography of the entire study area at a scale of 1:20,000, with definition of vegetation polygons based on the different shading patterns evident. The location of 170 quadrats (50 m by 50 m or 2,500 m² in equivalent area) formally assessed was overlaid on the aerial photography, and associated flora and vegetation data from additional releve sites used to provide vegetation association descriptions for individual polygons.

Description of vegetation structure follows the height, life form and density classes of Specht (1970) as modified by Aplin (1979) and Trudgen (2009) (see Appendix 1). This is largely a structural classification suitable for broader scale mapping, but taking all ecologically significant strata into account. Vegetation condition for each of the sampling sites was determined using a recognised rating scale (based on Keighery 1994, see Appendix 2).

2.3.6 Vouchering

Where field identification of plant taxa was not possible, specimens were collected in a systematic manner for later identification by expert taxonomists utilising the resources of the Western Australian Herbarium (WAH). Species were identified through comparison with the reference collection and the use of identification keys by Dr Eleanor Bennett. A select number of voucher specimens were provided to the BHP Billiton sponsored botanist based at the WAH, Mr Steve Dillon. All names were checked against WAH (2014) to ensure their currency. Nomenclature follows Paczkowska and Chapman (2000) and the WAH.

2.3.7 Field Survey Constraints

The EPA Guidance Statement for Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2004) list twelve potential constraints that field surveys may encounter. These constraints are addressed in Table 3.

Table 3 Relevance of constraints, as identified by EPA (2004), to the flora and vegetation survey.

Constraint	Relevance
Scope	The scope was established by BHP Billiton Iron Ore in compliance with relevant EPA Guidance Statements.
Proportion of flora collected and identified	It is likely that a large proportion of the species within the study area were collected and identified. The survey was conducted after a season of adequate rainfall. A two-season survey ensured that seasonal and ephemeral species were collected, and a third targeted field assessment was completed.
Sources of information	One previous flora and vegetation survey had been completed within the study area, with numerous additional surveys completed in close proximity, providing an extensive local database.
The proportion of the task achieved and further work which might be needed	A comprehensive desktop review of the previous survey work was completed within, and in close proximity to, the study area. A two-season field survey covering the entire study area at an appropriate scale was completed. All allocated tasks were achieved during the investigation and no further work is needed at this site.
Timing / weather / season / cycle	The survey was completed over two seasons encompassing May/June 2011, July/August 2012 and August 2013. The Pilbara received good summer rainfall ahead of all three surveys, and seasonal influences were not a limiting factor.
Disturbances, e.g. fire, flood	Disturbances within the study area included fire (mosaic of burn ages recorded), grazing of lowland vegetation associations by domestic stock (cattle), introduction of weed species (particularly in riparian habitats), historical access tracks and exploration activities, and proximity to Great Northern Highway, other access roads and tracks, and Rio Tinto's Yandicoogina rail line. None of these affected the ability to complete the scope.
Intensity	A total of 170 quadrats (study sites) were assessed within the 235km ² study area by Onshore Environmental. This represents an intensive survey.
Completeness	The Level 2 flora and vegetation survey is determined to have addressed all items within the scope of works and is compliant with all relevant legislation; the study is determined to be complete.
Resources	Appropriate resources were applied to the survey which included up to seven botanists over three field visits.
Access problems	The entire study area was accessible by vehicle and on foot, noting that vegetation mapping was facilitated by high-resolution aerial photography.
Availability of contextual information	Numerous flora and vegetation surveys have been undertaken within a 50 km radius of the study area, providing an extensive local dataset.
Experience levels	The Senior Botanists and Field Botanists working on the survey each had between three and 15 years of Pilbara experience. All have completed numerous surveys in close proximity to the study area over recent years.

2.3.8 Assessment of Conservation Significance

The conservation significance of flora and ecological communities are classified on a Commonwealth, State and Local level on the basis of various Acts and Agreements (EPA Guidance Statement No. 51, EPA 2004), including:

Commonwealth Level:

- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act): The Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) lists Threatened Flora and Ecological Communities, which are determined by the Western Australian Threatened Species Specific Committee according to criteria set out in the Act. The Act lists flora that are considered to be of conservation significance under one of six categories (Appendix 3).

State Level:

- *Wildlife Conservation Act 1950* (WC Act): At a State level native flora species are protected under the *Wildlife Conservation Act 1950* - Wildlife Conservation (Rare Flora) Notice. A number of plant species are assigned an additional level of conservation significance based on a limited number of known populations and the perceived threats to these locations. Species of the highest conservation significance are gazetted Threatened Flora (T) under subsection 2 of section 23F of the Act. It is an offence to take or damage T without Ministerial approval. Section 23F of the Act defines 'to take' as "to gather, pick, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means".
- DPaW Priority list: DPaW produces a list of Priority species and ecological communities (PEC's) that have not been assigned statutory protection under the *Wildlife Conservation Act 1950*. Priority Flora are under consideration for declaration as 'Rare Flora', classified as in urgent need of further survey (Priority One to Three) or require monitoring every 5-10 years (Priority Four, see Appendix 4). The list of Priority Ecological Communities identifies those that need further investigation before nomination for Threatened Ecological Community status.

Local Level:

- Species may be considered of local conservation significance because of their patterns of distribution and abundance. Although not formally protected by legislation, such species are acknowledged to be in decline as a result of threatening processes, primarily habitat loss through land clearing.

3.0 RESULTS

3.1 Desktop Review

3.1.1 Previous Flora Surveys

The background and major results from 15 previous flora and vegetation surveys completed within, or in close proximity to the study area are presented in Table 4 and summarised in Appendix 5.

Table 4 Summary of data from previous flora and vegetation surveys completed within, or in close proximity to, the study area.

Survey	Consultant	Year	Significant Flora	Introduced Weeds
Yandi Western Corridor Biological Assessment	HGM	1999	None	* <i>Bidens bipinnata</i> , * <i>Malvastrum americanum</i> , * <i>Portulaca oleracea</i>
Upper Marillana Exploration Project Biological Survey	Ecologia	2005	None	* <i>Malvastrum americanum</i> , * <i>Bidens bipinnata</i>
Ministers North Biological Survey	Ecologia	2006	None	* <i>Acetosa vesicaria</i> , * <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i>
Upper Marillana Exploration Lease Flora and Vegetation Assessment	ENV	2007	<i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3)	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Malvastrum americanum</i> , * <i>Cucumis melo</i> subsp. <i>agrestis</i>
Ministers North Flora and Vegetation Assessment	ENV	2008	<i>Sida</i> sp. Barlee Range (P3)	* <i>Sonchus oleraceus</i> , * <i>Chloris virgata</i> , * <i>Cenchrus setiger</i>
Alligator Jaws Exploration Lease Flora and Vegetation Assessment	ENV	2008	<i>Spartothamnella puberula</i> (P2), <i>Eremophila magnifica</i> subsp. <i>magnifica</i> (P4)	* <i>Malvastrum americanum</i> , * <i>Sigesbeckia orientalis</i> , * <i>Setaria verticillata</i> , * <i>Bidens bipinnata</i>
Munjina Exploration Lease Flora and Vegetation Assessment	ENV	2009	<i>Acacia subtiliformis</i> (P3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3)	* <i>Bidens bipinnata</i> , * <i>Chloris virgata</i> , * <i>Malvastrum americanum</i> , * <i>Portulaca oleracea</i> , * <i>Setaria verticillata</i> , * <i>Vachellia farnesiana</i>
Priority and Rare Flora Survey Mudlark Well Area	Pilbara Flora	2009	None	* <i>Malvastrum americanum</i> , * <i>Bidens bipinnata</i> , * <i>Setaria verticillata</i> , * <i>Datura leichardtii</i>
Area C West NVCP Flora, Vegetation and Fauna Assessment	ENV	2010	<i>Eremophila magnifica</i> subsp. <i>magnifica</i> (P4), <i>Eremophila magnifica</i> subsp. <i>velutina</i> (P3), <i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794), <i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642) (P3), <i>Triodia</i> sp. Mt Ella (ME Trudgen 12739) (P3)	* <i>Aerva javanica</i> , * <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Chloris virgata</i> , * <i>Malvastrum americanum</i> , * <i>Setaria verticillata</i> , * <i>Sigesbeckia orientalis</i> , * <i>Sonchus oleraceus</i>

Survey	Consultant	Year	Significant Flora	Introduced Weeds
Packsaddle East Survey Area Level 2 Flora and Vegetation Survey	Onshore	2010	<i>Aristida jerichoensis</i> subsp. <i>subspinulifera</i> (P1), <i>Stylidium weeliwolli</i> (P2), <i>Acacia subtiliformis</i> (P3), <i>Fimbristylis sieberiana</i> (P3), <i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727) (P3), <i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794) (P3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3), <i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642) (P3); <i>Goodenia nuda</i> (P4), <i>Lepidium catapycnon</i> (T)	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Malvastrum americanum</i> , * <i>Sigesbeckia orientalis</i> , * <i>Vachellia farnesiana</i>
Yandi Flora and Vegetation Survey	Onshore Environmental	2011	<i>Lepidium catapycnon</i> (T), <i>Acacia subtiliformis</i> (P3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3), <i>Goodenia nuda</i> (P4)	* <i>Acetosa vesicaria</i> , * <i>Aerva javanica</i> , * <i>Argemone ochroleuca</i> subsp. <i>ochroleuca</i> , * <i>Bidens bipinnata</i> , * <i>Brassica rapa</i> , * <i>Cenchrus ciliaris</i> , * <i>Centaurea melitensis</i> , * <i>Chloris virgata</i> , * <i>Citrullus lanatus</i> , * <i>Conyza bonariensis</i> , * <i>Cucumis melo</i> subsp. <i>agrestis</i> , * <i>Cynodon dactylon</i> , * <i>Lactuca serriola</i> forma <i>serriola</i> , * <i>Malvastrum americanum</i> , * <i>Polypogon monspeliensis</i> , * <i>Portulaca oleracea</i> , * <i>Rostraria cristata</i> , * <i>Setaria verticillata</i> , * <i>Sigesbeckia orientalis</i> , * <i>Solanum nigrum</i> , * <i>Sonchus asper</i> , * <i>Sonchus oleraceus</i> , * <i>Vachellia farnesiana</i>
Area C and Surrounds Study Area- Review of flora and Vegetation	Onshore	2011	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i> (P1), <i>Aristida lazaridis</i> (P2), <i>Spartothamnella puberula</i> (P2), <i>Stylidium weeliwolli</i> (P2), <i>Vittadinia</i> sp. Coondewanna Flats (S. van Leeuwen 4684) (P1), <i>Acacia subtiliformis</i> (P3), <i>Euphorbia inappendiculata</i> (P3), <i>Fimbristylis sieberiana</i> (P3), <i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727) (P3), <i>Nicotiana umbratica</i> (P3), <i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794) (P3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3), <i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642) (P3), <i>Eremophila magnifica</i> subsp. <i>magnifica</i> (P4), <i>Goodenia nuda</i> (P4)	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Chloris barbata</i> , * <i>Chloris virgata</i> , * <i>Cynodon dactylon</i> , * <i>Datura leichardtii</i> , * <i>Malvastrum americanum</i> , * <i>Portulaca oleracea</i> , * <i>Setaria verticillata</i> , * <i>Sigesbeckia orientalis</i> , * <i>Vachellia farnesiana</i>

Survey	Consultant	Year	Significant Flora	Introduced Weeds
Jinidi Study Area- Review of Flora and Vegetation	Onshore	2011c	<i>Acacia subtiliformis</i> (P3), <i>Goodenia</i> sp. East Pilbara (P3), <i>Goodenia nuda</i> (P4), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3), <i>Triodia</i> sp. Mt Ella (P3), <i>Rhagodia</i> sp. Hamersley (P3), <i>Indigofera</i> sp. Gilesii (M.E. Trudgen 15869) (P3), <i>Isotropis parviflora</i> (P2)	* <i>Cenchrus ciliaris</i> , * <i>Bidens bipinnata</i> , * <i>Vachellia farnesiana</i> , * <i>Portulaca oleracea</i> , * <i>Cucumis melo</i> subsp. <i>agrestis</i> , * <i>Malvastrum americanum</i> , * <i>Setaria verticillata</i> , * <i>Flaveria trinervia</i>
Southern Flank Study Area Level Two Flora and Vegetation Survey	Onshore	2011	<i>Lepidium catapycnon</i> (T), <i>Spartothamnella puberula</i> (P2), <i>Dampiera metallorum</i> (P3), <i>Eremophila magnifica</i> subsp. <i>magnifica</i> (P4), <i>Sida</i> sp. Barlee Range (S van Leeuwen 1642) (P4), <i>Aristida jerichoensis</i> var. <i>subspinulifera</i> (P1), <i>Pilbara trudgenii</i> (P2), <i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794) (P3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3), <i>Triodia</i> sp. Mt. Ella (ME Trudgen 12739) (P3), <i>Acacia bromilowiana</i> (P4), <i>Ptilotus mollis</i> (P4)	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Malvastrum americanum</i> , <i>Setaria verticillata</i> , * <i>Vachellia farnesiana</i>
Camp Hill Study Area Level 2 Flora and Vegetation Survey	Onshore	2011	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i> (P1), <i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794) (P3), <i>Triodia</i> sp. Mt Ella (M.E. Trudgen 12739) (P3), <i>Acacia bromilowiana</i> (P4), <i>Eremophila magnifica</i> subsp. <i>magnifica</i> (P4)	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i> , * <i>Cucumis melo</i> subsp. <i>agrestis</i> , * <i>Malvastrum americanum</i> , * <i>Portulaca oleracea</i> , * <i>Setaria verticillata</i> , * <i>Vachellia farnesiana</i>

3.1.2 Threatened Flora Listed under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act)

A search of the EPBC Act Protected Matters Database (DoE 2013) identified two records of 'Vulnerable' plant taxa (Appendix 2) potentially occurring within the vicinity of the study area; *Lepidium catapycnon* and *Thryptomene wittweri*.

Lepidium catapycnon is broadly distributed between the Pilbara towns of Newman, Nullagine and Wittenoom. The total area of extent approximates 21,736 km² with eight confirmed populations occurring within nearby Karijini National Park. *Lepidium catapycnon* has previously been recorded south-east of the nearby Yandi Mine (Onshore Environmental 2011a), with larger populations occurring further south at BHP Billiton Iron Ore's Jinidi tenements (Onshore Environmental 2011c).

Thryptomene wittweri (Mountain Thryptomene) is only known from high-altitude mountaintops in the Pilbara, with its distribution extending south into the Gascoyne and Great Victoria Desert bioregions. It is found on steep rocky scree slopes and breakaways near the summits of large ranges. This species has been recorded on Mt Meharry situated west of the study area.

3.1.3 Threatened Flora listed under the WA Wildlife Conservation (Rare Flora) Notice

The DPaW database search (DPaW 2013) identified two Threatened Flora occurring within a 50 km radius of the study area; *Lepidium catapycnon* and *Thryptomene wittweri* (Table 5).

3.1.4 Priority Flora recognised by the DPaW

The DPaW database search (DPaW 2013) identified 69 Priority flora occurring within a 50 km search radius of the study area (Table 5). None of these taxa had previously been recorded from the study area.

Table 5 Significant flora previously recorded from a 50 km search radius of the study area, and their likely occurrence within the study area. ¹ SCC - State Conservation Code (WC Act) and DPaW (2013), ² FCC - Federal Conservation Code (EPBC Act).

Species	Likely to Occur	SCC ¹	FCC ²
<i>Acacia bromilowiana</i>	N	4	
<i>Acacia dawweana</i>	N	3	
<i>Acacia effusa</i>	Y	3	
<i>Acacia subtiliformis</i>	Y	3	
<i>Adiantum capillus-veneris</i>	N	2	
<i>Adiantum hispidulum</i>	N	2	
<i>Ampelopteris prolifera</i>	N	3	
<i>Aristida calycina</i> var. <i>calycina</i>	N	2	
<i>Aristida lazaridis</i>	Y	2	
<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	Y	1	
<i>Astrebla lappacea</i>	N	3	
<i>Barbula ehrenbergii</i>	N	1	

Species	Likely to Occur	SCC ¹	FCC ²
<i>Bothriochloa decipens</i> var. <i>cloncurrans</i>	N	1	
<i>Brachyscome</i> sp. Wanna Munna Flats (S. van Leeuwen 4662)	Y	1	
<i>Calotis latiuscula</i>	Y	3	
<i>Calotis squamigera</i>	N	1	
<i>Cladium procerum</i>	N	2	
<i>Dampiera anonyma</i> ms	N	3	
<i>Dampiera metallorum</i> ms	N	3	
<i>Dicladantha glabra</i>	N	2	
<i>Eragrostis</i> sp. Mt Robinson (S. van Leeuwen 4109)	N	1	
<i>Eremophila forrestii</i> ssp. Pingandy (M.E. Trudgen 2662)	N	2	
<i>Eremophila forrestii</i> ssp. <i>viridis</i>	N	3	
<i>Eremophila magnifica</i> ssp. <i>magnifica</i>	Y	4	
<i>Eremophila magnifica</i> ssp. <i>velutina</i>	Y	3	
<i>Eremophila</i> sp. West Angelas (S. van Leeuwen 4086)	N	1	
<i>Eremophila</i> sp. Snowy Mountain (S. van. Leeuwen 3737)	N	1	
<i>Eriachne semiciliata</i>	N	3	
<i>Eucalyptus lucens</i>	N	1	
<i>Euphorbia</i> sp. Mt Bruce Flats (S. van Leeuwen 3861)	N	2	
<i>Euphorbia stevenii</i>	N	3	
<i>Fimbristylis sieberiana</i>	N	3	
<i>Geijera salicifolia</i>	N	3	
Genus sp. Hamersley Range hilltops (S van Leeuwen 4345)	N	1	
<i>Glycine falcata</i>	N	3	
<i>Goodenia lyrata</i>	Y	1	
<i>Goodenia nuda</i>	Y	4	
<i>Goodenia</i> sp. East Pilbara (AA Mitchell PRP 727)	Y	3	
<i>Indigofera</i> sp. Gilesii (M.E. Trudgen 15869)	Y	3	
<i>Indigofera ixocarpa</i>	N	2	
<i>Indigofera</i> sp. Bungaroo Creek (S. van Leeuwen 4301)	N	3	
<i>Iotasperma sessilifolium</i>	N	3	
<i>Isotropis parviflora</i>	Y	2	
<i>Josephinia</i> sp. Marandoo (M.E. Trudgen 1554)	Y	1	
<i>Lepidium catapycnon</i>	Y	R	V
<i>Nicotiana umbratica</i>	N	3	
<i>Oldenlandia</i> sp. Hamersley Station (A.A. Mitchell PRP 1479)	N	3	
<i>Olearia mucronata</i>	Y	3	
<i>Oxalis</i> sp. Pilbara (M.E. Trudgen 12725)	Y	2	
<i>Pilbara trudgenii</i>	Y	2	
<i>Polymeria</i> sp. Hamersley (ME Trudgen 11353)	N	3	
<i>Ptilotus subspinescens</i>	N	3	
<i>Rhagodia</i> sp. Hamersley (M. Trudgen 17794)	Y	3	
<i>Rhynchosia bungarensis</i>	N	4	
<i>Rhodanthe ascendens</i>	N	1	
<i>Rostellularia adscendens</i> var. <i>latifolia</i>	Y	3	
<i>Scaevola</i> sp. Hamersley Range basalts (S. van Leeuwen 3675)	N	2	
<i>Sida</i> sp. Barlee Range (S van Leeuwen 1642)	Y	3	
<i>Sida</i> sp. Hamersley Range (K. Newbey 10692)	N	1	
<i>Spartothamnella puberula</i>	N	2	
<i>Swainsona</i> sp. Hamersley Station (A.A. Mitchell 196)	N	3	

Species	Likely to Occur	SCC ¹	FCC ²
<i>Tecticornia</i> sp. Roy Hill (H. Pringle 62)	N	3	
<i>Tetralochea fordiana</i> ms	N	1	
<i>Themeda</i> sp. Hamersley Station (M.E. Trudgen 11431)	Y	3	
<i>Thryptomene wittweri</i>	N	R	V
<i>Triodia</i> sp. Mt. Ella (ME Trudgen 12739)	Y	3	
<i>Triodia</i> sp. Robe River (M.E. Trudgen et al. MET 12367)	N	3	
<i>Vigna</i> sp. Central (M.E. Trudgen 1626)	N	2	
<i>Vittadinia</i> sp. Coondewanna Flats (s. van Leeuwen 4684)	Y	1	
<i>Whiteochloa capillipes</i>	N	3	

3.1.5 Threatened Ecological Communities (TECs) listed under State and Federal Legislation

A search of the EPBC Act Protected Matters database (DoE 2013) confirmed there were no Federal listed TECs previously recorded within, or adjacent to, the study area. Similarly, a search of DPaWs Threatened and Priority Ecological Communities database (DPaW 2013) confirmed there were no State listed TEC records for the immediate study area.

3.1.6 Priority Ecological Communities (PECs) recognised by DPaW

A search of the State communities database (DPaW 2013b) confirmed that five PECs occur within a 50 km radius of the study area (Table 6). The Coolibah-lignum flats: *Eucalyptus victrix* over *Muehlenbeckia* community occurs approximately 13 km to the south; the Weeli Wolli Spring community occurs approximately 25 km to the east; the Fortescue Marsh (Marsh Land System) occurs approximately 30 km to the north-east¹; the West Angelas Cracking Clays community occurs approximately 30 km south; and the Brockman Iron cracking clay communities of the Hamersley Range occur approximately 35 km south-west of the study area. These communities are described in Table 6 below and their location is shown in Figure 6.

Table 6 PEC's occurring within a 50 km radius of the study area.

Community Name	Priority
Coolibah-lignum flats: <i>Eucalyptus victrix</i> over <i>Muehlenbeckia</i> community	Priority 1
Woodland or forest of <i>Eucalyptus victrix</i> (Coolibah) over thicket of <i>Muehlenbeckia florulenta</i> (lignum) on red clays in run-on zones. Associated species include <i>Eriachne benthamii</i> , <i>Themeda triandra</i> , <i>Aristida latifolia</i> , <i>Eulalia aurea</i> and <i>Acacia aneura</i> . A series of sub-types have been identified:	
<ul style="list-style-type: none"> Coolibah woodlands over lignum (<i>Muehlenbeckia florulenta</i>) over swamp wandiree (Lake Robinson is the only known occurrence) Coolibah and mulga (<i>Acacia aneura</i>) woodland over lignum and tussock grasses on clay plains (Coondewanna Flats and Wanna Munna Flats) Coolibah woodland over lignum and silky browntop (<i>Eulalia aurea</i>) (two occurrences known on Mt Bruce Flats). 	
Threats: dewatering and grazing, clearing associated with infrastructure corridors	Priority 3
	Priority 1

¹ It is noted that the DPaW buffer intercepts the study area, but none of the vegetation is affiliated with the Fortescue Marsh PEC.

Community Name	Priority
<p>Weeli Wolli Spring Community Fringing forest or tall woodland of Silver Cadjeput (<i>Melaleuca argentea</i>) and River Red Gum (<i>Eucalyptus camaldulensis</i>) over trees of Coolibah (<i>Eucalyptus vitrix</i>) and a dense shrub layer dominated by wattles, in particular Pilbara Jam (<i>Acacia citrinoviridis</i>). Threats: dewatering and re-watering altering patterns of inundation, weed invasion.</p>	Priority 1
<p>Fortescue Marsh (Marsh Land System) Fortescue Marsh is an extensive, episodically inundated samphire marsh at the upper terminus of the Fortescue River and the western end of Goodiadarrie Hills. It is regarded as the largest ephemeral wetland in the Pilbara. It is a highly diverse ecosystem with fringing mulga woodlands (on the northern side), samphire shrublands and groundwater dependent riparian ecosystems. Endemic <i>Eremophila</i> species, populations of priority flora and several near endemic and new to science samphires. Threats: mining, altered hydrology (watering with fresh water), grazing and weed invasion.</p>	Priority 1
<p>West Angelas Cracking-Clays Open tussock grasslands of <i>Astrebla pectinata</i>, <i>A. elymoides</i>, <i>Aristida latifolia</i>, in combination with <i>Astrebla squarrosa</i> and low scattered shrubs of <i>Sida fibulifera</i>, on cracking-clay loam depressions and flowlines. Threats: Disturbance footprints increasing from mine, future infrastructure development, possible weed invasion and changes in fire regime.</p>	Priority 1
<p>Brockman Iron cracking clay communities of the Hamersley Range Rare tussock grassland dominated by <i>Astrebla lappacea</i> in the Hamersley Range, on the Newman land system. Tussock grassland on cracking clays-derived in valley floors, depositional floors. This is a rare community and the landform is rare. Known from near West Angelas, Newman, Tom Price and boundary of Hamersley and Brockman Stations. Threats: Heavily grazed, mining and infrastructure developments.</p>	Priority 1

3.1.7 Proposed Conservation Reserves

The south-west sector of the study area lies approximately 2 km east of the 2015 Pastoral lease re-negotiation exclusion area at Juna Downs Station (Figure 7). This will be transferred to conservation estate in 2015, where it is proposed for inclusion in the 'Mulglands Conservation Park' (van Leeuwen and Bromilow 2002). The reserve is proposed as a multiple-use reserve by DPaW and vested for conservation, mining and infrastructure. The size of the proposed reserve is large, extending south between the Great North Highway and eastern fringe of Karijini National Park (Juna Downs Pastoral Lease), to west of Mount Newman and north of the Prairie Downs and Turee Creek Pastoral Leases. The reserve recognises the northern occurrence of mulga woodlands, associated biodiversity values, and current threats posed by pastoral activities, mining and exploration, and wildfire.

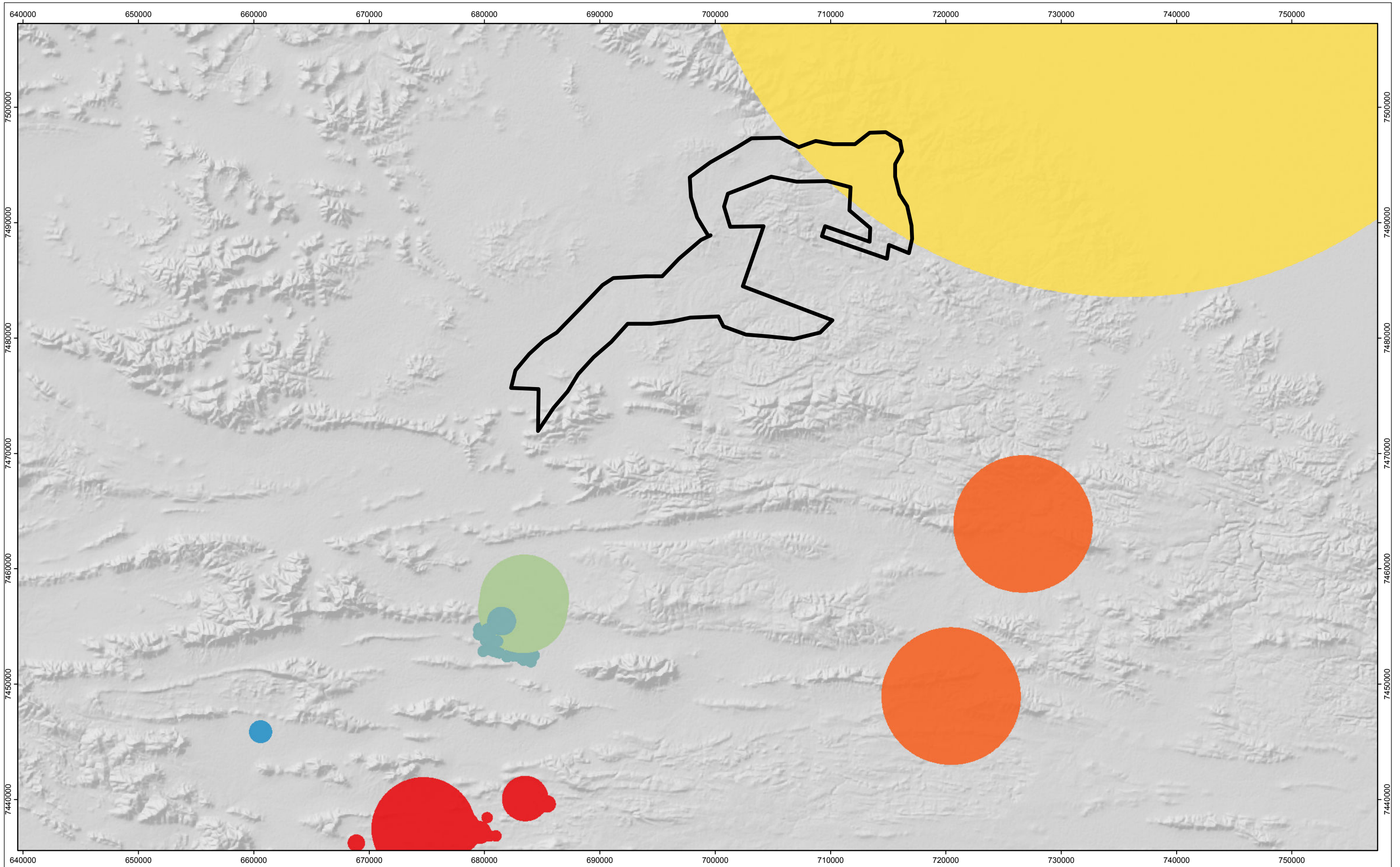

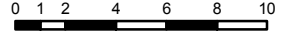



Figure:	6	Date:	28/01/2014
Sheet Size:	A3	Status:	DRAFT
Drawn by:	GSM	Requested by:	DB
		GSM Reference:	Fig 6_PEC

N


Kilometers
1:300,000

Datum: GDA94
Projection: MGA Zone 50







AREA C WEST TO YANDI

Location of the PECs in relation to the study area

Legend

 Study Area - Area C West to

PEC Locations

	Brockman Iron cracking clay communities of the Hamersley Range		Coolibah - Lignum Flats: sub type 2
	Coolibah - Lignum Flats: sub type 1		Fortescue Marsh (Marsh Land System)
	Weeli Wolli Spring Community		West Angelas Cracking-Clays



PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

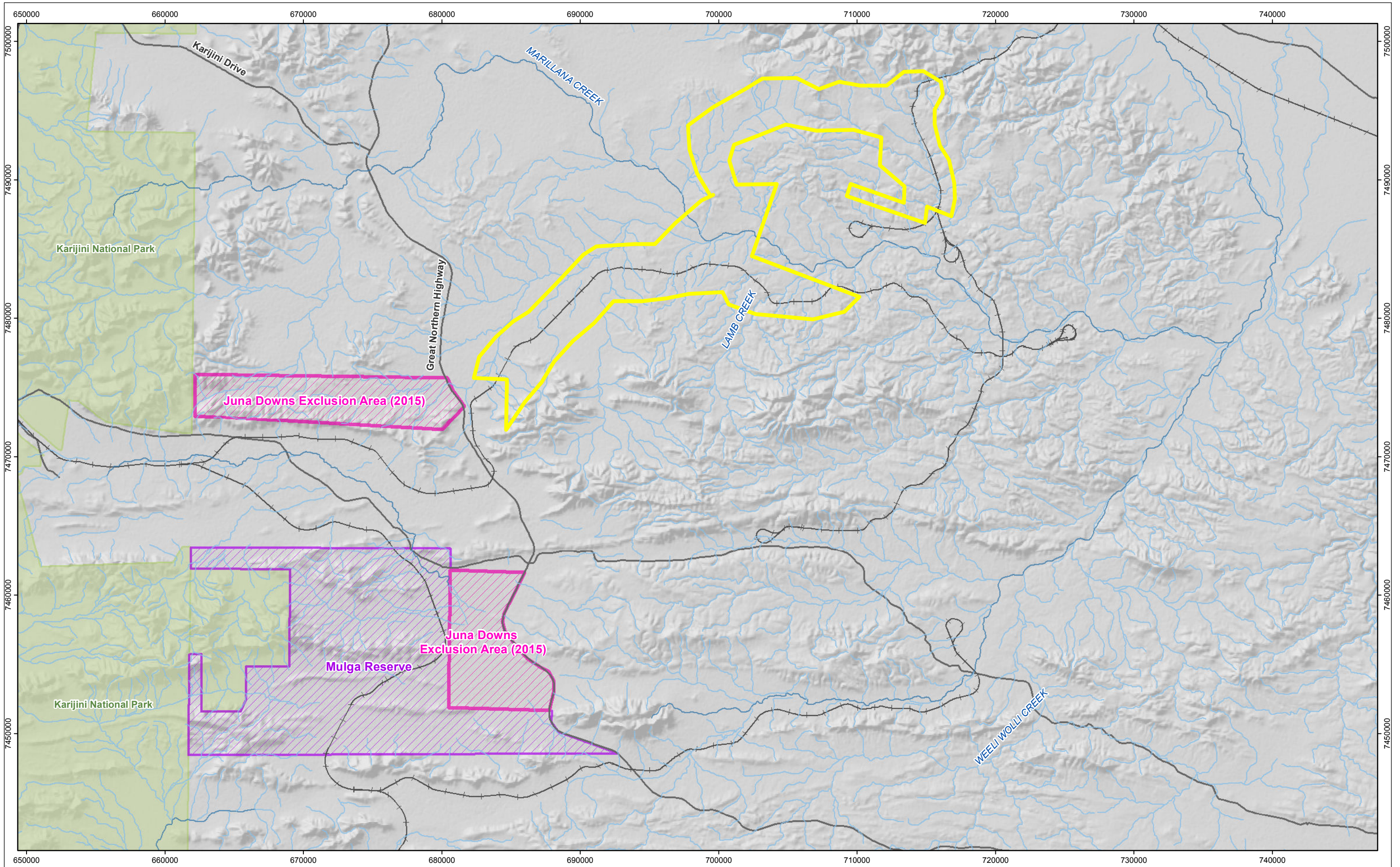
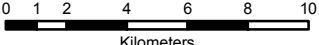



Figure:	7	Date:	21/05/2014
Sheet Size:	A3	Status:	DRAFT
Drawn by:	GSM	Requested by:	DB
GSM Reference		Fig 7_mulga_juna	

N



Kilometers
1:250,000

Datum: GDA94
Projection: MGA Zone 50

AREA C WEST TO YANDI

Location of existing Mulgalands Conservation Reserve and the area included in the 2015

Legend

 Study Area - Area C West to Yandi	 Rio Tinto Rail Line
 Karijini National Park	 Major Roads
	 Juna Downs Exclusion Area (2015)
	 Mulga Reserve



PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

3.2 Flora Species

A total number of 427 plant taxa (including varieties and subspecies) from 58 families and 174 genera have been recorded from the study area (Appendices 6 and 7). Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, Myrtaceae, Amaranthaceae and Euphorbiaceae families, which is typical for the Pilbara Bioregion (Table 7). The most speciose genus was *Acacia* followed by *Senna*, *Sida*, *Euphorbia*, *Eriachne* and *Goodenia*.

Table 7 Statistics for total flora recorded from the study area.

Parameter	No. Taxa
No. Families	58
No. Genera	174
No. Species (incl. subspecies & varieties)	428
No. Native Species (incl. subsp. & var.)	416
No. Threatened Flora	0
No. Priority Flora	13
No. Introduced Species	12
Speciose Families	
Fabaceae	86
Poaceae	68
Malvaceae	50
Asteraceae	23
Myrtaceae	16
Amaranthaceae	15
Euphorbiaceae	14
Goodeniaceae	14
Convolvulaceae	11
Lamiaceae	10
Phyllanthaceae	10
Chenopodiaceae	10
Speciose Genera	
<i>Acacia</i> (Fabaceae)	39
<i>Senna</i> (Fabaceae)	22
<i>Sida</i> (Malvaceae)	14
<i>Euphorbia</i> (Euphorbiaceae)	13
<i>Goodenia</i> (Goodeniaceae)	11
<i>Eriachne</i> (Poaceae)	10
<i>Ptilotus</i> (Amaranthaceae)	10
<i>Corchorus</i> (Malvaceae)	9
<i>Abutilon</i> (Malvaceae)	9
<i>Eucalyptus</i> (Myrtaceae)	9
<i>Hibiscus</i> (Malvaceae)	8
<i>Triodia</i> (Poaceae)	7
<i>Tephrosia</i> (Fabaceae)	6

3.3 Significant Flora Species

3.3.1 Threatened Flora

No plant taxa gazetted as Threatened Flora pursuant to subsection (2) of section 23F of the WC Act or listed under the EPBC Act were recorded from the study area.



3.3.2 Priority Flora


A total of 13 currently listed Priority flora taxa have been recorded from the study area (Tables 8 and 9, Figure 8, Appendix 8).


Table 8 Priority flora recorded from the study area. ¹SCC - State Conservation Code (WC Act) and DPaW (2013)



Species	SCC ¹
<i>Acacia bromilowiana</i>	4
<i>Acacia effusa</i>	3
<i>Acacia subtiliformis</i>	3
<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	1
<i>Gymnanthera cunninghamii</i>	3
<i>Goodenia nuda</i>	4
<i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727)	3
<i>Rostellularia adscendens</i> var. <i>latifolia</i>	3
<i>Rhynchosia bungarensis</i>	4
<i>Sauropus</i> sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213)	1
<i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642)	3
<i>Spartothamnella puberula</i>	2
<i>Vittadinia</i> sp. Coondewanna Flats (s. Van Leeuwen 4684)	1


Table 9 Significant flora recorded from the study area.



Taxon	Photograph	Description	Occurrence in project area
<p><i>Acacia bromilowiana</i> (Priority 4)</p>		<p>A tree or shrub that reached up to 12 m high with dark grey fibrous bark and phyllodes that are more or less glaucous and slightly pruinose. It produced yellow/pink flowers on spiked inflorescences from July to August. It prefers red skeletal stony loam, orange brown pebbly gravel loam, laterite, banded ironstone and basalt. It occurs on rocky hills, breakaways, scree slopes, gorges and in creek beds (WAH 2014).</p> <p>Occurs over a 500km east-west extent along the southern fringe of the Pilbara bioregion (WAH 2014).</p>	<p>Recorded at a single location in the north-east sector of the study area (Figure 8). Associated vegetation was described as a Low Open Woodland of <i>Corymbia ferriticola</i>, <i>Acacia bromilowiana</i>, <i>Acacia pruinocarpa</i> over High Shrubland of <i>Acacia hamersleyensis</i> over Shrubland of <i>Dodonaea pachyneura</i> over Very Open Tussock Grassland of <i>Eriachne mucronata</i>, <i>Themeda triandra</i> and <i>Cymbopogon ambiguus</i> on rocky undulating hills.</p> <p>A total of 30 individuals were recorded from an isolated population, with plants reaching a maximum height of 6 m.</p>
<p><i>Acacia effusa</i> (Priority 3)</p>		<p>A dense to spreading low viscid shrub that grows to 1m high. It has characteristic 'minni-ritchi' bark and produces yellow flowers from May to August. It occurs only within the Pilbara on the scree slopes of low ranges.</p> <p>Restricted to the Hamersley Range occurring broadly from Tom Price to west of Newman in the central southern sector of the Pilbara bioregion (WAH 2014).</p>	<p>Recorded from a total of 61 point locations as two nearby populations at the south-west sector of the study area (Figure 8). Occurring on low ironstone hill crests. Associated vegetation was described as Low Open Woodland of <i>Eucalyptus leucophloia</i> over High Open Shrubland of <i>Acacia inaequilatera</i> over Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill and <i>T. wiseana</i> (occasionally with <i>Eucalyptus gamophylla</i> forming Open Mallee).</p> <p>Approximately 161 plants occurring at the two populations, at an average density of 5 plants per 100 m² and reaching 0.5 m in height. Providing ground coverage up to 5%, but generally less than 1%.</p>



Taxon	Photograph	Description	Occurrence in project area
<p><i>Acacia subtiliformis</i> (Priority 3)</p>		<p>An erect spindly shrub occurring up to 3.5 m in height, but more commonly in the 1 m height range. It is known from eleven localities between Newman and Karijini National Park, a range of approximately 120 km east-west and 90 km north-south. Only one of these localities is found within the conservation estate (Karijini National Park) (DPaW 2010). This species prefers habitat on rocky calcrete low hills and plains (DPaW 2010).</p> <p><i>Acacia subtiliformis</i> has recently been recorded at two locations at Yandi (Onshore Environmental 2011a), on calcrete plains bordering Weeli Wolli Creek at the eastern end of Packsaddle Range (Onshore Environmental 2011) and south-west of Roundtop Hill (Onshore Environmental 2011c).</p>	<p>Recorded from 28 point locations associated with calcrete plains and low hills in the central sector of the study area (Figure 8). Plant density ranged from a few scattered plants up to 150 plants per 100m².</p> <p>The following vegetation associations were typical:</p> <ul style="list-style-type: none"> • Open Hummock Grassland of <i>Triodia wiseana</i> with Very Open Mallee of <i>Eucalyptus socialis</i> subsp. <i>eucentrica</i> over Low Open Shrubland of <i>Acacia bivenosa</i> and <i>Androcalva luteiflora</i> • Hummock Grassland of <i>Triodia wiseana</i> with High Shrubland of <i>Acacia bivenosa</i> over Shrubland of <i>Acacia subtiliformis</i>, <i>Senna glutinosa</i> subsp. <i>glutinosa</i> and <i>Acacia ancistrocarpa</i> with Low Open Woodland of <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i>


Taxon	Photograph	Description	Occurrence in project area
<p><i>Aristida jerichoensis</i> var. <i>subspinulifera</i> (Priority 1)</p>		<p>A compact tufted perennial grass ranging in height from 0.3m to 0.8m, occurring on hardpan plains in the Pilbara. It is distinguished by its muricate lemma groove. Six records have been made from Lake Robinson and fringing areas of Coondewanna Flats as part of the South Flank survey (Onshore Environmental 2012), with other records from the Tandanya project area (Onshore Environmental 2013). <i>Aristida jerichoensis</i> subsp. <i>subspinulifera</i> extends north from Coondewanna Flats along both sides of the Great Northern Highway, occurring on open floodplain and hardpan plain habitats often in association with <i>Acacia aptaneura</i> and <i>Acacia paraneura</i>. It was recorded extensively west of Area C in 2009 and 2010 (Onshore Environmental 2011a), and extends further west (Astron Environmental 2010) and north into the Camp Hill tenements (Onshore Environmental 2011c, Ecologia Environment 2009).</p>	<p>Recorded as scattered plants providing less than one percent ground cover from a single one point in the south-west sector of the study area.</p> <p>Associated with gentle stony slopes adjacent to a medium drainage line, with vegetation described as Low Woodland of <i>Eucalyptus xerothermica</i> and <i>Acacia aptaneura</i> over Open Tussock Grassland of <i>Eulalia aurea</i>, <i>Chrysopogon fallax</i> and <i>Themeda triandra</i> with Scattered Low Shrubs of <i>Ptilotus obovatus</i>.</p>


Taxon	Photograph	Description	Occurrence in project area
<p><i>Gymnanthera cunninghamii</i> (Priority 3)</p>		<p>An erect (sometimes multi-stemmed) shrub occurring up to 2 m in height. Flowering occurs from January to December and flowers are cream, yellow or green in colour. It has a preference for sandy soils along creekline habitats. <i>Gymnanthera cunninghamii</i> is known from several locations in the Pilbara including Boodarie, 80 Mile Beach, the Dampier Archipelago, the Burrup Peninsula (Trudgen 2002) and the Shaw River (Trudgen <i>et al.</i> 2002). Although uncommon in the Fortescue Botanical District, the taxon is widespread, also occurring in the Midwest, the Northern Territory and Queensland (WAH 2014). It has previously been recorded from Weeli Wolli Spring (Onshore Environmental 2011g).</p>	<p>Recorded as 12 individuals from two locations in the north-east sector of the study area (Figure 8). Associated with steep hill slopes / gullies where vegetation was described as Low Open Woodland of <i>Eucalyptus camaldulensis</i> and <i>Corymbia ferriticola</i> over Open Shrubland of <i>Grevillea wickhamii</i>, <i>Corchorus laniflorus</i> and <i>Dodonaea pachyneura</i> over Very Open Tussock Grassland of <i>Themeda triandra</i> and <i>Eulalia aurea</i>.</p>
<p><i>Goodenia nuda</i> (Priority 4)</p>		<p>On drainage levees, flood plains and sand plains as an erect annual or biennial herb to 0.3 m in height. Known from at least 23 localities between Brassey Range and Onslow. Within the south-east Pilbara it has been collected from a number of neighbouring mining tenements including Tandanya (2013), South Flank (Onshore Environmental 2011a), Area C and Surrounds (Onshore Environmental 2011e), Jinidi (Onshore Environmental 2011d), Jinidi to Mainline (Onshore Environmental 2012).</p>	<p>Recorded as scattered plants (up to five individuals) from seven point locations associated with flood plains bordering medium drainage lines in central and eastern sectors of the study area (Figure 8). Vegetation was typically Low Open Woodland <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> over High Open Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Acacia pruinocarpa</i> over Hummock Grassland of <i>Triodia pungens</i>.</p>

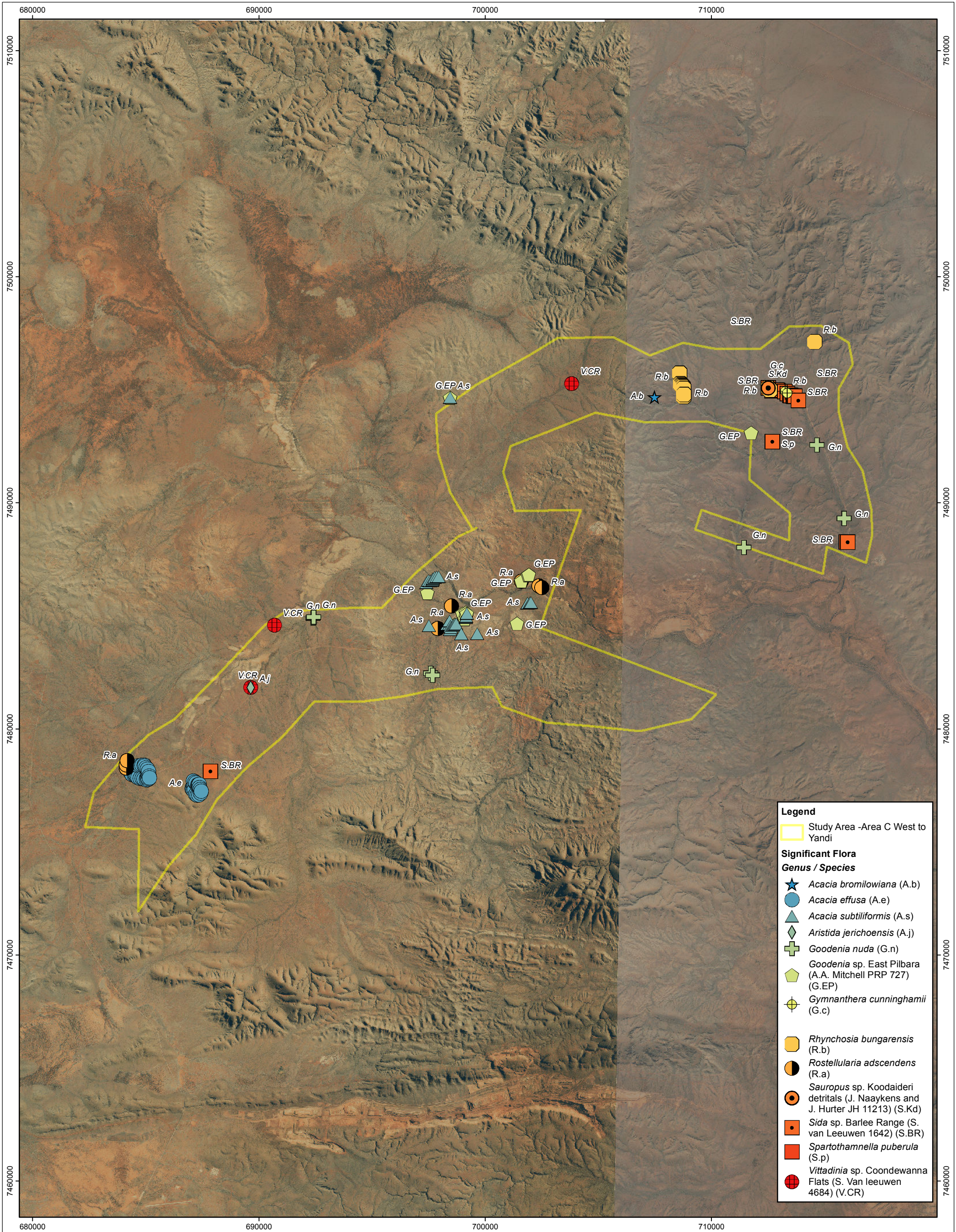
Taxon	Photograph	Description	Occurrence in project area
<p><i>Goodenia</i> sp. East Pilbara (A. A. Mitchell PRP 727) (Priority 3)</p>		<p>An open erect annual or biennial herb that grows up to 0.2 m in height and produces yellow flowers between March and September. It occurs on red-brown clay soil with calcrete pebbles on low undulating plains or swampy plains. <i>Goodenia</i> sp. East Pilbara has been recorded from 16 localities between Paraburdoo and Mount Cooke (DPaW 2010). This species has previously been recorded at Jinidi (Onshore Environmental 2011c), Weelli Wolli Creek (Onshore Environmental 2011g) and Area C (Onshore Environmental 2011b).</p>	<p>Recorded from 15 point locations associated with low calcrete hills and plains through the central and eastern sectors of the study area (Figure 8). Between one and 20 plants recorded from each location, but larger population likely to occur across the calcrete landform. Typical vegetation was described as:</p> <ul style="list-style-type: none"> • <i>Eucalyptus socialis</i> subsp. <i>eucentrica</i> Low Open Mallee over <i>Acacia bivenosa</i>, <i>Senna glutinosa</i> subsp. <i>glutinosa</i> and <i>Androcalva luteiflora</i> Open Shrubland over <i>Triodia wiseana</i> Hummock Grassland; and • <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> Scattered Low Trees over <i>Eucalyptus socialis</i> subsp. <i>eucentrica</i> Low Open Mallee over <i>Acacia bivenosa</i> Open Shrubland over <i>Triodia wiseana</i> and <i>Triodia angusta</i> Hummock Grassland.

Taxon	Photograph	Description	Occurrence in project area
<p><i>Rostellularia adscendens</i> var. <i>latifolia</i> (Priority 3)</p>		<p>A low shrub to 0.3 m in height, flowering in April and May. It grows in ironstone soils with habitat ranging from creeks to rocky hills. <i>Rostellularia adscendens</i> var. <i>latifolia</i> is known from ten localities between Warrawagine and Tom Price, all within the Pilbara IBRA region (DPaW 2010). Five of these records occur within Karijini National Park. <i>Rostellularia adscendens</i> var. <i>latifolia</i> has previously recorded at Yandi (Onshore Environmental 2011a), Tandanya (Onshore Environmental 2013), Weeli Wollie Creek (Onshore Environmental 2011f) and Jinidi (Onshore Environmental 2011c).</p>	<p>Recorded from eight locations associated with drainage lines in the central and south-west sectors of the study area (Figure 8). Occurring as between one and 30 plants at each location and providing less than one percent ground cover. Plant height was less than 0.3 m. Typical vegetation was described as Low Open Woodland of <i>Eucalyptus leucophloia</i> and <i>Acacia pruinocarpa</i> over High Shrubland of <i>Acacia tumida</i> var. <i>pilbaraensis</i> over Very Open Tussock Grassland of <i>Themeda triandra</i> over Very Open Hummock Grassland of <i>Triodia pungens</i>.</p>
<p><i>Rhynchosia bungarensis</i> (Priority 4)</p>		<p><i>Rhynchosia bungarensis</i> is a compact, prostrate shrub growing to 0.5 m high with yellow flowers. It grows on pebbly, shingly coarse sand (colluvium or alluvium as substrates) amongst boulders and more specifically valley floor and drainage line habitats. It is also sometimes recorded from rocky areas (WAH 2014).</p> <p>Widely distributed throughout southern and western sectors of the Pilbara bioregion, and extending into the northern Carnarvon and north-western Gascoyne bioregions.</p>	<p>It was recorded as greater than 80 individuals from 12 point locations in the north-east sector of the study area (Figure 8), associated with gullies and drainage lines. Typical vegetation was described as:</p> <ul style="list-style-type: none"> • Open Forest of <i>Eucalyptus camaldulensis</i> and <i>Eucalyptus victrix</i> over Open Scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Gossypium robinsonii</i> and <i>Androcalva luteiflora</i> over Open Tussock Grassland of <i>Themeda triandra</i>, <i>Eulalia aurea</i> and <i>Cymbopogon procerus</i>.

Taxon	Photograph	Description	Occurrence in project area
<p><i>Sauropus</i> sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213) (Priority 1)</p>		<p>Originally sampled in 2007 by botanists from Rio Tinto (Pilbara Iron 2007). Initial observations suggest that this species occurs in gullies with outcropping rock at an elevation greater than 500 m (J. Naaykens, Rio Tinto, pers. comm. 2011). Current records restricted to the Hamersley Range, broadly east of Karijini National Park.</p>	<p>Recorded as scattered plants providing less than one percent ground cover from a single location in the north-east sector of the study area, associated with a long unburnt major drainage line / gorge. Soils / geology was recorded as BIF, ironstone (cliffs, boulders, cobbles).</p> <p>Vegetation was described as Open Forest of <i>Eucalyptus camaldulensis</i> over Open Scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and <i>Androcalva luteiflora</i> over Tussock Grassland of <i>Eulalia aurea</i>, <i>Cymbopogon procerus</i> and <i>Eriachne tenuiculmis</i>.</p>
<p><i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642) (Priority 3)</p>		<p>A spreading shrub that grows to 0.5 metres in height. Flowers are yellow and occur in August. It grows on skeletal red soil pockets on the steep sides of ranges. This species is known from a 500km east-west extent along the border of the Pilbara and Gascoyne bioregions of Western Australia. It has previously been recorded from Mining Area C (Onshore Environmental 2011), Tandanya (Onshore Environmental 2013) and Weeli Wollie Creek (Onshore Environmental 2011f).</p>	<p>Recorded at 16 point locations predominantly within the north-east sector of the study area, but with one location in the south-west (Figure 8). A total of 57 plants were found growing on the upper slopes of minor gorges. The associated vegetation was described as Low Open Woodland of <i>Eucalyptus leucophloia</i> and <i>Acacia pruinocarpa</i> over High Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> over Very Open Tussock Grassland of <i>Themeda triandra</i> over Very Open Hummock Grassland of <i>Triodia pungens</i>.</p>

Taxon	Photograph	Description	Occurrence in project area
<p><i>Spartothamnella puberula</i> (Priority 2)</p>		<p>A shrub between 0.35m and 1.5 m high, flowering blue-white from September to November. It prefers rocky loam, sandy or skeletal soils on sandplains and hills (WAH 2014). However, recent collections on BHP Billiton Iron Ore tenure in the south-east Pilbara have been predominantly from the upper reaches of gorges where it occurs as an inconspicuous low to mid shrub at low numbers.</p> <p>Occurs over a 300km east-west range in the central southern sector of the Pilbara bioregion.</p>	<p>Recorded as three plants from a single point in the north-east sector of the study area. Occurring at the head of a rocky gorge near an overhang and adjacent to a minor drainage line. Associated vegetation was High Shrubland of <i>Acacia tumida</i>, <i>Gossypium robinsonii</i> and <i>Atalaya hemiglauca</i> over Open Tussock Grassland of <i>Eriachne mucronata</i> and <i>Themeda triandra</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>, <i>Corymbia hamersleyana</i> and <i>Ficus brachypoda</i>.</p>

Taxon	Photograph	Description	Occurrence in project area
<p><i>Vittadinia</i> sp. Coondewanna Flats (s. Van Leeuwen 4684) (Priority 1)</p>		<p>An annual herb growing to approximately 0.2 m in height. Previous records are situated approximately 150km north-west of Newman. Locally it has been recorded from the Coondewanna Flats PEC, nearby to the Area C Mine (Onshore Environmental 2011a) and less than 10 km west of Coondewanna Flats (Onshore Environmental 2013) where it occurred as scattered plants on stony plains.</p>	<p>Recorded as scattered plants providing less than one percent ground cover in the south-west and central northern sectors of the study area (Figure 8). Plants were between 0.1m and 0.4m in height. Occurring along prominent drainage lines, associated vegetation was Closed Tussock Grassland of <i>Themeda triandra</i>, <i>Eulalia aurea</i> and <i>Chrysopogon fallax</i> with Low Woodland of <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over Open Shrubland of <i>Acacia tumida</i>, <i>Gastrolobium grandiflorum</i> and <i>Acacia steedmanii</i> subsp. <i>borealis</i>.</p>

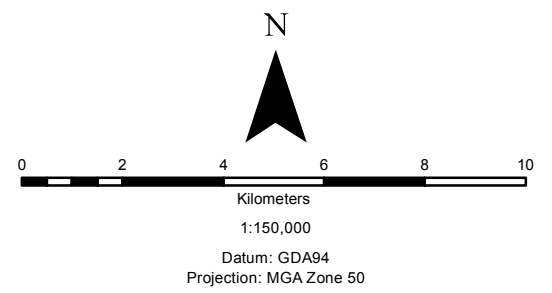


AREA C WEST TO YANDI

Location of Priority flora species recorded within the study area



Figure:	8	Date:	24/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by GSM	Requested by DB	Internal Reference Fig8_SigF	





3.4 Introduced Flora



There were 12 introduced (weed) species recorded from the study area (Tables 10 and 11, Figure 9 and Appendix 9). None of these taxa are listed as Declared Pests under the BAM Act.



Table 10 Introduced weed species recorded within the study area. * Introduced weed species



Taxon	Common Name
<i>*Acetosa vesicaria</i>	Ruby Dock
<i>*Bidens bipinnata</i>	Bipinnate Beggartick
<i>*Cenchrus ciliaris</i>	Buffel Grass
<i>*Cenchrus setiger</i>	Birdwood Grass
<i>*Citrullus colocynthis</i>	Colocynth
<i>*Flaveria trinervia</i>	Speedy Weed
<i>*Malvastrum americanum</i>	Spiked Malvastrum
<i>*Setaria verticillata</i>	Whorled Pigeon Grass
<i>*Sigesbeckia orientalis</i>	Indian Weed
<i>*Sonchus oleraceus</i>	Common Sowthistle
<i>*Tribulus terrestris</i>	Caltrop
<i>*Vachellia farnesiana</i>	Mimosa Bush



Table 11 Description and occurrence detail for 12 introduced weed species recorded from the study area.



Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p><i>*Acetosa vesicaria</i> (Ruby Dock)</p>		<p><i>*Acetosa vesicaria</i> (Ruby Dock) is an erect, stout, fleshy, hollow-stemmed annual herb growing between 0.2 m and 1 m height, flowering (pink to red) from July to September. Ruby Dock is found on sandy alluvial soils, or gravelly ironstone soils along roadsides or in disturbed areas. It is a common and widespread weed of the arid zone and is found in a variety of disturbed situations from the Pilbara to the Nullarbor. It is native to North Africa, the Middle East and India (Hussey <i>et al.</i> 1997). It is a highly aggressive and prolific colonizer, particularly of disturbed areas, and should be included in all weed management programmes within the Pilbara.</p>	<p>Restricted to the eastern sector of the study area (Figure 9)</p> <p>Five point locations</p> <p>Ranges from two to 100 individuals</p>
<p><i>*Bidens bipinnata</i> (Bipinnate Beggars Tick)</p>		<p><i>*Bidens bipinnata</i> (Beggars Ticks) is an erect annual herb with a four-angled stem and deeply lobbed leaves. It grows up to 1 m in height and produces yellow flowers between March and September. The flower head develops a narrow black fruit with barbed awns at one end, which readily attach to clothing or the coats of grazing animals. This species is widespread throughout the Pilbara, particularly where domestic cattle are present. It extends north from Shark Bay up to the Northern Territory Border and favours moist habitats such as wetlands, drainage lines, floodplains and gorges and responds vigorously to rainfall.</p>	<p>Scattered across the entire extent of the study area (Figure 9)</p> <p>36 point locations</p> <p>Up to >500 individuals recorded from each point, with ground cover up to 8%</p>

Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p>*<i>Cenchrus ciliaris</i> (Buffel Grass)</p>		<p>Tufted perennial grass originating from the Middle East as a fodder species by pastoralists. It grows in dense tussocks up to 1 m tall and typically occurs in monospecific stands on loamy plains and creekline levee banks. It is an aggressive colonizing species that has become well established throughout the Pilbara, Gascoyne and Murchison regions of Western Australia, and is continuing to spread in the south west (Hussey <i>et al.</i> 1997).</p>	<p>Recorded in the central south and south-east sectors of the study area</p> <p>Three point locations</p> <p>Ground cover ranging between <1% and 30%</p>
<p>*<i>Cenchrus setiger</i> (Birdwood Grass)</p>		<p>An erect tussocky, stoloniferous perennial grass that reaches up to 0.5 m in height with cream or purple flowers (between April and May). It favours brown sand, red loam and pindan soils on sand dunes, plains, stoney hillsides and floodplains. It is distributed across Western Australia in areas north of Geraldton (Hussey <i>et al.</i> 1997).</p>	<p>Recorded in the south-west sector of the study area (Figure 9)</p> <p>Two point locations</p> <p>Scattered plants (<10 individuals at each point) providing <1% ground cover</p>

Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p><i>*Citrullus colocynthis</i></p>		<p><i>*Citrullus colocynthis</i> is a yellow flowering, trailing perennial herb or climber flowering from January to October (Hussey <i>et al.</i> 1997). It occurs in rocky, stony loam or clay soils typically in wet disturbed sites such as floodplains. This taxon is widely distributed throughout Western Australia occurring in the Eremaean, Northern and South-Western Provinces.</p>	<p>Recorded in the central sector of the study area (Figure 9)</p> <p>One point location</p> <p>Scattered plants providing <1% ground cover within localized gilgai drainage depression on stony plain</p>
<p><i>*Flaveria trinervia</i> (Speedy Weed)</p>		<p>An erect glabrous annual herb to 0.8 m in height, producing yellow flowers; older stems are terete and often a distinctive red or purple colour. It occurs on clay or loam soils most often near watercourses and is distributed from Kununurra and Isdell River southwards throughout the Pilbara and along the coast to Carnarvon. It also occurs in the Northern Territory, Queensland, South Australia and New South Wales (Hussey <i>et al.</i> 1997).</p>	<p>Recorded in the central sector of the study area (Figure 9)</p> <p>Ten point locations</p> <p>Scattered plants (<15 individuals at each point) providing <1% ground cover</p>

Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p>*<i>Malvastrum americanum</i> (Spiked Malvastrum)</p>		<p>An erect perennial herb or shrub with hairy, serrate leaves growing up to 1.3 m in height. It produces dense terminal flower spikes with yellow to orange flowers from April to July. It grows in a variety of soil types including orange/red/yellow sands, gritty alluvial sand, black/brown clay, alluvial cracking clays, limestone and calcrete. It is widely distributed from the Nullarbour through to the Pilbara and Kimberly and is possibly toxic to stock.</p>	<p>Occurs throughout the project area generally in the northern part with multiple records from the northwest corner</p> <p>14 point locations</p> <p>Ranges from single plants to 25 individuals at each point, and providing less than 2% ground cover</p>
<p>*<i>Setaria verticillata</i> (Whorled Pigeon Grass)</p>		<p>A loosely tufted annual grass-like herb, growing between 0.1 m and 1.3 m in height and flowering from December to June. It grows in a variety of soils including sand, clay and loam and has spread over much of Western Australia.</p>	<p>Scattered within the central sector of the study area</p> <p>Six point locations</p> <p>Scattered plants (<5 individuals at each point) providing <1% ground cover</p>

Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p><i>*Sigesbeckia orientalis</i> (Indian Weed)</p>		<p>Erect, slender annual herb 0.15 m to 1 m in height and flowering yellow from January to December. Found in loamy soils over limestone or granite on rocky gullies, limestone ranges and creek beds. Occurs in the south-west of Western Australia as well as in the Pilbara.</p>	<p>Scattered within the central and eastern sectors of the study area</p> <p>Three point locations</p> <p>Scattered plants (<10 individuals at each point) providing <1% ground cover</p>
<p><i>*Sonchus oleraceus</i> (Common Sowthistle)</p>		<p>An erect, annual herb that grows to approximately 1.5 m in height and produces yellow flowers between January and December. It occurs on a variety of soils and is a weed of disturbed ground. The leaves of <i>*Sonchus oleraceus</i> are generally flaccid and are weakly prickly or have no prickles. The weed is widespread on roadsides, gardens, market gardens and wasteland from Wittenoom to the Nullarbor; it is native to Eurasia and North Africa (Hussey <i>et al.</i> 1997).</p>	<p>Scattered within the central and eastern sectors of the study area</p> <p>Nine point locations</p> <p>Scattered plants (<11 individuals at each point) providing <1% ground cover</p>

Taxon (Common Name)	Photograph	Description	Occurrence in project area
<p><i>*Tribulus terrestris</i> (Caltrop)</p>		<p><i>*Tribulus terrestris</i> (Caltrop) is a prostrate annual herb with leaflets growing in pairs of 4-7. It has distinct spines that reach 2-8mm in length. Flowers are yellow and flowering occurs between December and January (Hussey <i>et al.</i> 1997). This species favors sandy soils and was originally native to the Mediterranean but has spread across the majority of Australia. It is poisonous to stock.</p>	<p>Central sector of the study area</p> <p>One point location</p> <p>Scattered plants providing <1% ground cover</p>
<p><i>*Vachellia farnesiana</i> (Mimosa Bush)</p>		<p>An erect spreading, thicket forming thorny tree or shrub. It grows up to 4 in height and produces yellow flowers from June to August. Mimosa Bush grows on stony, sandy, clay or loam soils and is common in low lying areas such as creeks and river banks and also occurs in disturbed areas. It is widespread from the Kimberley to near Perth.</p>	<p>Scattered across the majority of the study area</p> <p>12 point locations</p> <p>Scattered plants (<15 individuals at each point) providing <1% ground cover</p>

3.5 TECs and PECs

The field survey confirmed that none of the vegetation associations recorded from the study area were affiliated with any current Federal or State listed TECs, or State listed PECs.

3.6 Vegetation

A total of 23 vegetation associations were described and mapped from the study area (Figure 10). The vegetation associations were classified into eight Broad Floristic Formations on the basis of the dominant vegetation stratum (Table 12).

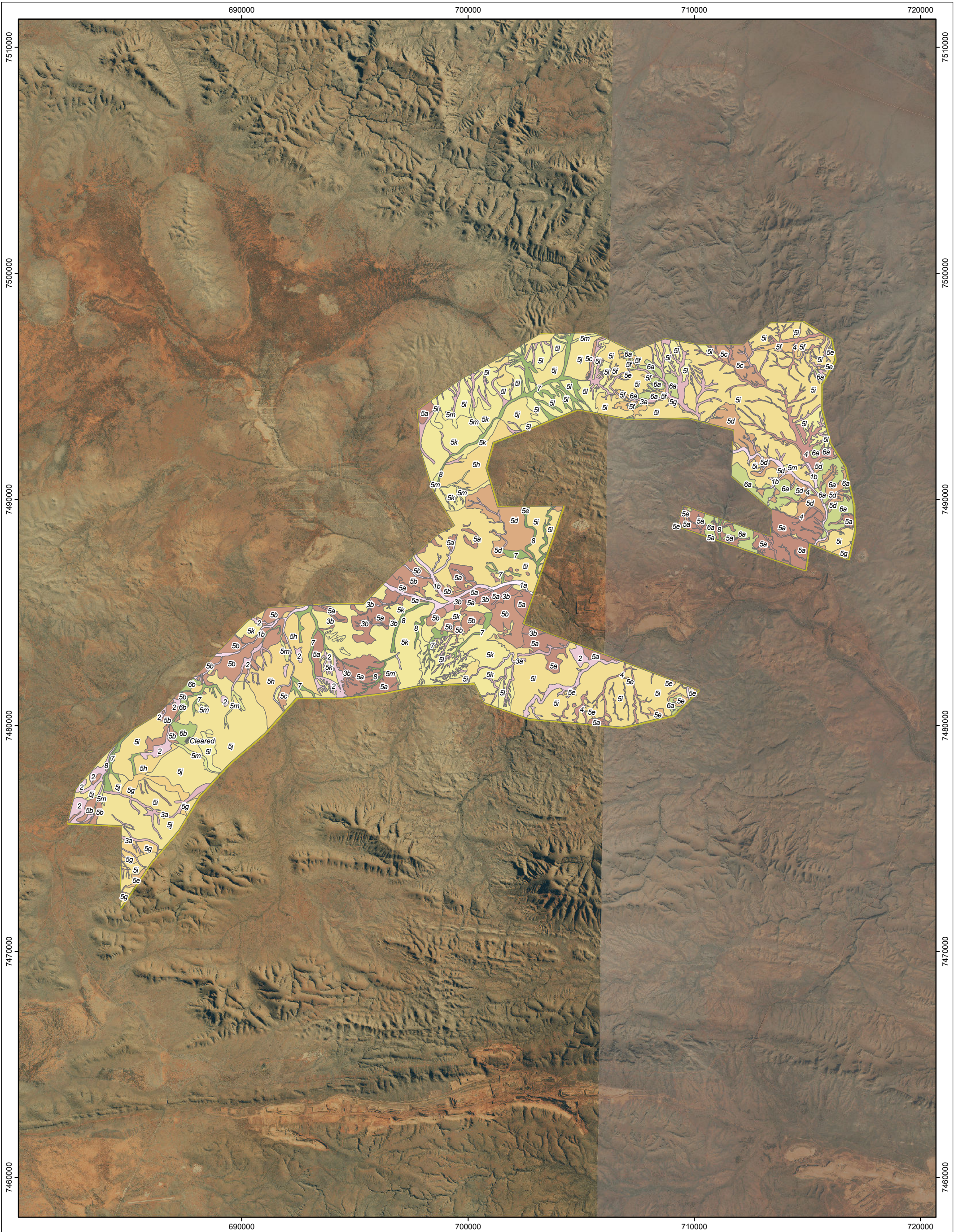
Table 12 The 23 vegetation associations described and mapped from the study area, with vegetation condition and area (ha) covered by each association (with proportion in brackets).

Broad Floristic Formation	Vegetation Association	Condition	Area (ha)
<i>Eucalyptus</i> Open Forest	1a Open Forest of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> , <i>Eucalyptus victrix</i> and <i>Melaleuca argentea</i> over Low Open Forest of <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>Acacia ampliceps</i> and <i>Atalaya hemiglauca</i> over Open Sedges of <i>Typha domingensis</i> , <i>Schoenoplectus dissachanthus</i> and <i>Cyperus vaginatus</i> in brown sandy clay loam along major drainage channels supporting permanent pools or near-surface groundwater	Very Good	32.9 (0.1%)
<i>Eucalyptus</i> Open Forest	1b Open Forest (to Woodland) of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> and <i>Eucalyptus victrix</i> over Open Scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium robinsonii</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> over Tussock Grassland of <i>Themeda triandra</i> , <i>Eualia aurea</i> and <i>Cymbopogon procerus</i> in brown loam on major drainage lines	Very Good	404.1 (1.7%)
<i>Acacia</i> Low Open Forest	2 Low Open Forest of <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia wiseana</i> over Open (to Very Open) Tussock Grassland of <i>Chrysopogon fallax</i> , <i>Themeda triandra</i> and <i>Aristida holathera</i> var. <i>holathera</i> in brown silty clay loam on drainage zones and drainage plains	Very Good	544.9 (2.3%)
<i>Acacia</i> Open Scrub	3a Open Scrub of <i>Acacia monticola</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) in brown sandy loam on minor drainage lines dissecting ironstone hills	Excellent	967.7 (4.1%)

Broad Floristic Formation	Vegetation Association	Condition	Area (ha)
<i>Acacia</i> Open Scrub	3b Open Scrub of <i>Acacia maitlandii</i> , <i>Acacia ancistrocarpa</i> and <i>Santalum lanceolatum</i> over Tussock Grassland of <i>Themeda triandra</i> , <i>Enneapogon robustissimus</i> and <i>Cymbopogon ambiguus</i> with Low Open Woodland of <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> in brown gravelly loam on minor drainage lines amongst dolerite hills	Excellent	101.3 (0.4%)
<i>Acacia</i> High Shrubland	4 High Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium robinsonii</i> and <i>Acacia monticola</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Cymbopogon procerus</i> and <i>Eriachne tenuiculmis</i> in brown sandy loam on minor drainage lines dissecting ironstone hills	Excellent	751.8 (3.2%)
<i>Triodia</i> Hummock Grassland	5a Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with High Open Shrubland of <i>Acacia inaequilatera</i> over Low Open Shrubland of <i>Eremophila fraseri</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> and <i>Indigofera rugosa</i> in sand to silty loam soils on low undulating dolerite hill crests, slopes and valleys	Excellent	1,941.5 (8.2%)
<i>Triodia</i> Hummock Grassland	5b Hummock Grassland of <i>Triodia wiseana</i> and <i>Triodia angusta</i> with High Shrubland of <i>Acacia bivenosa</i> and Very Open Mallee of <i>Eucalyptus socialis</i> subsp. <i>eucentrica</i> in light brown silty loam on calcrete plains	Excellent	1,206.0 (5.1%)
<i>Triodia</i> Hummock Grassland	5c Hummock Grassland of <i>Triodia wiseana</i> with Low Open Woodland of <i>Eucalyptus xerothermica</i> over Low Open Shrubland of <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Ptilotus astrolasius</i> and <i>Acacia pruinocarpa</i> in brown loam on raised stony floodplains (with levees)	Very Good	229.7 (1.0%)
<i>Triodia</i> Hummock Grassland	5d Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Ptilotus calostachyus</i> , <i>Ptilotus astrolasius</i> and <i>Acacia hilliana</i> in brown loam on eroded outcropping upper hill slopes and crests	Excellent	879.1 (3.7%)
<i>Triodia</i> Hummock Grassland	5e Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) and <i>Triodia brizoides</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Open Tussock Grassland of <i>Eriachne mucronata</i> and <i>Themeda triandra</i> in brown loam on upper scree slopes	Excellent	118.0 (0.5%)
<i>Triodia</i> Hummock Grassland	5f Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) and <i>Triodia brizoides</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Acacia hilliana</i> and <i>Corchorus lasiocarpus</i> in brown skeletal silty loam on rocky outcropping hill slopes	Excellent	189.0 (0.8%)

Broad Floristic Formation	Vegetation Association	Condition	Area (ha)
<i>Triodia</i> Hummock Grassland	5g Hummock Grassland of <i>Triodia wiseana</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Corymbia hamersleyana</i> and Open Shrubland of <i>Acacia atkinsiana</i> , <i>Acacia ancistrocarpa</i> and <i>Acacia maitlandii</i> in brown loam on footslopes	Excellent	279.9 (1.2%)
<i>Triodia</i> Hummock Grassland	5h Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) and <i>Triodia melvillei</i> with Very Open Mallee of <i>Eucalyptus gamophylla</i> , <i>Eucalyptus xerothermica</i> and <i>Eucalyptus trivalva</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> and <i>Acacia pruinocarpa</i> in brown silty loam on stony sloping plains and lower footslopes	Excellent	1,137.9 (4.8%)
<i>Triodia</i> Hummock Grassland	5i Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> and <i>Corymbia deserticola</i> subsp. <i>deserticola</i> over Low Open Shrubland of <i>Acacia hilliana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> and <i>Keraudrenia velutina</i> subsp. <i>elliptica</i> C.F. Wilkins ms in brown silty loam on ironstone hill slopes	Excellent	6,229.7 (26.5%)
<i>Triodia</i> Hummock Grassland	5j Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Shrubland (to High Shrubland) of <i>Acacia atkinsiana</i> , <i>Acacia ancistrocarpa</i> and <i>Acacia pruinocarpa</i> and Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> in brown silty loam on undulating footslopes	Excellent	2,264.8 (9.6%)
<i>Triodia</i> Hummock Grassland	5k Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> and <i>Hakea chordophylla</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> and <i>Acacia bivenosa</i> in brown sandy loam on undulating low ironstone hills (dissected by minor drainage lines)	Excellent	2,422.0 (10.3%)
<i>Triodia</i> Hummock Grassland	5l Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835), <i>Triodia pungens</i> and <i>Triodia wiseana</i> with Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia atkinsiana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> and <i>Acacia hilliana</i> in brown silty loam on low undulating hills	Excellent	1,766.7 (7.5%)
<i>Triodia</i> Hummock Grassland	5m Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and Low Open Woodland of <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> in brown silty loam on medium drainage lines and adjacent flood plains	Very Good	204.6 (0.9%)

Broad Floristic Formation	Vegetation Association	Condition	Area (ha)
<i>Triodia</i> Open Hummock Grassland	6a Open Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Hakea chordophylla</i> over Low Open Shrubland of <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Corchorus lasiocarpus</i> and <i>Acacia hilliana</i> in brown silty loam on ironstone plateaux and hill crests	Excellent	825.9 (3.5%)
<i>Triodia</i> Open Hummock Grassland	6b Open Hummock Grassland of <i>Triodia melvillei</i> , <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Scattered Low Trees of <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over High Open Shrubland of <i>Acacia aptaneura</i> and <i>Acacia pruinoarpa</i> in brown silty loam soil on stony plains	Very Good	111.7 (0.5%)
<i>Themeda</i> Tussock Grassland	7 Tussock Grassland of <i>Themeda triandra</i> , <i>Eulalia aurea</i> and <i>Chrysopogon fallax</i> with Low Woodland of <i>Eucalyptus xerothermica</i> , <i>Acacia aptaneura</i> and <i>Corymbia hamersleyana</i> over Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> and <i>Acacia elachantha</i> in brown clay loam on medium drainage lines and floodplains	Excellent	708.9 (3.0%)
<i>Themeda</i> Open Tussock Grassland	8 Open Tussock Grassland of <i>Themeda triandra</i> , <i>Eulalia aurea</i> and <i>Eriachne tenuiculmis</i> with Open Woodland of <i>Eucalyptus victrix</i> over High Shrubland of <i>Acacia pyrifolia</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> in brown sandy loam on medium and major drainage lines	Very Good	199.1 (0.8%)



GRIFFIN
SPATIAL & MAPPING

PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI

Vegetation map for the study area



Figure:	10	Date:	24/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
		Internal Reference:	Fig11_VegMap

See Legend Separate Sheet

N

0 2 4 6 8 10
Kilometers

1:150,000



Datum: GDA94
Projection: MGA Zone 50

Legend


 **Study Area -Area C West to Yandi**

Vegetation Mapping



Eucalyptus Open Forest

-  1a *Open Forest of Eucalyptus camaldulensis subsp. refulgens, Eucalyptus victrix and Melaleuca argentea over Low Open Forest of Acacia coriacea subsp. pendens, Acacia ampliceps and Atalaya hemiglauca over Open Sedges of Typha domingensis, Schoenoplectus subulatus and Cyperus vaginatus in brown sandy clay loam along major drainage channels supporting permanent pools or near-surface groundwater*
-  1b *Open Forest (to Woodland) of Eucalyptus camaldulensis subsp. refulgens and Eucalyptus victrix over Open Scrub of Acacia tumida var. pilbarensis, Gossypium robinsonii and Grevillea wickhamii subsp. hispidula over Tussock Grassland of Themeda triandra, Eualia aurea and Cymbopogon procerus in brown loam on major drainage lines*


Acacia Low Open Forest

-  2 *Low Open Forest of Acacia aptaneura and Eucalyptus xerothermica over Hummock Grassland of Triodia pungens and Triodia wiseana over Open (to Very Open) Tussock Grassland of Chrysopogon fallax, Themeda triandra and Aristida holathera var. holathera in brown silty clay loam on drainage zones and drainage plains*














Acacia Open Scrub

-  3a *Open Scrub of Acacia monticola, Acacia tumida var. pilbarensis and Grevillea wickhamii subsp. hispidula with Low Open Woodland of Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia over Open Hummock Grassland of Triodia pungens and Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) in brown sandy loam on minor drainage lines dissecting ironstone hills*
-  3b *Open Scrub of Acacia maitlandii, Acacia ancistrocarpa and Santalum lanceolatum over Tussock Grassland of Themeda triandra, Enneapogon robustissimus and Cymbopogon ambiguus with Low Open Woodland of Eucalyptus xerothermica and Corymbia hamersleyana in brown gravelly loam on minor drainage lines amongst dolerite hills*



Acacia High Shrubland

-  4 *High Shrubland of Acacia tumida var. pilbarensis, Gossypium robinsonii and Acacia monticola with Low Open Woodland of Corymbia hamersleyana and Eucalyptus leucophloia subsp. leucophloia over Open Tussock Grassland of Themeda triandra, Cymbopogon procerus and Eriachne tenuiculmis in brown sandy loam on minor drainage lines dissecting ironstone hills*


Triodia Hummock Grassland

-  5a *Hummock Grassland of Triodia wiseana, Triodia brizoides and Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835) with High Open Shrubland of Acacia inaequilatera over Low Open Shrubland of Eremophila fraseri, Senna artemisioides subsp. oligophylla and Indigofera rugosa in sand to silty loam soils on low undulating dolerite hill crests, slopes and valleys*
-  5b *Hummock Grassland of Triodia wiseana and Triodia angusta with High Shrubland of Acacia bivenosa and Very Open Mallee of Eucalyptus socialis subsp. eucentrica in light brown silty loam on calcrete plains*
-  5c *Hummock Grassland of Triodia wiseana with Low Open Woodland of Eucalyptus xerothermica over Low Open Shrubland of Senna artemisioides subsp. oligophylla, Ptilotus astrolasius and Acacia pruinocarpa in brown loam on raised stony floodplains (with levees)*
-  5d *Hummock Grassland of Triodia wiseana, Triodia brizoides and Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia, Eucalyptus xerothermica and Corymbia hamersleyana over Low Open Shrubland of Ptilotus calostachyus, Ptilotus astrolasius and Acacia hilliana in brown loam on eroded outcropping upper hill slopes and crests*
-  5e *Hummock Grassland of Triodia wiseana, Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835) and Triodia brizoides with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia and Corymbia hamersleyana over Open Tussock Grassland of Eriachne mucronata and Themeda triandra in brown loam on upper scree slopes*
-  5f *Hummock Grassland of Triodia wiseana, Triodia sp. Shovelanna Hill (S. van Leeuwen 3835) and Triodia brizoides with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia and Corymbia hamersleyana over Low Open Shrubland of Acacia adoxa var. adoxa, Acacia hilliana and Corchorus lasiocarpus in brown skeletal silty loam on rocky outcropping hill slopes*
-  5g *Hummock Grassland of Triodia wiseana and Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835) with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia, Corymbia deserticola subsp. deserticola and Corymbia hamersleyana and Open Shrubland of Acacia atkinsiana, Acacia ancistrocarpa and Acacia maitlandii in brown loam on footslopes*
-  5h *Hummock Grassland of Triodia wiseana, Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835) and Triodia melvillei with Very Open Mallee of Eucalyptus gamophylla, Eucalyptus xerothermica and Eucalyptus trivalva over Open Shrubland of Acacia ancistrocarpa, Acacia atkinsiana and Acacia pruinocarpa in brown silty loam on stony sloping plains and lower footslopes*
-  5i *Hummock Grassland of Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), Triodia wiseana and Triodia pungens with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia, Corymbia hamersleyana and Corymbia deserticola subsp. deserticola over Low Open Shrubland of Acacia hilliana, Acacia adoxa var. adoxa and Keraudrenia velutina subsp. elliptica C.F.Wilkins ms in brown silty loam on ironstone hill slopes*
-  5j *Hummock Grassland of Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), Triodia wiseana and Triodia pungens with Shrubland (to High Shrubland) of Acacia atkinsiana, Acacia ancistrocarpa and Acacia pruinocarpa and Low Open Woodland of Corymbia deserticola subsp. deserticola and Eucalyptus leucophloia subsp. leucophloia in brown silty loam on undulating footslopes*
-  5k *Hummock Grassland of Triodia sp. Shovelanna Hill (S. van Leeuwen 3835), Triodia wiseana and Triodia pungens with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia, Corymbia hamersleyana and Hakea chordophylla over Open Shrubland of Acacia ancistrocarpa, Acacia atkinsiana and Acacia bivenosa in brown sandy loam on undulating low ironstone hills (dissected by minor drainage lines)*
-  5l *Hummock Grassland of Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835), Triodia pungens and Triodia wiseana with Low Open Woodland of Corymbia deserticola subsp. deserticola, Eucalyptus leucophloia subsp. leucophloia and Corymbia hamersleyana over Low Open Shrubland of Acacia atkinsiana, Acacia adoxa var. adoxa and Acacia hilliana in brown silty loam on low undulating hills*
-  5m *Hummock Grassland of Triodia pungens and Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835) with Shrubland of Acacia tumida var. pilbarensis, Acacia atkinsiana and Grevillea wickhamii subsp. hispidula and Low Open Woodland of Eucalyptus xerothermica and Corymbia hamersleyana in brown silty loam on medium drainage lines and adjacent flood plains*


Triodia Open Hummock Grassland

-  6a *Open Hummock Grassland of Triodia sp. Shovelanna Hill (S. Van Leeuwen 3835), Triodia wiseana and Triodia pungens with Low Open Woodland of Eucalyptus leucophloia subsp. leucophloia, Corymbia deserticola subsp. deserticola and Hakea chordophylla over Low Open Shrubland of Acacia adoxa var. adoxa, Corchorus lasiocarpus and Acacia hilliana in brown silty loam on ironstone plateaux and hill crests*
-  6b *Open Hummock Grassland of Triodia melvillei, Triodia wiseana and Triodia pungens with Scattered Low Trees of Acacia aptaneura and Eucalyptus xerothermica over High Open Shrubland of Acacia aptaneura and Acacia pruinocarpa in brown silty loam soil on stony plains*


Themeda Tussock

-  7 *Tussock Grassland of Themeda triandra, Eualia aurea and Chrysopogon fallax with Low Woodland of Eucalyptus xerothermica, Acacia aptaneura and Corymbia hamersleyana over Shrubland of Acacia tumida var. pilbarensis, Acacia atkinsiana and Acacia elachantha in brown clay loam on medium drainage lines and floodplains*

Themeda Open Tussock

-  8 *Open Tussock Grassland of Themeda triandra, Eualia aurea and Eriachne tenuiculmis with Open Woodland of Eucalyptus victrix over High Shrubland of Acacia pyrifolia, Acacia tumida var. pilbarensis and Grevillea wickhamii subsp. hispidula in brown sandy loam on medium and major drainage lines*

Other

-  Cleared *Cleared / Disturbed*



GRIFFIN
SPATIAL & MAPPING
PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI
Vegetation map for the study area



Figure:	10	Date:	24/01/2014
Sheet Size:	A3	Status:	Draft
Drawn by:	GSM	Requested by:	DB
		Internal Reference:	Fig11_VegMap

See Legend Separate Sheet

N


0 2 4 6 8 10
Kilometers
1:150,000
Datum: GDA94
Projection: MGA Zone 50

Broad Floristic Formation	1a <i>Eucalyptus</i> Open Forest
Vegetation Association	Open Forest of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> , <i>Eucalyptus victrix</i> and <i>Melaleuca argentea</i> over Low Open Forest of <i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>Acacia ampliceps</i> and <i>Atalaya hemiglauca</i> over Open Sedges of <i>Typha domingensis</i> , <i>Schoenoplectus subulatus</i> and <i>Cyperus vaginatus</i> in brown sandy clay loam along major drainage channels supporting permanent pools or near-surface groundwater



Area Mapped (ha)	32.9 ha
Quadrats Sampled	AY90
Leaf Litter Cover (%)	70
Bare Ground (%)	<30
Soils and Geology	Brown sandy clay loam, mixed riverine gravels
Land System	River
Land Form	Major rivers with areas of permanent water
TECs/PECs	None
Significant Flora	None
Introduced (Weed) Species	<i>*Sigesbeckia orientalis</i> , <i>*Bidens bipinnata</i> , <i>*Setaria verticillata</i> , <i>*Malvastrum americanum</i> , <i>*Vachellia farnesiana</i> , <i>*Sonchus oleraceus</i>
Vegetation Condition	Very Good
Disturbances	Weeds, livestock, access road
Average Fire Age	Very Old (>10 years)

Vegetation Structure & Floristics	
Trees 10-30m	<i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> , <i>Eucalyptus victrix</i> , <i>Melaleuca argentea</i>
Trees <10m	<i>Acacia coriacea</i> subsp. <i>pendens</i> , <i>Acacia ampliceps</i> , <i>Atalaya hemiglauca</i>
Tall Shrubs >2m	<i>Melaleuca glomerata</i> , <i>Myoporum montanum</i>
Shrubs <1m	<i>Corchorus crozophorifolius</i> , <i>Phyllanthus</i> <i>maderaspatensis</i>
Tussock grasses	<i>Themeda triandra</i> , <i>Paspalidium basicladium</i> , <i>Eulalia</i> <i>aurea</i>
Sedges	<i>Typha domingensis</i> , <i>Schoenoplectus subulatus</i> , <i>Cyperus vaginatus</i>
Herbs	<i>Potamogeton tricarinatus</i>

Broad Floristic Formation	1b <i>Eucalyptus</i> Open Forest
Vegetation Association	Open Forest (to Woodland) of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> and <i>Eucalyptus victrix</i> over Open Scrub of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium robinsonii</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> over Tussock Grassland of <i>Themeda triandra</i> , <i>Eualia aurea</i> and <i>Cymbopogon procerus</i> in brown loam on major drainage lines
	
Area Mapped (ha)	404.1 ha
Quadrats Sampled	AY044, AY069, AY070, AY073, AY079, AY121, AY145, AY157
Leaf Litter Cover (%)	5-10
Bare Ground (%)	65
Soils and Geology	Brown loam soils, riverine gravels (including, ironstone, chert), BIF cliffs and boulders
Land System	River
Land Form	Major Drainage Lines (some in cliff-lined gorges)
TECs/PECs	None
Significant Flora	<i>Rostellularia adscendens</i> var. <i>latifolia</i> (Priority 3), <i>Goodenia nuda</i> (Priority 4), <i>Rhynchosia bungarensis</i> (Priority 4), <i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642, Priority 3)
Introduced (Weed) Species	* <i>Bidens bipinnata</i> , * <i>Setaria verticillata</i> , * <i>Vachellia farnesiana</i> , * <i>Malvastrum americanum</i> , * <i>Sonchus oleraceus</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Fire, flooding, livestock, weeds, access tracks, rail
Average Fire Age	5-10 yr (Old)

Vegetation Structure & Floristics	
Trees 10-30m	<i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> , <i>Eucalyptus victrix</i>
Tall Shrubs >2m	<i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium</i> <i>robinsonii</i> , <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> , <i>Petalostylis labicheoides</i> , <i>Acacia bivenosa</i> , <i>Acacia</i> <i>coriacea</i> subsp. <i>pendens</i>
Shrubs 1-2m	<i>Acacia pyrifolia</i> , <i>Androcalva luteiflora</i> , <i>Stylobasium</i> <i>spathulatum</i> , <i>Melaleuca bracteata</i>
Shrubs <1m	<i>Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186), <i>Corchorus crozophorifolius</i>
Hummock Grasses	<i>Triodia longiceps</i> , <i>Triodia wiseana</i> , <i>Triodia pungens</i>
Tussock Grasses	<i>Themeda triandra</i> , <i>Eulalia aurea</i> , <i>Cymbopogon</i> <i>procerus</i> , <i>Eriachne tenuiculmis</i>
Sedges	<i>Cyperus vaginatus</i>
Herbs	<i>Phyllanthus maderaspatensis</i>

Broad Floristic Formation	2 <i>Acacia</i> Low Open Forest
Vegetation Association	Low Open Forest of <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia wiseana</i> over Open (to Very Open) Tussock Grassland of <i>Chrysopogon fallax</i> , <i>Themeda triandra</i> and <i>Aristida holathera</i> var. <i>holathera</i> in brown silty clay loam on drainage zones and drainage plains



Area Mapped	544.9 ha
Quadrats Sampled	AY014, AY034, AY045, AY047, AY050, AY141, AY167
Leaf Litter Cover (%)	5-10
Bare Ground (%)	35
Soils and Geology	Brown silty clay loam, ironstone, chert, some mixed riverine gravels
Land Form	Drainage zones and drainage plains
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i> , * <i>Malvastrum americanum</i> , * <i>Setaria verticillata</i> , * <i>Vachellia farnesiana</i>
Vegetation Condition	Very Good
Disturbances	Weeds, livestock, powerlines and easement, Yandi access road, senescence, fire, flooding
Average Fire Age	Very Old (>10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Acacia aptaneura</i> , <i>Eucalyptus xerothermica</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>
Tall Shrubs >2m	<i>Acacia pruinocarpa</i> , <i>Acacia atkinsiana</i> , <i>Petalostylis labicheoides</i> , <i>Acacia monticola</i> , <i>Acacia tetragonophylla</i>
Shrubs 1-2m	<i>Acacia ancistrocarpa</i> , <i>Santalum lanceolatum</i>
Low shrubs <1m	<i>Ptilotus obovatus</i>
Hummock Grasses	<i>Triodia pungens</i> , <i>Triodia wiseana</i>
Tussock Grasses	<i>Chrysopogon fallax</i> , <i>Themeda triandra</i> , <i>Aristida holathera</i> var. <i>holathera</i> , <i>Eulalia aurea</i> , <i>Eriachne mucronata</i> , <i>Sporobolus australasicus</i>
Herbs	* <i>Bidens bipinnata</i>

Broad Floristic Formation	3a <i>Acacia</i> Open Scrub
Vegetation Association	Open Scrub of <i>Acacia monticola</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) in brown sandy loam on minor drainage lines dissecting ironstone hills



Area Mapped (ha)	967.7 ha
Quadrats Sampled	AY001, AY013, AY023, AY025, AY061, AY101, AY112, AY122, AY150
Leaf Litter Cover (%)	<5
Bare Ground (%)	20
Soils and Geology	Brown sandy loam soils
Land Form	Minor drainage lines through ironstone hills
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Access tracks, rail, livestock, fire
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia hamersleyana</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>
Mallee	<i>Eucalyptus gamophylla</i>
Tall Shrubs >2m	<i>Acacia monticola</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Grevillea wickhamii</i> , <i>Gossypium robinsonii</i> , <i>Petalostylis labicheoides</i> , <i>Santalum lanceolatum</i> , <i>Acacia atkinsiana</i> , <i>Dodonaea lanceolata</i>
Shrubs 1-2m	<i>Androcalva luteiflora</i>
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Gompholobium oreophilum</i> , <i>Keraudrenia velutina</i> , <i>Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186), <i>Indigofera monophylla</i> , <i>Corchorus lasiocarpus</i> , <i>Acacia spondylophylla</i>
Hummock Grasses	<i>Triodia pungens</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i>
Tussock Grasses	<i>Eriachne mucronata</i> , <i>Themeda triandra</i> , <i>Cymbopogon ambiguus</i>

Broad Floristic Formation	3b <i>Acacia</i> Open Scrub
Vegetation Association	Open Scrub of <i>Acacia maitlandii</i> , <i>Acacia ancistrocarpa</i> and <i>Santalum lanceolatum</i> over Tussock Grassland of <i>Themeda triandra</i> , <i>Enneapogon robustissimus</i> and <i>Cymbopogon ambiguus</i> with Low Open Woodland of <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> in brown gravelly loam on minor drainage lines amongst dolerite hills



Area Mapped (ha)	101.3 ha
Quadrats Sampled	AY006, AY066
Leaf Litter Cover (%)	1
Bare Ground (%)	15
Soils and Geology	Brown gravelly loam soil amongst dolerite
Land Form	Minor drainage lines amongst dolerite slopes
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Malvastrum americanum</i> , * <i>Bidens bipinnata</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Yandi access road, powerlines and easement, fire, livestock
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus xerothermica</i> , <i>Corymbia hamersleyana</i>
Shrubs >2m	<i>Acacia maitlandii</i> , <i>Acacia ancistrocarpa</i> , <i>Santalum lanceolatum</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i>
Shrubs 1-2m	<i>Senna glutinosa</i> subsp. <i>glutinosa</i>
Shrubs <1m	<i>Ptilotus astrolasius</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Indigofera rugosa</i>
Hummock Grasses	<i>Triodia wiseana</i>
Tussock Grasses	<i>Themeda triandra</i> , <i>Enneapogon robustissimus</i> , <i>Cymbopogon ambiguus</i>

Broad Floristic Formation	4 <i>Acacia</i> High Shrubland
Vegetation Association	High Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium robinsonii</i> and <i>Acacia monticola</i> with Low Open Woodland of <i>Corymbia hamersleyana</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> over Open Tussock Grassland of <i>Themeda triandra</i> , <i>Cymbopogon procerus</i> and <i>Eriachne tenuiculmis</i> in brown sandy loam on minor drainage lines dissecting ironstone hills



Area Mapped (ha)	751.8 ha
Quadrats Sampled	AY107, AY118, AY138
Leaf Litter Cover (%)	<5
Bare Ground (%)	60
Soils and Geology	Brown sandy loam, ironstone, BIF and some mixed riverine gravels
Land Form	Minor to medium drainage line through ironstone hills
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Rail, access tracks, fire
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia hamersleyana</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i>
Tall Shrubs >2m	<i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Gossypium robinsonii</i> , <i>Acacia monticola</i> , <i>Grevillea wickhamii</i> , <i>Acacia pyrifolia</i>
Shrubs 1-2m	<i>Androcalva luteiflora</i>
Hummock Grasses	<i>Triodia pungens</i> , <i>Triodia wiseana</i>
Tussock Grasses	<i>Themeda triandra</i> , <i>Cymbopogon procerus</i> , <i>Eriachne tenuiculmis</i> , <i>Eriachne mucronata</i>

Broad Floristic Formation	5a <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with High Open Shrubland of <i>Acacia inaequilatera</i> over Low Open Shrubland of <i>Eremophila fraseri</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> and <i>Indigofera rugosa</i> in sand to silty loam soils on low undulating dolerite hill crests, slopes and valleys



Area Mapped (ha)	1,941.5 ha
Quadrats Sampled	AY008, AY053, AY065, AY068, AY071, AY081, AY085, AY092, AY119, AY130, AY134, AY137, AY153, AY160
Leaf Litter Cover (%)	<1
Bare Ground (%)	35
Soils and Geology	Sandy to silty loam, dolerite
Land Form	Undulating hillslopes, valleys and crests
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Fire, access tracks, livestock, weeds, powerline and easement, Yandi access road
Average Fire Age	Moderate (5-10 yr)


Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia hamersleyana</i>
Shrubs >2m	<i>Acacia inaequilatera</i>
Shrubs 1-2m	<i>Senna glutinosa</i> subsp. <i>glutinosa</i>
Shrubs <1m	<i>Eremophila fraseri</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Indigofera rugosa</i> , <i>Ptilotus nobilis</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> , <i>Ptilotus nobilis</i> , <i>Ptilotus auriculifolius</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia brizoides</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835)
Tussock Grasses	<i>Enneapogon caeruleus</i> , <i>Aristida contorta</i> , <i>Enneapogon polyphyllus</i> , <i>Aristida holathera</i> var. <i>holathera</i>
Herbs	<i>Tribulus hirsutus</i>

Broad Floristic Formation	5b <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> and <i>Triodia angusta</i> with High Shrubland of <i>Acacia bivenosa</i> and Very Open Mallee of <i>Eucalyptus socialis</i> subsp. <i>eucentrica</i> in light brown silty loam on calcrete plains



Area Mapped (ha)	1,206.0 ha
Quadrats Sampled	AY002, AY003, AY009, AY028, AY040, AY042, AY048, AY052, AY094, AY096, AY155, AY165
Leaf Litter Cover (%)	<1
Bare Ground (%)	70
Soils and Geology	Light brown silty loam, calcrete and silcrete
Land Form	Calcrete dominated undulating hills and plains
Priority Ecological Community	None
Rare Flora	<i>Acacia subtiliformis</i> (Priority 3), <i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727, Priority 3), <i>Rostellularia adscendens</i> var. <i>latifolia</i> (Priority 3)
Introduced (Weed) Species	* <i>Bidens bipinnata</i>
Vegetation Condition	Excellent
Disturbances	Fire, Yandi access road, access tracks, livestock, rail, powerlines and easement, cattle yards
Average Fire Age	Young (1-2 yr)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Eucalyptus xerothermica</i> , <i>Hakea chordophylla</i>
Mallee	<i>Eucalyptus socialis</i> subsp. <i>eucentrica</i>
Tall Shrubs >2m	<i>Acacia bivenosa</i> (wispy form), <i>Acacia inaequilatera</i>
Shrubs 1-2m	<i>Acacia subtiliformis</i> (Priority 3)
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Acacia hilliana</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia angusta</i>
Tussock Grasses	<i>Eragrostis eriopoda</i>

Broad Floristic Formation	5c <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> with Low Open Woodland of <i>Eucalyptus xerothermica</i> over Low Open Shrubland of <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Ptilotus astrolasius</i> and <i>Acacia pruinocarpa</i> in brown loam on raised stony floodplains (with levees)
	
Area Mapped (ha)	229.7 ha
Quadrats Sampled	AY006, AY055
Leaf Litter Cover (%)	<2
Bare Ground (%)	25-40
Soils and Geology	Brown loam, ironstone and chert
Land Form	Raised stony floodplain (with levees)
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Malvastrum americanum</i> , * <i>Bidens bipinnata</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Fire, Yandi access road, livestock
Average Fire Age	Young (1-2 yrs)
Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus xerothermica</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Hakea lorea</i> subsp. <i>lorea</i>
Shrubs >2m	<i>Acacia pruinocarpa</i>
Shrubs <1m	<i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Ptilotus astrolasius</i>
Hummock Grasses	<i>Triodia wiseana</i>
Tussock Grasses	<i>Enneapogon caeruleascens</i>

Broad Floristic Formation	5d <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia brizoides</i> and <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Ptilotus calostachyus</i> , <i>Ptilotus astrolasius</i> and <i>Acacia hilliana</i> in brown loam on eroded outcropping upper hill slopes and crests



Area Mapped (ha)	879.1 ha
Quadrats Sampled	AY074, AY078, AY084, AY088, AY140, AY151
Leaf Litter Cover (%)	<1
Bare Ground (%)	40
Soils and Geology	Brown loamy soil, ironstone, chert, quartz some silcrete and greenstone
Land Form	Eroded outcropping upper slopes and crests
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None evident to fire, access tracks, Yandi access road
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Eucalyptus xerothermica</i> , <i>Corymbia hamersleyana</i>
Shrubs >2m	<i>Acacia inaequilatera</i> , <i>Grevillea wickhamii</i>
Shrubs 1-2m	<i>Acacia ancistrocarpa</i>
Shrubs <1m	<i>Ptilotus calostachyus</i> , <i>Ptilotus astrolasius</i> , <i>Acacia hilliana</i> , <i>Indigofera monophylla</i> , <i>Goodenia stobbsiana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia brizoides</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia pungens</i>
Tussock Grasses	<i>Aristida contorta</i> , <i>Eriachne pulchella</i> , <i>Themeda triandra</i> , <i>Eriachne lanata</i>
Sedges	<i>Fimbristylis simulans</i>

Broad Floristic Formation	5e <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) and <i>Triodia brizoides</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Open Tussock Grassland of <i>Eriachne mucronata</i> and <i>Themeda triandra</i> in brown loam on upper scree slopes



Area Mapped (ha)	118.0 ha
Quadrats Sampled	AY116, AY127, AY133
Leaf Litter Cover (%)	<1
Bare Ground (%)	40
Soils and Geology	Brown loam, ironstone and sandstone
Land Form	Scree slopes below hill crests
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Fire, access tracks, rehabilitated areas, powerline and easement
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i>
Shrubs 1-2m	<i>Acacia bivenosa</i> , <i>Senna symonii</i> , <i>Senna glutinosa</i> subsp. <i>pruinosa</i>
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Tephrosia arenicola</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3935), <i>Triodia brizoides</i> , <i>Triodia</i> <i>pungens</i>
Tussock Grasses	<i>Eriachne mucronata</i> , <i>Themeda triandra</i> , <i>Schizachyrium fragile</i> , <i>Eriachne pulchella</i> , <i>Iseilema dolichotrichum</i>

Broad Floristic Formation	5f <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835) and <i>Triodia brizoides</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Acacia hilliana</i> and <i>Corchorus lasiocarpus</i> in brown skeletal silty loam on rocky outcropping hill slopes



Area Mapped (ha)	189.0 ha
Quadrats Sampled	AY113, AY135, AY158
Leaf Litter Cover (%)	<1
Bare Ground (%)	20
Soils and Geology	Brown silty loam, ironstone
Land Form	Rocky outcropping hillslopes
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	None evident except fire
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs >2m	<i>Grevillea wickhamii</i> , <i>Acacia inaequilatera</i> , <i>Acacia monticola</i> , <i>Acacia bivenosa</i> (wispy form)
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Acacia hilliana</i> , <i>Corchorus lasiocarpus</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia brizoides</i> , <i>Triodia pungens</i>
Tussock Grasses	<i>Schizachyrium fragile</i>

Broad Floristic Formation	5g <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Corymbia hamersleyana</i> and Open Shrubland of <i>Acacia atkinsiana</i> , <i>Acacia ancistrocarpa</i> and <i>Acacia maitlandii</i> in brown loam on footslopes



Area Mapped (ha)	279.9 ha
Quadrats Sampled	AY019, AY126
Leaf Litter Cover (%)	<1
Bare Ground (%)	35
Soils and Geology	Brown loam, ironstone
Land Form	Footslopes
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good to Excellent
Disturbances	Livestock, fire, Yandi Village access road, access tracks, rehabilitation
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Corymbia hamersleyana</i>
Shrubs >2m	<i>Acacia pachyacra</i>
Shrubs 1-2m	<i>Acacia atkinsiana</i> , <i>Acacia ancistrocarpa</i> , <i>Acacia maitlandii</i> , <i>Acacia dictyophleba</i> , <i>Senna glutinosa</i> subsp. <i>glutinosa</i>
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Ptilotus astrolasius</i> , <i>Keraudrenia velutina</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835)
Sedges	<i>Fimbristylis simulans</i>

Broad Floristic Formation	5h <i>Triodia</i> Tussock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) and <i>Triodia melvillei</i> with Very Open Mallee of <i>Eucalyptus gamophylla</i> , <i>Eucalyptus xerothermica</i> and <i>Eucalyptus trivalva</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> and <i>Acacia pruinocarpa</i> in brown silty loam on stony sloping plains and lower footslopes



Area Mapped (ha)	1,137.9 ha
Quadrats Sampled	AY020, AY035, AY036, AY037, AY041, AY054, AY062, AY087, AY098, AY100, AY164, AY168, AY169, AY170
Leaf Litter Cover (%)	2
Bare Ground (%)	30
Soils and Geology	Brown silty loam, ironstone and chert
Land Form	Stony sloping plains and low footslopes
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i>
Vegetation Condition	Excellent
Disturbances	Powerline and easement, Yandi access road, rehabilitation, rail, livestock, fire
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Eucalyptus xerothermica</i>
Mallee	<i>Eucalyptus gamophylla</i> , <i>Eucalyptus xerothermica</i> , <i>Eucalyptus trivalva</i>
Shrubs >2m	<i>Acacia aptaneura</i> , <i>Acacia inaequilatera</i> , <i>Acacia</i> <i>pachyacra</i> , <i>Petalostylis labicheoides</i> , <i>Acacia</i> <i>bivenosa</i> , <i>Acacia aneura</i>
Shrubs 1-2m	<i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> , <i>Acacia</i> <i>pruinocarpa</i> , <i>Acacia bivenosa</i> , <i>Acacia tenuissima</i> , <i>Sida arenicola</i>
Shrubs <1m	<i>Ptilotus astrolasius</i> , <i>Senna artemisioides</i> subsp. <i>oligophylla</i> , <i>Indigofera monophylla</i>
Hummock Grasses	<i>Triodia wiseana</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia melvillei</i> , <i>Triodia</i> <i>pungens</i>
Tussock Grasses	<i>Themeda triandra</i> , <i>Aristida holathera</i> var. <i>holathera</i> , <i>Paraneurachne muelleri</i>

Broad Floristic Formation	5i <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> and <i>Corymbia deserticola</i> subsp. <i>deserticola</i> over Low Open Shrubland of <i>Acacia hilliana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> and <i>Keraudrenia velutina</i> subsp. <i>elliptica</i> C.F. Wilkins ms in brown silty loam on ironstone hill slopes



Area Mapped (ha)	6,229.7 ha
Quadrats Sampled	AY010, AY011, AY021, AY027, AY058, AY064, AY075, AY076, AY077, AY082, AY083, AY095, AY102, AY103, AY105, AY109, AY120, AY125, AY128, AY129, AY131, AY136, AY146, AY147, AY148, AY149, AY154, AY159, AY161, AY163
Leaf Litter Cover (%)	<1
Bare Ground (%)	35
Soils and Geology	Brown silty loam, ironstone
Land Form	Hill slopes
Priority Ecological Community	None
Rare Flora	<i>Acacia effusa</i> (Priority 3)
Introduced (Weed) Species	* <i>Bidens bipinnata</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Yandi access road, powerline and easement, livestock, bow pit, rehabilitation areas, fire, weeds, rail
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Corymbia deserticola</i> , subsp. <i>deserticola</i> , <i>Hakea chordophylla</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs >2m	<i>Acacia pruinocarpa</i> , <i>Acacia atkinsiana</i> , <i>Grevillea wickhamii</i> , <i>Acacia maitlandii</i>
Shrubs 1-2	<i>Corchorus lasiocarpus</i> , <i>Ptilotus rotundifolius</i> , <i>Senna glutinosa</i> subsp. <i>pruinosa</i> , <i>Senna glutinosa</i> subsp. <i>glutinosa</i> , <i>Acacia inaequilatera</i> , <i>Acacia arida</i> , <i>Petalostylis labicheoides</i> , <i>Acacia monticola</i>
Shrubs <1m	<i>Acacia hilliana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Keraudrenia velutina</i> , <i>Indigofera monophylla</i> , <i>Acacia effusa</i> (Priority 3), <i>Gompholobium oreophilum</i>
Hummock Grasses	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> , <i>Triodia pungens</i>
Tussock Grasses	<i>Eriachne lanata</i> , <i>Eriachne mucronata</i> , <i>Themeda triandra</i> , <i>Amphipogon sericeus</i>

Broad Floristic Formation	5j <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Shrubland (to High Shrubland) of <i>Acacia atkinsiana</i> , <i>Acacia ancistrocarpa</i> and <i>Acacia pruinocarpa</i> and Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> in brown silty loam on undulating footslopes



Area Mapped (ha)	2,264.8 ha
Quadrats Sampled	AY015, AY016, AY017, AY024, AY029, AY030, AY031, AY032, AY097, AY143, AY144
Leaf Litter Cover (%)	<3
Bare Ground (%)	30-60
Soils and Geology	Brown sand to silty loam, ironstone, chert
Land Form	Undulating footslopes
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good to Excellent
Disturbances	Fire, livestock, powerline and easement, access tracks, Yandi access road, survey mark, cattle yards
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Codonocarpus cotinofolius</i> , <i>Hakea chordophylla</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs >2m	<i>Acacia atkinsiana</i> , <i>Acacia pruinocarpa</i> , <i>Acacia inaequilatera</i> , <i>Acacia aneura</i> , <i>Acacia ancistrocarpa</i>
Shrubs 1-2m	<i>Acacia ancistrocarpa</i> , <i>Acacia kempeana</i> , <i>Acacia monticola</i> , <i>Acacia tenuissima</i> , <i>Senna glutinosa</i> subsp. <i>glutinosa</i>
Shrubs <1m	<i>Indigofera monophylla</i> , <i>Keraudrenia velutina</i>
Hummock Grasses	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> , <i>Triodia pungens</i>
Tussock Grasses	<i>Eriachne mucronata</i> , <i>Paraneurachne muelleri</i> , <i>Eragrostis eriopoda</i> , <i>Aristida holathera</i> var. <i>holathera</i>

Broad Floristic Formation	5k <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> and <i>Hakea chordophylla</i> over Open Shrubland of <i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> and <i>Acacia bivenosa</i> in brown sandy loam on undulating low ironstone hills (dissected by minor drainage lines)



Area Mapped (ha)	2,422.0 ha
Quadrats Sampled	AY004, AY005, AY022, AY046, AY049, AY051, AY060, AY063, AY067, AY072, AY086, AY089, AY091, AY156, AY162
Leaf Litter Cover (%)	<2
Bare Ground (%)	45
Soils and Geology	Brown sandy loam, ironstone, chert
Land Form	Undulating low ironstone hills as a mosaic dissected with minor drainage lines
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Fire, Yandi access road, powerline and easement, livestock, cattle yards, old exploration tracks, rail
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Hakea chordophylla</i>
Mallee	<i>Eucalyptus gamophylla</i> , <i>Eucalyptus trivalva</i>
Shrubs >2m	<i>Petalostylis labicheoides</i> , <i>Acacia aptaneura</i> , <i>Acacia pruinocarpa</i> , <i>Acacia inaequilatera</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i>
Shrubs 1-2m	<i>Acacia ancistrocarpa</i> , <i>Acacia atkinsiana</i> , <i>Acacia bivenosa</i> (wispy form), <i>Acacia arida</i>
Shrubs <1m	<i>Indigofera monophylla</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Acacia hilliana</i>
Hummock Grasses	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> , <i>Triodia pungens</i>
Herbs	<i>Tribulus hirsutus</i>

Broad Floristic Formation	5I <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835), <i>Triodia pungens</i> and <i>Triodia wiseana</i> with Low Open Woodland of <i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and <i>Corymbia hamersleyana</i> over Low Open Shrubland of <i>Acacia atkinsiana</i> , <i>Acacia adoxa</i> var. <i>adoxo</i> and <i>Acacia hilliiana</i> in brown silty loam on low undulating hills



Area Mapped (ha)	1,766.7 ha
Quadrats Sampled	AY033, AY059, AY108, AY111, AY139, AY142, AY166
Leaf Litter Cover (%)	1
Bare Ground (%)	30-40
Soils and Geology	Brown silty loam, ironstone
Land Form	Low hill crests
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Excellent
Disturbances	Livestock, rail, fire
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Corymbia deserticola</i> subsp. <i>deserticola</i> , <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i> , <i>Hakea chordophylla</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs 1-2	<i>Acacia atkinsiana</i>
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Acacia hilliana</i> , <i>Gompholobium oreophilum</i> , <i>Keraudrenia velutina</i>
Hummock Grasses	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia pungens</i> , <i>Triodia wiseana</i>
Sedges	<i>Fimbristylis simulans</i>

Broad Floristic Formation	5m <i>Triodia</i> Hummock Grassland
Vegetation Association	Hummock Grassland of <i>Triodia pungens</i> and <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835) with Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and Low Open Woodland of <i>Eucalyptus xerothermica</i> and <i>Corymbia hamersleyana</i> in brown silty loam on medium drainage lines and adjacent flood plains



Area Mapped (ha)	204.6 ha
Quadrats Sampled	AY007, AY106, AY115, AY124, EP05, E036
Leaf Litter Cover (%)	2
Bare Ground (%)	35
Soils and Geology	Brown silty loam, Ironstone, chert and some mixed riverine gravels
Land Form	Medium to minor drainage line and associated floodplains
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i> , * <i>Cenchrus ciliaris</i>
Vegetation Condition	Very Good
Disturbances	Livestock, fire, access tracks, rail, weeds
Average Fire Age	Moderate to Old


Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia hamersleyana</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs 1-2m	<i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> , <i>Grevillea wickhamii</i> , <i>Petalostylis labicheoides</i> , <i>Acacia pyrifolia</i> , <i>Androcalva luteiflora</i>
Shrubs <1m	<i>Ptilotus astrolasius</i> , <i>Indigofera georgeii</i>
Hummock Grasses	<i>Triodia pungens</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835)
Tussock Grasses	<i>Themeda triandra</i> , <i>Eulalea aurea</i> , <i>Chrysopogon</i> <i>fallax</i> , <i>Aristida holathera</i> var. <i>holathera</i> , <i>Cymbopogon procerus</i>

Broad Floristic Formation	6a <i>Triodia</i> Open Hummock Grassland
Vegetation Association	Open Hummock Grassland of <i>Triodia</i> sp. Shovelanna Hill (S. Van Leeuwen 3835), <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Low Open Woodland of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> subsp. <i>deserticola</i> and <i>Hakea chordophylla</i> over Low Open Shrubland of <i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Corchorus lasiocarpus</i> and <i>Acacia hilliana</i> in brown silty loam on ironstone plateaux and hill crests



Area Mapped (ha)	825.9 ha
Quadrats Sampled	AY104, AY114, AY117, AY123, AY132, AY152
Leaf Litter Cover (%)	2
Bare Ground (%)	30
Soils and Geology	Brown silty loam, ironstone
Land Form	Ironstone plateau hillcrests
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good to Excellent
Disturbances	Minimal to drill pad, rail construction, access tracks and fire
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees >10m	<i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> , <i>Corymbia deserticola</i> , <i>Hakea chordophylla</i> , <i>Corymbia hamersleyana</i>
Shrubs >2m	<i>Grevillea wickhamii</i>
Shrubs 1-2m	<i>Ptilotus calostachyus</i> , <i>Tephrosia arenicola</i> , <i>Acacia ancistrocarpa</i>
Shrubs <1m	<i>Acacia adoxa</i> var. <i>adoxo</i> , <i>Corchorus lasiocarpus</i> , <i>Acacia hilliana</i> , <i>Goodenia stobbsiana</i> , <i>Gompholobium oreophilum</i> , <i>Keraudrenia velutina</i>
Hummock Grasses	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i> , <i>Triodia pungens</i>
Tussock Grasses	<i>Amphipogon sericeus</i>

Broad Floristic Formation	6b <i>Triodia</i> Open Hummock Grassland
Vegetation Association	Open Hummock Grassland of <i>Triodia melvillei</i> , <i>Triodia wiseana</i> and <i>Triodia pungens</i> with Scattered Low Trees of <i>Acacia aptaneura</i> and <i>Eucalyptus xerothermica</i> over High Open Shrubland of <i>Acacia aptaneura</i> and <i>Acacia pruinocarpa</i> in brown silty loam soil on stony plains
	
Area Mapped (ha)	111.7 ha
Quadrats Sampled	AY018, AY038
Leaf Litter Cover (%)	1
Bare Ground (%)	55
Soils and Geology	Brown silty loam
Land Form	Stony loam plains
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i>
Vegetation Condition	Very Good
Disturbances	Old rehabilitated tracks, Yandi access roads, fire, livestock
Average Fire Age	Recent (<1 yr)
Vegetation Structure & Floristics	
Trees <10m	<i>Acacia aptaneura</i> , <i>Eucalyptus xerothermica</i>
Tall Shrubs >2m	<i>Acacia aptaneura</i> , <i>Acacia pruinocarpa</i>
Shrubs 1-2m	<i>Acacia pachyacra</i>
Shrubs <1m	<i>Senna notabilis</i> , <i>Solanum phlomoides</i> , <i>Abutilon otocarpum</i>
Hummock Grasses	<i>Triodia melvillei</i> , <i>Triodia pungens</i> , <i>Triodia wiseana</i>

Broad Floristic Formation	7 <i>Themeda</i> Tussock Grassland
Vegetation Association	Tussock Grassland of <i>Themeda triandra</i> , <i>Eulalia aurea</i> and <i>Chrysopogon fallax</i> with Low Woodland of <i>Eucalyptus xerothermica</i> , <i>Acacia aptaneura</i> and <i>Corymbia hamersleyana</i> over Shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> and <i>Acacia elachantha</i> in brown clay loam on medium drainage lines and floodplains



Area Mapped (ha)	708.9 ha
Quadrats Sampled	AY012, AY026, AY039, AY056, AY057, AY093, AY099, AY110
Leaf Litter Cover (%)	5
Bare Ground (%)	20
Soils and Geology	Brown clay loam sand, mixed riverine gravels (chert, calcrete, ironstone)
Land Form	Medium drainage lines and narrow flood plains
Priority Ecological Community	None
Rare Flora	* <i>Rostellularia adscendens</i> var. <i>latifolia</i> (Priority 3)
Introduced (Weed) Species	* <i>Malvastrum americanum</i> , * <i>Bidens bipinnata</i> , * <i>Cenchrus setiger</i> , * <i>Vachellia farnesiana</i>
Vegetation Condition	Very Good to Excellent
Disturbances	Livestock, weeds, access tracks, powerline and easement, rail
Average Fire Age	Moderate (2-5 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus xerothermica</i> , <i>Acacia aptaneura</i> , <i>Corymbia hamersleyana</i>
Mallee	<i>Eucalyptus gamophylla</i>
Shrubs 1-2m	<i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Acacia atkinsiana</i> , <i>Acacia elachantha</i> , <i>Gastrolobium grandiflorum</i> , <i>Acacia monticola</i> , <i>Petalostylis labicheoides</i> , <i>Acacia ancistrocarpa</i> , <i>Acacia tenuissima</i> , <i>Acacia</i> <i>pyrifolia</i> , <i>Acacia bivenosa</i> , <i>Gossypium robinsonii</i>
Shrubs >1m	<i>Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186)
Hummock Grassland	<i>Triodia pungens</i> , <i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835), <i>Triodia wiseana</i>
Tussock Grasses	<i>Themeda triandra</i> , <i>Eulalea aurea</i> , <i>Chrysopogon</i> <i>fallax</i>

Broad Floristic Formation	8 <i>Themeda</i> Tussock Grassland
Vegetation Association	Open Tussock Grassland of <i>Themeda triandra</i> , <i>Eulalea aurea</i> , <i>Eriachne tenuiculmis</i> with Open Woodland of <i>Eucalyptus victrix</i> over High Shrubland of <i>Acacia pyrifolia</i> , <i>Acacia tumida</i> var. <i>pilbarensis</i> , <i>Grevillea wickhamii</i> in brown sandy loam soil in medium to major drainage lines
	
Area Mapped (ha)	199.1 ha
Quadrats Sampled	AY043, AY080
Leaf Litter Cover (%)	3
Bare Ground (%)	20-35
Soils and Geology	Brown sandy loam, ironstone and mixed riverine gravels
Land Form	Major to medium drainage lines
Priority Ecological Community	None
Rare Flora	None
Introduced (Weed) Species	* <i>Bidens bipinnata</i> , * <i>Setaria verticillata</i>
Vegetation Condition	Very Good
Disturbances	Livestock, access tracks, weeds, rail
Average Fire Age	Old (5-10 yrs)

Vegetation Structure & Floristics	
Trees <10m	<i>Eucalyptus victrix, Corymbia hamersleyana</i>
Shrubs >2m	<i>Acacia pyrifolia, Acacia tumida</i> var. <i>pilbarensis</i> , <i>Grevillea wickhamii, Acacia monticola, Acacia coriacea, Gossypium robinsonii, Acacia dictyophleba</i>
Shrubs 1-2m	<i>Androcalva luteiflora, Acacia maitlandii</i>
Shrubs <1m	<i>Indigofera monophylla, Tephrosia rosea</i> var. Fortescue creeks (M.I.H. Brooker 2186)
Hummock Grasses	<i>Triodia pungens</i>
Tussock Grasses	<i>Themeda triandra, Eulalia aurea, Eriachne tenuiculmis, Aristida holathera</i> var. <i>holathera, Setaria surgens, Chrysopogon fallax</i>

3.7 Vegetation Condition

Vegetation condition within the study area ranged from excellent to very good (Figure 11). Reduced vegetation condition was typically associated with edge effects along cleared infrastructure corridors such as access roads and tracks, railway lines and historical exploration workings such as drill lines and drill pads. Vegetation condition also declined slightly within medium and large drainage lines and associated flood plain habitats, where grazing by domestic cattle was concentrated. These landforms provide habitat, seasonal surface water, and support fodder species for cattle. The majority of pastoral watering points have historically been established within the broad floodplain and drainage areas. Historical grazing within the study area was evident, but grazing intensity was generally moderate, leading to localised alteration of vegetation structure, reduced native plant species richness, and introduction of exotic (weed) species.



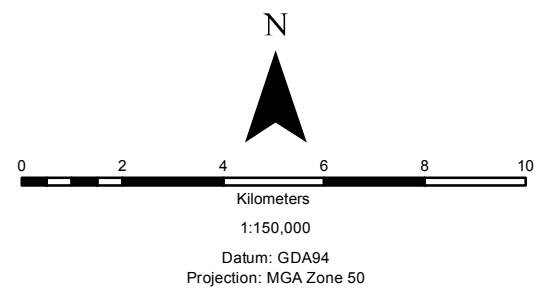
GRIFFIN
SPATIAL & MAPPING
PO Box 7215
EATON WA 6232
admin@griffinspatial.com.au
+61 8 9725 3213

AREA C WEST TO YANDI

Vegetation Condition map
for the study area



Figure:	11	Date:	16/03/2014
Sheet Size:	A3	Status:	Draft
Drawn by GSM	Requested by DB	Internal Reference Fig12_VegCond	



4.0 SUMMARY

A two-season Level 2 flora and vegetation survey of the proposed access corridor linking the north-west corner of the tenement supporting BHP Billiton Iron Ore's Area C Mine, with the western side of the tenement supporting their Yandi (Marillana Creek) Mine, was completed by Onshore Environmental between May 2011 and August 2013.

A total number of 428 plant taxa (including varieties and subspecies) from 58 families and 174 genera were recorded from the study area. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, Myrtaceae, Amaranthaceae and Euphorbiaceae families, which is typical for the Pilbara Bioregion. The most speciose genus was *Acacia* followed by *Senna*, *Sida*, *Euphorbia*, *Eriachne* and *Goodenia*.

None of the plant taxa were gazetted as Threatened Flora pursuant to subsection (2) of section 23F of the WC Act or listed under the EPBC Act.

A total of 13 currently listed Priority flora taxa were recorded from the study area; *Acacia bromilowiana* (Priority 4), *Acacia effusa* (Priority 3), *Acacia subtiliformis* (Priority 3), *Aristida jerichoensis* var. *subspinulifera* (Priority 1), *Gymnanthera cunninghamii* (Priority 3), *Goodenia nuda* (Priority 4), *Goodenia* sp. East Pilbara (Priority 3), *Rostellularia adscendens* var. *latifolia* (Priority 3), *Rhynchosia bungarensis* (Priority 4), *Sauropus* sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213) (Priority 1), *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3), *Spartothamnella puberula* (Priority 2) and *Vittadinia* sp. Coondewanna Flats (s. Van Leeuwen 4684) (Priority 1).

There were 12 introduced (weed) species recorded from the study area. None of these taxa are listed as Declared Pests under the BAM Act.

A total of 23 vegetation associations were described and mapped from the study area. The vegetation associations were classified into eight Broad Floristic Formations on the basis of the dominant vegetation stratum. The field survey confirmed that none of the vegetation associations recorded from the study area were affiliated with any current Federal or State listed TECs, or State listed PECs.

Vegetation condition within the study area ranged from excellent to very good, with reduced vegetation condition typically associated with edge effects along cleared infrastructure corridors. Vegetation condition also declined slightly within medium and large drainage lines and associated flood plain habitats, where grazing by domestic cattle was concentrated.

5.0 STUDY TEAM

The Level 2 flora and vegetation survey was planned, co-ordinated and executed by the following personnel:

Onshore Environmental Consultants P/L

ABN 41 095 837 120

PO Box 227

YALLINGUP WA 6282

pf 08 9756 6206 m0427 339 842

Email onshoreenv@westnet.com.au

Project Staff

Dr Darren Brearley	PhD	Project Manager
Dr Jerome Bull	PhD	Senior Botanist
Ms Ellen Palmer	BSc	Senior Botanist
Mr Daniel Roberts	BSc	Botanist
Ms Jessica Waters	BSc	Botanist
Mr Glyn Hopkinson	BSc	Botanist
Mr Peter Sweeny	BSc	Botanist
Mrs Kerry Keenan		Data Analyst
Mr Todd Griffin		GIS and Mapping Specialist

Licences

The field survey was conducted under the authorisation of the following licences issued by the Department of Parks and Wildlife:

- Darren Brearley, Onshore Environmental Consultants 'Licence to take flora for scientific & other prescribed purposes' Licence No. SL009041
- Jerome Bull, Onshore Environmental Consultants 'Licence to take flora for scientific & other prescribed purposes' Licence No. SL009037

6.0 REFERENCES

- A.M. Thorne & I.M. Tyler (1996). *Roy Hill, Western Australia 1:250 000 Geological Series*. Geological Survey of Western Australia, Perth, Western Australia.
- AGC Woodward Clyde (1995) *Marillana and Weeli Wollie Creeks and Paleochannel Vegetation and Flora Survey*. Confidential report prepared for BHP Iron Ore.
- Aplin T.E.H. (1979). The Flora. Chapter 3 In O'Brien, B.J. (ed.) (1979). *Environment and Science*. University of Western Australia Press.
- Australian Natural Resource Atlas (2008). *Biodiversity Assessment - Pilbara*. Australian Natural Resource Atlas, website. www.anra.gov.au. available at <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.
- Beard, J. S. (1975). Pilbara. Explanatory Notes and Map Sheet 5, 1:1 000 000 series Vegetation Survey of Western Australia. University of Western Australia Press: Nedlands.
- Belbin, L. (2003). PATN - A Revised User's Guide. Blatant Fabrications Pty Ltd.
- Bettenay, E., H.M. Churchward and W.M. McArthur (1967) *Atlas of Australian Soils*. Sheet 6. Meekatharra - Hamersley Range Area CSIRO, Melbourne.
- BHP Billiton Iron Ore Pty Ltd (2010) *Guidance for Vegetation and Flora Surveys in the Pilbara Region*. Unpublished guidance statement prepared by BHP Billiton Iron Ore.
- BHPIO (2000) *Yandi Priority Flora Species Survey*. Confidential report prepared by BHP Iron Ore.
- Biota (2002) Proposed *Yandi Airstrip Flora Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Brown, A, Thomson-Dans, C & Marchant, NJ (Eds) (1998) *Western Australia's Threatened Flora*, Department of Conservation & Land Management, Western
- BSD (1997) *A survey of Mexican Poppy (Argemone ochroleuca) at Marillana Creek*. Confidential report prepared for BHP Iron Ore.
- Burbidge, N.T. (1959) *Div. Plant Ind. Tech Paper 12*. Notes on plants and plant habitats observed in the Abydos-Woodstock area, Pilbara District, CSIRO, Western Australia
- Bureau of Meteorology (2010) Climatic Average dataset, Newman. Website www.bom.gov.au. Bureau of Meteorology.
- Dames and Moore (1991) *Yandi Baseline Vegetation Survey Marillana Creek - Part 1, Precommissioning of Yandicoogina Iron Ore Mine*. Confidential report prepared for BHP Iron Ore.
- Dawe, C. and Dunlop, J.N. (1983) Introduction to Hamersley Range National Park. In Muir, B.G. (ed.) *A Fauna Survey of the Hamersley Range National Park W.A.* Bull No. 1 National Parks Authority WA.
- Department of Sustainability, Environment, Water, Population and Communities, (2008) *Commonwealth Conservation Advice on Lepidium catapycnon*. http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=9397

- Department of Sustainability, Environment, Water, Population and Communities, (2011) Interactive Environmental Database Reporting Tool Search, performed August 2011. www.environment.gov.au
- Department of Conservation & Land Management (CALM) (1999) Karijini National Park Management Plan 1999-2009, CALM, Western Australia.
- Department of Parks and Wildlife (DPaW) (2014a) *List of Threatened Ecological Communities on the Department of Conservation and Land Management's Threatened Ecological Community (TEC) Database endorsed by the Minister for the Environment*. WA Threatened Species & Communities Unit, Department of Parks and Wildlife.
- Department of Parks and Wildlife (DPaW) (2014b) Threatened Flora Database Search - Department of Parks and Wildlife.
- Department of Parks and Wildlife (DPaW) (2014c) *Priority Ecological Communities for Western Australia*. Department of Parks and Wildlife. Publicly available listing.
- Ecologia Environment (1995) *Yandi Stage 2 Iron Ore Project Biological Assessment Survey*. Confidential report prepared for BHP Iron Ore.
- Ecologia Environment (1997) *Hope Downs Biological Survey*. Prepared for Hancock Prospecting Pty Ltd. *Ecologia* Environmental Consultants, West Perth.
- Ecologia Environment (1998) *Yandi Vegetation and Soil Survey*. Confidential report prepared for BHP Iron Ore.
- Ecologia Environment (2001) *Yandi Proposed Air Strip Environmental Clearance Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2002) *Yandi Airstrip and Access Road Rare and Priority Flora Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2003a) *Yandi IOWA Conveyor: Rare and Priority Flora Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2003b) *Yandi IOWA Conveyor - Amendment to Rare and Priority Flora Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2004) *Yandi Stockyard and Overland Conveyor Fauna and Flora Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2005) *Upper Marillana Exploration Project Biological Survey*. Confidential report prepared for BHP Iron Ore
- Ecologia Environment (2006a) *Yandi Rail Corridor DRF and Priority Flora Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2006b) *Ministers North Biological Survey*. Confidential report prepared for BHP Iron Ore
- Ecologia Environment (2007a) *Marillana ML70/270 SA Sec 2 Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2007b) *Yandi Mine Extension RGP5 EIA Flora Survey Interim Report Post Phase 1 Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Ecologia Environment (2008) *Two Phase Assessment of the Flora and Vegetation of the Proposed Marillana Creek (Yandi) Mine Extension Areas RGP5 - KBR*. Confidential report prepared for BHP Billiton Iron Ore.

- ENV Australia (2007) *Upper Marillana Exploration Lease Flora and Vegetation Assessment*. Confidential report prepared for BHP Iron Ore
- ENV Australia (2008a) *RGP5 M270SA Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2008b) *Ministers North Flora and Vegetation Assessment*. Confidential report prepared for BHP Iron Ore
- ENV Australia (2008c) *Fork South and Parallel Ridge Exploration Lease*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2008d) *Boundary Ridge Exploration Lease Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2008e) *Alligator Jaws Exploration Lease Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2009a) *Central 3 Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2009b) *Western 6, 7, and 8 Flora and Vegetation Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2009c) *RGP5 Yandi Flora Survey and Assessment of Barimunya Airport and a Potential Borrow Area*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2009d) *Western 2 & Western 1 Waste Dump Flora and Assessment*. Confidential report prepared for BHP Billiton Iron Ore.
- ENV Australia (2009e) *Mujina Exploration Lease Flora and Vegetation Assessment*. Confidential report prepared for BHP Iron Ore
- ENV Australia (2010) *Area C West NVCP Flora, Vegetation and Fauna Assessment*. Confidential report prepared for BHP Billiton Iron Ore
- Environmental Protection Authority (2000) *Environmental Protection of Native Vegetation in Western Australia: Clearing of Native Vegetation with Particular Reference to Agricultural Areas*, Position Statement No. 2, EPA, Perth.
- Environmental Protection Authority (2002) *Terrestrial Biological Surveys as an Element of Biodiversity Protection*, Position Statement No. 3, EPA, Perth.
- Environmental Protection Authority (2004) *EPA Guidance for the Assessment of Environmental Factors: Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia*, No. 51, EPA, Perth.
- GHD (2010) *Report for Yandi W1 and W4 OSA Targeted Rare and Priority Flora Survey*. Confidential report prepared for BHP Billiton Iron Ore.
- Green, J.W. (1985) *Census of the Vascular Plants of Western Australia*. (2nd edition) Western Australian Herbarium, Department of Agriculture, Western Australia.
- Green, J.W. (1987) *Census of the Vascular Plants of Western Australia*. Supplement No. 7. Western Australian Herbarium, Department of Agriculture, Western Australia.
- Halpern Glick Maunsell (1999a) *Marillana Creek Western Access Corridor Biological Assessment*. Confidential report prepared for BHP Iron Ore.
- Halpern Glick Maunsell (1999b) *Marillana Creek Iron Ore Project Review of Biological Reporting*. Confidential report prepared for BHP Iron Ore.

- Halpern Glick Maunsell (1996) *Yandi Stage 2 Iron Ore Project Survey of Flora of Interest*. Confidential report prepared for BHP Iron Ore.
- Halpern Glick Maunsell (1997) *Marillana Creek Iron Ore Project Survey for Goodenia stellata and Flora of Interest*. Confidential report prepared for BHP Iron Ore.
- Hewson, HJ (1981) 'The Genus *Lepidium* L. (Brassicaceae) In Australia', *Brunonia*, vol. 4, no. 2, pp. 214-308.
- Hussey, B. M. J., Keighery, G. J., Cousens, R. D., Dodd, J. and Lloyd, S. G. (1997) *Western Weeds*. The Plant Protection Society of Western Australia and Agriculture Western Australia. Kensington, W.A.
- International Union for Conservation of Nature (IUCN) (2011) Interactive Environmental Database Reporting Tool Search, performed June 2011. www.iucn.org
- Keighery, B.J. (1994) *Bushland Plant Survey: a Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc.), Nedlands, Western Australia.
- Kendrick (2001) Bioregion: Pilbara 3 Subregion (PIL3). Department of Conservation and Land Management, Perth.
- Maunsell (2003) *Yandi Life of Mine Flora and Fauna*. Confidential report prepared for BHP Billiton Iron Ore.
- Maunsell (2004) *Yandi Flora and Vegetation Survey Lease M47 292 and E4 Drill Lines*. Confidential report prepared for BHP Billiton Iron Ore.
- McCune, B. and Grace, J.B. (2002) *Analysis of Ecological Communities*. MJM Software Design, Gleneden Beach, Oregon.
- O'Brien, B.J. and Associates Pty. Ltd. (1992) *Marandoo Iron ore Mine and Central Pilbara Railway*. Environmental Review and Management Programme. Report to Hamersley Iron Pty. Ltd.
- Onshore Environmental (2009a) *Biological Survey, South Parmelia Exploration Leases*. Confidential Report to BHP Billiton Iron Ore.
- Onshore Environmental (2009b) *Biological Survey, Myopic Exploration Leases*. Confidential Report to BHP Billiton Iron Ore.
- Onshore Environmental (2010) *Packsaddle East Survey Area Level 2 Flora and Vegetation Survey*. Prepared for BHP Billiton Iron Ore
- Onshore Environmental (2011a) *Yandi Study Area - Review of Flora and Vegetation Survey*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011b) *Area C and Surrounds Study Area - Review of Flora and Vegetation*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011c) *Jinidi Study Area - Review of Flora and Vegetation*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011d) *Camp Hill Study Area Level 2 Flora and Vegetation Survey*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011e) *Southern Flank Study Area Level 2 Flora and Vegetation Survey*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011f) *Weeli Wollli Spring Study Area - Defining the perimeter of the Priority 1 PEC*. Prepared for BHP Billiton Iron Ore.
- Onshore Environmental (2011h) *Packsaddle East Study Area - Targeted significant flora searches along proposed drill lines and drill holes*. Letter Report prepared for BHP Billiton Iron Ore.

- Onshore Environmental Consultants (2011g) *Barimunya Camp - Flora and Vegetation Survey*. Confidential Report to BHP BILLITON.
- Paczkowska, G. and Chapman, A. R. (2000) *The Western Australian Flora, A Descriptive Catalogue*. *Wildflower Society of Western Australia, Western Australian Herbarium* CALM, Botanic Gardens and Park Authority, Perth, Western Australia.
- Pilbara Flora (2009) *Priority and Rare Flora Survey Mudlark Well Area*. Prepared for BHP Billiton Iron Ore
- Pilbara Iron (2007) Koodaideri Rare Flora and Vegetation Survey. Internal report prepared by H. Marmarac, Pilbara Iron.
- Shepherd, D., Beeston, G and Hopkins, A. (2002) 'Native Vegetation in Western Australia. Extent, Type and Status' *Resource Management Technical Report 249*. Department of Agriculture, South Perth.
- Specht R.L. (1970) *Vegetation*. In *The Australian Environment*. 4th edn (Ed. G.W. Leeper). Melbourne.
- Thackway and Cresswell (1995) *An Interim Biogeographic Regionalisation for Australia: A framework for setting priorities in the National Reserves System Cooperative Program Version 4*. Australian Nature Conservation Agency, Canberra.
- Tille, P. (2006) *Soil-landscapes of Western Australia's rangelands and arid interior*. Resource management technical report 313. Department of Agriculture and Food WA.
- Trudgen, M.E. (1984) *A Flora and Vegetation Survey of the Weeli Weeli Creek Area*.
- Trudgen, M.E. (2002). A flora, vegetation and floristic survey of the Burrup Peninsula, some adjoining areas and part of the Dampier Archipelago, with comparisons to the floristics of three areas of the adjoining mainland. Volume 1. Prepared for the Office of Major Projects.
- Trudgen, M.E. (2009) Review of vegetation classification for baseline flora and vegetation surveys in the Pilbara. Incorporated into BHP Billiton Ore Guidance Statement.
- Trudgen, M. and Casson, N. (1998) Flora and vegetation surveys of Orebody A and Orebody B in the West Angela Hill area, an area surrounding them, and of rail route options considered to link them to the existing Robe River Iron Associates rail line. Unpublished report for Robe River Iron Associates.
- Trudgen, M.E., B.R. Morgan and E.A. Griffin (2002). A flora and vegetation survey of the proposed mine areas and access road for the Panorama project. Volumes 1-3. Unpublished report prepared for Astron Environmental by M.E. Trudgen and Associates.
- Van Vreeswyk et al. (2004) *An inventory and condition survey of the Pilbara region, Western Australia*. Western Australian Department of Agriculture Technical Bulletin No. 92.
- Western Australian Herbarium (2014) *Florabase - Information on the Western Australian flora*. Department of Parks and Wildlife (DPaW). Online: <http://florabase.dpaw.wa.gov.au>

APPENDIX 1

Conservation Codes for Western Australian Flora

R: Declared Rare Flora - Extant Taxa

Taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such.

1: Priority One - Poorly Known Taxa

Taxa that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, Westrail and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.

2: Priority Two - Poorly Known Taxa

Taxa that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

3: Priority Three - Poorly Known Taxa

Taxa that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Taxa may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

4: Priority Four - Rare, Near Threatened and other taxa in need of monitoring

- (a) **Rare.** Taxa 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 taxa are usually represented on conservation lands.
- (b) **Near Threatened.** Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Taxa that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

5: Priority Five - Conservation Dependent taxa

Taxa that are not threatened but are subject to a specific conservation program, the cessation of which would result in the taxa becoming threatened within five years.

APPENDIX 2

Conservation categories for flora described
under the EPBC Act

CATEGORY	DESCRIPTION
Extinct	A species is extinct if there is no reasonable doubt that the last member of the species has died.
Extinct in the Wild	A species is categorised as extinct in the wild if it is only known to survive in cultivations, in captivity, or as a naturalised population well outside its past range; or if it has not been recorded in its known/expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically Endangered	The species is facing an extremely high risk of extinction in the wild and in the immediate future.
Endangered	The species is likely to become extinct unless the circumstances and factors threatening its abundance, survival, or evolutionary development cease to operate; or its numbers have been reduced to such a critical level, or its habitats have been so drastically reduced, that it is in immediate danger of extinction.
Vulnerable	Within the next 25 years, the species is likely to become endangered unless the circumstances and factors threatening its abundance, survival or evolutionary development cease to operate.
Conservation Dependent	The species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

APPENDIX 3

Vegetation Classification for the Pilbara based on Specht (1970), as modified by Aplin (1979) and Trudgen (2009)

Height Class	Canopy Cover				
	100 - 70%	70 - 30%	30 - 10%	10 - 2%	< 2%
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 Mallees
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

Source: S. Van Leeuwen (DPaW)

APPENDIX 4

Vegetation condition scale
(as developed by Keighery 1994)

CONDITION	CODE	DESCRIPTION
Pristine	1	Pristine or nearly so, no obvious signs of disturbance.
Excellent	2	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	3	Vegetation structure altered; obvious signs of disturbance.
Good	4	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it.
Degraded	5	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching Very Good condition without intensive management.
Completely Degraded	6	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species.

APPENDIX 5

Summary of previous flora and vegetation surveys
completed in the vicinity of the study area

Marillana Creek Western Access Corridor Biological Assessment (Halpern Glick Maunsell 1999a)

A biological assessment of the Western Access corridor was completed in late April 1999. The Western Access Corridor runs from Mining Area C through the Juna Downs pastoral lease to the Yandi mine site. This survey covered most of the current study area, excluding areas to the north and north-east of the Yandi Mine. A total of 195 vascular flora species were recorded including 98 genera and 40 families.

No Threatened Flora was recorded during the survey. *Goodenia stellata* (no longer listed as a Priority flora species) was recorded at three locations within the study area. Three introduced weed species were recorded; **Bidens bipinnata*, **Portulaca oleracea*² and **Malvastrum americanum*.

A total of 26 vegetation associations were described from the study area. They were classified in to the following four groups on the basis of landform:

- 1) Major Creek Lines and Tributaries;
- 2) Minor drainages and gullies;
- 3) Plains; and
- 4) Hills, Ridges & Breakaways.

Yandi Flora and Vegetation Survey (Onshore Environmental 2011a)

In 2011 Onshore Environmental completed a review of the vegetation and flora of the Yandi study area. The aim of the survey was to consolidate and update the vegetation and flora data for a 132 km² area surrounding the Yandi Mine. A desktop review was completed, along with targeted field surveys to review previous locations for species of conservation significance and introduced species. A total of 28 previous surveys from the Yandi Area were reviewed for this report including the Western Access Corridor report (HGM 1999). A total of 457 plant taxa from 56 families and 179 genera were recorded within the study area including surveys dating back to 1991. Species representation was greatest among the Fabaceae, Poaceae, Mavaceae, Asteraceae, Amaranthaceae, Myrtaceae, Goodeniaceae, Solanaceae, Chenopodiaceae and Scrophulariaceae families. One Threatened Flora species was recorded from the central southern section of the study area: *Lepidium catapycnon*. Three Priority species also occur within the study area; *Acacia subtiliformis* (Priority 3), *Rostellularia adscendens* var. *latifolia* (Priority 3) and *Goodenia nuda* (Priority 4). A total of 23 introduced species had previously been recorded within the study area; none of these were listed as Declared Pests under the BAM Act.

A total of 24 vegetation associations were described and mapped from the study area. None are affiliated with any currently listed TECs or PECs.

Area C West NVCP Flora, Vegetation and Fauna Assessment (ENV Australia 2010)

A survey of the Area C West Native Vegetation Clearing Permit project area was completed in March 2010. The survey encompassed Fork South, Parallel Ridge and Boundary Ridge and the alluvial flats between these ranges, situated approximately 10 km south-west of the study area. A total of 526 taxa were recorded from the survey area, comprised of 53 families and 171 genera. The most frequently recorded families were Fabaceae (101 taxa), Poaceae (80 taxa) and Malvaceae (65

² No longer considered a weed species.

taxa), and the most frequently recorded genera were *Acacia* (55 taxa), *Sida* (23 taxa) and *Ptilotus* (22 taxa). No Threatened Flora was recorded from the survey area. Five priority species were identified; *Eremophila magnifica* subsp. *magnifica* (Priority 4), *Eremophila magnifica* subsp. *velutina* (Priority 3), *Rhagodia* sp. Hamersley (M. Trudgen 17794), *Sida* sp. Barlee Range (S. van Leeuwen 1642) and *Triodia* sp. Mt Ella (ME Trudgen 12739) (Priority 3). Eight introduced species were recorded; **Aerva javanica*, **Bidens bipinnata*, **Cenchrus ciliaris*, **Chloris virgata*, **Malvastrum americanum*, **Setaria verticillata*, **Sigesbeckia orientalis*, and **Sonchus oleraceus*. None are listed as Declared Pests under the BAM Act.

A total of ten vegetation associations were described and mapped in the survey area with condition ranging from completely degraded to pristine. None of the vegetation associations recorded are currently listed TECs. One PEC exists within the survey area; Coolibah-lignum Flats PEC (Priority 3).

Munjina Exploration Lease Flora and Vegetation Assessment (ENV Australia 2009e)

A survey of the Munjina exploration lease was completed in September 2007 by ENV Australia. This lease lies just to the north of the study area. From 78 quadrats a total of 296 taxa were recorded consisting of 115 genera and 42 families. The most commonly recorded taxa were *Acacia* (37 taxa), *Senna* (15 taxa), and *Sida* (14 taxa). No Threatened Flora was recorded from the survey area. However two Priority flora taxa were recorded; *Acacia subtiliformis* (Priority 3) and *Rostellularia adscendens* var. *latifolia* (Priority 3), along with six introduced weed species; **Bidens bipinnata*, **Chloris virgata*, **Malvastrum americanum*, **Portulaca oleracea*, **Setaria verticillata* and **Vachellia farnesiana*. None of these species are Declared Pests under the BAM Act.

There was 16 vegetation associations described and mapped from the Munjina Exploration lease. None of the communities are listed as TECs or PECs.

Upper Marillana Exploration Project Biological Survey (Ecologia Environment 2005)

A biological survey of the Upper Marillana exploration area was undertaken in April 2005. Upper Marillana lies adjacent to the Munjina exploration area just to the north of the study area. The aims of the survey were to document and describe the vegetation of proposed drill pads in the area and identify any species of conservation significance. A total of 156 flora taxa were recorded in the survey. Eight plant families were represented by a single taxon. No species listed as Threatened Flora or Priority flora was recorded, however two species of interest were identified; *Sida* aff. *arenicola* and *Sida* aff. *cardiophylla*. Two introduced species were also recorded; **Malvastrum americanum* and **Bidens bipinnata*. The weeds are not listed as Declared Pests under the BAM Act.

Upper Marillana Exploration Lease Flora and Vegetation Assessment (ENV Australia 2007)

A Level 2 flora and vegetation survey of the Upper Marillana exploration lease was completed by ENV Australia in May 2007, in preparation for the commencement of exploration drilling in the area. The objectives of the survey were to document the plant species and vegetation communities within the area with a focus on identifying species and communities of conservation significance. The presence of any species of conservation significance occurring on proposed drill pad areas or within the operational impact footprint of these areas was also documented.

A total of 296 plant taxa were recorded comprising 135 genera and 46 families. The Priority 3 taxon *Rostellularia adscendens* var. *latifolia* was recorded at four locations. Four introduced weed species were also recorded; **Bidens bipinnata*, **Cenchrus ciliaris*, **Malvastrum americanum* and **Cucumis melo* subsp. *agrestis*. The weeds are not listed as Declared Pests under the BAM Act.

Area C and Surrounds Study Area - Review of Flora and Vegetation (Onshore Environmental 2011b)

In 2010 Onshore Environmental completed a Level 2 flora and vegetation survey of the Area C and Surrounds survey area, adjoining the south-western boundary of the study area. The assessment included a review of historical flora and vegetation surveys completed in the area from 1997 to 2010. A survey of two areas proposed as future exploration areas, Packsaddle East and R-Deposit, was also completed.

A total of 479 plant taxa from 53 families and 166 genera were recorded from the survey area. Species representation was highest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, Amaranthaceae, Myrtaceae, Chenopodiaceae, Goodeniaceae, Scrophulariaceae and Solanaceae families. The survey of Packsaddle East recorded 206 taxa while the survey of R-Deposit recorded 219 taxa. One Threatened Flora taxon was recorded from the survey area; *Lepidium catapycnon*. This species was recorded from two locations in the eastern sector of the survey area. A total of 15 Priority flora taxa were confirmed from the survey area:

- *Aristida jerichoensis* var. *subspinulifera* (Priority 1);
- *Aristida lazaridis* (Priority 2);
- *Spartothamnella puberula* (Priority 2);
- *Stylidium weeliwollii* (Priority 2);
- *Vittadinia* sp. *Coondewanna Flats* (S. van Leeuwen 4684) (Priority 1);
- *Acacia subtiliformis* (Priority 3);
- *Euphorbia inappendiculata* (Priority 3);
- *Fimbristylis sieberiana* (Priority 3);
- *Goodenia* sp. *East Pilbara* (A.A. Mitchell PRP 727) (Priority 3);
- *Nicotiana umbratica* (Priority 3);
- *Rhagodia* sp. *Hamersley* (M. Trudgen 17794) (Priority 3);
- *Rostellularia adscendens* var. *latifolia* (Priority 3);
- *Sida* sp. *Barlee Range* (S. van Leeuwen 1642) (Priority 3);
- *Eremophila magnifica* subsp. *magnifica* (Priority 4); and
- *Goodenia nuda* (Priority 4).

There were eleven introduced weed species recorded from the survey area; none of these were listed as Declared Pests under the BAM Act.

There were 37 vegetation associations described and mapped from the study area. These were classified into eleven Broad Floristic Formations on the basis of dominant vegetation stratum. None of the vegetation associations were affiliated with any currently listed TECs. However, the Priority 1 PEC Weeli Wollli Spring Community occurs at the eastern fringe of the survey area associated with Weeli Wollli Creek.

Ministers North Biological Survey (Ecologia Environment 2006b)

Ecologia Environment surveyed the Ministers North exploration area in May 2006 (located south-east of the Yandi Mine). The survey aimed to provide an inventory of vascular flora, biologically significant species and vegetation associations.

A total of 125 plant taxa were recorded from the survey area representing 37 families and 72 genera. No Threatened Flora or Priority flora taxa were recorded within the survey area. The introduced species **Acetosa vesicaria*, **Bidens bipinnata*, and **Cenchrus ciliaris* were identified during the survey; these are not listed as Declared Pests under the BAM Act. None of the vegetation communities mapped are affiliated with any known TECs or PECs.

Ministers North Flora and Vegetation Assessment (ENV Australia 2008a)

The Ministers North exploration area was surveyed by ENV Australia in September 2007. A major focus of the survey was to identify the species of conservation significance within the impact footprint of proposed drill pads and access tracks. A total of 216 plant taxa from 44 families and 97 genera were recorded from the survey area. The Priority 3 Flora taxon *Sida* sp. Barlee Range was recorded at two locations. The introduced species **Sonchus oleraceus*, **Chloris virgata* and **Cenchrus setiger* were also recorded (not listed as Declared Pests under the BAM Act). None of the vegetation associations were affiliated with any currently listed TECs or PECs.

Jinidi Study Area - Review of Flora and Vegetation (Onshore Environmental 2011c)

A Level 2 flora and vegetation survey of the Jinidi leases was completed by Onshore Environmental in 2011. The objective of the study was to compile and update data from previous surveys of the area to provide adequate baseline flora data for the area. A total number of 495 plant taxa (including varieties and subspecies) from 54 families and 180 genera have been recorded from all surveys completed within the Jinidi study area. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Asteraceae, Amaranthaceae, Myrtaceae, Chenopodiaceae, Goodeniaceae and Scrophulariaceae families, which is typical for the Pilbara Bioregion. The most speciose genus was *Acacia* (71 taxa), followed by *Eremophila* (17 taxa), *Senna* (15 taxa), *Sida* (15 taxa), *Ptilotus* (13 taxa), *Triodia* (11 taxa), *Abutilon* (10 taxa), *Eucalyptus* (10 taxa) and *Goodenia* (10 taxa).

The Threatened Flora taxon *Lepidium catapycnon* was recorded at a total of 231 locations throughout the study area. In addition ten Priority flora taxa were recorded including *Acacia subtiliformis* (Priority 3), *Goodenia* sp. East Pilbara (Priority 3), *Goodenia nuda* (Priority 4), *Rostellularia adscendens* var. *latifolia* (Priority 3), *Isotropis parviflora* (Priority 2) *Triodia* sp. Mt Ella (Priority 3), *Rhagodia* sp. Hamersley (Priority 3), *Indigofera* sp. Gilesii (M.E. Trudgen 15869) (Priority 3) and *Grevillea* sp. Turee (J. Bull & G. Hopkinson ONS JJ 01.01) (Priority 1). Eight introduced weed species have also been recorded from the study area; **Bidens bipinnata*, **Cenchrus ciliaris*, **Cucumis melo* subsp. *agrestis*, **Flaveria trinervia*, **Malvastrum americanum*, **Portulaca oleracea*, **Setaria verticillata* and **Vachellia farnesiana*. None of these are listed as Declared Pests under the BAM Act.

A total of 18 vegetation associations were described and mapped from within the Jinidi study area. The vegetation associations were classified into seven Broad Floristic Formations on the basis of the dominant vegetation stratum. The field survey confirmed that none of the vegetation associations described from the study area are currently listed as TECs or PECs. It is noted that the Priority 1 PEC Weeli

Wolli Spring occurs less than 1 km west of the north-west corner of the study area. Vegetation condition across the majority of the Jinidi study area was rated as 'excellent'. Drainage lines were often in poorer condition due to grazing and introduced species.

Alligator Jaws Exploration Lease Flora and Vegetation Assessment (ENV Australia 2008a)

A survey of the Alligator Jaws exploration lease was completed in July 2007 and included a survey of the operation impact footprint and proposed drill pad locations. A total of 264 plant taxa were recorded from the operation impact footprint. This total was comprised of 109 genera and 48 families. The most frequently recorded families were Poaceae, Malvaceae, and Mimosaceae, while the most recorded genera were *Acacia*, *Senna*, *Ptilotus* and *Sida*. Two Priority flora taxa were recorded; *Spartothamnella puberula* (Priority 2), and *Eremophila magnifica* subsp. *magnifica* (Priority 4). No communities listed as TECs or PECs were recorded within the survey area. A total of five introduced species were recorded including **Datura leichardtii* (Native Thornapple), **Malvastrum americanum* (Spiked Malvastrum), **Sigesbeckia orientalis* (Indian Weed), **Setaria verticillata* (Whorled Pigeon Grass) and **Bidens bipinnata* (Bipinnate Beggartick). None of these are listed as Declared Pests under the BAM Act.

Priority and Rare Flora Survey Mudlark Well Area (Pilbara Flora 2009)

A targeted survey of proposed drill lines within the Mudlark Well area was undertaken in 2009. A total of four priority species were recorded; *Rhagodia* sp. Hamersley (M. Trudgen 17794) (Priority 3), *Spartothamnella puberula* (Priority 2), *Eremophila magnifica* subsp. *magnifica* (Priority 4) and *Eremophila magnifica* subsp. *velutina* (Priority 3). No declared rare flora were recorded. Four introduced species were recorded; **Malvastrum americanum*, **Bidens bipinnata*, **Setaria verticillata* and **Datura leichardtii*.

Southern Flank Study Area Level 2 Flora and Vegetation Survey (Onshore Environmental 2011e)

In 2011 Onshore Environmental undertook a survey of the Southern Flank study area situated south of Mining Area C. The aims of this study included compiling data from a number of previous surveys, reviewing locations for species of conservation significance and introduced species, and mapping the vegetation associations within the study area. A total of 357 plant taxa were recorded from the study area from 46 families and 129 genera. Species representation was greatest amongst the Fabaceae, Poaceae, Malvaceae, Asteraceae and Solanaceae families. The most speciose genus were *Acacia* (50 taxa), *Senna* (17 taxa), *Sida* (13 taxa), *Eremophila* (11 taxa), *Triodia* (10 taxa) and *Eriachne* (9 taxa). The Threatened Flora taxon *Lepidium catapycnon* was recorded during the survey. Additionally a total of eleven Priority flora taxa were recorded from the study area; *Spartothamnella puberula* (Priority 2), *Dampiera metallorum* ms (Priority 3), *Eremophila magnifica* subsp. *magnifica* (Priority 4), *Sida* sp. Barlee Range (S van Leeuwen 1642) (Priority 4), *Aristida jerichoensis* var. *subspinulifera* (Priority 1), *Pilbara trudgenii* (Priority 2), *Rhagodia* sp. Hamersley (M. Trudgen 17794) (Priority 3), *Rostellularia adscendens* var. *latifolia* (Priority 3), *Triodia* sp. Mt. Ella (ME Trudgen 12739) (Priority 3), *Acacia bromilowiana* (Priority 4) and *Ptilotus mollis* (Priority 4). Five introduced species were recorded; **Bidens bipinnata* (Beggars Ticks), **Cenchrus ciliaris* (Buffel Grass), **Malvastrum americanum* (Spiked Malvastrum), *Setaria verticillata* (Whorled Pigeon Grass) and **Vachellia farnesiana* (Mimosa Bush). None of these taxa are listed as Declared Pests under the BAM Act.

A total of 34 vegetation associations were mapped within the study area. Two PEC sub-types exist in the western sector of the study area. The 'Coolibah Woodlands over Lignum over Swamp Wandiree Community (Priority 1)' occurs at Lake Robinson and is the only known occurrence of this community. The neighboring 'Coolibah and Mulga Woodland over Lignum and Tussock Grasses on Clay Plains Community' is associated with the Coondewanna Flats; listed as Priority 3. The following five vegetation associations are affiliated with these communities:

- Woodland of *Eucalyptus victrix* over Low Woodland of *Acacia aneura* over Open Tussock Grassland of *Eulalia aurea*, *Eriachne benthamii*, *Themeda triandra*
- Low Woodland of *Acacia aneura* over Open Tussock Grassland of *Eulalia aurea*, *Eriachne benthamii* with Scattered Trees of *Eucalyptus victrix*
- Tussock Grassland of *Eriachne benthamii* with Open Woodland of *Eucalyptus victrix* over Low Open Shrubland of *Muehlenbeckia florulenta*
- Tussock Grassland of *Eriachne benthamii* with Scattered Trees of *Eucalyptus victrix*
- Tussock Grassland of *Eriachne benthamii*, *Eulalia aurea* with Open Woodland of *Eucalyptus victrix*

Camp Hill Study Area Level 2 Flora and Vegetation Survey (Onshore Environmental 2011d)

In August 2010 Onshore Environmental completed a Level 2 flora and vegetation survey of the Camp Hill exploration area. A total of 304 plant taxa were recorded from 49 families and 126 genera. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Myrtaceae, Scrophulariaceae, Asteraceae, Goodeniaceae, Amaranthaceae and Chenopodiaceae families.

One Threatened Flora taxon, *Lepidium catapycnon* was recorded from the study area. Additionally the following five Priority flora taxa were recorded;

- *Aristida jerichoensis* var. *subspinulifera* (Priority 1);
- *Rhagodia* sp. Hamersley (M. Trudgen 17794) (Priority 3);
- *Triodia* sp. Mt Ella (M.E. Trudgen 12739) (Priority 3);
- *Acacia bromilowiana* (Priority 4) and
- *Eremophila magnifica* subsp. *magnifica* (Priority 4).

Seven introduced species were recorded from the study area, none of which are listed as Declared Pests under the BAM Act; **Bidens bipinnata*, **Cenchrus ciliaris*, **Cucumis melo* subsp. *agrestis*, **Malvastrum americanum*, **Portulaca oleracea*, **Setaria verticillata* and **Vachellia farnesiana*.

A total of 28 vegetation associations were mapped within the Camp Hill study area. These were classified in to thirteen broad floristic formations based on dominant strata. None of these were listed as TECs or PECs.

Packsaddle East Survey Area Level 2 Flora and Vegetation Survey (Onshore Environmental 2010)

In 2010 Onshore Environmental undertook a Level 2 flora and vegetation survey of the Packsaddle East survey area. A total of 337 plant taxa were recorded from 50 families and 133 genera. Species representation was greatest among the Fabaceae, Poaceae, Malvaceae, Myrtaceae, Asteraceae, Goodeniaceae and Amaranthaceae families. The most speciose genera were *Acacia* (36 taxa), *Senna* (16 taxa), *Sida* (13 taxa), *Eremophila* (10 taxa), *Ptilotus* (9 taxa) and *Eucalyptus* (9 taxa). The

Thraetened Flora *Lepidium catapycnon* was recorded from the eastern section of the study area. A total of 182 plants were recorded from steep hill slopes and drainages lines. The following nine Priority flora taxa were also recorded:

- *Aristida jerichoensis* ssp. *subspinulifera* (Priority 1);
- *Stylidium weeliwolli* (Priority 2);
- *Acacia subtiliformis* (Priority 3);
- *Fimbristylis sieberiana* (Priority 3);
- *Goodenia* sp. East Pilbara (A.A. Mitchell PRP 727) (Priority 3);
- *Rhagodia* sp. Hamersley (M. Trudgen 17794) (Priority 3);
- *Rostellularia adscendens* var. *latifolia* (Priority 3);
- *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3); and
- *Goodenia nuda* (Priority 4).

Five introduced species were recorded from the study area; **Bidens bipinnata*, **Cenchrus ciliaris*, **Malvastrum americanum*, **Sigesbeckia orientalis* and **Vachellia farnesiana*. None of these species area listed as Declared Pests under the BAM Act.

A total of 23 vegetation association were described and mapped within the study area, classified into nine broad floristic formations. None of the vegetation associations were affiliated with any known TECs. However, the Weeli Wollli Spring Community (Priority 1) occurs at the eastern edge of the survey area associated with Weeli Wollli Creek.

APPENDIX 6

Total flora list from the study area

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Acanthaceae	<i>Dipteracanthus</i>	<i>australasicus</i>	subsp. <i>australasicus</i>
Acanthaceae	<i>Rostellularia</i>	<i>adsdens</i>	var. <i>latifolia</i>
Aizoaceae	<i>Trianthema</i>	<i>glossostigma</i>	
Amaranthaceae	<i>Alternanthera</i>	<i>nana</i>	
Amaranthaceae	<i>Alternanthera</i>	<i>nodiflora</i>	
Amaranthaceae	<i>Amaranthus</i>	<i>undulatus</i>	
Amaranthaceae	<i>Gomphrena</i>	<i>canescens</i>	subsp. <i>canescens</i>
Amaranthaceae	<i>Gomphrena</i>	<i>cunninghamii</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>aeroides</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>astrolasius</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>auriculifolius</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>calostachyus</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>clementii</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>fusiformis</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>helipteroides</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>nobilis</i>	
Amaranthaceae	<i>Ptilotus</i>	<i>rotundifolius</i>	
Apocynaceae	<i>Gymnanthera</i>	<i>cunninghamii</i>	
Apocynaceae	<i>Rhyncharrhena</i>	<i>linearis</i>	
Araliaceae	<i>Trachymene</i>	<i>oleracea</i>	
Asteraceae	* <i>Bidens</i>	<i>bipinnata</i>	
Asteraceae	* <i>Flaveria</i>	<i>trinervia</i>	
Asteraceae	* <i>Sigesbeckia</i>	<i>orientalis</i>	
Asteraceae	* <i>Sonchus</i>	<i>oleraceus</i>	
Asteraceae	<i>Apowollastonia</i>	<i>hamersleyensis</i>	
Asteraceae	<i>Blumea</i>	<i>tenella</i>	
Asteraceae	<i>Centipeda</i>	<i>minima</i>	subsp. <i>macrocephala</i>
Asteraceae	<i>Chrysocephalum</i>	<i>apiculatum</i>	
Asteraceae	<i>Olearia</i>	<i>fluvialis</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Asteraceae	<i>Peripleura</i>	<i>arida</i>	
Asteraceae	<i>Peripleura</i>	<i>hispidula</i>	
Asteraceae	<i>Peripleura</i>	<i>virgata</i>	
Asteraceae	<i>Pluchea</i>	<i>dentex</i>	
Asteraceae	<i>Pluchea</i>	<i>dunlopii</i>	
Asteraceae	<i>Pluchea</i>	<i>rubelliflora</i>	
Asteraceae	<i>Pluchea</i>	<i>tetranthera</i>	
Asteraceae	<i>Pterocaulon</i>	<i>sphaeranthoides</i>	
Asteraceae	<i>Rhodanthe</i>	<i>margarethae</i>	
Asteraceae	<i>Streptoglossa</i>	<i>bubakii</i>	
Asteraceae	<i>Streptoglossa</i>	cf. <i>bubakii</i>	
Asteraceae	<i>Streptoglossa</i>	<i>decurrens</i>	
Asteraceae	<i>Streptoglossa</i>	sp. indet	
Asteraceae	<i>Vittadinia</i>	sp. Coondewanna Flats (s. Van Leeuwen 4684)	
Bignoniaceae	<i>Pandorea</i>	<i>pandorana</i>	
Boraginaceae	<i>Heliotropium</i>	<i>chrysocarpum</i>	
Boraginaceae	<i>Heliotropium</i>	<i>cunninghamii</i>	
Boraginaceae	<i>Heliotropium</i>	<i>heteranthum</i>	
Boraginaceae	<i>Heliotropium</i>	<i>pachyphyllum</i>	
Boraginaceae	<i>Heliotropium</i>	<i>tenuifolium</i>	
Boraginaceae	<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>
Brassicaceae	<i>Lepidium</i>	<i>pedicellosum</i>	
Campanulaceae	<i>Wahlenbergia</i>	<i>tumidifruca</i>	
Capparaceae	<i>Capparis</i>	<i>lasiantha</i>	
Capparaceae	<i>Capparis</i>	<i>spinosa</i>	var. <i>nummularia</i>
Caryophyllaceae	<i>Polycarpaea</i>	<i>corymbosa</i>	
Caryophyllaceae	<i>Polycarpaea</i>	<i>holtzei</i>	
Caryophyllaceae	<i>Polycarpaea</i>	<i>longiflora</i>	
Celastraceae	<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Celastraceae	<i>Stackhousia</i>	<i>intermedia</i>	
Celastraceae	<i>Stackhousia</i>	sp. swollen gynophore (W.R. Barker 2041)	
Chenopodiaceae	<i>Dysphania</i>	cf. <i>rhadinostachya</i>	var. <i>rhadinostachya</i>
Chenopodiaceae	<i>Dysphania</i>	<i>glomulifera</i>	
Chenopodiaceae	<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>
Chenopodiaceae	<i>Enchylaena</i>	<i>tomentosa</i>	
Chenopodiaceae	<i>Maireana</i>	<i>villosa</i>	
Chenopodiaceae	<i>Maireana</i>	<i>planifolia</i>	
Chenopodiaceae	<i>Maireana</i>	sp. <i>indet</i>	
Chenopodiaceae	<i>Rhagodia</i>	<i>eremaea</i>	
Chenopodiaceae	<i>Salsola</i>	<i>australis</i>	
Chenopodiaceae	<i>Sclerolaena</i>	<i>cornishiana</i>	
Cleomaceae	<i>Cleome</i>	<i>viscosa</i>	
Convolvulaceae	<i>Bonamia</i>	<i>erecta</i>	
Convolvulaceae	<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>
Convolvulaceae	<i>Bonamia</i>	sp. Dampier (A.A. Mitchell PRP 217)	
Convolvulaceae	<i>Convolvulus</i>	<i>clementii</i>	
Convolvulaceae	<i>Duperreya</i>	<i>commixta</i>	
Convolvulaceae	<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>
Convolvulaceae	<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>
Convolvulaceae	<i>Ipomoea</i>	<i>muelleri</i>	
Convolvulaceae	<i>Ipomoea</i>	<i>plebeia</i>	
Convolvulaceae	<i>Ipomoea</i>	<i>polymorpha</i>	
Convolvulaceae	<i>Polymeria</i>	<i>ambigua</i>	
Cucurbitaceae	* <i>Citrullus</i>	<i>colycynthis</i>	
Cucurbitaceae	<i>Cucumis</i>	<i>maderaspatana</i>	
Cyperaceae	<i>Bulbostylis</i>	<i>barbata</i>	
Cyperaceae	<i>Cyperus</i>	<i>vaginatus</i>	
Cyperaceae	<i>Fimbristylis</i>	aff. <i>elegans</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Cyperaceae	<i>Fimbristylis</i>	<i>dichotoma</i>	
Cyperaceae	<i>Fimbristylis</i>	<i>simulans</i>	
Cyperaceae	<i>Lipocarpa</i>	<i>microcephala</i>	
Cyperaceae	<i>Schoenoplectus</i>	<i>subulatus</i>	
Elatinaceae	<i>Bergia</i>	<i>pedicellaris</i>	
Euphorbiaceae	<i>Adriana</i>	<i>tomentosa</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>australis</i>	var. <i>hispidula</i>
Euphorbiaceae	<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>
Euphorbiaceae	<i>Euphorbia</i>	<i>biconvexa</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>boophthona</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>careyi</i>	
Euphorbiaceae	<i>Euphorbia</i>	cf. <i>biconvexa</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>coghlani</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>drummondii</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>schultzii</i>	
Euphorbiaceae	<i>Euphorbia</i>	sp. indet	
Euphorbiaceae	<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>
Euphorbiaceae	<i>Euphorbia</i>	<i>trigonosperma</i>	
Euphorbiaceae	<i>Euphorbia</i>	<i>vaccaria</i>	var. <i>vaccaria</i>
Fabaceae	* <i>Vachellia</i>	<i>farnesiana</i>	
Fabaceae	<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>
Fabaceae	<i>Acacia</i>	<i>adsurgens</i>	
Fabaceae	<i>Acacia</i>	<i>adsurgens X rhodophloia</i>	
Fabaceae	<i>Acacia</i>	<i>ampliceps</i>	
Fabaceae	<i>Acacia</i>	<i>ancistrocarpa</i>	
Fabaceae	<i>Acacia</i>	<i>aneura</i>	
Fabaceae	<i>Acacia</i>	<i>aptaneura</i>	
Fabaceae	<i>Acacia</i>	<i>arida</i>	
Fabaceae	<i>Acacia</i>	<i>atkinsiana</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Fabaceae	<i>Acacia</i>	<i>ayersiana</i>	
Fabaceae	<i>Acacia</i>	<i>bivenosa</i>	<i>X sclerosperma</i> subsp. <i>sclerosperma</i>
Fabaceae	<i>Acacia</i>	<i>bromilowiana</i>	
Fabaceae	<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>
Fabaceae	<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>
Fabaceae	<i>Acacia</i>	<i>dictyophleba</i>	
Fabaceae	<i>Acacia</i>	<i>effusa</i>	
Fabaceae	<i>Acacia</i>	<i>elachantha</i>	
Fabaceae	<i>Acacia</i>	<i>hamersleyensis</i>	
Fabaceae	<i>Acacia</i>	<i>hilliana</i>	
Fabaceae	<i>Acacia</i>	<i>inaequilatera</i>	
Fabaceae	<i>Acacia</i>	<i>kempeana</i>	
Fabaceae	<i>Acacia</i>	<i>macraneura</i>	
Fabaceae	<i>Acacia</i>	<i>maitlandii</i>	
Fabaceae	<i>Acacia</i>	<i>monticola</i>	
Fabaceae	<i>Acacia</i>	<i>pachyacra</i>	
Fabaceae	<i>Acacia</i>	<i>pruinocarpa</i>	
Fabaceae	<i>Acacia</i>	<i>pyrifolia</i>	
Fabaceae	<i>Acacia</i>	<i>rhodophloia</i>	
Fabaceae	<i>Acacia</i>	<i>rhodophloia</i> (hybrid)	
Fabaceae	<i>Acacia</i>	<i>sericophylla</i>	
Fabaceae	<i>Acacia</i>	<i>sibirica</i>	
Fabaceae	<i>Acacia</i>	sp. indet	
Fabaceae	<i>Acacia</i>	<i>spondylophylla</i>	
Fabaceae	<i>Acacia</i>	<i>steadmanii</i>	subsp. <i>borealis</i>
Fabaceae	<i>Acacia</i>	<i>subtiliformis</i>	
Fabaceae	<i>Acacia</i>	<i>synchronicia</i>	
Fabaceae	<i>Acacia</i>	<i>tenuissima</i>	
Fabaceae	<i>Acacia</i>	<i>tetragonophylla</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Fabaceae	<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>
Fabaceae	<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>
Fabaceae	<i>Crotalaria</i>	<i>novae-hollandiae</i>	subsp. <i>novae-hollandiae</i>
Fabaceae	<i>Cullen</i>	<i>leucochaites</i>	
Fabaceae	<i>Cullen</i>	<i>martinii</i>	
Fabaceae	<i>Gastrolobium</i>	<i>grandiflorum</i>	
Fabaceae	<i>Glycine</i>	<i>canescens</i>	
Fabaceae	<i>Gompholobium</i>	<i>oreophilum</i>	
Fabaceae	<i>Indigofera</i>	<i>georgei</i>	
Fabaceae	<i>Indigofera</i>	<i>monophylla</i>	
Fabaceae	<i>Indigofera</i>	<i>rugosa</i>	
Fabaceae	<i>Isotropis</i>	<i>atropurpurea</i>	
Fabaceae	<i>Isotropis</i>	<i>forrestii</i>	
Fabaceae	<i>Mirbelia</i>	<i>viminalis</i>	
Fabaceae	<i>Petalostylis</i>	<i>labicheoides</i>	
Fabaceae	<i>Rhynchosia</i>	<i>bungarensis</i>	
Fabaceae	<i>Rhynchosia</i>	<i>minima</i>	
Fabaceae	<i>Senna</i>	? <i>artemisioides</i>	subsp. <i>oligophylla</i> X <i>helmsii</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	sp. indet
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i> X <i>helmsii</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i> X sp. <i>Meekathara</i> (E. Bailey 1-26)
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. X <i>artemisioides</i>
Fabaceae	<i>Senna</i>	<i>artemisioides</i>	subsp. X <i>sturtii</i>
Fabaceae	<i>Senna</i>	<i>ferraria</i>	
Fabaceae	<i>Senna</i>	<i>glaucifolia</i>	
Fabaceae	<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Fabaceae	<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>
Fabaceae	<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>
Fabaceae	<i>Senna</i>	<i>glutinosa</i> (? hybrid)	
Fabaceae	<i>Senna</i>	<i>notabilis</i>	
Fabaceae	<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>
Fabaceae	<i>Senna</i>	sp. Meekatharra (E. Bailey 1-26)	
Fabaceae	<i>Senna</i>	<i>stricta</i>	
Fabaceae	<i>Senna</i>	<i>symonii</i>	
Fabaceae	<i>Senna</i>	<i>symonii</i> (hybrid)	
Fabaceae	<i>Senna</i>	<i>venusta</i>	
Fabaceae	<i>Swainsona</i>	<i>decurrens</i>	
Fabaceae	<i>Tephrosia</i>	<i>arenicola</i>	
Fabaceae	<i>Tephrosia</i>	<i>clementii</i>	
Fabaceae	<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)
Fabaceae	<i>Tephrosia</i>	sp. Bungaroo Creek (M.E. Trudgen 11601)	
Fabaceae	<i>Tephrosia</i>	sp. Cathedral Gorge (F.H. Mollemans 2420)	
Fabaceae	<i>Tephrosia</i>	sp. Fortescue (A.A. Mitchell 606)	
Fabaceae	<i>Vigna</i>	<i>lanceolata</i>	var. <i>lanceolata</i>
Goodeniaceae	<i>Brunonia</i>	<i>australis</i>	
Goodeniaceae	<i>Dampiera</i>	<i>candicans</i>	
Goodeniaceae	<i>Goodenia</i>	<i>cusackiana</i>	
Goodeniaceae	<i>Goodenia</i>	<i>heterochila</i>	
Goodeniaceae	<i>Goodenia</i>	<i>lamprosperma</i>	
Goodeniaceae	<i>Goodenia</i>	<i>microptera</i>	
Goodeniaceae	<i>Goodenia</i>	<i>muelleriana</i>	
Goodeniaceae	<i>Goodenia</i>	<i>nuda</i>	
Goodeniaceae	<i>Goodenia</i>	<i>prostrata</i>	
Goodeniaceae	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Goodeniaceae	<i>Goodenia</i>	<i>stellata</i>	
Goodeniaceae	<i>Goodenia</i>	<i>stobbsiana</i>	
Goodeniaceae	<i>Goodenia</i>	<i>triodiophila</i>	
Goodeniaceae	<i>Velleia</i>	<i>connata</i>	
Gyrostemonaceae	<i>Codonocarpus</i>	<i>cotinifolius</i>	
Haloragaceae	<i>Haloragis</i>	<i>gossei</i>	
Hemerocallidaceae	<i>Tricoryne</i>	sp. Hamersley Range (S. van Leeuwen 915)	
Lamiaceae	<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>
Lamiaceae	<i>Dicrastylis</i>	<i>cordifolia</i>	
Lamiaceae	<i>Newcastelia</i>	sp. Hamersley Range (S. van Leeuwen 4264)	
Lamiaceae	<i>Nicotiana</i>	<i>benthamiana</i>	
Lamiaceae	<i>Nicotiana</i>	<i>occidentalis</i>	
Lamiaceae	<i>Nicotiana</i>	<i>rosulata</i>	subsp. <i>rosulata</i>
Lamiaceae	<i>Nicotiana</i>	sp. indet	
Lamiaceae	<i>Prostanthera</i>	<i>albiflora</i>	
Lamiaceae	<i>Spartothamnella</i>	<i>puberula</i>	
Lamiaceae	<i>Spartothamnella</i>	<i>teucriflora</i>	
Lauraceae	<i>Cassytha</i>	<i>capillaris</i>	
Loranthaceae	<i>Amyema</i>	<i>preissii</i>	
Loranthaceae	<i>Amyema</i>	<i>sanguinea</i>	subsp. <i>pulchella</i>
Loranthaceae	<i>Diplatia</i>	<i>grandibractea</i>	
Lythraceae	<i>Rotala</i>	<i>diandra</i>	
Malvaceae	* <i>Malvastrum</i>	<i>americanum</i>	
Malvaceae	<i>Abutilon</i>	<i>fraseri</i>	
Malvaceae	<i>Abutilon</i>	<i>lepidium</i>	
Malvaceae	<i>Abutilon</i>	<i>macrum</i>	
Malvaceae	<i>Abutilon</i>	<i>malvifolium</i>	
Malvaceae	<i>Abutilon</i>	<i>otocarpum</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Malvaceae	<i>Abutilon</i>	<i>oxycarpum</i>	
Malvaceae	<i>Abutilon</i>	sp. Dioicum (A.A. Mitchell PRP1618)	
Malvaceae	<i>Abutilon</i>	<i>trudgenii</i>	
Malvaceae	<i>Abutilon</i>	<i>cunninghamii</i>	
Malvaceae	<i>Androcalva</i>	<i>luteiflora</i>	
Malvaceae	<i>Corchorus</i>	<i>crozophorifolius</i>	
Malvaceae	<i>Corchorus</i>	<i>laniflorus</i>	
Malvaceae	<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. indet
Malvaceae	<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>
Malvaceae	<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>parvus</i>
Malvaceae	<i>Corchorus</i>	<i>lasiocarpus</i>	
Malvaceae	<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>
Malvaceae	<i>Corchorus</i>	<i>tectus</i>	
Malvaceae	<i>Corchorus</i>	<i>tridens</i>	
Malvaceae	<i>Gossypium</i>	<i>australe</i>	
Malvaceae	<i>Gossypium</i>	<i>robinsonii</i>	
Malvaceae	<i>Hibiscus</i>	aff. <i>coatesii</i>	
Malvaceae	<i>Hibiscus</i>	<i>burtonii</i>	
Malvaceae	<i>Hibiscus</i>	<i>coatesii</i>	
Malvaceae	<i>Hibiscus</i>	sp. indet	
Malvaceae	<i>Hibiscus</i>	<i>sturtii</i>	subsp. indet
Malvaceae	<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>
Malvaceae	<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>
Malvaceae	<i>Hibiscus</i>	<i>verdcourtii</i>	
Malvaceae	<i>Keraudrenia</i>	cf. <i>nephrosperma</i>	
Malvaceae	<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>
Malvaceae	<i>Melhania</i>	<i>oblongifolia</i>	
Malvaceae	<i>Sida</i>	aff. <i>fibulifera</i>	
Malvaceae	<i>Sida</i>	<i>arenicola</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Malvaceae	<i>Sida</i>	<i>cardiophylla</i>	
Malvaceae	<i>Sida</i>	<i>echinocarpa</i>	
Malvaceae	<i>Sida</i>	<i>fibulifera</i>	
Malvaceae	<i>Sida</i>	<i>rohlena</i>	subsp. cf. <i>rohlena</i>
Malvaceae	<i>Sida</i>	sp. Articulation below (A.A. Mitchell PRP1605)	
Malvaceae	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
Malvaceae	<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote 32)	
Malvaceae	<i>Sida</i>	sp. indet	
Malvaceae	<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)	
Malvaceae	<i>Sida</i>	sp. Rabbit Flat (B.J. Carter 626)	
Malvaceae	<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)	
Malvaceae	<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)	
Malvaceae	<i>Triumfetta</i>	<i>leptacantha</i>	
Malvaceae	<i>Triumfetta</i>	<i>maconochieana</i>	
Malvaceae	<i>Waltheria</i>	<i>indica</i>	
Marsileaceae	<i>Marsilea</i>	<i>hirsuta</i>	
Menispermaceae	<i>Tinospora</i>	<i>smilacina</i>	
Molluginaceae	<i>Mollugo</i>	<i>molluginea</i>	
Moraceae	<i>Ficus</i>	<i>brachypoda</i>	
Myrtaceae	<i>Calytrix</i>	<i>carinata</i>	
Myrtaceae	<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>
Myrtaceae	<i>Corymbia</i>	<i>ferritcola</i>	
Myrtaceae	<i>Corymbia</i>	<i>hamersleyana</i>	
Myrtaceae	<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>
Myrtaceae	<i>Eucalyptus</i>	<i>gamophylla</i>	
Myrtaceae	<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Myrtaceae	<i>Eucalyptus</i>	<i>repullulans</i>	
Myrtaceae	<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>
Myrtaceae	<i>Eucalyptus</i>	<i>trivalva</i>	
Myrtaceae	<i>Eucalyptus</i>	<i>victrix</i>	
Myrtaceae	<i>Eucalyptus</i>	<i>xerothermica</i>	
Myrtaceae	<i>Eucalyptus</i>	sp. indet	
Myrtaceae	<i>Melaleuca</i>	<i>argentea</i>	
Myrtaceae	<i>Melaleuca</i>	<i>bracteata</i>	
Myrtaceae	<i>Melaleuca</i>	<i>glomerata</i>	
Nyctaginaceae	<i>Boerhavia</i>	<i>coccinea</i>	
Oleaceae	<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>
Phrymaceae	<i>Mimulus</i>	<i>gracilis</i>	
Phyllanthaceae	<i>Notoleptopus</i>	<i>decaisnei</i>	
Phyllanthaceae	<i>Phyllanthus</i>	<i>erwinii</i>	
Phyllanthaceae	<i>Phyllanthus</i>	<i>maderaspatensis</i>	
Phyllanthaceae	<i>Phyllanthus</i>	<i>reticulatus</i>	
Phyllanthaceae	<i>Sauropus</i>	sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213)	
Phyllanthaceae	<i>Scaevola</i>	<i>acacioides</i>	
Phyllanthaceae	<i>Scaevola</i>	<i>amblyanthera</i>	var. <i>centralis</i>
Phyllanthaceae	<i>Scaevola</i>	<i>browniana</i>	
Phyllanthaceae	<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>
Phyllanthaceae	<i>Scaevola</i>	<i>spinescens</i>	
Plantaginaceae	<i>Stemoda</i>	<i>grossa</i>	
Poaceae	* <i>Cenchrus</i>	<i>ciliaris</i>	
Poaceae	* <i>Cenchrus</i>	<i>setiger</i>	
Poaceae	* <i>Setaria</i>	<i>verticillata</i>	
Poaceae	<i>Acrachne</i>	<i>racemosa</i>	
Poaceae	<i>Amphipogon</i>	<i>sericeus</i>	
Poaceae	<i>Aristida</i>	<i>burbidgeae</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Poaceae	<i>Aristida</i>	<i>contorta</i>	
Poaceae	<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>
Poaceae	<i>Aristida</i>	<i>inaequiglumis</i>	
Poaceae	<i>Aristida</i>	<i>jerichoensis</i>	var. <i>subspinulifera</i>
Poaceae	<i>Aristida</i>	<i>obscura</i>	
Poaceae	<i>Bothriochloa</i>	<i>ewartiana</i>	
Poaceae	<i>Chloris</i>	<i>pectinata</i>	
Poaceae	<i>Chrysopogon</i>	<i>fallax</i>	
Poaceae	<i>Cymbopogon</i>	<i>ambiguus</i>	
Poaceae	<i>Cymbopogon</i>	<i>obtectus</i>	
Poaceae	<i>Cymbopogon</i>	<i>procerus</i>	
Poaceae	<i>Dichanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>
Poaceae	<i>Digitaria</i>	<i>brownii</i>	
Poaceae	<i>Digitaria</i>	<i>ctenantha</i>	
Poaceae	<i>Enneapogon</i>	<i>caerulescens</i>	
Poaceae	<i>Enneapogon</i>	<i>lindleyanus</i>	
Poaceae	<i>Enneapogon</i>	<i>polyphyllus</i>	
Poaceae	<i>Enneapogon</i>	<i>robustissimus</i>	
Poaceae	<i>Enteropogon</i>	<i>ramosus</i>	
Poaceae	<i>Eragrostis</i>	<i>cumingii</i>	
Poaceae	<i>Eragrostis</i>	<i>elongata</i>	
Poaceae	<i>Eragrostis</i>	<i>eriopoda</i>	
Poaceae	<i>Eragrostis</i>	sp. indet	
Poaceae	<i>Eragrostis</i>	<i>tenellula</i>	
Poaceae	<i>Eragrostis</i>	<i>xerophila</i>	
Poaceae	<i>Eriachne</i>	<i>aristidea</i>	
Poaceae	<i>Eriachne</i>	<i>benthamii</i>	
Poaceae	<i>Eriachne</i>	<i>ciliata</i>	
Poaceae	<i>Eriachne</i>	<i>lanata</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Poaceae	<i>Eriachne</i>	<i>mucronata</i>	
Poaceae	<i>Eriachne</i>	<i>obtusa</i>	
Poaceae	<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>
Poaceae	<i>Eriachne</i>	<i>pulchella</i>	
Poaceae	<i>Eriachne</i>	sp. indet	
Poaceae	<i>Eriachne</i>	<i>tenuiculmis</i>	
Poaceae	<i>Eulalia</i>	<i>aurea</i>	
Poaceae	<i>Iseilema</i>	<i>dolichotrichum</i>	
Poaceae	<i>Iseilema</i>	<i>eremaeum</i>	
Poaceae	<i>Iseilema</i>	<i>membranaceum</i>	
Poaceae	<i>Panicum</i>	<i>effusum</i>	
Poaceae	<i>Paraneurachne</i>	<i>muelleri</i>	
Poaceae	<i>Paspalidium</i>	<i>basicladium</i>	
Poaceae	<i>Paspalidium</i>	<i>clementii</i>	
Poaceae	<i>Paspalidium</i>	<i>rarum</i>	
Poaceae	<i>Perotis</i>	<i>rara</i>	
Poaceae	<i>Schizachyrium</i>	<i>fragile</i>	
Poaceae	<i>Setaria</i>	<i>dielsii</i>	
Poaceae	<i>Setaria</i>	<i>surgens</i>	
Poaceae	<i>Sorghum</i>	<i>plumosum</i>	
Poaceae	<i>Sorghum</i>	<i>stipoideum</i>	
Poaceae	<i>Sporobolus</i>	<i>australasicus</i>	
Poaceae	<i>Themeda</i>	<i>triandra</i>	
Poaceae	<i>Tragus</i>	<i>australianus</i>	
Poaceae	<i>Triodia</i>	<i>angusta</i>	
Poaceae	<i>Triodia</i>	<i>brizoides</i>	
Poaceae	<i>Triodia</i>	<i>longiceps</i>	
Poaceae	<i>Triodia</i>	<i>melvillei</i>	
Poaceae	<i>Triodia</i>	<i>pungens</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Poaceae	<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)	
Poaceae	<i>Triodia</i>	<i>wiseana</i>	
Poaceae	<i>Tripogon</i>	<i>loliiformis</i>	
Poaceae	<i>Yakirra</i>	<i>australiensis</i>	
Polygalaceae	<i>Polygala</i>	<i>glaucifolia</i>	
Polygalaceae	<i>Polygala</i>	<i>isingii</i>	
Polygonaceae	* <i>Acetosa</i>	<i>vesicaria</i>	
Portulacaceae	<i>Portulaca</i>	<i>oleracea</i>	
Potamogetonaceae	<i>Potamogeton</i>	<i>tricarinatus</i>	
Primulaceae	<i>Samolus</i>	<i>repens</i>	
Proteaceae	<i>Grevillea</i>	<i>berryana</i>	
Proteaceae	<i>Grevillea</i>	<i>pyramidalis</i>	subsp. <i>leucadendron</i>
Proteaceae	<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>
Proteaceae	<i>Hakea</i>	<i>chordophylla</i>	
Proteaceae	<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>
Pteridaceae	<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>
Pteridaceae	<i>Cheilanthes</i>	<i>brownii</i>	
Rhamnaceae	<i>Ventilago</i>	<i>viminalis</i>	
Rubiaceae	<i>Oldenlandia</i>	<i>crouchiana</i>	
Rubiaceae	<i>Oldenlandia</i>	<i>galioides</i>	
Rubiaceae	<i>Opercularia</i>	<i>acquistepala</i>	
Rubiaceae	<i>Psydrax</i>	<i>latifolia</i>	
Rubiaceae	<i>Psydrax</i>	<i>sauveleons</i>	
Rubiaceae	<i>Spermacoce</i>	<i>brachystema</i>	
Rubiaceae	<i>Synaptantha</i>	<i>tilliacea</i>	subsp. <i>tilliacea</i>
Santalaceae	<i>Anthobolus</i>	<i>leptomerioides</i>	
Santalaceae	<i>Exocarpos</i>	<i>sparteus</i>	
Santalaceae	<i>Santalum</i>	<i>lanceolatum</i>	
Sapindaceae	<i>Alectryon</i>	<i>oleifolius</i>	

FAMILY	GENUS	SPECIES	SUBSP. / VAR.
Sapindaceae	<i>Atalaya</i>	<i>hemiglauca</i>	
Sapindaceae	<i>Dodonaea</i>	<i>coriacea</i>	
Sapindaceae	<i>Dodonaea</i>	<i>lanceolata</i>	
Sapindaceae	<i>Dodonaea</i>	<i>pachyneura</i>	
Sapindaceae	<i>Dodonaea</i>	<i>petiolaris</i>	
Scrophulariaceae	<i>Eremophila</i>	<i>forrestii</i>	subsp. <i>forrestii</i>
Scrophulariaceae	<i>Eremophila</i>	<i>fraserii</i>	
Scrophulariaceae	<i>Eremophila</i>	<i>jucunda</i>	subsp. <i>pulcherrima</i>
Scrophulariaceae	<i>Eremophila</i>	<i>lanceolata</i>	
Scrophulariaceae	<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>
Scrophulariaceae	<i>Eremophila</i>	<i>longifolia</i>	
Scrophulariaceae	<i>Myoporum</i>	<i>montanum</i>	
Solanaceae	<i>Solanum</i>	<i>ferocissimum</i>	
Solanaceae	<i>Solanum</i>	<i>gabrielae</i>	
Solanaceae	<i>Solanum</i>	<i>horridum</i>	
Solanaceae	<i>Solanum</i>	<i>lasiophyllum</i>	
Solanaceae	<i>Solanum</i>	<i>phlomoides</i>	
Surianaceae	<i>Stylobasium</i>	<i>spathulatum</i>	
Typhaceae	<i>Typha</i>	<i>domingensis</i>	
Violaceae	<i>Hybanthus</i>	<i>aurantiacus</i>	
Zygophyllaceae	* <i>Tribulus</i>	<i>terrestris</i>	
Zygophyllaceae	<i>Tribulus</i>	<i>hirsutus</i>	
Zygophyllaceae	<i>Tribulus</i>	<i>macrocarpus</i>	
Zygophyllaceae	<i>Tribulus</i>	<i>platypterus</i>	
Zygophyllaceae	<i>Tribulus</i>	sp. indet	
Zygophyllaceae	<i>Tribulus</i>	<i>suberosus</i>	

APPENDIX 7

Chain of Custody Forms

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
AY010.01-s2	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with probably <i>A. sibirica</i> . Also see note for AY129.02
AY129.02	<i>Acacia rhodophloia</i> hybrid	Need pods and photo/description of main stem bark. This is most likely a hybrid of <i>A. rhodophloia</i> with possibly <i>A. sibirica</i> or <i>A. kempeana</i> (or maybe something else). This is a complex that needs a lot of work to resolve.
AY129.05	<i>Acacia sibirica</i> (or <i>rhodophloia</i> hybrid)	This is most likely <i>A. sibirica</i> but may be a hybrid of <i>A. rhodophloia</i> with probably <i>A. sibirica</i> . Also see note for AY129.02
AY130.04	<i>Euphorbia trigonosperma</i>	
AY138.01	<i>Maytenus</i> sp. Mt Windell (S. van Leeuwen 846)	
AY141.03	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with probably <i>A. sibirica</i> . Also see note for AY129.02
AY141.05	<i>Acacia aptaneura</i>	
AY142.02	<i>Eragrostis eriopoda</i>	
AY142.03	<i>Acacia ayersiana</i>	Short phyllode variant
AY143.01	<i>Keraudrenia velutina</i> subsp. <i>elliptica</i>	
AY143.02	<i>Sida</i> ? sp. Barlee Range (S. van Leeuwen 1642)	Material is insufficient to be certain
AY144.02	<i>Acacia aneura/ptaneura</i>	Or some hybrid.
AY144.03	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with probably <i>A. sibirica</i> . Also see note for AY129.02
AY144.04	<i>Acacia</i> ? <i>adsurgens</i>	Broad phyllode form. An odd entity from the Pilbara, never been collected with pods.
AY144.06	<i>Euphorbia australis</i> var. <i>hispida</i>	
AY144.07	<i>Acacia adsurgens</i> X <i>rhodophloia</i>	Probably (peduncle length=spike length, calyx long relative to corolla). Also see note for AY129.02
AY145.03	<i>Sauropus</i> sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213)	Worth lodging
AY146.01	<i>Senna glutinosa</i> subsp. <i>pruinosa</i>	The stipule is distinct. Probably a hybrid (see note for AY146.01)
AY153.01	<i>Senna glutinosa</i> (? hybrid)	There are several Pilbara collections under <i>S. glutinosa</i> that match this but they are atypical and I suspect they are all hybrids (wow, a <i>Senna</i> hybridising - who'd have thought eh?)
AY153.08	<i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i>	

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
AY153.09	<i>Euphorbia vaccaria</i> var. <i>vaccaria</i> & <i>E. australis</i> var. <i>subtomentosa</i>	2 species in 1 bag. I separated them & placed the <i>E. australis</i> in a cellophane bag (but there are still some <i>vaccaria</i> capsule mixed in with it)..
AY155.04	<i>Acacia aptaneura</i>	
AY164.02	<i>Eriachne mucronata</i>	Probably. There are several "forms" of this taxon in the collection which may warrant recognition as separate entities.
AY165.04	<i>Acacia aptaneura</i>	
AY165.11	<i>Hibiscus verdcourtii</i>	
AY167.07	<i>Senna</i> ? <i>artemisioides</i> subsp. <i>oligophylla</i> X sp. Meekathara	
AY167.08	<i>Eriachne mucronata</i>	Probably. There are several "forms" of this taxon in the collection which may warrant recognition as separate entities.
AY167.16	<i>Mimulus gracilis</i>	
AY167.17	<i>Senna</i> ? <i>artemisioides</i> subsp. <i>oligophylla</i> X <i>helmsii</i>	
Ay169.02	<i>Acacia aptaneura</i>	
Ay169.03	<i>Acacia aneura</i>	
D101.03	<i>Gymnanthera cunninghamii</i>	Worth lodging.
D107.01	<i>Rhynchosia bungarensis</i>	Worth lodging.
D120.01	<i>Spartothamnella puberula</i>	Worth lodging.
D135.02	<i>Acacia maitlandii</i>	
D135.03	<i>Acacia bivenosa</i> X <i>sclerosperma</i> subsp. <i>sclerosperma</i>	
D142.01	<i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727)	
D152.01	<i>Pandorea pandorana</i>	
D153.01	<i>Rhynchosia bungarensis</i>	
D158.01	<i>Rhynchosia bungarensis</i>	Worth lodging.
D166.01	<i>Acacia bromilowiana</i>	
D186.01	<i>Acacia subtiliformis</i>	
D194	<i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642)	
D20.01	<i>Goodenia triodiophila</i>	
D21.01	<i>Acacia elachantha</i>	

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
D33.01	<i>Acacia effusa</i>	
D45.01	<i>Acacia effusa</i>	Worth lodging
D68.01	<i>Acacia effusa</i>	Worth lodging
D97.01	<i>Phyllanthus reticulatus</i>	Probably. Family is being revised so a lot of material is on loan.
E004.01	<i>Acacia aptaneura</i>	
E004.02	<i>Acacia aptaneura</i>	
E004.03	<i>Acacia aptaneura</i>	
E010.01	<i>Goodenia triodiophylla</i>	
for ID purposes	<i>Acacia aptaneura</i>	
for ID purposes	<i>Acacia aptaneura</i>	Short/broad phyllode variant. See note below
for ID purposes	<i>Acacia aneura</i>	See note below
for ID purposes	<i>Acacia aptaneura</i>	Juvenile
for ID purposes	<i>Acacia macraneura</i>	See note below
AY141.03	<i>Acacia aptaneura</i>	Not on original CoC
AY026.02	<i>Blumea tenella</i>	
AY026.06	<i>Acacia macraneura</i>	Probably but only really based on the short curved phyllodes.
AY028.01	<i>Acacia sibirica</i>	
AY028.03	<i>Acacia aptaneura</i>	
AY034.04	<i>Aristida jerichoensis</i> var. <i>subspinulifera</i>	
AY036.03	<i>Acacia atkinsiana</i>	
AY036.04 (A)	<i>Acacia rhodophloia</i> hybrid	Need pods and photo/description of main stem bark. This is most likely a hybrid of <i>A. rhodophloia</i> with possibly <i>A. sibirica</i> or <i>A. kempeana</i> (or maybe something else). This is a complex that needs a lot of work to resolve. There are 2 specimens (different dates), I've labelled them A & B
AY036.04 (B)	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with probably <i>A. sibirica</i> . Also see note for AY036.04 (A)
AY038.01	<i>Acacia ayersiana</i>	Narrow phyllode variant.
AY050.09	<i>Acacia aptaneura</i>	
AY060.01	<i>Acacia aptaneura</i>	

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
AY066.01	<i>Acacia rhodophloia</i> hybrid	This may be a hybrid of <i>A. rhodophloia</i> with possibly <i>A. sibirica</i> or <i>A. kempeana</i> . Also see note for AY036.04 (A)
AY079.07	<i>Corchorus sidioides</i> subsp. <i>sidioides</i>	
AY079.10	<i>Corchorus sidioides</i> subsp. <i>sidioides</i>	
AY082.01	<i>Acacia aptaneura</i>	
AY091.01	<i>Triodia</i> sp. Shovelanna Hill (S. van Leeuwen 3835)	
AY093.01	<i>Triodia melvillei</i>	
AY093.02	<i>Acacia sibirica</i>	
AY093.04	<i>Acacia aptaneura</i>	
AY108.01	<i>Acacia sericophylla</i>	Probably. If bark thick, spongy & yellow underneath then <i>A. sericophylla</i> . If bark thin & hard & weeping tree then <i>A. coriacea</i> subsp. <i>pendens</i>
AY110.01	<i>Acacia aptaneura</i>	
GA0330	<i>Acacia elachantha</i>	
J10	<i>Acacia effusa</i>	A bit atypical - possible hybrid with <i>A. monticola</i> ?
J19.02	<i>Tephrosia clementii</i>	
J25.04	<i>Blumea tenella</i>	
J40.01	<i>Acacia aptaneura</i>	
J40.02	<i>Acacia ayersiana</i>	Narrow phyllode variant.
J87	<i>Goodenia heterochila</i>	
J93.03	<i>Triumfetta leptacantha</i>	
J94.06	<i>Alectryon oleifolius</i>	
J96.02	<i>Eriachne ciliata</i>	
J99.01	<i>Isotropis parvifolia</i>	Worth lodging.
POI011	<i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727)	
AY040.03	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with possibly <i>A. sibirica</i> or <i>A. kempeana</i> . Also see note for AY036.04 (A), Not on original CoC form.
OpColl near J23	<i>Acacia sibirica</i> or <i>rhodophloia</i> hybrid	This is either <i>A. sibirica</i> or a hybrid of <i>A. rhodophloia</i> with possibly <i>A. sibirica</i> or <i>A. kempeana</i> . Also see note for AY036.04 (A), Not on original CoC form.

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
ay002.03	<i>Acacia subtiliformis</i>	
ay003.03	<i>Acacia maitlandii</i>	
ay004.01	<i>Acacia maitlandii</i>	
ay006.05	<i>Iseilema membranaceum</i>	
ay008.03	<i>Iseilema membranaceum</i>	
ay010.02	<i>Acacia effusa</i>	P3
ay012.03	<i>Iseilema eremaeum</i>	Has some affinities to <i>I. dolichotrichum</i> in that the pedicels of the involucre bracts have hairs on at least one side (cf glabrous except at the base) but the specimen has very few glands on the vegetative parts. <i>Iseilema dolichotrichum</i> appears to intergrade with <i>I. eremaeum</i> and both species being related to each other & <i>I. membranaceum</i> (B. Simon, Ausgrass 2 & Flora of the Kimberley). Many of the WA collections are at odds with the circumscriptions.
ay012.04	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	P3
ay015.03	<i>Stackhousia</i> sp. swollen gynophore (W.R. Barker 2041)	
ay016.02	<i>Stackhousia</i> sp. swollen gynophore (W.R. Barker 2041)	
ay016.03	<i>Acacia kempeana</i>	One of the (many) forms of this species. Notes from Wattles of the Pilbara: "Acacia kempeana in the Pilbara displays a wide range of variation, especially in phyllode dimensions. Acacia kempeana belongs to a taxonomically complex small group of species of which five are found in the Pilbara region, namely, <i>A. adsurgens</i> , <i>A. atkinsiana</i> , <i>A. kempeana</i> , <i>A. rhodophloia</i> and <i>A. sibirica</i> . In the Pilbara the situation is further complicated because several of these species seemingly hybridize, and also because both <i>A. sibirica</i> and <i>A. kempeana</i> display extreme variation within the region."
ay018.04	<i>Peripleura arida</i>	Glandular hairs dense in upper parts, more obscure in lower (older) parts - abraison? Involucre bracts with only glandular hairs - <i>P. hispidula</i> has coarse septate hairs plus a few obscure glandular hairs on the bracts.
ay018.06	<i>Euphorbia drummondii</i>	
ay025.02	<i>Glycine canescens</i>	All hairs appressed, hairs on stems retrorse.
ay027.02	<i>Acacia effusa</i>	P3. Worth lodging

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
ay039.04	<i>Acacia aptaneura</i>	This is the "yet another" form of this species from the Pilbara - it has dark new shoots with more red-resin hairlets than the typical form. The new shoots are resinous which, along with some other characters, rules out <i>A. fuscaneura</i> .
ay050.02	<i>Vittadinia</i> sp. Coondewanna Flats (S. van Leeuwen 4684)	P1. Worth lodging
ay057.06	<i>Goodenia heterochila</i>	
ay069.03	? <i>Pluchea rubelliflora</i>	Closest match (this species is quite variable in regards to leaf size, esp. length:width ratio) but need flowers to be certain
ay069.06	<i>Myoporum montanum</i>	Worth lodging as it feels in a gap in the distribution
ay080.01	<i>Peripleura arida</i>	Glandular hairs dense in upper parts, more obscure in lower (older) parts - abrasion? Involucral bracts with only glandular hairs - <i>P. hispidula</i> has coarse septate hairs plus a few obscure glandular hairs on the bracts.
ay090.11	<i>Somolus repens</i>	Leaves atypically thin but most likely due to it being a flush of new growth.
ay096.01	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	P3
ay096.02	<i>Goodenia</i> sp. East Pilbara (A.A. Mitchell PRP 727)	P3
ay107.03	<i>Peripleura arida</i>	Glandular hairs dense in upper parts, more obscure in lower (older) parts - abrasion? Involucral bracts with only glandular hairs - <i>P. hispidula</i> has coarse septate hairs plus a few obscure glandular hairs on the bracts.
ay113.01	<i>Stackhousia</i> sp. swollen gynophore (W.R. Barker 2041)	
ay117.01	<i>Senna symonii</i>	More typical than the specimen in the ref. herb. Worth lodging.
ay121.06	<i>Oldenlandia galioides</i>	Somewhat atypical in that the pedicels are glabrous or only sparsely scabrous.
ay121.07	<i>Goodenia lamprosperma</i>	High amount of branching, small flowers, bracteoles present, uneven wings on the lower corolla lobes, narrow & purple indusium. The fine hairs are uncommon (usually glabrous) but a number of specimens have this, especially younger growth.
G ?nuda 1	<i>Goodenia nuda</i>	
j105.02	<i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642)	P3.
j107.01	<i>Sida</i> sp. Barlee Range (S. van Leeuwen 1642)	P3. Worth lodging

Specimen Code	BHP Sponsored Botanist ID	BHP Sponsored Botanist Comments
j37.02	<i>Goodenia nuda</i>	
j5.01	<i>Apowollastonia hamersleyensis</i>	Worth lodging as it's a slight range extension
j66	<i>Eucalyptus repullulans</i>	Fits within the accepted variation for this species.
j7.01	<i>Acacia effusa</i>	P3.
j72.01	<i>Rostellularia adscendens</i> var. <i>latifolia</i>	P3
j98	<i>Isotropis parvifolia</i>	P2. Worth lodging.
opcoll 112, on road, 1-2m	<i>Senna symonii</i> (hybrid)	Atypical for leaf colour and that the leaflets are held flat (usually +/- folded) - suspect this is a hybrid but not sure of the parents.

APPENDIX 8

Records of conservation significant flora
from the study area

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species	Subsp/Var
119.0189667	-22.6422	<i>Acacia</i>	<i>bromilowiana</i>	
684992	7478110	<i>Acacia</i>	<i>effusa</i>	
687257	7477357	<i>Acacia</i>	<i>effusa</i>	
118.8250833	-22.79923333	<i>Acacia</i>	<i>effusa</i>	
118.8247333	-22.7997	<i>Acacia</i>	<i>effusa</i>	
118.82325	-22.80121667	<i>Acacia</i>	<i>effusa</i>	
118.8227167	-22.80146667	<i>Acacia</i>	<i>effusa</i>	
118.8224167	-22.80101667	<i>Acacia</i>	<i>effusa</i>	
118.82235	-22.80056667	<i>Acacia</i>	<i>effusa</i>	
118.8226833	-22.79998333	<i>Acacia</i>	<i>effusa</i>	
118.82305	-22.79958333	<i>Acacia</i>	<i>effusa</i>	
118.8228667	-22.7978	<i>Acacia</i>	<i>effusa</i>	
118.8032	-22.79728333	<i>Acacia</i>	<i>effusa</i>	
118.8033	-22.7969	<i>Acacia</i>	<i>effusa</i>	
118.8038333	-22.79673333	<i>Acacia</i>	<i>effusa</i>	
118.80375	-22.79601667	<i>Acacia</i>	<i>effusa</i>	
118.8034333	-22.79558333	<i>Acacia</i>	<i>effusa</i>	
118.8029833	-22.7947	<i>Acacia</i>	<i>effusa</i>	
118.8033333	-22.79463333	<i>Acacia</i>	<i>effusa</i>	
118.8035	-22.79425	<i>Acacia</i>	<i>effusa</i>	
118.8029833	-22.79328333	<i>Acacia</i>	<i>effusa</i>	
118.8023333	-22.79276667	<i>Acacia</i>	<i>effusa</i>	
118.8016667	-22.79201667	<i>Acacia</i>	<i>effusa</i>	
118.8015667	-22.79168333	<i>Acacia</i>	<i>effusa</i>	
118.8005833	-22.79168333	<i>Acacia</i>	<i>effusa</i>	
118.79905	-22.79201667	<i>Acacia</i>	<i>effusa</i>	
118.80005	-22.792	<i>Acacia</i>	<i>effusa</i>	
118.79805	-22.79313333	<i>Acacia</i>	<i>effusa</i>	
118.79685	-22.79285	<i>Acacia</i>	<i>effusa</i>	
118.7961833	-22.79298333	<i>Acacia</i>	<i>effusa</i>	
118.7954833	-22.79321667	<i>Acacia</i>	<i>effusa</i>	
118.7954833	-22.79361667	<i>Acacia</i>	<i>effusa</i>	
118.79555	-22.79445	<i>Acacia</i>	<i>effusa</i>	
118.79635	-22.79541667	<i>Acacia</i>	<i>effusa</i>	
118.7974333	-22.79578333	<i>Acacia</i>	<i>effusa</i>	
118.79775	-22.79553333	<i>Acacia</i>	<i>effusa</i>	
118.7983167	-22.79615	<i>Acacia</i>	<i>effusa</i>	
118.7989833	-22.79663333	<i>Acacia</i>	<i>effusa</i>	
118.7998833	-22.79701667	<i>Acacia</i>	<i>effusa</i>	
118.8008167	-22.79703333	<i>Acacia</i>	<i>effusa</i>	
118.80155	-22.79716667	<i>Acacia</i>	<i>effusa</i>	
118.8026333	-22.79698333	<i>Acacia</i>	<i>effusa</i>	
118.8027	-22.79755	<i>Acacia</i>	<i>effusa</i>	
118.8239	-22.80313333	<i>Acacia</i>	<i>effusa</i>	
118.8244833	-22.80353333	<i>Acacia</i>	<i>effusa</i>	
118.8252667	-22.80333333	<i>Acacia</i>	<i>effusa</i>	
118.8259667	-22.80268333	<i>Acacia</i>	<i>effusa</i>	
118.82625	-22.80191667	<i>Acacia</i>	<i>effusa</i>	
118.8258833	-22.80123333	<i>Acacia</i>	<i>effusa</i>	

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species	Subsp/Var
118.8254167	-22.80038333	<i>Acacia</i>	<i>effusa</i>	
118.8252167	-22.8	<i>Acacia</i>	<i>effusa</i>	
118.8252667	-22.79915	<i>Acacia</i>	<i>effusa</i>	
118.8247833	-22.79921667	<i>Acacia</i>	<i>effusa</i>	
118.8239333	-22.79861667	<i>Acacia</i>	<i>effusa</i>	
118.8234167	-22.79826667	<i>Acacia</i>	<i>effusa</i>	
684698	7478256	<i>Acacia</i>	<i>effusa</i>	
684616	7478320	<i>Acacia</i>	<i>effusa</i>	
685044	7477761	<i>Acacia</i>	<i>effusa</i>	
685082	7477783	<i>Acacia</i>	<i>effusa</i>	
685059	7477957	<i>Acacia</i>	<i>effusa</i>	
684888	7478147	<i>Acacia</i>	<i>effusa</i>	
684837	7478177	<i>Acacia</i>	<i>effusa</i>	
698451	7494661	<i>Acacia</i>	<i>subtiliformis</i>	
699644	7484221	<i>Acacia</i>	<i>subtiliformis</i>	
118.9271833	-22.71508333	<i>Acacia</i>	<i>subtiliformis</i>	
118.9263333	-22.71516667	<i>Acacia</i>	<i>subtiliformis</i>	
118.9254833	-22.7154	<i>Acacia</i>	<i>subtiliformis</i>	
118.92465	-22.71605	<i>Acacia</i>	<i>subtiliformis</i>	
118.9246833	-22.71596667	<i>Acacia</i>	<i>subtiliformis</i>	
118.9244667	-22.7166	<i>Acacia</i>	<i>subtiliformis</i>	
118.92355	-22.7168	<i>Acacia</i>	<i>subtiliformis</i>	
118.92275	-22.71671667	<i>Acacia</i>	<i>subtiliformis</i>	
118.92195	-22.71756667	<i>Acacia</i>	<i>subtiliformis</i>	
118.9372667	-22.73781667	<i>Acacia</i>	<i>subtiliformis</i>	
698485	7484479	<i>Acacia</i>	<i>subtiliformis</i>	
698328	7484636	<i>Acacia</i>	<i>subtiliformis</i>	
698465	7484544	<i>Acacia</i>	<i>subtiliformis</i>	
698425	7484629	<i>Acacia</i>	<i>subtiliformis</i>	
698426	7484769	<i>Acacia</i>	<i>subtiliformis</i>	
699187	7485110	<i>Acacia</i>	<i>subtiliformis</i>	
699158	7484979	<i>Acacia</i>	<i>subtiliformis</i>	
698450	7484392	<i>Acacia</i>	<i>subtiliformis</i>	
699154	7484924	<i>Acacia</i>	<i>subtiliformis</i>	
698718	7484645	<i>Acacia</i>	<i>subtiliformis</i>	
698656	7484617	<i>Acacia</i>	<i>subtiliformis</i>	
698593	7484588	<i>Acacia</i>	<i>subtiliformis</i>	
702022	7485590	<i>Acacia</i>	<i>subtiliformis</i>	
701967	7485579	<i>Acacia</i>	<i>subtiliformis</i>	
701866	7485568	<i>Acacia</i>	<i>subtiliformis</i>	
697511	7484575	<i>Acacia</i>	<i>subtiliformis</i>	
689637	7481846	<i>Aristida</i>	<i>jerichoensis</i>	var. <i>subspinulifera</i>
715865	7489325	<i>Goodenia</i>	<i>nuda</i>	
119.0890833	-22.66031667	<i>Goodenia</i>	<i>nuda</i>	
119.0583167	-22.70165	<i>Goodenia</i>	<i>nuda</i>	
697674	7482389	<i>Goodenia</i>	<i>nuda</i>	
692390	7484908	<i>Goodenia</i>	<i>nuda</i>	
697589	7482470	<i>Goodenia</i>	<i>nuda</i>	
692412	7484950	<i>Goodenia</i>	<i>nuda</i>	

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species	Subsp/Var
698451	7494661	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
701601	7486541	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
701413	7484670	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
118.9225167	-22.72156667	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
698990	7485106	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
698457	7484582	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
699151	7485153	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
699187	7485110	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
699158	7484979	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
699096	7484864	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
698656	7484617	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
698593	7484588	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
701898	7486813	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
701931	7486837	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
119.0607333	-22.65591667	<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)	
119.076	-22.63985	<i>Gymnanthera</i>	<i>cunninghamii</i>	
119.0751167	-22.63918333	<i>Gymnanthera</i>	<i>cunninghamii</i>	
712512	7495085	<i>Rhynchosia</i>	<i>bungarensis</i>	
708768	7494980	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.06865	-22.63865	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0874833	-22.6192	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0295667	-22.63253333	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0300833	-22.63678333	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.03045	-22.63723333	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0308333	-22.63756667	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0311667	-22.63793333	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0313667	-22.63863333	<i>Rhynchosia</i>	<i>bungarensis</i>	

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species	Subsp/Var
119.03155	-22.64095	<i>Rhynchosia</i>	<i>bungarensis</i>	
119.0315	-22.6418	<i>Rhynchosia</i>	<i>bungarensis</i>	
684175	7478611	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
698511	7485450	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
701601	7486541	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
118.9270833	-22.73566667	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
684135	7478420	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
684128	7478287	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
702369	7486331	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
702497	7486257	<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>
712512	7495085	<i>Sauropus</i>	sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213)	
687859	7478131	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
712512	7495085	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0749667	-22.63926667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0716333	-22.6387	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0695	-22.63896667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0808	-22.64273333	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0698833	-22.6593	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.07925	-22.64106667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0790167	-22.64101667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0786	-22.64101667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0775333	-22.64081667	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0771667	-22.6407	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0761	-22.64008333	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
716014	7488281	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species	Subsp/Var
716016	7488270	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
715956	7488275	<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)	
119.0698833	-22.6593	<i>Spartothamnella</i>	<i>puberula</i>	
689637	7481846	<i>Vittadinia</i>	sp. Coondewanna Flats (S. Van leeuwen 4684)	
690689	7484593	<i>Vittadinia</i>	sp. Coondewanna Flats (S. Van leeuwen 4684)	
703824	7495281	<i>Vittadinia</i>	sp. Coondewanna Flats (S. Van leeuwen 4684)	

APPENDIX 9

Records for introduced weed species recorded
from the study area

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species
119.0916167	-22.66188333	* <i>Acetosa</i>	<i>vesicaria</i>
119.0962	-22.67095	* <i>Acetosa</i>	<i>vesicaria</i>
119.1031833	-22.693	* <i>Acetosa</i>	<i>vesicaria</i>
119.1030167	-22.6949	* <i>Acetosa</i>	<i>vesicaria</i>
119.0064	-22.76375	* <i>Acetosa</i>	<i>vesicaria</i>
704694	7483103	* <i>Bidens</i>	<i>bipinnata</i>
699524	7485555	* <i>Bidens</i>	<i>bipinnata</i>
689580	7481053	* <i>Bidens</i>	<i>bipinnata</i>
684175	7478611	* <i>Bidens</i>	<i>bipinnata</i>
683544	7477512	* <i>Bidens</i>	<i>bipinnata</i>
687529	7479663	* <i>Bidens</i>	<i>bipinnata</i>
686711	7480644	* <i>Bidens</i>	<i>bipinnata</i>
692253	7481752	* <i>Bidens</i>	<i>bipinnata</i>
692254	7482696	* <i>Bidens</i>	<i>bipinnata</i>
689571	7183177	* <i>Bidens</i>	<i>bipinnata</i>
692541	7483077	* <i>Bidens</i>	<i>bipinnata</i>
693164	748262	* <i>Bidens</i>	<i>bipinnata</i>
690689	7484593	* <i>Bidens</i>	<i>bipinnata</i>
692310	7484844	* <i>Bidens</i>	<i>bipinnata</i>
698260	7483584	* <i>Bidens</i>	<i>bipinnata</i>
703779	7483424	* <i>Bidens</i>	<i>bipinnata</i>
698511	7485450	* <i>Bidens</i>	<i>bipinnata</i>
703910	7482615	* <i>Bidens</i>	<i>bipinnata</i>
705253	7482511	* <i>Bidens</i>	<i>bipinnata</i>
703338	7488727	* <i>Bidens</i>	<i>bipinnata</i>
702363	7486273	* <i>Bidens</i>	<i>bipinnata</i>
703824	7495281	* <i>Bidens</i>	<i>bipinnata</i>
706397	7482592	* <i>Bidens</i>	<i>bipinnata</i>
705723	7483076	* <i>Bidens</i>	<i>bipinnata</i>
704694	7483103	* <i>Bidens</i>	<i>bipinnata</i>
119.0819167	-22.64235	* <i>Bidens</i>	<i>bipinnata</i>
118.9932667	-22.76178333	* <i>Bidens</i>	<i>bipinnata</i>
118.9946667	-22.75886667	* <i>Bidens</i>	<i>bipinnata</i>
118.9944	-22.75828333	* <i>Bidens</i>	<i>bipinnata</i>
119.0191333	-22.7556	* <i>Bidens</i>	<i>bipinnata</i>
119.00585	-22.74841667	* <i>Bidens</i>	<i>bipinnata</i>
119.07955	-22.64081667	* <i>Bidens</i>	<i>bipinnata</i>
696900	7482170	* <i>Bidens</i>	<i>bipinnata</i>
697273	7482205	* <i>Bidens</i>	<i>bipinnata</i>
697674	7482389	* <i>Bidens</i>	<i>bipinnata</i>
2243.131	11858.296	* <i>Bidens</i>	<i>bipinnata</i>
705253	7482511	* <i>Cenchrus</i>	<i>ciliaris</i>
715365	7491708	* <i>Cenchrus</i>	<i>ciliaris</i>
119.0382167	-22.69385	* <i>Cenchrus</i>	<i>ciliaris</i>
684175	7478611	* <i>Cenchrus</i>	<i>setiger</i>
2243.91	11852.417	* <i>Cenchrus</i>	<i>setiger</i>
2242.666	11857.858	* <i>Citrullus</i>	<i>colocynthis</i>
689571	7183177	* <i>Flaveria</i>	<i>trinervia</i>
698511	7485450	* <i>Flaveria</i>	<i>trinervia</i>
703338	7488727	* <i>Flaveria</i>	<i>trinervia</i>
699963	7491098	* <i>Flaveria</i>	<i>trinervia</i>
119.0064	-22.76375	* <i>Flaveria</i>	<i>trinervia</i>
119.0062333	-22.76265	* <i>Flaveria</i>	<i>trinervia</i>
118.9932667	-22.76178333	* <i>Flaveria</i>	<i>trinervia</i>

GCS GDA94 Latitude	GCS GDA94 Longitude	Genus	Species
118.9946667	-22.75886667	* <i>Flaveria</i>	<i>trinervia</i>
118.9944	-22.75828333	* <i>Flaveria</i>	<i>trinervia</i>
119.00585	-22.74841667	* <i>Flaveria</i>	<i>trinervia</i>
699524	7485555	* <i>Malvastrum</i>	<i>americanum</i>
684175	7478611	* <i>Malvastrum</i>	<i>americanum</i>
683544	7477512	* <i>Malvastrum</i>	<i>americanum</i>
692254	7482696	* <i>Malvastrum</i>	<i>americanum</i>
689571	7183177	* <i>Malvastrum</i>	<i>americanum</i>
693164	748262	* <i>Malvastrum</i>	<i>americanum</i>
702363	7486273	* <i>Malvastrum</i>	<i>americanum</i>
703824	7495281	* <i>Malvastrum</i>	<i>americanum</i>
704694	7483103	* <i>Malvastrum</i>	<i>americanum</i>
119.0064	-22.76375	* <i>Malvastrum</i>	<i>americanum</i>
118.9944	-22.75828333	* <i>Malvastrum</i>	<i>americanum</i>
119.00585	-22.74841667	* <i>Malvastrum</i>	<i>americanum</i>
2245.115	11851.291	* <i>Malvastrum</i>	<i>americanum</i>
2243.131	11858.296	* <i>Malvastrum</i>	<i>americanum</i>
690689	7484593	* <i>Setaria</i>	<i>verticillata</i>
698511	7485450	* <i>Setaria</i>	<i>verticillata</i>
703338	7488727	* <i>Setaria</i>	<i>verticillata</i>
702363	7486273	* <i>Setaria</i>	<i>verticillata</i>
697614	7482480	* <i>Setaria</i>	<i>verticillata</i>
2243.131	11858.296	* <i>Setaria</i>	<i>verticillata</i>
702363	7486273	* <i>Sigesbeckia</i>	<i>orientalis</i>
119.07595	-22.63996667	* <i>Sigesbeckia</i>	<i>orientalis</i>
119.07955	-22.64081667	* <i>Sigesbeckia</i>	<i>orientalis</i>
703779	7483424	* <i>Sonchus</i>	<i>oleraceus</i>
698557	7486324	* <i>Sonchus</i>	<i>oleraceus</i>
702363	7486273	* <i>Sonchus</i>	<i>oleraceus</i>
715865	7489325	* <i>Sonchus</i>	<i>oleraceus</i>
708768	7494980	* <i>Sonchus</i>	<i>oleraceus</i>
119.0819167	-22.64235	* <i>Sonchus</i>	<i>oleraceus</i>
119.0274167	-22.64461667	* <i>Sonchus</i>	<i>oleraceus</i>
119.0192	-22.6447	* <i>Sonchus</i>	<i>oleraceus</i>
2243.221	11858.329	* <i>Sonchus</i>	<i>oleraceus</i>
699524	7485555	* <i>Tribulus</i>	<i>terrestris</i>
684175	7478611	* <i>Vachellia</i>	<i>farnesiana</i>
687802	7481336	* <i>Vachellia</i>	<i>farnesiana</i>
689571	7183177	* <i>Vachellia</i>	<i>farnesiana</i>
703779	7483424	* <i>Vachellia</i>	<i>farnesiana</i>
698511	7485450	* <i>Vachellia</i>	<i>farnesiana</i>
702363	7486273	* <i>Vachellia</i>	<i>farnesiana</i>
704694	7483103	* <i>Vachellia</i>	<i>farnesiana</i>
118.9946667	-22.75886667	* <i>Vachellia</i>	<i>farnesiana</i>
118.9942667	-22.75915	* <i>Vachellia</i>	<i>farnesiana</i>
119.08595	-22.69701667	* <i>Vachellia</i>	<i>farnesiana</i>
2245.115	11851.291	* <i>Vachellia</i>	<i>farnesiana</i>
2244.317	11851.721	* <i>Vachellia</i>	<i>farnesiana</i>

APPENDIX 10

Site sheets summarising raw data for quadrats
within the study area

Site	Site AY001
Date	22/05/2011
Recorder	PS/GH
Photo	AY01
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697230
Northing	7483571
Habitat	Drainage Depression (DDE)
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Ironstone (cobbles, pebbles)
% Leaves:Logs	1.5:2
Vegetation Condition	Excellent
Disturbance Type	Access track nearby; Rail nearby
Fire Age	Moderate
Vegetation	<i>Eucalyptus</i> Open Mallee

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	2-3
<i>Acacia</i>	<i>monticola</i>		5	2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	6	2-3
<i>Androcalva</i>	<i>luteiflora</i>		1	3
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	2-3
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>gamophylla</i>		12	4-5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	0.5
<i>Gompholobium</i>	<i>oreophilum</i>		4	0.4
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.5
<i>Indigofera</i>	<i>monophylla</i>		<1	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		2	4
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.8
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	1.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Sida</i>	<i>arenicola</i>		<1	0.5
<i>Triodia</i>	<i>pungens</i>		10	0.7
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		10	0.8

Site	Site AY002
Date	22/05/2011
Recorder	JB/EP
Photo	JB510, 511
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698451
Northing	7494661
Habitat	Hillslope (HSL)
Aspect	Gently Inclined (GE) (1°46' to 5°45')
Slope	350°
Soil	Silty loam
Rock Type	Calcrete (outcropping, cobbles, pebbles) with Scattered Ironstone (pebbles)
% Leaves:Logs	<1:2.5
Vegetation Condition	Excellent
Disturbance Type	Recent fire (young 1-2 yrs); Access road nearby; Livestock
Fire Age	Recent
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		0.5	0.5-3
<i>Acacia</i>	<i>subtiliformis</i>		1.5	0.5-1
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.5
<i>Androcalva</i>	<i>luteiflora</i>		1	0.5-1
<i>Corchorus</i>	<i>lasiocarpus</i>		0.5	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	6
<i>Dodonaea</i>	<i>lanceolata</i>		<1	0.5-1
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.2-0.3
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	6.5	1-2
<i>Eucalyptus</i>	<i>xerothermica</i>		1	1-2
<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)		<1	0.05-0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	1-2
<i>Heliotropium</i>	<i>chrysocarpum</i>		0.5	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Polygala</i>	<i>isingii</i>		<1	0.02
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>clementii</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.2
<i>Salsola</i>	<i>australis</i>		0.5	0.2
<i>Santalum</i>	<i>lanceolatum</i>		<1	1-2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5-1
<i>Themeda</i>	<i>triandra</i>		<1	0.7

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		15	0.5-1

Site	Site AY003
Date	22/05/2011
Recorder	PS/GH
Photo	AY03
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699524
Northing	7484221
Habitat	Hillcrest (HCR)
Aspect	40°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Calcrete (cobbles, pebbles) with Quartz intrusions
% Leaves:Logs	<1:05
Vegetation Condition	Excellent
Disturbance Type	Access track nearby; Rail nearby; Powerlines nearby
Fire Age	
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
Acacia	adoxa	var. adoxa	2.5	0.4
Acacia	bivenosa		9	3-4
Acacia	hilliana		3	0.4
Acacia	subtiliformis		<1	1.2
Capparis	lasiantha		<1	0.5
Codonocarpus	cotinifolius		<1	0.5
Corymbia	hamersleyana		1.5	4-5
Eriachne	aristidea		<1	0.2
Eriachne	pulchella	subsp. dominii	<1	0.25
Eriachne	pulchella		<1	0.1
Eucalyptus	leucophloia	subsp. luecophloia	3	4-6
Eucalyptus	xerothermica		1	4-6
Goodenia	muelleriana		<1	0.5
Hakea	chordophylla		0.5	3-6
Indigofera	monophylla		<1	0.4
Jasminum	didymum	subsp. lineare	<1	0.6
Paspalidium	clementii		<1	0.4
Ptilotus	astrolasius		<1	0.3
Ptilotus	clementii		<1	0.4
Ptilotus	nobilis		<1	0.4
Senna	artemisioides	subsp. luerssenii	<1	1.2
Senna	artemisioides	subsp. oligophylla	<1	0.3
Senna	glutinosa	subsp. glutinosa	<1	1
Solanum	lasiophyllum		<1	0.4
Themeda	triandra		<1	0.6
Tribulus	sp. indet		<1	0.1
Triodia	wiseana		18	1

Site	Site AY004
Date	22/05/2011
Recorder	JB/EP
Photo	JB520
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697511
Northing	7484575
Habitat	Hillslope (HSL)
Aspect	350°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Ironstone (fine pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire in past (Mod 2-5 yrs); Close to Yandi access road; Possible livestock
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	1-1.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	1-2
<i>Acacia</i>	<i>bivenosa</i>		2.5	2-4
<i>Acacia</i>	<i>dictyophleba</i>		<1	1-2
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2-3
<i>Acacia</i>	<i>pachyacra</i>		<1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	2
<i>Acacia</i>	<i>synchronicia</i>		<1	1
<i>Acacia</i>	<i>tenuissima</i>		1	1-2
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.5-1
<i>Acacia</i>	<i>subtiliformis</i>		<1	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.5
<i>Bonamia</i>	<i>erecta</i>		<1	0.4
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.7
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		2	3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	5-7
<i>Eulalia</i>	<i>aurea</i>		<1	0.5-1
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	1-2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	0.25	0.5
<i>Mollugo</i>	<i>molluginea</i>		<1	0.1
<i>Pluchea</i>	<i>tetranthera</i>		<1	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2-0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	0.5-0.6
<i>Triodia</i>	<i>wiseana</i>		4	0.4

Site	Site AY005
Date	22/05/2011
Recorder	PS/GH
Photo	AY05
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7484336
Northing	700418
Habitat	Hillslope (HSL)
Aspect	90°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Ironstone (pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Access track nearby; Rail nearby; Powerlines nearby
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		5	1-2
<i>Acacia</i>	<i>bivenosa</i>		3	2-4
<i>Acacia</i>	<i>synchronicia</i>		1	0.3
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Calytrix</i>	<i>carinata</i>		<1	0.3
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	2
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	4-6
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Eriachne</i>	<i>pulchella</i>		<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		2	2-4
<i>Euphorbia</i>	<i>schultzii</i>		<1	Cr
<i>Goodenia</i>	<i>microptera</i>		<1	0.05
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.15
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.3
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Streptoglossa</i>	cf. <i>bubakii</i>		<1	0.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		10	0.6
<i>Triodia</i>	<i>wiseana</i>		8	1.2

Site	Site AY006
Date	22/05/2011
Recorder	JB/EP
Photo	JB524
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7485555
Northing	699524
Habitat	Levee (LEV)
Aspect	320°
Slope	Level (0° to 0°35')
Soil	Loamy Sand
Rock Type	Mixed Ironstone; Chert (cobbles, fine pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Very Good
Disturbance Type	Access road Yandi nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.1
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.5
<i>*Tribulus</i>	<i>terrestris</i>		<1	Cr
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5-1
<i>Acacia</i>	<i>bivenosa</i>		<1	1-1.5
<i>Acacia</i>	<i>synchronicia</i>		<1	0.5-1
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1-2
<i>Acacia</i>	<i>inaequilatera</i>		1.5	23
<i>Acacia</i>	<i>macraneura</i>		1	7-8
<i>Alternanthera</i>	<i>nana</i>		<1	0.1
<i>Aristida</i>	<i>contorta</i>		1	0.25
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.3
<i>Bonamia</i>	sp. Dampier (A.A. Mitchell PRP 217)		<1	0.1
<i>Chrysopogon</i>	<i>fallax</i>		1	1.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.7
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>caerulescens</i>		1.5	0.25
<i>Enneapogon</i>	<i>polyphyllus</i>		0.5	0.25
<i>Enneapogon</i>	<i>robustissimus</i>		<1	0.5-1
<i>Eremophila</i>	<i>longifolia</i>		<1	1.5-2.5
<i>Eriachne</i>	<i>mucronata</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eriachne</i>	<i>tenuiculmis</i>		<1	0.4
<i>Eucalyptus</i>	<i>xerothematica</i>		1	4-6
<i>Eulalia</i>	<i>aurea</i>		1	0.5-1
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.05

Genus	Species	subsp./var.	% Cover	Height
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.2
<i>Gossypium</i>	<i>australe</i>		0.5	0.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	1	2-5
<i>Indigofera</i>	<i>monophylla</i>		<1	00.25
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		3	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5
<i>Sclerolaena</i>	<i>cornishiana</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	1-2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	4	0.5
<i>Senna</i>	<i>stricta</i>		1.5	1-2
<i>Sida</i>	<i>echinocarpa</i>		<1	0.2
<i>Sida</i>	sp. indet		<1	0.25
<i>Sporobolus</i>	<i>australasicus</i>		0.5	0.15
<i>Tribulus</i>	<i>hirsutus</i>		0.25	Cr
<i>Triodia</i>	<i>longiceps</i>		<1	1.5
<i>Triodia</i>	<i>wiseana</i>		40	0.2

Site	Site AY007
Date	22/05/2011
Recorder	PS/GH
Photo	AY07
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7481053
Northing	689580
Habitat	Drainage line
Aspect	10°
Slope	Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Ironstone (cobbles, pebbles)
% Leaves:Logs	1:1.5
Vegetation Condition	Very Good
Disturbance Type	Livestock; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Themeda</i> Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.3
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2
<i>Acacia</i>	<i>pachyacra</i>		<1	1
<i>Acacia</i>	<i>pyrifolia</i>		<1	0.7
<i>Acacia</i>	<i>aptaneura</i>		2	0.7
<i>Acacia</i>	<i>tetragonophylla</i>		1	1
<i>Alternanthera</i>	<i>nana</i>		0.5	0.3
<i>Aristida</i>	<i>contorta</i>		<1	0.4
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Capparis</i>	<i>lasiantha</i>		<1	0.3
<i>Chrysopogon</i>	<i>fallax</i>		6	1.5
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Cymbopogon</i>	<i>obtectus</i>		<1	1
<i>Duperreya</i>	<i>commixta</i>		1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		2	0.4
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		2	2-4
<i>Eucalyptus</i>	<i>xerothermica</i>		<1	6-8
<i>Eulalia</i>	<i>aurea</i>		8	0.9
<i>Euphorbia</i>	<i>schultzii</i>		<1	Cr
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.2
<i>Goodenia</i>	<i>stellata</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.4
<i>Indigofera</i>	<i>georgei</i>		<1	1
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Indigofera</i>	<i>monophylla</i>		<1	0.5
<i>Isotropis</i>	<i>forrestii</i>		<1	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	1	0.8
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		3	0.4
<i>Perotis</i>	<i>rara</i>		<1	0.1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		0.5	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>artemisioides</i>	8	0.6
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	0.6
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	2	0.7
<i>Senna</i>	<i>notabilis</i>		<1	0.3
<i>Setaria</i>	<i>surgens</i>		<1	0.7
<i>Sida</i>	<i>fibulifera</i>		<1	-
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.6
<i>Sporobolus</i>	<i>australasicus</i>		1	0.25
<i>Themeda</i>	<i>triandra</i>		20	1.4
<i>Triodia</i>	<i>pungens</i>		<1	0.5
<i>Triodia</i>	<i>wiseana</i>		2	1

Site	Site AY008
Date	22/05/2011
Recorder	JB/EP
Photo	JB525
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700393
Northing	7485573
Habitat	Hillslope (HSL)
Aspect	0°
Slope	Gently Inclined (GE) 1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Red Ironstone; Dolerite (outcrops, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Access track; Fire (Young 1-2 yrs); Weeds
Fire Age	Recent
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1-3
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.35
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		<1	7
<i>Enneapogon</i>	<i>caerulescens</i>		8.5	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	1	0.1
<i>Haloragis</i>	<i>gossei</i>		<1	0.1
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Polygala</i>	<i>isingii</i>		<1	0.05
<i>Portulaca</i>	<i>oleracea</i>		0.25	0.05
<i>Ptilotus</i>	<i>aervoides</i>		<1	Cr
<i>Ptilotus</i>	<i>auriculifolius</i>		1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.35
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	3.5	0.4
<i>Sida</i>	<i>echinocarpa</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		0.5	0.15
<i>Tribulus</i>	<i>hirsutus</i>		2.5	0.1
<i>Triodia</i>	<i>brizoides</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		12	0.3

Site	Site AY009
Date	23/05/2011
Recorder	PS/GH
Photo	AY09
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7476486
Northing	683300
Habitat	Plain (PLA)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam
Rock Type	Brown Calcrete; Ironstone (pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Powerline nearby; Livestock
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1-2
<i>Acacia</i>	<i>bivenosa</i>		1	2-3
<i>Acacia</i>	<i>dictyophleba</i>		0.5	1-2
<i>Acacia</i>	<i>inaequilatera</i>		2.5	2-4
<i>Acacia</i>	<i>pachyacra</i>		1	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	4
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	6
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	1.5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eucalyptus</i>	<i>xerothermica</i>		2	2-6
<i>Euphorbia</i>	<i>coghlanii</i>		<1	Cr
<i>Hakea</i>	<i>chordophylla</i>		1	2-4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.8
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	<1	0.5
<i>Themeda</i>	<i>triandra</i>		0.5	1
<i>Triodia</i>	<i>wiseana</i>		80	1.5

Site	Site AY010/2
Date	25/07/2012
Recorder	JB/EP, JB/JW
Photo	JB534, 535: 1020316, DSC726
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7478110
Northing	684992
Habitat	Hillslope (HSL)
Aspect	Gently Inclined (GE) (1°46' to 5°45')
Slope	70°
Soil	Silty loam
Rock Type	Red Ironstone (pebbles, scattered cobbles)
% Leaves:Logs	0.5-0.5
Vegetation Condition	Excellent
Disturbance Type	Yandi main access bitumen road nearby; Powerline easement; Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5
<i>Acacia</i>	<i>aptaneura</i>		<1	2
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5
<i>Acacia</i>	<i>effusa</i>		2.5	0.5-1
<i>Acacia</i>	<i>hilliana</i>		3.5	0.3-0.4
<i>Acacia</i>	<i>inaequilatera</i>		2	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.7
<i>Acacia</i>	<i>tenuissima</i>		<1	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1
<i>Cleome</i>	<i>viscosa</i>		<1	0.1
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	<1	4-8
<i>Corymbia</i>	<i>hamersleyana</i>		<1	3-3.5
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4.5	10
<i>Fimbristylis</i>	<i>dichotoma</i>		<1	0.15
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Hakea</i>	<i>chordophylla</i>		1.25	1-3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.01
<i>Ptilotus</i>	<i>obovatus</i>		<1	
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.6
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3-0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1-1.5
<i>Sida</i>	<i>arenicola</i>		<1	0.3
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	0.7
<i>Triodia</i>	<i>wiseana</i>		40	1.2

Site	Site AY011
Date	23/05/2011
Recorder	PS/GH
Photo	AY011
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7474429
Northing	685836
Habitat	Hillslope (HSL)
Aspect	350°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>hilliana</i>		8	0.3
<i>Acacia</i>	<i>inaequilatera</i>		4	2-4
<i>Acacia</i>	<i>pachyacra</i>		<1	0.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.3
<i>Acacia</i>	<i>bivenosa</i>		<1	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	1.5
<i>Corchorus</i>	<i>lasiocarpus</i>		1.5	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		3	4-6
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	8-10
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	2.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.3
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.2
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Ptilotus</i>	<i>rotundifolius</i>		0.5	1
<i>Schizachyrium</i>	<i>fragile</i>		0.5	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1	1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote)		<1	0.3
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Trachymene</i>	<i>oleracea</i>		<1	0.05
<i>Tribulus</i>	<i>suberosus</i>		<1	0.6
<i>Triodia</i>	<i>pungens</i>		16	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		2	0.4
<i>Triumfetta</i>	<i>leptacantha</i>		<1	0.2

Site	Site AY012
Date	23/05/2011
Recorder	JB/EP
Photo	JB536, 537
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7478611
Northing	684175
Habitat	Drainage Depression (DDE)
Aspect	10°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Red Sandy loam
Rock Type	Mixed- Ironstone; Chert; Riverine gravels (cobbles, pebbles)
% Leaves:Logs	7:3
Vegetation Condition	Good
Disturbance Type	Livestock; Weeds
Fire Age	Old
Vegetation	<i>Themeda</i> Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.15
<i>*Cenchrus</i>	<i>setiger</i>		0.5	1
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.5
<i>*Vachellia</i>	<i>farnesiana</i>		<1	2.2
<i>Acacia</i>	<i>dictyophleba</i>		2	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		2	2-4
<i>Acacia</i>	<i>pyrifolia</i>		8	1-2.5
<i>Acacia</i>	<i>tenuissima</i>		1	2-2.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	6.5	2-3
<i>Acacia</i>	<i>bivenosa</i>		5	2-3
<i>Alternanthera</i>	<i>nana</i>		<1	0.1
<i>Atalaya</i>	<i>hemiglauca</i>		1	2-4
<i>Boerhavia</i>	sp. indet		1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		<1	1
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Corchorus</i>	<i>tectus</i>		<1	0.35
<i>Corymbia</i>	<i>hamersleyana</i>		15	8-15
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		8	1-1.5
<i>Digitaria</i>	<i>ctenantha</i>		<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>lindleyanus</i>		<1	0.35
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Enneapogon</i>	<i>robustissimus</i>		<1	0.5-1
<i>Enteropogon</i>	<i>ramosus</i>		0.5	1.3
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.2
<i>Eremophila</i>	<i>longifolia</i>		<1	1-2.5
<i>Eriachne</i>	<i>tenuiculmis</i>		<1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Eucalyptus</i>	<i>xerothermica</i>		12	6-15
<i>Eulalia</i>	<i>aurea</i>		25	1.1
<i>Euphorbia</i>	<i>coghlani</i>		<1	0.2
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.2
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.2
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Gossypium</i>	<i>robinsonii</i>		2	1-2
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	1.5	4-8
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.15
<i>Keraudrenia</i>	cf. <i>nephrosperma</i>		<1	0.4
<i>Peripleura</i>	<i>arida</i>		<1	0.5
<i>Perotis</i>	<i>rara</i>		<1	0.1
<i>Petalostylis</i>	<i>labicheoides</i>		8	2-4
<i>Phyllanthus</i>	<i>maderaspatensis</i>		1	0.4
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Ptilotus</i>	<i>obovatus</i>		0.5	0.4
<i>Rhynchosia</i>	<i>minima</i>		<1	CI
<i>Rostellularia</i>	<i>adsensens</i>	var. <i>latifolia</i>	<1	0.25
<i>Schizachyrium</i>	<i>fragile</i>		<1	2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	3	0.4-1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5-1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>X sturtii</i>	0.5	1-1.5
<i>Setaria</i>	<i>dielsii</i>		<1	0.4
<i>Setaria</i>	<i>surgens</i>		<1	0.4
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1-1.5
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		1	0.2
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	3.5	0.5
<i>Themeda</i>	<i>triandra</i>		35	0.5-1
<i>Ventilago</i>	<i>viminalis</i>		1.5	2-4

Site	Site AY013
Date	23/05/2011
Recorder	PS/GH
Photo	AY013
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7475354
Northing	686208
Habitat	Drainage Depression (DDE)
Aspect	350°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	Livestock; Old fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Grevillea</i> High Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		1	0.6
<i>Acacia</i>	<i>pyrifolia</i>		<1	2-5
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>monticola</i>		2	1-2.5
<i>Aristida</i>	<i>burbridgeae</i>		<1	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	1
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		2	6-8
<i>Cymbopogon</i>	<i>ambiguus</i>		0.5	1
<i>Eremophila</i>	<i>longifolia</i>		<1	1.2
<i>Eriachne</i>	<i>mucronata</i>		2	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	6-8
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.3
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Gossypium</i>	<i>robinsonii</i>		2	2-3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	6	1-3
<i>Hakea</i>	<i>chordophylla</i>		<1	1
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		1.5	0.5
<i>Indigofera</i>	<i>monophylla</i>		1	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.8
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	8	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.8
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.7
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.3
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Stylobasium</i>	<i>spathulatum</i>		<1	1-2
<i>Tephrosia</i>	<i>rosea</i>	var. <i>Fortescue creeks</i> (M.I.H. Brooker 2186)	5	0.4
<i>Themeda</i>	<i>triandra</i>		4	0.7
<i>Trachymene</i>	<i>oleracea</i>		<1	0.05
<i>Triodia</i>	<i>pungens</i>		8	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		3	0.4

Site	Site AY014
Date	23/05/2011
Recorder	JB/EP
Photo	JB542
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7477512
Northing	683544
Habitat	Drainage Depression (DDE)
Aspect	110°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Orange Clay loam
Rock Type	Ironstone (very scattered pebble)
% Leaves:Logs	3:8
Vegetation Condition	Good
Disturbance Type	Weeds; Livestock
Fire Age	Old
Vegetation	<i>Acacia</i> Low Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		8	0.3
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.3
<i>Acacia</i>	<i>aptaneura</i>		60	8-10
<i>Acacia</i>	<i>bivenosa</i>		0.5	2.5
<i>Alternanthera</i>	<i>nana</i>		<1	0.1
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1.3
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Bothriochloa</i>	<i>erwartiana</i>		<1	1-1.2
<i>Chrysopogon</i>	<i>fallax</i>		5	1-1.3
<i>Convolvulus</i>	<i>clementii</i>		<1	Cr
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Dicanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	<1	0.15
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.1
<i>Eremophila</i>	<i>lanceolata</i>		1	0.2
<i>Eremophila</i>	<i>longifolia</i>		<1	1-2
<i>Eriachne</i>	<i>mucronata</i>		<1	0.5
<i>Eucalyptus</i>	<i>xerothermica</i>		1	8
<i>Eulalia</i>	<i>aurea</i>		<1	0.5-1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.1
<i>Goodenia</i>	<i>prostrata</i>		<1	Cr
<i>Gossypium</i>	<i>robinsonii</i>		<1	3
<i>Nicotiana</i>	<i>occidentalis</i>		<1	0.3
<i>Perotis</i>	<i>rara</i>		<1	0.1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.2
<i>Ptilotus</i>	<i>obovatus</i>		1.5	0.9
<i>Senna</i>	<i>notabilis</i>		<1	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Spartothamnella</i>	<i>teucriflora</i>		<1	0.5-1
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.05
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Themeda</i>	<i>triandra</i>		<1	1

Site	Site AY015
Date	23/05/2011
Recorder	PS/GH
Photo	AY015
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7475527
Northing	685578
Habitat	Plain (PLA)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	1:2
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	<i>Acacia</i> Open Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1
<i>Acacia</i>	<i>atkinsiana</i>		15	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Acacia</i>	<i>sibirica</i>		<1	2
<i>Amphipogon</i>	<i>sericeus</i>		1.5	0.5
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	1
<i>Brunonia</i>	<i>australis</i>		<1	0.05
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.4
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	5	6-10
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		3	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		2	2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	4-8
<i>Hakea</i>	<i>chordophylla</i>		0.5	1-4
<i>Heliotropium</i>	<i>pachyphyllum</i>		<1	0.3
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		1.5	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	3	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		1.5	0.3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.25

Genus	Species	subsp./var.	% Cover	Height
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5
<i>Sida</i>	<i>arenicola</i>		1	0.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Themeda</i>	<i>triandra</i>		<1	1.1
<i>Triodia</i>	<i>pungens</i>		3	0.8
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		10	0.6

Site	Site AY016
Date	23/05/2011
Recorder	JB/EP
Photo	JB547
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7477482
Northing	684388
Habitat	Footslope (FOO)
Aspect	320°
Slope	Gentle
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	3:1.5
Vegetation Condition	Very Good
Disturbance Type	Powerline easement nearby; Access track nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		2	2-3
<i>Acacia</i>	<i>aptaneura</i>		0.5	2-3
<i>Acacia</i>	<i>aptaneura</i>		2.5	5
<i>Acacia</i>	<i>atkinsiana</i>		2.5	2
<i>Acacia</i>	<i>bivenosa</i>		1	2-3
<i>Acacia</i>	<i>elachantha</i>		3	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2
<i>Acacia</i>	<i>pyrifolia</i>		<1	3
<i>Acacia</i>	<i>rhodophloia</i> (hybrid)		10	2-3
<i>Acacia</i>	<i>sibirica</i>		<1	2-3
<i>Acacia</i>	<i>tenuissima</i>		1	3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.35
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5-1
<i>Corymbia</i>	<i>hamersleyana</i>		2	6
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.65
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.4
<i>Eremophila</i>	<i>longifolia</i>		<1	0.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	3
<i>Hibiscus</i>	<i>burtonii</i>		<1	1
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.5
<i>Indigofera</i>	<i>monophylla</i>		<1	0.25
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.3
<i>Petalostylis</i>	<i>labicheoides</i>		<1	2.5
<i>Psydrax</i>	<i>sauveleons</i>		<1	1
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.15

Genus	Species	subsp./var.	% Cover	Height
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.15
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Sida</i>	<i>cardiophylla</i>		<1	0.2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Triodia</i>	<i>melvillei</i>		2.5	1.5
<i>Triodia</i>	<i>pungens</i>		8	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		55	0.6

Site	Site AY017
Date	23/05/2011
Recorder	PS/GH
Photo	AY017
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7476706
Northing	684765
Habitat	Plain (PLA)
Aspect	330°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Brown Ironstone (pebbles)
Rock Type	Sandy loam
% Leaves:Logs	<1:2
Vegetation Condition	Excellent
Disturbance Type	Livestock; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.5
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2.5
<i>Amphipogon</i>	<i>sericeus</i>		0.25	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.6
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.15
<i>Bonamia</i>	<i>erecta</i>		1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eucalyptus</i>	<i>gamophylla</i>		4	3-5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	6-10
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.5
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.2
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.25
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Schizachyrium</i>	<i>fragile</i>		0.5	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	0.8
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.8
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		1	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.3
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Triodia</i>	<i>pungens</i>		4	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		9	0.6

Site	Site AY018
Date	23/05/2011
Recorder	JB/EP
Photo	JB553
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7479663
Northing	687529
Habitat	Plain (PLA)
Aspect	320°
Slope	Level (LE) (0° to 0°35')
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	1.5:5
Vegetation Condition	Very Good
Disturbance Type	Access Road Yandi; Livestock
Fire Age	Old
Vegetation	<i>Acacia</i> Low Open Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.15
<i>Abutilon</i>	<i>otocarpum</i>		0.5	0.2
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.4
<i>Acacia</i>	<i>aptaneura</i>		5.5	1.5-8
<i>Acacia</i>	<i>aptaneura</i>		<1	2-6
<i>Acacia</i>	<i>inaequilatera</i>		<1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.4
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Capparis</i>	<i>lasiantha</i>		<1	0.2
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		<1	1
<i>Cleome</i>	<i>viscosa</i>		<1	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.3
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.8
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.25
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>latrobei</i>	<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	1-2
<i>Eucalyptus</i>	<i>xerothermica</i>		2.5	2-8
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.05
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.15

Genus	Species	subsp./var.	% Cover	Height
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.4
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Heliotropium</i>	<i>heteranthum</i>		<1	0.05
<i>Hibiscus</i>	<i>burtonii</i>		<1	0.4
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.6
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.5
<i>Indigofera</i>	<i>georgei</i>		<1	0.1
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.05
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.15
<i>Melhania</i>	<i>oblongifolia</i>		<1	0.25
<i>Nicotiana</i>	<i>rosulata</i>	subsp. <i>rosulata</i>	<1	0.3
<i>Paspalidium</i>	<i>clementii</i>		<1	0.25
<i>Peripleura</i>	<i>hispidula</i>		<1	0.3
<i>Peripleura</i>	<i>arida</i>		<1	0.3
<i>Polygala</i>	<i>glaucifolia</i>		<1	0.05
<i>Portulaca</i>	<i>oleracea</i>		<1	0.02
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.2
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.2
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Sclerolaena</i>	<i>cornishiana</i>		<1	0.2
<i>Senna</i>	<i>notabilis</i>		0.5	0.2
<i>Sida</i>	<i>fibulifera</i>		<1	0.15
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.6
<i>Solanum</i>	<i>phlomoides</i>		<1	0.2
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.05
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Streptoglossa</i>	<i>decurrens</i>		<1	0.3
<i>Streptoglossa</i>	sp. indet		<1	0.3
<i>Themeda</i>	<i>triandra</i>		<1	0.7
<i>Triodia</i>	<i>pungens</i>		1	0.5
<i>Triodia</i>	<i>wiseana</i>		0.5	0.6
<i>Velleia</i>	<i>connata</i>		<1	0.3

Site	Site AY019
Date	24/05/2011
Recorder	PS/GH
Photo	AY019
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7477313
Northing	685206
Habitat	Hillslope (HSL)
Aspect	290°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Livestock; Old fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		4	1-2
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2
<i>Acacia</i>	<i>hilliana</i>		1	0.3
<i>Acacia</i>	<i>inaequilatera</i>		0.5	2.5
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2	4-6
<i>Corymbia</i>	<i>hamersleyana</i>		1	4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	6	4-6
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	0.8
<i>Hakea</i>	<i>chordophylla</i>		1	1-3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.5
<i>Ptilotus</i>	<i>rotundifolius</i>		0.5	0.8
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1.5	1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.8
<i>Sida</i>	<i>arenicola</i>		<1	0.15
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		1	0.7
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		40	0.7

Site	Site AY020
Date	23/05/2011
Recorder	JB/EP
Photo	JB554
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7478580
Northing	686335
Habitat	Plain (PLA)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	0.5:<1
Vegetation Condition	Excellent
Disturbance Type	Powerline easements; Yandi main access nearby; HI rail line nearby; Livestock; Rehabilitation area
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>cunninghamii</i>		<1	0.3
<i>Acacia</i>	<i>bivenosa</i>		2	2-3
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1-2
<i>Acacia</i>	<i>pachyacra</i>		1	2-3
<i>Acacia</i>	<i>rhodophloia</i>		<1	1-2
<i>Anthobolus</i>	<i>leptomerioides</i>		<1	0.5
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5-1
<i>Bonamia</i>	<i>erecta</i>		<1	0.1
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		2.5	3-4
<i>Eucalyptus</i>	<i>xerothermica</i>		3	3-6
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.2
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.2
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	2-3
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Paspalidium</i>	<i>clementii</i>		<1	0.4
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.5
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.25
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	CI
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1.5	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Themeda</i>	<i>triandra</i>		0.5	1.3
<i>Triodia</i>	<i>wiseana</i>		75	1

Site	Site AY021/2
Date	25/07/2012
Recorder	PS/GH: JB/JW
Photo	AY021: DSC728, 1020822
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7476730
Northing	685721
Habitat	Hillslope (HSL)
Aspect	200°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Keraudrenia</i> Low Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1.5
<i>Acacia</i>	<i>hilliana</i>		10	0.3
<i>Acacia</i>	<i>pruinocarpa</i>		+	0.8
<i>Bulbostylis</i>	<i>barbata</i>		+	0.05
<i>Corchorus</i>	<i>lasiocarpus</i>		0.5	0.3
<i>Dodonaea</i>	<i>coriacea</i>		+	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		0.5	0.3
<i>Gossypium</i>	<i>robinsonii</i>		+	1.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-2
<i>Indigofera</i>	<i>monophylla</i>		1	0.25
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	CI
<i>Petalostylis</i>	<i>labicheoides</i>		<1	3
<i>Ptilotus</i>	<i>clementii</i>		+	0.2
<i>Senna</i>	<i>ferraria</i>		+	0.1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		25	0.4

Site	Site AY022
Date	24/05/2011
Recorder	JB/EP
Photo	JB555
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7482393
Northing	688629
Habitat	Hillslope (HSL)
Aspect	290°
Slope	Gently Inclined (GE)
Soil	Loamy Sand
Rock Type	Orange Ironstone; Chert; Calcrete (pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Recent - Young 1yr)
Fire Age	Recent
Vegetation	<i>Triodia</i> Very Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5
<i>Acacia</i>	<i>bivenosa</i>		<1	0.4
<i>Acacia</i>	<i>inaequilatera</i>		1	0.5-1
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		1	4-6
<i>Dysphania</i>	cf. <i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.05
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	4
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	1-2
<i>Eucalyptus</i>	<i>xerothermica</i>		<1	3-5
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.01
<i>Goodenia</i>	<i>microptera</i>		0.5	0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	1-2
<i>Haloragis</i>	<i>gossei</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		<1	0.1
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.2
<i>Ptilotus</i>	<i>clementii</i>		0.5	0.2
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.2
<i>Senna</i>	<i>notabilis</i>		<1	0.15
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Tribulus</i>	<i>hirsutus</i>		6	Cr
<i>Triodia</i>	<i>wiseana</i>		6.5	0.2

Site	Site AY023
Date	24/05/2011
Recorder	PS/GH
Photo	AY023
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7476172
Northing	686678
Habitat	Footslope (FOO)
Aspect	190°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Corymbia</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2	0.3
<i>Acacia</i>	<i>hilliana</i>		2	0.3
<i>Acacia</i>	<i>monticola</i>		4.5	1-2
<i>Acacia</i>	<i>pachyacra</i>		<1	0.3
<i>Acacia</i>	<i>pyrifolia</i>		<1	1
<i>Capparis</i>	<i>lasiantha</i>		<1	0.6
<i>Cassytha</i>	<i>capillaris</i>		<1	Cl
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.1
<i>Corchorus</i>	<i>lasiocarpus</i>		6	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		6	3-7
<i>Cymbopogon</i>	<i>obtectus</i>		<1	1
<i>Dodonaea</i>	<i>lanceolata</i>		1.5	1-2
<i>Eremophila</i>	<i>jucunda</i>	subsp. <i>pulcherrima</i>	<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	2-8
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		1.5	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Gossypium</i>	<i>robinsonii</i>		1.5	1
<i>Grevillea</i>	<i>berryana</i>		1	1
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	7	1-2
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		2	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Petalostylis</i>	<i>labicheoides</i>		4.5	2-3
<i>Ptilotus</i>	<i>clementii</i>		<1	0.3
<i>Santalum</i>	<i>lanceolatum</i>		0.5	1.5
<i>Scaevola</i>	<i>browniana</i>		<1	0.3
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.15
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.3
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.3
<i>Trachymene</i>	<i>oleracea</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		10	0.4

Site	Site AY024
Date	24/05/2011
Recorder	JB/EP
Photo	JB556
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	688801
Northing	7481668
Habitat	Hillslope (HSL)
Aspect	310°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert (pebbles, cobbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Very Good
Disturbance Type	Access tracks through area; Powerline easement nearby
Fire Age	Fire (Recent 1 year)
Vegetation	<i>Triodia</i> Very Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5-1
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5
<i>Acacia</i>	<i>pachyacra</i>		0.5	0.5-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.25	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.25
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	cf. <i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	1-2
<i>Eulalia</i>	<i>aurea</i>		<1	0.5
<i>Goodenia</i>	<i>microptera</i>		0.5	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.4
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		<1	0.1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.25	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		1	0.6
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.2
<i>Senna</i>	<i>notabilis</i>		0.5	0.3
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	<1	0.4
<i>Sida</i>	<i>arenicola</i>		<1	0.1
<i>Sida</i>	<i>cardiophylla</i>		<1	0.4
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>lasiophyllum</i>			0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.1
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.2
<i>Streptoglossa</i>	sp. indet		<1	0.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		2	0.1

Site	Site AY025
Date	24/05/2011
Recorder	PS/GH
Photo	AY025
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	687021
Northing	7476589
Habitat	Gully (GUL)
Aspect	140°
Slope	Steep (ST) (18°1' to 30°)
Soil	Loamy Sand
Rock Type	Brown Ironstone (cliffs, outcrops, boulders, cobbles, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Eucalyptus</i> Low Open Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>pachyacra</i>		<1	0.5
<i>Capparis</i>	<i>lasiantha</i>		<1	0.4
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.1
<i>Cleome</i>	<i>viscosa</i>		<1	0.3
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.3
<i>Corymbia</i>	<i>ferriticola</i>		1	2-3
<i>Corymbia</i>	<i>hamersleyana</i>		3	4-7
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Cymbopogon</i>	<i>ambiguus</i>		3	1.2
<i>Dodonaea</i>	<i>pachyneura</i>		<1	1
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	3-8
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.3
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.2
<i>Ficus</i>	<i>brachypoda</i>		<1	0.2
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Glycine</i>	<i>canescens</i>		<1	Cl
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.6
<i>Gomphrena</i>	<i>cunninghamii</i>		1.5	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Gossypium</i>	<i>robinsonii</i>		2	1-2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	3	1-2
<i>Indigofera</i>	<i>monophylla</i>		1	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Paraneurachne</i>	<i>muelleri</i>		1.5	0.4
<i>Paspalidium</i>	<i>clementii</i>		<1	0.3
<i>Peripleura</i>	<i>virgata</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Petalostylis</i>	<i>labicheoides</i>		2	2-3
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.4
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.5
<i>Ptilotus</i>	<i>obovatus</i>		0.5	0.5
<i>Rhodanthe</i>	<i>margarethae</i>		<1	0.1
<i>Santalum</i>	<i>lanceolatum</i>		2	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		1	0.3
<i>Themeda</i>	<i>triandra</i>		6	0.8
<i>Trachymene</i>	<i>oleracea</i>		1	0.3
<i>Triodia</i>	<i>wiseana</i>		4	0.3
<i>Triodia</i>	<i>pungens</i>		4	0.8

Site	Site AY026
Date	24/05/2011
Recorder	JB/EP
Photo	JB558
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	687802
Northing	7481336
Habitat	Drainage Depression (DDE)
Aspect	90°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Light clay
Rock Type	Brown Calcrete (scattered pebbles, cobbles, gravels)
% Leaves:Logs	3:3
Vegetation Condition	Very Good
Disturbance Type	Livestock - heavily grazed; Access track nearby; Fire (Recent 1 yr); Weeds
Fire Age	Recent
Vegetation	<i>Eucalyptus</i> Low Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Vachellia</i>	<i>farnesiana</i>		<1	0.5-1
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5
<i>Acacia</i>	<i>pyrifolia</i>		<1	0.5-1
<i>Acacia</i>	<i>macraneura</i>		7	3-8
<i>Blumea</i>	<i>tenella</i>		<1	0.15
<i>Bothriochloa</i>	<i>erwartiana</i>		<1	0.4
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		2	1
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Dicanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	<1	0.25
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eragrostis</i>	<i>cumingii</i>		0.5	0.1
<i>Eremophila</i>	<i>lanceolata</i>		<1	0.35
<i>Eucalyptus</i>	<i>xerothematica</i>		25	3-8
<i>Eulalia</i>	<i>aurea</i>		15	0.5
<i>Euphorbia</i>	sp. indet		<1	Prost
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.1
<i>Goodenia</i>	<i>prostrata</i>		<1	0.15
<i>Goodenia</i>	<i>stellata</i>		0.5	0.1
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	1.5	1-7
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.2
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.1
<i>Polygala</i>	<i>glaucifolia</i>		<1	0.05
<i>Polymeria</i>	<i>ambigua</i>		0.5	Cr
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	0.3
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Setaria</i>	<i>surgens</i>		<1	0.4
<i>Sida</i>	<i>fibulifera</i>		<1	0.1
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.3
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		0.5	0.2
<i>Streptoglossa</i>	sp. indet		<1	0.1
<i>Themeda</i>	<i>triandra</i>		20	0.5-1
<i>Tragus</i>	<i>australianus</i>		<1	0.2
<i>Triodia</i>	<i>melvillei</i>		<1	1.3
<i>Triodia</i>	<i>wiseana</i>		1.5	0.3

Site	Site AY027
Date	24/05/2011
Recorder	PS/GH
Photo	AY027
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	687257
Northing	7477357
Habitat	Footslope (FOO)
Aspect	0°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1-2
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5
<i>Acacia</i>	<i>bivenosa</i>		<1	0.5
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.3
<i>Acacia</i>	<i>effusa</i>		5	0.5
<i>Acacia</i>	<i>elachantha</i>		<1	1.2
<i>Acacia</i>	<i>hilliana</i>		<1	0.3
<i>Acacia</i>	<i>pachyacra</i>		<1	0.6
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.7
<i>Bonamia</i>	<i>erecta</i>		<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.3
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3	4-8
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.6
<i>Eremophila</i>	<i>longifolia</i>		<1	0.6
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	5-8
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Gossypium</i>	<i>robinsonii</i>		1	1-2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-2

Genus	Species	subsp./var.	% Cover	Height
<i>Hakea</i>	<i>chordophylla</i>		<1	1.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	4	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.05
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.25
<i>Ptilotus</i>	<i>calostachyus</i>		<1	1
<i>Ptilotus</i>	<i>clementii</i>		<1	0.2
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6
<i>Scaevola</i>	<i>acacioides</i>		<1	0.7
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	1	0.8
<i>Sida</i>	<i>arenicola</i>		<1	0.4
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.6
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Tephrosia</i>	<i>rosea</i>	var. <i>Fortescue creeks</i> (M.I.H. Brooker 2186)	<1	0.1
<i>Tephrosia</i>	sp. Cathedral Gorge (F.H. Mollemans 2420)		<1	0.1
<i>Themeda</i>	<i>triandra</i>		<1	0.7
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.6
<i>Triodia</i>	<i>wiseana</i>		1	0.4
<i>Triodia</i>	<i>pungens</i>		2	0.6

Site	Site AY028
Date	24/05/2011
Recorder	JB/EP
Photo	JB559
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	686711
Northing	7480644
Habitat	Plain (PLA)
Aspect	240°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Pale Calcrete (outcrops, cobbles, pebbles)
% Leaves:Logs	1:2
Vegetation Condition	Excellent
Disturbance Type	Near access track; Cattle yards few 100m
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.3
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.25
<i>Acacia</i>	<i>aptaneura</i>		0.5	2-3
<i>Acacia</i>	<i>bivenosa</i>		15	2-4
<i>Acacia</i>	<i>inaequilatera</i>		0.5	2-4
<i>Acacia</i>	<i>pruinocarpa</i>		1	2-4
<i>Acacia</i>	<i>sibirica</i>		<1	0.5-1.5
<i>Androcalva</i>	<i>luteiflora</i>		0.5	1-1.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>parvus</i>	<1	0.15
<i>Corymbia</i>	<i>hamersleyana</i>		1	5-10
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.5
<i>Eremophila</i>	<i>longifolia</i>		<1	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		1.5	3-6
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.15
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	0.5	2.5
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.1
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Ptilotus</i>	<i>clementii</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Salsola</i>	<i>australis</i>		<1	0.4
<i>Sclerolaena</i>	<i>cornishiana</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1.5	0.5-0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.15

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		83	0.5-1.2
* <i>Bidens</i>	<i>bipinnata</i>		<1	0.3
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.25
<i>Acacia</i>	<i>aptaneura</i>		0.5	2-3
<i>Acacia</i>	<i>bivenosa</i>		15	2-4
<i>Acacia</i>	<i>inaequilatera</i>		0.5	2-4
<i>Acacia</i>	<i>pruinocarpa</i>		1	2-4
<i>Acacia</i>	<i>sibirica</i>		<1	0.5-1.5
<i>Androcalva</i>	<i>luteiflora</i>		0.5	1-1.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>parvus</i>	<1	0.15
<i>Corymbia</i>	<i>hamersleyana</i>		1	5-10
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.5
<i>Eremophila</i>	<i>longifolia</i>		<1	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		1.5	3-6
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.15
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	0.5	2.5
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.1
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Ptilotus</i>	<i>clementii</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Salsola</i>	<i>australis</i>		<1	0.4
<i>Sclerolaena</i>	<i>cornishiana</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1.5	0.5-0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.15
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		83	0.5-1.2

Site	Site AY029
Date	24/05/2011
Recorder	PS/GH
Photo	AY029
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	686384
Northing	7477825
Habitat	Plain (PLA)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.3
<i>Acacia</i>	<i>hilliana</i>		1	0.4
<i>Acacia</i>	<i>inaequilatera</i>		2	2-4
<i>Acacia</i>	<i>monticola</i>		<1	2-3
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.2
<i>Aristida</i>	<i>contorta</i>		<1	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	1
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Bonamia</i>	<i>erecta</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.4
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3	4-7
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Enneapogon</i>	<i>lindleyanus</i>		1	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eragrostis</i>	<i>eriopoda</i>		2	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	2-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	6	4-8
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Gossypium</i>	<i>robinsonii</i>		1	1-1.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.6
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.05

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		0.5	0.7
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	1	0.3
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.35
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1.5	1-2
<i>Senna</i>	<i>notabilis</i>		1	0.1
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	<i>cardiophylla</i>		<1	0.4
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Trachymene</i>	<i>oleracea</i>		<1	0.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		15	0.6

Site	Site AY030
Date	24/05/2011
Recorder	JB/EP
Photo	JB561
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	687651
Northing	7480451
Habitat	Hillslope (HSL)
Aspect	0°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:<1
Vegetation Condition	Excellent
Disturbance Type	Powerline line easement; Access tracks; Yandi main access nearby; Survey mark; Cattle yards
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		5	1-2.5
<i>Acacia</i>	<i>aptaneura</i>		<1	1-2
<i>Acacia</i>	<i>atkinsiana</i>		1	1-2
<i>Acacia</i>	<i>bivenosa</i>		0.5	1-2
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2-4
<i>Acacia</i>	<i>pachyacra</i>		<1	2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Acacia</i>	<i>tenuissima</i>		1	2
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eucalyptus</i>	<i>gamophylla</i>		3	2.5-3.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	5-8
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.1
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	3-6
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.25
<i>Indigofera</i>	<i>monophylla</i>		<1	0.15
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.6
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		45	0.5-1
<i>Triodia</i>	<i>wiseana</i>		7	0.5

Site	Site AY031
Date	25/05/2011
Recorder	PS/GH
Photo	AY031
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	688804
Northing	7479328
Habitat	Hillslope (HSL)
Aspect	50°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	1:0.5
Vegetation Condition	Excellent
Disturbance Type	Access track; Adjacent to recent fire
Fire Age	Old to Recent
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		2	1-1.5
<i>Acacia</i>	<i>ayersiana</i>		<1	0.4
<i>Acacia</i>	<i>bivenosa</i>		<1	2-3
<i>Acacia</i>	<i>inaequilatera</i>		<1	3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		6	1-2
<i>Acacia</i>	<i>sibirica</i>		<1	0.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.2
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.5	5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eucalyptus</i>	<i>gamophylla</i>		2	1-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	2-5
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.15
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	2-4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.2
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	1.2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>glaucifolia</i>		<1	0.5
<i>Senna</i>	<i>stricta</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		50	0.6
<i>Triodia</i>	<i>wiseana</i>		10	1

Site	Site AY032
Date	24/05/2011
Recorder	JB/EP
Photo	JB562
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7480934
Northing	688726
Habitat	Plain (PLA)
Aspect	310°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert (pebbles, cobbles)
% Leaves:Logs	<1:3
Vegetation Condition	Very Good
Disturbance Type	Access track; Powerline easement- track through easement; Yandi main access road.
Fire Age	Recent
Vegetation	Aristida Open Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>otocarpum</i>		<1	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	2-3
<i>Acacia</i>	<i>aptaneura</i>		<1	0.5-1
<i>Acacia</i>	<i>atkinsiana</i>		2	2-3
<i>Acacia</i>	<i>tenuissima</i>		<1	2-3
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.2
<i>Aristida</i>	<i>burbridgeae</i>		<1	0.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	10	0.4
<i>Bonamia</i>	<i>erecta</i>		<1	0.3
<i>Brunonia</i>	<i>australis</i>		<1	0.25
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		1.5	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	1	4-7
<i>Digitaria</i>	<i>brownii</i>		<1	0.7
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>glomulifera</i>		<1	0.2
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eriachne</i>	<i>aristidea</i>		<1	0.2
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>gamophylla</i>		1	3-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	6
<i>Goodenia</i>	<i>microptera</i>		2	0.3
<i>Hakea</i>	<i>chordophylla</i>		0.5	3-5
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		0.25	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.2-0.3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	1
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>glaucifolia</i>		<1	0.5
<i>Senna</i>	<i>notabilis</i>		<1	0.3
<i>Sida</i>	<i>arenicola</i>		0.5	0.5-1
<i>Sida</i>	<i>cardiophylla</i>		0.25	0.4
<i>Sida</i>	<i>echinocarpa</i>		<1	1.1
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.3
<i>Tephrosia</i>	<i>sp. Bungaroo Creek</i>		<1	0.3
<i>Themeda</i>	<i>triandra</i>		<1	0.5-1
<i>Triodia</i>	<i>pungens</i>		3	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		2	0.15

Site	Site AY033
Date	25/05/2011
Recorder	PS/GH
Photo	AY033
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	688431
Northing	7478823
Habitat	Hillcrest (HCR)
Aspect	140°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles, minor outcropping)
% Leaves:Logs	1:0.5
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.2
<i>Acacia</i>	<i>atkinsiana</i>		6	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1.7
<i>Acacia</i>	<i>tetragonophylla</i>		<1	2
<i>Aristida</i>	<i>contorta</i>		<1	0.15
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.25	6
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.6
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>mucronata</i>		1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>gamophylla</i>		1	4-6
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	4-6
<i>Hakea</i>	<i>chordophylla</i>		<1	2.5
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Ptilotus</i>	<i>rotundifolius</i>		1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Tribulus</i>	<i>suberosus</i>		<1	0.6
<i>Triodia</i>	<i>wiseana</i>		55	1.2

Site	Site AY034
Date	24/05/2011
Recorder	JB/EP
Photo	JB563
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	689637
Northing	7481846
Habitat	Drainage Depression (DDE)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Chert; Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:4
Vegetation Condition	Very Good
Disturbance Type	Powerline easement in site; Yandi main road access road 200m away; Livestock
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>otocarpum</i>		<1	0.1
<i>Acacia</i>	<i>validinervia</i>		<1	0.5
<i>Acacia</i>	<i>aptaneura</i>		2	4-8
<i>Alternanthera</i>	<i>nana</i>		<1	0.1
<i>Androcalva</i>	<i>luteiflora</i>		<1	0.5
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5-1
<i>Aristida</i>	<i>jerichoensis</i>	var. <i>subspinulifera</i>	<1	0.4
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.1
<i>Chrysopogon</i>	<i>fallax</i>		3	0.5-1
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>glomulifera</i>		<1	0.1
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.1
<i>Eremophila</i>	<i>longifolia</i>		<1	0.5
<i>Eucalyptus</i>	<i>xerothermica</i>		12	4-8
<i>Eulalia</i>	<i>aurea</i>		20	0.5-1
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispidula</i>	<1	0.1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.1
<i>Goodenia</i>	<i>stellata</i>		0.5	0.05
<i>Indigofera</i>	<i>georgei</i>		<1	0.1
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.1
<i>Nicotiana</i>	<i>rosulata</i>	subsp. <i>rosulata</i>	<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.2
<i>Perotis</i>	<i>rara</i>		<1	0.1
<i>Phyllanthus</i>	<i>erwinii</i>		<1	0.1
<i>Portulaca</i>	<i>oleracea</i>		<1	0.0
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Ptilotus</i>	<i>obovatus</i>		1	0.4
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	CI
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	0.4
<i>Senna</i>	<i>notabilis</i>		<1	0.2
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.25
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		1	0.2
<i>Themeda</i>	<i>triandra</i>		6	0.5-1
<i>Vittadinia</i>	sp. Coondewanna Flats (s. Van Leeuwen 4684)		<1	0.1

Site	Site AY035
Date	25/05/2011
Recorder	PS/GH
Photo	AY035
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	689490
Northing	7479022
Habitat	Plain (PLA)
Aspect	
Slope	Level (LE) (0° to 0°35')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1.5
Vegetation Condition	Excellent
Disturbance Type	Livestock; Some senescence
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		2	1-3
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5
<i>Acacia</i>	<i>pruinocarpa</i>		<1	4
<i>Acacia</i>	<i>aptaneura</i>		3	4-8
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>contorta</i>		<1	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3	4-6
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>gamophylla</i>		4	3-5
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	1-2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Psydrax</i>	<i>latifolia</i>		0.25	1.7
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.8
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.3
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	CI
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glaucifolia</i>		<1	1.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.2
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		30	1.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	0.7

Site	Site AY036
Date	25/05/2011
Recorder	JB/EP
Photo	JB564
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	685406
Northing	7478361
Habitat	Plain (PLA)
Aspect	330°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Ironstone (pebbles)
% Leaves:Logs	3:2
Vegetation Condition	Excellent
Disturbance Type	Yandi access road; Access tracks; Livestock
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	2
<i>Acacia</i>	<i>atkinsiana</i>		5	1.5-2.5
<i>Acacia</i>	<i>bivenosa</i>		3.5	2-3
<i>Acacia</i>	<i>inaequilatera</i>		3	2-4
<i>Acacia</i>	<i>pachyacra</i>		<1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	3
<i>Acacia</i>	<i>sibirica</i> (or <i>rhodophloia</i> hybrid)		1.5	2-2.5
<i>Anthobolus</i>	<i>leptomerioides</i>		0.5	1-2
<i>Aristida</i>	<i>burbidgeae</i>		<1	0.8
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Capparis</i>	<i>lasiantha</i>		<1	1
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5-1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eremophila</i>	<i>longifolia</i>		<1	1-2
<i>Eucalyptus</i>	<i>gamophylla</i>		4	3-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	5
<i>Eucalyptus</i>	<i>xerothermica</i>		3.5	4-7
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	0.5	2-5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.2-0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Phyllanthus</i>	<i>erwinii</i>		<1	0.15
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Rhagodia</i>	<i>eremaea</i>		<1	1-2

Genus	Species	subsp./var.	% Cover	Height
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	1	1-2
<i>Triodia</i>	<i>wiseana</i>		80	1.1

Site	Site AY037
Date	25/05/2011
Recorder	PS/GH
Photo	AY037
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	690566
Northing	7481530
Habitat	Plain (PLA)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Very Good
Disturbance Type	Livestock; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5
<i>Acacia</i>	<i>bivenosa</i>		<1	1
<i>Acacia</i>	<i>inaequilatera</i>		2	1-3
<i>Acacia</i>	<i>pachyacra</i>		<1	0.6
<i>Aristida</i>	<i>contorta</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.6
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1.1
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Eucalyptus</i>	<i>gamophylla</i>		4	3-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	6
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.6
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	1.7
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.6
<i>Ptilotus</i>	<i>rotundifolius</i>		2	0.8-1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.2
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	<i>cardiophylla</i>		<1	0.5
<i>Sida</i>	<i>echinocarpa</i>		<1	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		25	0.6
<i>Triodia</i>	<i>pungens</i>		4	0.7

Site	Site AY038
Date	25/05/2011
Recorder	JB/EP
Photo	JB566
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	685359
Northing	7479462
Habitat	Plain (PLA)
Aspect	290°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert (pebbles, fine gravel)
% Leaves:Logs	<1:6
Vegetation Condition	Very Good
Disturbance Type	Old rehabilitation track nearby; Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ayersiana</i>		2	2-2.5
<i>Acacia</i>	<i>inaequilatera</i>		<1	3
<i>Acacia</i>	<i>pachyacra</i>		1	0.5-1.5
<i>Acacia</i>	<i>pruinocarpa</i>		5	1-3
<i>Acacia</i>	<i>macraneura</i>		6	2-4
<i>Acacia</i>	<i>rhodophloia</i>		0.5	2
<i>Aristida</i>	<i>contorta</i>		<1	0.25
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.3
<i>Cleome</i>	<i>viscosa</i>		<1	0.7
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		0.25	0.3
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	<1	1
<i>Eremophila</i>	<i>longifolia</i>		<1	2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	0.5-3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Maireana</i>	<i>villosa</i>		<1	0.15
<i>Paspalidium</i>	<i>clementii</i>		<1	0.25
<i>Portulaca</i>	<i>oleracea</i>		<1	0.01
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.3
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.15
<i>Ptilotus</i>	<i>obovatus</i>		0.5	0.5
<i>Senna</i>	<i>notabilis</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Triodia</i>	<i>melvillei</i>		20	1.5-1.8
<i>Triodia</i>	<i>wiseana</i>		2	0.5

Site	Site AY039
Date	25/05/2011
Recorder	PS/GH
Photo	AY039
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	692253
Northing	7481752
Habitat	Gully (GUL)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam
Rock Type	Brown Scattered Ironstone (cobbles, pebbles)
% Leaves:Logs	2:2
Vegetation Condition	Excellent
Disturbance Type	Livestock; Senescent
Fire Age	Old
Vegetation	<i>Acacia</i> Low Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.2
<i>Acacia</i>	<i>atkinsiana</i>		1	1
<i>Acacia</i>	<i>bivenosa</i>		<1	1.5
<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>	<1	0.4
<i>Acacia</i>	<i>dictyophleba</i>		<1	1
<i>Acacia</i>	<i>inaequilatera</i>		<1	1-5
<i>Acacia</i>	<i>pachyacra</i>		1.5	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.4
<i>Acacia</i>	<i>aptaneura</i>		55	2-8
<i>Alternanthera</i>	<i>nana</i>		<1	0.1
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		6	1.2
<i>Aristida</i>	<i>obscura</i>		2	0.3
<i>Brunonia</i>	<i>australis</i>		<1	0.3
<i>Chrysopogon</i>	<i>fallax</i>		<1	1.2
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.15
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Cymbopogon</i>	<i>obtectus</i>		0.5	1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		1.5	0.4
<i>Eremophila</i>	<i>longifolia</i>		1	1.2
<i>Eriachne</i>	<i>mucronata</i>		1	0.3
<i>Eriachne</i>	<i>pulchella</i>		<1	0.15
<i>Eucalyptus</i>	<i>xerothermica</i>		2	6-8

Genus	Species	subsp./var.	% Cover	Height
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.05
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.3
<i>Goodenia</i>	<i>stellata</i>		2-5	0.05
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Hibiscus</i>	<i>burtonii</i>		<1	0.8
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Maireana</i>	<i>planifolia</i>		<1	0.3
<i>Maireana</i>	<i>villosa</i>		0.25	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.1
<i>Perotis</i>	<i>rara</i>		<1	0.15
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.2
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.6
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.25
<i>Ptilotus</i>	<i>obovatus</i>		1.5	0.3
<i>Scaevola</i>	<i>browniana</i>		<1	0.2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	1.2
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	<1	0.4
<i>Sida</i>	<i>echinocarpa</i>		<1	0.5
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		1	0.3
<i>Themeda</i>	<i>triandra</i>		2	1
<i>Triodia</i>	<i>pungens</i>		2	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.6
<i>Triodia</i>	<i>wiseana</i>		<1	1

Site	Site AY040
Date	25/05/2011
Recorder	JB/EP
Photo	JB569
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	686366
Northing	7479372
Habitat	Plain
Aspect	
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Pale Calcrete (cobbles, pebbles)
% Leaves:Logs	3:3.5
Vegetation Condition	Excellent
Disturbance Type	Powerline easement nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		3.5	3-4
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	1-1.5
<i>Acacia</i>	<i>sibirica</i> (or <i>rhodophloia</i> hybrid)		<1	1.5
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	12	2-3
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.25
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Triodia</i>	<i>longiceps</i>		4	0.5-1
<i>Triodia</i>	<i>wiseana</i>		70	0.5-1

Site	Site AY041
Date	25/05/2011
Recorder	PS/GH
Photo	AY041
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	691323
Northing	7482181
Habitat	Plain (PLA)
Aspect	350°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy
Rock Type	Brown loam, Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5yrs); Livestock; Track nearby; Rail nearby
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	2
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2
<i>Acacia</i>	<i>bivenosa</i>		<1	1-2
<i>Acacia</i>	<i>inaequilatera</i>		<1	3
<i>Aristida</i>	<i>burbridgeae</i>		<1	0.2
<i>Capparis</i>	<i>lasiantha</i>		<1	0.6
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.5	4-5
<i>Corymbia</i>	<i>hamersleyana</i>		0.25	5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eremophila</i>	<i>longifolia</i>		0.25	2
<i>Eucalyptus</i>	<i>xerothermica</i>		2.5	4
<i>Eucalyptus</i>	<i>gamophylla</i>		7	4-5
<i>Euphorbia</i>	<i>schultzii</i>		<1	Cr
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	3
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.3
<i>Paspalidium</i>	<i>clementii</i>		<1	0.2
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	1
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	1.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.5
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.25
<i>Triodia</i>	<i>pungens</i>		15	1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.6
<i>Triodia</i>	<i>wiseana</i>		8	1.1

Site	Site AY042
Date	25/05/2011
Recorder	JB/EP
Photo	JB572
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	690524
Northing	7482777
Habitat	Hillslope (HSL)
Aspect	270°
Slope	
Soil	Silty loam
Rock Type	Pale Chert; Ironstone; Calcrete (pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Nearby access tracks; Powerline; Yandi main road; Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>synchronicia</i>		<1	0
<i>Acacia</i>	<i>bivenosa</i>		10	2-4
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.03
<i>Eragrostis</i>	<i>eriopoda</i>		0.25	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	1-2
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	3	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		<1	3
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.1
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	4
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.2
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.01-0.07
<i>Triodia</i>	<i>wiseana</i>		60	1-1.5

Site	Site AY043
Date	26/05/2011
Recorder	PS/GH
Photo	AY043
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	692254
Northing	7482696
Habitat	Drainage Depression (DDE)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Brown Ironstone (cobbles, pebbles with riverine gravels)
% Leaves:Logs	3:1.5
Vegetation Condition	Very Good
Disturbance Type	Livestock; Access tracks nearby; Rail nearby; Weeds
Fire Age	Moderate
Vegetation	<i>Acacia</i> Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		0.25	0.3
<i>*Malvastrum</i>	<i>americanum</i>		2	0.4
<i>Acacia</i>	<i>bivenosa</i>		<1	2-3
<i>Acacia</i>	<i>maitlandii</i>		3	1-2
<i>Acacia</i>	<i>pyrifolia</i>		4	1-2
<i>Acacia</i>	<i>sibirica</i>		<1	0.4
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	7	1-2
<i>Alternanthera</i>	<i>nana</i>		<1	0.2
<i>Androcalva</i>	<i>luteiflora</i>		3.5	1.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	3	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1.2
<i>Atalaya</i>	<i>hemiglauca</i>		1	2-4
<i>Brunonia</i>	<i>australis</i>		<1	0.5
<i>Cleome</i>	<i>viscosa</i>		0.5	0.6
<i>Corchorus</i>	<i>lasiocarpus</i>		2	0.6-1
<i>Corymbia</i>	<i>hamersleyana</i>		1.5	3-8
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Dodonaea</i>	<i>lanceolata</i>		1	1.5
<i>Duperreya</i>	<i>commixta</i>		0.5	Cl
<i>Enneapogon</i>	<i>lindleyanus</i>		1	0.6
<i>Eremophila</i>	<i>longifolia</i>		<1	0.8
<i>Eriachne</i>	<i>mucronata</i>		12	0.6
<i>Eucalyptus</i>	<i>victrix</i>		5	8-15
<i>Eulalia</i>	<i>aurea</i>		1.5	1
<i>Gomphrena</i>	<i>canescens</i>	subsp. <i>canescens</i>	1	0.4
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.5
<i>Gossypium</i>	<i>australe</i>		0.5	1.1
<i>Gossypium</i>	<i>robinsonii</i>		5	2-5

Genus	Species	subsp./var.	% Cover	Height
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	4	1-2
<i>Hakea</i>	<i>chordophylla</i>		<1	0.8
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.25
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		3	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.4
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.5
<i>Ptilotus</i>	<i>obovatus</i>		<1	3-4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>X artemisioides</i>	<1	1
<i>Setaria</i>	<i>surgens</i>		3	0.6
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.6
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Tephrosia</i>	<i>rosea</i>	var. <i>Fortescue creeks</i> (M.I.H. Brooker 2186)	2	0.7
<i>Themeda</i>	<i>triandra</i>		6	1
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.2
<i>Triodia</i>	<i>pungens</i>		3	0.8

Site	Site AY044
Date	25/05/2011
Recorder	JB/EP
Photo	JB576
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	689571
Northing	7183177
Habitat	Drainage Depression (DDE)
Aspect	80°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone; Chert (mixed gravels)
% Leaves:Logs	1:2
Vegetation Condition	Very Good
Disturbance Type	Fire (Young 1-2 yrs); Livestock; Weeds
Fire Age	Young
Vegetation	<i>Eucalyptus</i> Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.25
<i>*Flaveria</i>	<i>trinervia</i>		<1	0.2
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.5
<i>*Vachellia</i>	<i>farnesiana</i>		<1	0.5
<i>Abutilon</i>	<i>fraseri</i>		<1	0.2
<i>Abutilon</i>	<i>otocarpum</i>		<1	0.3
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5
<i>Acacia</i>	<i>maitlandii</i>		<1	0.5
<i>Acacia</i>	<i>pyrifolia</i>		2	1
<i>Adriana</i>	<i>tomentosa</i>		<1	0.4
<i>Alternanthera</i>	<i>nana</i>		<1	0.2
<i>Androcalva</i>	<i>luteiflora</i>		0.5	0.5
<i>Aristida</i>	<i>contorta</i>		<1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1
<i>Glycine</i>	<i>canescens</i>		<1	CI
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Bothriochloa</i>	<i>erwartiana</i>		0.5	1
<i>Cleome</i>	<i>viscosa</i>		<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	<1	0.3
<i>Corchorus</i>	<i>tectus</i>		<1	0.3
<i>Corchorus</i>	<i>tridens</i>		<1	Prost
<i>Corymbia</i>	<i>hamersleyana</i>		<1	8-10
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.3
<i>Cymbopogon</i>	<i>procerus</i>		3	1-1.5
<i>Dichanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	<1	0.5
<i>Digitaria</i>	<i>ctenantha</i>		<1	0.3
<i>Dodonaea</i>	<i>lanceolata</i>		<1	0.5
<i>Duperreya</i>	<i>commixta</i>		<1	CI

Genus	Species	subsp./var.	% Cover	Height
<i>Dysphania</i>	<i>glomulifera</i>		<1	0.2
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Enneapogon</i>	<i>robustissimus</i>		<1	0.5
<i>Eriachne</i>	<i>tenuiculmis</i>		4	0.5
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	4	10-18
<i>Eucalyptus</i>	<i>victrix</i>		15	10-18
<i>Eulalia</i>	<i>aurea</i>		5	0.5-1
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	Prost
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Gossypium</i>	<i>australe</i>		<1	0.5
<i>Haloragis</i>	<i>gossei</i>		<1	0.2
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.2
<i>Indigofera</i>	<i>georgei</i>		<1	0.2
<i>Ipomoea</i>	<i>plebeia</i>		<1	Cr
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Melhania</i>	<i>oblongifolia</i>		<1	0.3
<i>Olearia</i>	<i>fluvialis</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.2
<i>Petalostylis</i>	<i>labicheoides</i>		5.5	1-2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.2
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.15
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.2
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Rhynchosia</i>	<i>minima</i>		<1	Cl
<i>Salsola</i>	<i>australis</i>		<1	0.5
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.4
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Setaria</i>	<i>surgens</i>		<1	0.3
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Stylobasium</i>	<i>spathulatum</i>		<1	0.5
<i>Synaptantha</i>	<i>tilliacea</i>	subsp. <i>tilliacea</i>	<1	Prost
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	3.5	0.5
<i>Themeda</i>	<i>triandra</i>		6	0.5-1
<i>Trachymene</i>	<i>oleracea</i>		<1	0.2
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.1
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.2
<i>Triodia</i>	<i>longiceps</i>		0.5	1.8
<i>Waltheria</i>	<i>indica</i>		<1	0.5

Site	Site AY045
Date	26/05/2011
Recorder	PS/GH
Photo	AY045
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	692541
Northing	7483077
Habitat	Plain (PLA)
Aspect	340°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Ironstone (cobbles, pebbles)
% Leaves:Logs	5:5
Vegetation Condition	Very Good
Disturbance Type	Senescent; Livestock; Weeds; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Acacia</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		1	1-2
<i>Acacia</i>	<i>bivenosa</i>		<1	1
<i>Acacia</i>	<i>inaequilatera</i>		0.5	2-4
<i>Acacia</i>	<i>maitlandii</i>		<1	1.5
<i>Acacia</i>	<i>pachyacra</i>		1	1.5-2
<i>Acacia</i>	<i>pruinocarpa</i>		4	2-5
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1
<i>Acacia</i>	<i>aptaneura</i>		8	5-8
<i>Acacia</i>	<i>ayersiana</i>		6	5-8
<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>	5	1-2
<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>	<1	2
<i>Acacia</i>	<i>aptaneura</i>		4	1-2
<i>Alternanthera</i>	<i>nodiflora</i>		<1	0.2
<i>Anthobolus</i>	<i>leptomerioides</i>		0.25	1.1
<i>Aristida</i>	<i>obscura</i>		20	0.4
<i>Blumea</i>	<i>tenella</i>		<1	0.15
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		4	1.1
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.5	6
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	6-8
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eremophila</i>	<i>forrestii</i>	subsp. <i>forrestii</i>	<1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	4-5
<i>Eucalyptus</i>	<i>xerothermica</i>		2	6-7
<i>Eucalyptus</i>	sp. indet		<1	7-8
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.25
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platyklamys</i>	<1	0.7
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Maireana</i>	<i>villosa</i>		<1	0.2
<i>Nicotiana</i>	<i>rosulata</i>	subsp. <i>rosulata</i>	<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Perotis</i>	<i>rara</i>		<1	0.15
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.25
<i>Psydrax</i>	<i>latifolia</i>		<1	0.3
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		2	0.5
<i>Sida</i>	<i>echinocarpa</i>		<1	0.2
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		0.5	0.2
<i>Triodia</i>	<i>wiseana</i>		4	1

Site	Site AY046
Date	25/05/2011
Recorder	JB/EP
Photo	JB578
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	689995
Northing	7484052
Habitat	Hillcrest (HCR)
Aspect	240°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Pale Ironstone (Marramamba?) (cobbles, pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Recent <1 yr)
Fire Age	Recent
Vegetation	<i>Eucalyptus</i> Low Open Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.4
<i>Acacia</i>	<i>hilliana</i>		<1	0.5-1
<i>Acacia</i>	<i>inaequilatera</i>		0.25	0.5-1
<i>Acacia</i>	<i>pachyacra</i>		<1	0.5
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.5-1
<i>Acacia</i>	<i>atkinsiana</i>		<1	1-1.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.25
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.05
<i>Eriachne</i>	<i>lanata</i>		<1	0.35
<i>Eriachne</i>	<i>mucronata</i>		0.25	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	1-2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3.5	3-8
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Haloragis</i>	<i>gossei</i>		<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	0.5	0.3
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.1
<i>Peripleura</i>	<i>virgata</i>		<1	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.5
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Senna</i>	<i>ferraria</i>		<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5
<i>Senna</i>	<i>notabilis</i>		<1	0.05
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	<1	0.2
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Streptoglossa</i>	<i>decurrens</i>		<1	0.1
<i>Themeda</i>	<i>triandra</i>		<1	0.5-1
<i>Triodia</i>	<i>wiseana</i>		2.5	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		6	0.5

Site	Site AY047
Date	26/05/2011
Recorder	PS/GH
Photo	AY047
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	693164
Northing	7483262
Habitat	Drainage Depression (DDE)
Aspect	350°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Light clay
Rock Type	Not evident
% Leaves:Logs	2:4.5
Vegetation Condition	Very Good
Disturbance Type	Weeds; Livestock
Fire Age	Very Old
Vegetation	<i>Acacia</i> Low Closed Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		5	0.3
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		2	1-2
<i>Acacia</i>	<i>atkinsiana</i>		1	1-2
<i>Acacia</i>	<i>ayersiana</i>		<1	0.5
<i>Acacia</i>	<i>pachyacra</i>		<1	2
<i>Acacia</i>	<i>pruinocarpa</i>		3	6
<i>Acacia</i>	<i>aptaneura</i>		40	5-8
<i>Acacia</i>	<i>ayersiana</i>		25	4-7
<i>Alternanthera</i>	<i>nana</i>		<1	0.2
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		10	1.2
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eremophila</i>	<i>longifolia</i>		<1	0.5
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	4
<i>Eucalyptus</i>	<i>xerothermica</i>		5	6
<i>Eucalyptus</i>	sp. indet		1.5	4-5
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.2
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.25
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Indigofera</i>	<i>georgei</i>		0.5	0.5
<i>Isotropis</i>	<i>forrestii</i>		<1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filiformis</i>	<1	0.3
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Themeda</i>	<i>triandra</i>		1.5	1

Genus	Species	subsp./var.	% Cover	Height
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.15
<i>Triodia</i>	<i>pungens</i>		15	0.4

Site	Site AY048
Date	26/05/2011
Recorder	JB/EP
Photo	JB579
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	691487
Northing	7483887
Habitat	Hillslope (HSL)
Aspect	
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Pale brown sandy loam
Rock Type	Calcrete; Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:2
Vegetation Condition	Excellent
Disturbance Type	Powerline easement; Main access road nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>fraseri</i>		<1	0.3
<i>Acacia</i>	<i>bivenosa</i>		20	2-3
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2
<i>Acacia</i>	<i>pachyacra</i>		<1	1-2
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5
<i>Capparis</i>	<i>lasiantha</i>		<1	0.5-1
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	2
<i>Corymbia</i>	<i>hamersleyana</i>		1.5	3-6
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.2
<i>Eremophila</i>	<i>longifolia</i>		<1	2
				3
<i>Eucalyptus</i>	<i>xerothermica</i>		1.5	Mallee
<i>Eulalia</i>	<i>aurea</i>		<1	0.5
<i>Hakea</i>	<i>chordophylla</i>		<1	2.3
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.3
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.5
<i>Sclerolaena</i>	<i>cornishiana</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Triodia</i>	<i>wiseana</i>		70	0.5-1

Site	Site AY049
Date	26/05/2011
Recorder	PS/GH
Photo	AY049
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	693820
Northing	7483206
Habitat	Hillcrest (HCR)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (gravel)
% Leaves:Logs	0.5:1
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5yrs); Rail nearby; Livestock
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		1	1
<i>Acacia</i>	<i>atkinsiana</i>		2	0.7
<i>Acacia</i>	<i>pachyacra</i>		<1	1
<i>Acacia</i>	<i>pruinocarpa</i>		3	1-2
<i>Acacia</i>	<i>aptaneura</i>		<1	1.5
<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>	<1	0.5-1.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.3
<i>Anthobolus</i>	<i>leptomerioides</i>		<1	1.8
<i>Codonocarpus</i>	<i>cotinifolius</i>		1	1-1.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.2
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	4-8
<i>Eulalia</i>	<i>aurea</i>		0.25	0.7
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	0.5	2-4
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		<1	1
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.2
<i>Senna</i>	<i>stricta</i>		<1	0.3
<i>Sida</i>	<i>cardiophylla</i>		<1	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		12	0.5
<i>Triodia</i>	<i>wiseana</i>		6	0.7

Site	Site AY050
Date	26/05/2011
Recorder	JB/EP
Photo	JB582
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	690689
Northing	7484593
Habitat	Drainage Depression (DDE)
Aspect	110°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Red Chert; Ironstone(uncommon pebbles)
% Leaves:Logs	3:15
Vegetation Condition	Very Good
Disturbance Type	Weeds; Flooding; Livestock
Fire Age	Very Old
Vegetation	<i>Acacia</i> Low Closed Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		1	0.25
<i>*Setaria</i>	<i>verticillata</i>		<1	0.4
<i>Acacia</i>	<i>aptaneura</i>		85	5-8
<i>Acacia</i>	<i>pruinocarpa</i>		<1	2-3
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Centipeda</i>	<i>minima</i>	subsp. <i>macrocephala</i>	<1	0.05
<i>Chloris</i>	<i>pectinata</i>		<1	0.4
<i>Chrysopogon</i>	<i>fallax</i>		1.5	1
<i>Cleome</i>	<i>viscosa</i>		<1	0.2
<i>Convolvulus</i>	<i>clementii</i>		<1	Cr
<i>Diclandanthera</i>	<i>australianus</i>	subsp. <i>australianus</i>	<1	0.2
<i>Duperreya</i>	<i>commixta</i>		<1	1
<i>Dysphania</i>	cf. <i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.25
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.1
<i>Eragrostis</i>	<i>xerophila</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		0.25	0.4
<i>Eucalyptus</i>	<i>xerothermica</i>		2.5	5-9
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.05
<i>Goodenia</i>	<i>stellata</i>		<1	Prost
<i>Maireana</i>	sp. indet		<1	0.3
<i>Maireana</i>	<i>villosa</i>		0.25	0.3
<i>Nicotiana</i>	<i>rosulata</i>	subsp. <i>rosulata</i>	<1	0.5
<i>Pluchea</i>	<i>dunlopii</i>		<1	0.3
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.15
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.15
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.15
<i>Themeda</i>	<i>triandra</i>		<1	0.5-1
<i>Triodia</i>	<i>pungens</i>		5	0.5
<i>Vittadinia</i>	sp. Coondewanna Flats (S. Van Leeuwen 4684)		<1	0.2

Site	Site AY051
Date	26/05/2011
Recorder	PS/GH
Photo	AY051
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	694462
Northing	7483105
Habitat	Gully (GUL)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (gravel)
% Leaves:Logs	2:3
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock; Rail nearby
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.3
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2	0.2
<i>Acacia</i>	<i>hilliana</i>		1	0.3
<i>Acacia</i>	<i>maitlandii</i>		1	1.2
<i>Acacia</i>	<i>monticola</i>		<1	1
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1.6
<i>Acacia</i>	<i>ancistrocarpa</i>		4	1-2
<i>Acacia</i>	<i>aptaneura</i>		3	1
<i>Acacia</i>	<i>catenulata</i>	subsp. <i>occidentalis</i>	3	1.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1-3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	6-8
<i>Eucalyptus</i>	<i>gamophylla</i>		5	4-5
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.15
<i>Hakea</i>	<i>chordophylla</i>		<1	3.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		1	0.15
<i>Petalostylis</i>	<i>labicheoides</i>		3	1.5-2
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	CI
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.25
<i>Themeda</i>	<i>triandra</i>		1	0.6
<i>Triodia</i>	<i>wiseana</i>		10	0.5
<i>Triodia</i>	<i>pungens</i>		6	0.8
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.6

Site	Site AY052
Date	26/05/2011
Recorder	JB/EP
Photo	JB585
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	691477
Northing	7485074
Habitat	Hillcrest (HCR)
Aspect	340°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Pale Calcrete (outcopsr, cobbles, pebbles)
% Leaves:Logs	<1:1.5
Vegetation Condition	Excellent
Disturbance Type	Burn nearby; Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		15	2-3
<i>Androcalva</i>	<i>luteiflora</i>		0.5	0.5-1
<i>Capparis</i>	<i>lasiantha</i>		<1	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Dysphania</i>	<i>cf. rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.15
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	7	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		<1	4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	0.2
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		0.25	0.1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	0.5	0.35
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Scaevola</i>	<i>amblyanthera</i>	var. <i>centralis</i>	<1	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		60	1

Site	Site AY053
Date	26/05/2011
Recorder	PS/GH
Photo	AY053.
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	694878
Northing	7482353
Habitat	Footslope (FOO)
Aspect	320°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Dolerite (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock; Access track nearby
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.7
<i>Acacia</i>	<i>dictyophleba</i>		0.25	2
<i>Acacia</i>	<i>inaequilatera</i>		2	1-2-5
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.7
<i>Aristida</i>	<i>contorta</i>		8	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	2	0.4
<i>Cleome</i>	<i>viscosa</i>		<1	0.7
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.25
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>caerulescens</i>		4	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.25
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	1.2
<i>Heliotropium</i>	<i>heteranthum</i>		<1	0.05
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.3
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.1
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		5	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.1
<i>Ptilotus</i>	<i>clementii</i>		<1	0.3
<i>Ptilotus</i>	<i>helipteroides</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		2	0.5
<i>Ptilotus</i>	<i>rotundifolius</i>		1	0.7
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.7
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1
<i>Senna</i>	<i>notabilis</i>		<1	0.25
<i>Sida</i>	<i>echinocarpa</i>		0.5	0.3
<i>Sporobolus</i>	<i>australasicus</i>		1	0.2
<i>Streptoglossa</i>	sp. indet		<1	0.25
<i>Swainsona</i>	<i>decurrens</i>		<1	0.4
<i>Trachymene</i>	<i>oleracea</i>		<1	0.15
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.2
<i>Tribulus</i>	<i>suberosus</i>		<1	0.3
<i>Triodia</i>	<i>wiseana</i>		30	0.6

Site	Site AY054
Date	26/05/2011
Recorder	JB/EP
Photo	JB597
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	692310
Northing	7484844
Habitat	Plain (PLA)
Aspect	Gently Inclined (GE) (1°46' to 5°45')
Slope	340°
Soil	Silty loam
Rock Type	Brown Mixed Chert; Ironstone; Calcrete (cobbles, pebbles)
% Leaves:Logs	3:3
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.25
<i>Abutilon</i>	<i>fraseri</i>		<1	0.5
<i>Acacia</i>	<i>ancistrocarpa</i>		6	1-2
<i>Acacia</i>	<i>aptaneura</i>		0.5	1-2
<i>Acacia</i>	<i>atkinsiana</i>		<1	1-2
<i>Acacia</i>	<i>bivenosa</i>		2.5	2-4
<i>Acacia</i>	<i>dictyophleba</i>		1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.2
<i>Acacia</i>	<i>tenuissima</i>		1.5	1-2
<i>Aristida</i>	<i>contorta</i>		<1	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1
<i>Atalaya</i>	<i>hemiglauca</i>		<1	2-3
<i>Bonamia</i>	<i>erecta</i>		1	0.3
<i>Chrysopogon</i>	<i>fallax</i>		<1	1
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.7
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.4
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.25-3
<i>Eremophila</i>	<i>longifolia</i>		<1	2-3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>xerothermica</i>		5	4-8
<i>Eucalyptus</i>	<i>gamophylla</i>		2.5	2-4
<i>Eulalia</i>	<i>aurea</i>		0.5	0.2
<i>Goodenia</i>	<i>stellata</i>		<1	0.01
<i>Gossypium</i>	<i>australe</i>		<1	0.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	1-2
<i>Indigofera</i>	<i>monophylla</i>		2	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Petalostylis</i>	<i>labicheoides</i>		0.5	2-3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	CI
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.25	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5
<i>Sida</i>	<i>arenicola</i>		<1	1.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5-1
<i>Themeda</i>	<i>triandra</i>		3	0.5-1
<i>Triodia</i>	<i>pungens</i>		2	1
<i>Triodia</i>	<i>wiseana</i>		25	0.5-1

Site	Site AY055
Date	27/05/2011
Recorder	PS/GH
Photo	AY055
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697450
Northing	7482914
Habitat	Plain (PLA)
Aspect	60°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	3:1.5
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>aptaneura</i>		8	4-6
<i>Acacia</i>	<i>atkinsiana</i>		<1	2
<i>Acacia</i>	<i>bivenosa</i>		<1	2
<i>Acacia</i>	<i>pruinocarpa</i>		7	4-5
<i>Acacia</i>	<i>sibirica</i>		6	2-6
<i>Anthobolus</i>	<i>leptomerioides</i>		<1	2
<i>Capparis</i>	<i>lasiantha</i>		<1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		1	6
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	7	6-8
<i>Eucalyptus</i>	<i>xerothermica</i>		3	6-8
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	2
<i>Ptilotus</i>	<i>obovatus</i>		<1	1
<i>Senna</i>	<i>glaucifolia</i>		<1	1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.3
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Themeda</i>	<i>triandra</i>		0.25	1
<i>Triodia</i>	<i>wiseana</i>		45	1.3

Site	Site AY056
Date	26/05/2011
Recorder	JB/EP
Photo	JB598
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	692528
Northing	7484186
Habitat	Drainage Depression (DDE)
Aspect	30°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Red Ironstone; Chert (scattered pebbles)
% Leaves:Logs	1.5:1
Vegetation Condition	Excellent
Disturbance Type	Livestock; Powerline
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		6	1-2
<i>Acacia</i>	<i>aptaneura</i>		1.5	1-2
<i>Acacia</i>	<i>atkinsiana</i>		4	1
<i>Acacia</i>	<i>maitlandii</i>		<1	1.4
<i>Acacia</i>	<i>pruinocarpa</i>		<1	3
<i>Acacia</i>	<i>tenuissima</i>		2	1-1.5-2
<i>Acacia</i>	<i>validinervia</i>		<1	1-2
<i>Bonamia</i>	<i>erecta</i>		<1	0.35
<i>Chrysopogon</i>	<i>fallax</i>		<1	1.3
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		4	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		5	5-7
<i>Eulalia</i>	<i>aurea</i>		0.5	1
<i>Goodenia</i>	<i>stellata</i>		<1	0.05
<i>Gossypium</i>	<i>australe</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.15
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	7	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		0.5	0.5
<i>Salsola</i>	<i>australis</i>		<1	1.2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.25
<i>Themeda</i>	<i>triandra</i>		7	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.6
<i>Triodia</i>	<i>wiseana</i>		<1	1
<i>Triodia</i>	<i>pungens</i>		70	1-1.5

Site	Site AY057
Date	27/05/2011
Recorder	PS/GH
Photo	AY057
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698260
Northing	7483584
Habitat	Drainage Depression (DDE)
Aspect	20°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	2:2
Vegetation Condition	Excellent
Disturbance Type	Livestock; Rail nearby
Fire Age	Old
Vegetation	<i>Euclyptus</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.2
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	1-2
<i>Acacia</i>	<i>atkinsiana</i>		2	1-2
<i>Acacia</i>	<i>elachantha</i>		3	1.5-3
<i>Acacia</i>	<i>inaequilatera</i>		<1	1
<i>Acacia</i>	<i>monticola</i>		3	2-4
<i>Acacia</i>	<i>pruinocarpa</i>		1	3
<i>Alternanthera</i>	<i>nana</i>		<1	0.4
<i>Androcalva</i>	<i>luteiflora</i>		0.5	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.4
<i>Acacia</i>	<i>aptaneura</i>		7	4-5
<i>Goodenia</i>	<i>heterochila</i>		1	0.25
<i>Capparis</i>	<i>lasiantha</i>		<1	1
<i>Chrysopogon</i>	<i>fallax</i>		10	1.3
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		0.5	1.1
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		1.5	0.5
<i>Eremophila</i>	<i>longifolia</i>		1	2
<i>Eucalyptus</i>	<i>gamophylla</i>		2	3-4
<i>Eucalyptus</i>	<i>xerothermica</i>		6	6-8
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.3
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.2
<i>Gastrolobium</i>	<i>grandiflorum</i>		<1	1-2.5
<i>Gastrolobium</i>	<i>grandiflorum</i>		<1	1.5
<i>Goodenia</i>	<i>stellata</i>		5	0.5
<i>Gossypium</i>	<i>australe</i>		<1	0.5
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Indigofera</i>	<i>monophylla</i>		1	0.3
<i>Ipomoea</i>	<i>polymorpha</i>		<1	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Panicum</i>	<i>effusum</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		1.5	0.4
<i>Paspalidium</i>	<i>clementii</i>		<1	0.25
<i>Peripleura</i>	<i>virgata</i>		<1	0.2
<i>Perotis</i>	<i>rara</i>		<1	0.1
<i>Petalostylis</i>	<i>labicheoides</i>		2	2-5
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Ptilotus</i>	<i>obovatus</i>		1	0.5
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>X artemisioides</i>	1	1.1
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Setaria</i>	<i>surgens</i>		1	0.4
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.25
<i>Stylobasium</i>	<i>spathulatum</i>		0.25	2
<i>Themeda</i>	<i>triandra</i>		8	1.2
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.3
<i>Triodia</i>	<i>pungens</i>		28	1.2

Site	Site AY058
Date	26/05/2011
Recorder	JB/EP
Photo	JB599
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	694043
Northing	7484104
Habitat	Hillslope (HSL)
Aspect	300°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Ironstone (orange/black) (outcropping, cobbles, pebbles)
% Leaves:Logs	1:2
Vegetation Condition	Very Good
Disturbance Type	Powerline nearby; Borrow pit nearby; Rehabilitation nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	%Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	0.75	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1
<i>Acacia</i>	<i>atkinsiana</i>		1.5	0.5-1
<i>Acacia</i>	<i>hilliana</i>		3	0.5
<i>Acacia</i>	<i>monticola</i>		0.5	0.5-1.5
<i>Acacia</i>	<i>maitlandii</i>		<1	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		<1	5
<i>Eriachne</i>	<i>lanata</i>		<1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	7	2-6
<i>Gompholobium</i>	<i>oreophilum</i>		0.5	
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	1-2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.34
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	1-2
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Scaevola</i>	<i>browniana</i>		<1	0.35
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5-1
<i>Sida</i>	<i>arenicola</i>		<1	0.7
<i>Solanum</i>	<i>phlomoides</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		20	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		40	0.5-1

Site	Site AY059
Date	27/05/2011
Recorder	PS/GH
Photo	AY059
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699310
Northing	7483317
Habitat	Hill Crest (HCR)
Aspect	
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Rail nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4.5	0.3
<i>Acacia</i>	<i>atkinsiana</i>		1	1
<i>Acacia</i>	<i>hilliana</i>		0.5	0.4
<i>Acacia</i>	<i>monticola</i>		<1	1.1
<i>Acacia</i>	<i>pachyacra</i>		0.25	1.2
<i>Acacia</i>	<i>tetragonophylla</i>			1
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	1	5
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	4
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.6
<i>Hakea</i>	<i>chordophylla</i>		1	2-3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Mirbelia</i>	<i>viminalis</i>		<1	0.6
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.25	1.7
<i>Solanum</i>	<i>phlomoides</i>		<1	0.6
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		55	0.6
<i>Triodia</i>	<i>pungens</i>		1	0.6

Site	Site AY060
Date	26/05/2011
Recorder	JB/EP
Photo	JB600
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	696474
Northing	7483600
Habitat	Hillslope (HSL)
Aspect	270°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Ironstone (cobbles, pebbles)
% Leaves:Logs	1.5:4
Vegetation Condition	Very Good
Disturbance Type	Main Yandi road nearby; Powerline nearby; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	0.5	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		2	0.5-1.5
<i>Acacia</i>	<i>aptaneura</i>		<1	3-5
<i>Acacia</i>	<i>atkinsiana</i>		3.5	0.5-2
<i>Acacia</i>	<i>bivenosa</i>		0.5	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2
<i>Acacia</i>	<i>sibirica</i>		<1	1
<i>Bonamia</i>	<i>erecta</i>		<1	0.4
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		<1	5
<i>Eremophila</i>	<i>longifolia</i>		<1	2
<i>Eriachne</i>	<i>mucronata</i>		<1	0.35
<i>Eucalyptus</i>	<i>gamophylla</i>		5	2-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	6-8
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	3.5
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.3
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	1-2
<i>Petalostylis</i>	<i>labicheoides</i>		0.5	0.5
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.2
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.25
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1-2
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		16	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		13	0.5

Site	Site AY061
Date	27/05/2011
Recorder	PS/GH
Photo	AY061
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698707
Northing	7482642
Habitat	Drainage Depression (DDE)
Aspect	30°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	4:3
Vegetation Condition	Excellent
Disturbance Type	Livestock; Rail
Fire Age	Very Old
Vegetation	<i>Acacia</i> Closed Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		25	2-3
<i>Acacia</i>	<i>monticola</i>		2	1.5-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	12	2-4
<i>Acacia</i>	<i>aptaneura</i>		4	1.5-3
<i>Androcalva</i>	<i>luteiflora</i>		<1	1-2
<i>Corymbia</i>	<i>hamersleyana</i>		6	4-6
<i>Dodonaea</i>	<i>lanceolata</i>		25	2-3
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	4-10
<i>Gastrolobium</i>	<i>grandiflorum</i>		4	1.5-2.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	3	2-4
<i>Hakea</i>	<i>chordophylla</i>		0.5	6
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.4
<i>Mirbelia</i>	<i>viminalis</i>		<1	1.3
<i>Peripleura</i>	<i>virgata</i>		<1	0.25
<i>Petalostylis</i>	<i>labicheoides</i>		6	2-4
<i>Santalum</i>	<i>lanceolatum</i>		1	1.5-2.5
<i>Triodia</i>	<i>pungens</i>		8	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		5	0.6

Site	Site AY062
Date	27/05/2011
Recorder	JB/EP
Photo	JB603
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	693336
Northing	7484631
Habitat	Hillslope (HSL)
Aspect	250°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	3:5
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs, Old 5-10 yrs); Livestock
Fire Age	Moderate to Old
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		4	1.5
<i>Acacia</i>	<i>atkinsiana</i>		1.5	0.5-1.5
<i>Acacia</i>	<i>bivenosa</i>		0.5	2-5
<i>Acacia</i>	<i>maitlandii</i>		0.5	0.5-1
<i>Acacia</i>	<i>pruinocarpa</i>		2	2-3
<i>Acacia</i>	<i>synchronicia</i>		<1	1
<i>Acacia</i>	<i>macraneura</i>		1	2.5
<i>Anthobolus</i>	<i>leptomerioides</i>		<1	0.5-1
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.3-5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	1
<i>Digitaria</i>	<i>brownii</i>		<1	0.5-1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		5	3
<i>Eucalyptus</i>	<i>xerothermica</i>		1	5
<i>Eulalia</i>	<i>aurea</i>		<1	0.5-1
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	1-2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		1.5	1-2
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.5
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Salsola</i>	<i>australis</i>		<1	1-1.5

Genus	Species	subsp./var.	% Cover	Height
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.25
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5-1
<i>Sida</i>	<i>fibulifera</i>		<1	0.4
<i>Themeda</i>	<i>triandra</i>		0.5	0.5-1
<i>Triodia</i>	<i>wiseana</i>		20	
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		6	0.5

Site	Site AY063
Date	27/05/2011
Recorder	PS/GH
Photo	AY063
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	696611
Northing	7482887
Habitat	Hillslope (HSL)
Aspect	0°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock; Rail nearby
Fire Age	Moderate
Vegetation	<i>Acacia</i> Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.3
<i>Acacia</i>	<i>dictyophleba</i>		0.25	1
<i>Acacia</i>	<i>hilliana</i>		3	0.4
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1.3
<i>Acacia</i>	<i>ancistrocarpa</i>		9	1-2
<i>Acacia</i>	<i>bivenosa</i>		1.5	1-2
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>gamophylla</i>		2.5	4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	3-8
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	1-3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3
<i>Petalostylis</i>	<i>labicheoides</i>		2	2-2.5
<i>Ptilotus</i>	<i>astrolasius</i>		1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	1.1
<i>Santalum</i>	<i>lanceolatum</i>		1	1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		22	0.5
<i>Triodia</i>	<i>wiseana</i>		6	1

Site	Site AY064
Date	27/05/2011
Recorder	JB/EP
Photo	JB607
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	694488
Northing	7484913
Habitat	Hillslope (HSL)
Aspect	270°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Ironstone; Shale (white/orange - outcrops, cobbles)
% Leaves:Logs	0.5:2
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	2
<i>Acacia</i>	<i>aptaneura</i>		<1	2
<i>Acacia</i>	<i>maitlandii</i>		<1	1
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.5<11
<i>Aristida</i>	<i>burbidgeae</i>		<1	0.1
<i>Aristida</i>	<i>contorta</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Capparis</i>	<i>lasiantha</i>		<1	0.2
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.1
<i>Cymbopogon</i>	<i>ambiguus</i>		0.25	0.5-0.8
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.6
<i>Dodonaea</i>	<i>petiolaris</i>		<1	0.15
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eremophila</i>	<i>longifolia</i>		<1	1-1.5
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	9.5	3-7
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.15
<i>Fimbristylis</i>	<i>dichotoma</i>		<1	0.15
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Lepidium</i>	<i>pedicellosum</i>		<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Paspalidium</i>	<i>clementii</i>		<1	0.15
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.5
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.25

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.25	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote		<1	0.3
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.15
<i>Themeda</i>	<i>triandra</i>		<1	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		35	0.6
<i>Triodia</i>	<i>wiseana</i>		10	0.5-1.3

Site	Site AY065
Date	27/05/2011
Recorder	PS/GH
Photo	AY065
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	696362
Northing	7481752
Habitat	Hillslope (HSL)
Aspect	40°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy Loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		1	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.8
<i>Aristida</i>	<i>obscura</i>		7	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Enneapogon</i>	<i>caerulescens</i>		3	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eremophila</i>	<i>fraserii</i>		0.5	0.6
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.2
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.3
<i>Goodenia</i>	<i>microptera</i>		0.5	0.3
<i>Goodenia</i>	<i>muelleriana</i>		0.5	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Haloragis</i>	<i>gossei</i>		0.5	0.25
<i>Heliotropium</i>	<i>heteranthum</i>		<1	0.05
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.25
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.1
<i>Peripleura</i>	<i>virgata</i>		<1	0.2
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.1
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		3	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		1	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>rotundifolius</i>		0.5	0.6
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	2
<i>Senna</i>	<i>notabilis</i>		<1	0.15
<i>Sida</i>	<i>cardiophylla</i>		<1	0.2
<i>Sida</i>	<i>echinocarpa</i>		0.5	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.25
<i>Sporobolus</i>	<i>australasicus</i>		0.5	0.2
<i>Streptoglossa</i>	<i>decurrens</i>		<1	0.3
<i>Swainsona</i>	<i>decurrens</i>		0.5	0.5
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Tribulus</i>	<i>macrocarpus</i>		<1	0.2
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.4
<i>Triodia</i>	<i>wiseana</i>		15	0.9

Site	Site AY066
Date	27/05/2011
Recorder	JB/EP
Photo	JB610
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7484643
Northing	695472
Habitat	Drainage Depression (DDE)
Aspect	100°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown Dolerite; Chert; Ironstone (cobbles, pebbles, scattered ironstone)
% Leaves:Logs	1:3
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs, Old 5-10 yrs); Powerline in vicinity; Livestock
Fire Age	Moderate
Vegetation	<i>Acacia</i> Open Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		10	1-2
<i>Acacia</i>	<i>bivenosa</i>		1	2-3
<i>Acacia</i>	<i>inaequilatera</i>		<1	1.5
<i>Acacia</i>	<i>rhodophloia hybrid</i>		<1	1-2
<i>Acacia</i>	<i>tenuissima</i>		<1	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	2	1-2
<i>Acacia</i>	<i>maitlandii</i>		50	1-2.5
<i>Aristida</i>	<i>contorta</i>		<1	0.25
				0.5--
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.7
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		1.5	3-4
<i>Cymbopogon</i>	<i>ambiguus</i>		1	0.5-1
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>caerulescens</i>		1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Enneapogon</i>	<i>robustissimus</i>		1.5	0.5-1
<i>Eriachne</i>	<i>mucronata</i>		<1	0.5
<i>Eucalyptus</i>	<i>xerothermica</i>		2	5
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.1
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Gossypium</i>	<i>australe</i>		1.5	0.5-1
<i>Indigofera</i>	<i>rugosa</i>		2	0.5-1
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Santalum</i>	<i>lanceolatum</i>		2.5	1-2.5
<i>Scaevola</i>	<i>spinescens</i>		<1	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>olgiophylla</i>	2	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	2.5	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5-1
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.6
<i>Swainsona</i>	<i>decurrens</i>		<1	0.35
<i>Themeda</i>	<i>triandra</i>		22	0.5-1
<i>Triodia</i>	<i>wiseana</i>		20	0.5-1
<i>Triodia</i>	<i>brizoides</i>		<1	0.6

Site	Site AY067
Date	28/05/2011
Recorder	PS/GH
Photo	AY067
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	708168
Northing	7483934
Habitat	Hillslope (HSL)
Aspect	170°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Mixed gravels - Ironstone; Calcrete; Quartz
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Powerlines nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1
<i>Acacia</i>	<i>bivenosa</i>		5	2-4
<i>Acacia</i>	<i>hilliana</i>		12	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.7
<i>Corymbia</i>	<i>hamersleyana</i>		2.5	3-6
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	4-7
<i>Hakea</i>	<i>chordophylla</i>		0.5	3-4
<i>Themeda</i>	<i>triandra</i>		0.25	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		25	0.6
<i>Triodia</i>	<i>wiseana</i>		20	1

Site	Site AY068
Date	27/05/2011
Recorder	JB/EP
Photo	JB612
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	696341
Northing	7484898
Habitat	Hillslope (HSL)
Aspect	110°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Dolerite (outcrops, cobbles, pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>lepidium</i>		<1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5-1
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2-3.5
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1.7
<i>Aristida</i>	<i>contorta</i>		4	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.4
<i>Dicanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	<1	0.3
<i>Enneapogon</i>	<i>caerulescens</i>		2.5	0.25
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Enneapogon</i>	<i>lindleyanus</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.1
<i>Euphorbia</i>	<i>boophthona</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.25
<i>Haloragis</i>	<i>gossei</i>		<1	0.3
<i>Indigofera</i>	<i>rugosa</i>		1	0.4
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.2
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.25
<i>Ptilotus</i>	<i>auriculifolius</i>		2	0.4
<i>Ptilotus</i>	<i>nobilis</i>		0.5	0.3-1
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	4	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Solanum</i>	<i>horridum</i>		<1	0.10
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Spermacoce</i>	<i>brachystema</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.3
<i>Streptoglossa</i>	sp. indet		<1	0.3
<i>Swainsona</i>	<i>decurrens</i>		0.5	0.3
<i>Tribulus</i>	<i>hirsutus</i>		1	0.1
<i>Triodia</i>	<i>brizoides</i>		3	0.7
<i>Triodia</i>	<i>wiseana</i>		30	0.5-1

Site	Site AY069
Date	28/05/2011
Recorder	PS/GH
Photo	AY069
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	703779
Northing	7483424
Habitat	Drainage Depression (DDE)
Aspect	120°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sand
Rock Type	Brown Riverine gravels
% Leaves:Logs	8:4
Vegetation Condition	Very Good
Disturbance Type	Livestock; Weeds
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.3
<i>*Sonchus</i>	<i>oleraceus</i>		<1	0.2-1.5
<i>*Vachellia</i>	<i>farnesiana</i>		<1	2
<i>Acacia</i>	<i>ampliceps</i>		8	5-7
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	9	4-5
<i>Acacia</i>	<i>pyrifolia</i>		<1	1
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	<1	1
<i>Alternanthera</i>	<i>nana</i>		<1	0.3
<i>Androcalva</i>	<i>luteiflora</i>		<1	1.1
<i>Atalaya</i>	<i>hemiglauca</i>		1	1-2
<i>Cassytha</i>	<i>capillaris</i>		<1	Cl
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Cymbopogon</i>	<i>procerus</i>		1	1
<i>Cyperus</i>	<i>vaginatus</i>		6	1
<i>Enteropogon</i>	<i>ramosus</i>		<1	0.7
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	40	10-15
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.3
<i>Glycine</i>	<i>canescens</i>		<1	Cl
<i>Gossypium</i>	<i>robinsonii</i>		8	2-4
<i>Haloragis</i>	<i>gossei</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Melhania</i>	<i>glomerata</i>		3	2-4
<i>Myoporum</i>	<i>montanum</i>		20	3-6
<i>Nicotiana</i>	sp. indet		<1	0.2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.4
<i>Pluchea</i>	sp. indet		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Rhynchosia</i>	<i>minima</i>		<1	Cl
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.8
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>X artemisioides</i>	<1	1.8
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.3
<i>Stylobasium</i>	<i>spathulatum</i>		7	1-1.5
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.3
<i>Themeda</i>	<i>triandra</i>		3	0.7
<i>Triodia</i>	<i>pungens</i>		4	0.7

Site	Site AY070
Date	27/05/2011
Recorder	JB/EP
Photo	JB620, 621
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698511
Northing	7485450
Habitat	Drainage Depression (DDE)
Aspect	110°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Mixed riverine gravels (cobbles, pebbles)
% Leaves:Logs	8:3
Vegetation Condition	Very Good
Disturbance Type	Livestock, Flooding
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.2
<i>*Flaveria</i>	<i>trinervia</i>		<1	0.1
<i>*Setaria</i>	<i>verticillata</i>		<1	0.3
<i>*Vachellia</i>	<i>farnesiana</i>		<1	0.5
<i>Acacia</i>	<i>ancistrocarpa</i>		1	2-3
<i>Acacia</i>	<i>bivenosa</i>		3.5	2-3
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	3	3-6
<i>Acacia</i>	<i>dictyophleba</i>		0.5	2-3
<i>Acacia</i>	<i>pyrifolia</i>		2	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	4.5	2-3
<i>Acacia</i>	<i>maitlandii</i>		<1	1-2
<i>Alternanthera</i>	<i>nana</i>		<1	0.15
<i>Androcalva</i>	<i>luteiflora</i>		1.5	1-2
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.2
<i>Atalaya</i>	<i>hemiglauca</i>		<1	2-5
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Bothriochloa</i>	<i>erwartiana</i>		5	0.5-1
<i>Cleome</i>	<i>viscosa</i>		<1	0.2
<i>Corchorus</i>	<i>crozophorifolius</i>		3	0.5-1
<i>Corchorus</i>	<i>tectus</i>		<1	0.3
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Cymbopogon</i>	<i>procerus</i>		0.5	1-1.5
<i>Digitaria</i>	<i>ctenantha</i>		<1	0.35
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>lindleyanus</i>		0.5	0.4
<i>Enneapogon</i>	<i>robustissimus</i>		<1	0.7
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.2
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eriachne</i>	<i>tenuiculmis</i>		10	0.6
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	4	10-15
<i>Eucalyptus</i>	<i>victrix</i>		9.5	18
<i>Eulalia</i>	<i>aurea</i>		5	0.5-1
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.4
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.15
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.1
<i>Glycine</i>	<i>canescens</i>		<1	Cl
<i>Gomphrena</i>	<i>canescens</i>	subsp. <i>canescens</i>	<1	0.3
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.3
<i>Gossypium</i>	<i>australe</i>		<1	0.5-1
<i>Gossypium</i>	<i>robinsonii</i>		3.5	2-4
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	1.5
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5-1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.4
<i>Melhania</i>	<i>glomerata</i>		<1	1-2
<i>Melhania</i>	<i>oblongifolia</i>		<1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		6	1-2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.3
<i>Pluchea</i>	<i>dentex</i>		<1	0.3
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>	<1	0.1
<i>Salsola</i>	<i>australis</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filiformis</i>	<1	0.5-1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Setaria</i>	<i>surgens</i>		<1	0.2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5-1
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.2
<i>Sorghum</i>	<i>plumosum</i>		1.5	1-1.5
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.15
<i>Stylobasium</i>	<i>spathulatum</i>		<1	0.4
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	2	0.4
<i>Themeda</i>	<i>triandra</i>		4	1
<i>Triodia</i>	<i>longiceps</i>		8	1-1.5
<i>Triodia</i>	<i>wiseana</i>		2	1
<i>Triodia</i>	<i>pungens</i>		2	0.5-1
<i>Waltheria</i>	<i>indica</i>		<1	0.5

Site	Site AY71
Date	28/05/2011
Recorder	PS/GH
Photo	AY071
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	703910
Northing	7482615
Habitat	Hillslope (HSL)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Dolerite (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Tracks nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.25
<i>Acacia</i>	<i>inaequilatera</i>		1	2-5
<i>Acacia</i>	<i>synchronica</i>		1	4
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.3
<i>Alternanthera</i>	<i>nana</i>		<1	0.15
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Aristida</i>	<i>obscura</i>		1	0.3
<i>Corchorus</i>	<i>tectus</i>		<1	0.15
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.8
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.15
<i>Eremophila</i>	<i>fraserii</i>		1	1-1.5
<i>Eriachne</i>	<i>aristidea</i>		<1	0.1
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.1
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.2
<i>Haloragis</i>	<i>gossei</i>		<1	0.3
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.4
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.5
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Salsola</i>	<i>australis</i>		<1	0.4
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Solanum</i>	<i>horridum</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Streptoglossa</i>	sp. indet		<1	0.1
<i>Swainsona</i>	<i>decurrens</i>		<1	0.3
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.8
<i>Triodia</i>	<i>wiseana</i>		45	1.1

Site	Site AY072
Date	28/05/2011
Recorder	JB/EP
Photo	JB628
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701683
Northing	7489441
Habitat	Hillcrest (HCR)
Aspect	270°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone - lateritic (Orange/red - outcrops, cobbles, pebbles)
% Leaves:Logs	<1:3
Vegetation Condition	Pristine
Disturbance Type	None evident
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>bivenosa</i>		<1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1
<i>Acacia</i>	<i>arida</i>		15	0.5-1.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.3
<i>Capparis</i>	<i>lasiantha</i>		<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eriachne</i>	<i>lanata</i>		<1	0.5
<i>Eucalyptus</i>	<i>gamophylla</i>		15	2.5-5
<i>Eucalyptus</i>	<i>trivalva</i>		4	3-4
<i>Hakea</i>	<i>chordophylla</i>		<1	3-4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3
<i>Petalostylis</i>	<i>labicheoides</i>		0.5	2-2.5
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.25	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-1.5
<i>Triodia</i>	<i>pungens</i>		<1	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		80	0.6
<i>Triodia</i>	<i>wiseana</i>		5	1-1.3

Site	Site AY073
Date	28/05/2011
Recorder	PS/GH
Photo	AY073
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	705253
Northing	7482511
Habitat	Drainage Depression (DDE)
Aspect	50°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Riverine gravels (cobbles, pebbles with Ironstone small cliffs)
% Leaves:Logs	1.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Weeds
Fire Age	Moderate
Vegetation	<i>Enneapogon</i> Open Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.3
<i>*Cenchrus</i>	<i>ciliaris</i>		0.5	0.5
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.5
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	1.5	5
<i>Acacia</i>	<i>maitlandii</i>		<1	2
<i>Acacia</i>	<i>monticola</i>		2	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2.5
<i>Acacia</i>	<i>pyrifolia</i>		<1	1
<i>Acacia</i>	<i>sibirica</i>		<1	2-3
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	1	2-3
<i>Acrachne</i>	<i>racemosa</i>		<1	0.9
<i>Alternanthera</i>	<i>nana</i>		<1	0.3
<i>Androcalva</i>	<i>luteiflora</i>		<1	1.7
<i>Atalaya</i>	<i>hemiglauca</i>		0.5	2.5
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Cleome</i>	<i>viscosa</i>		2.5	0.5
<i>Corchorus</i>	<i>crozophorifolius</i>		5	0.7
<i>Corchorus</i>	<i>tridens</i>		<1	Cr
<i>Corymbia</i>	<i>ferriticola</i>		<1	4
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	1.8
<i>Cyperus</i>	<i>vaginatus</i>		0.5	1
<i>Digitaria</i>	<i>ctenantha</i>		2	0.6
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.2
<i>Enteropogon</i>	<i>robustissimus</i>		4	0.5
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Eriachne</i>	<i>mucronata</i>		2	0.4
<i>Eucalyptus</i>	<i>victrix</i>		4	8-20
<i>Eulalia</i>	<i>aurea</i>		3	0.6
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.3
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.5
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.3
<i>Glycine</i>	<i>canescens</i>		<1	Cl
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Gossypium</i>	<i>australe</i>		<1	1
<i>Gossypium</i>	<i>robinsonii</i>		2	1-2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	2-3
<i>Ipomoea</i>	<i>muelleri</i>		<1	Cr
<i>Melhania</i>	<i>glomerata</i>		0.5	1
<i>Petalostylis</i>	<i>labicheoides</i>		0.5	2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	1
<i>Ptilotus</i>	<i>obovatus</i>		<1	1.1
<i>Rhynchosia</i>	<i>minima</i>		<1	Cr
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	1.7
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	2
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Stylobasium</i>	<i>spathulatum</i>		0.5	1-2
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	0.5	0.4
<i>Themeda</i>	<i>triandra</i>		3	0.8
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.25
<i>Triodia</i>	<i>pungens</i>		3	0.8
<i>Triodia</i>	<i>wiseana</i>		2	0.9
<i>Waltheria</i>	<i>indica</i>		<1	0.3

Site	Site AY074
Date	28/05/2011
Recorder	JB/EP
Photo	JB634
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700721
Northing	7490211
Habitat	Footslope (FOO)
Aspect	140°
Slope	Gently Inclined
Soil	Loamy Sand
Rock Type	Orange Ironstone; Chert; Quartz (cobbles, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Very Good
Disturbance Type	Fire (Young 1-2 yrs); Access track nearby
Fire Age	Young
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>fraseri</i>		0.5	0.35
<i>Acacia</i>	<i>arida</i>		<1	0.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5-1
<i>Acacia</i>	<i>bivenosa</i>		1	0.5-1
<i>Acacia</i>	<i>elachantha</i>		<1	1-2
<i>Acacia</i>	<i>maitlandii</i>		<1	1.5-2
<i>Acacia</i>	<i>pachyacra</i>		<1	1-1.5
<i>Acacia</i>	<i>synchronicia</i>		0.5	0.35
<i>Acacia</i>	<i>tenuissima</i>		0.5	1-2
<i>Androcalva</i>	<i>luteiflora</i>		<1	0.5-1.2
<i>Aristida</i>	<i>contorta</i>		1.5	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.35
<i>Bonamia</i>	<i>erecta</i>		<1<1	0.25
<i>Capparis</i>	<i>lasiantha</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	<1	0.3
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	<1	0.35
<i>Corymbia</i>	<i>hamersleyana</i>		<1	5
<i>Dampiera</i>	<i>candicans</i>		<1	0.5
<i>Enneapogon</i>	<i>caerulescens</i>		0.5	0.3
<i>Eremophila</i>	<i>longifolia</i>		<1	0.5-1
<i>Eriachne</i>	<i>mucronata</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	3	0.15
<i>Eriachne</i>	<i>tenuiculmis</i>		<1	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	6
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	1	1-2
<i>Eucalyptus</i>	<i>xerothermica</i>		2	3-7
<i>Eulalia</i>	<i>aurea</i>		0.5	0.5-1
<i>Euphorbia</i>	<i>boophthona</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Gossypium</i>	<i>australe</i>		<1	0.2
<i>Hakea</i>	<i>chordophylla</i>		<1	0.45
<i>Indigofera</i>	<i>monophylla</i>		1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1-1.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.25	0.5
<i>Petalostylis</i>	<i>labicheoides</i>		<1	1.2
<i>Ptilotus</i>	<i>astrolasius</i>		2	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.1
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.5-1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.25
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.2
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		<1	0.2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.35
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.15
<i>Themeda</i>	<i>triandra</i>		2	0.6
<i>Triodia</i>	<i>angusta</i>		1	0.5-0.7
<i>Triodia</i>	<i>pungens</i>		7	0.5-1
<i>Triodia</i>	<i>wiseana</i>		32	0.2-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		1	0.5

Site	Site AY075
Date	29/05/2011
Recorder	PS/GH
Photo	AY075
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700503
Northing	7487513
Habitat	Hillslope (HSL)
Aspect	140°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (gravels)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.2
<i>Acacia</i>	<i>arida</i>		4	0.4-1.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.4
<i>Acacia</i>	<i>hilliana</i>		1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		<1	1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>gamophylla</i>		2	2-3.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	6-8
<i>Gompholobium</i>	<i>oreophilum</i>		0.5	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		0.5	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.25	1-3
<i>Hakea</i>	<i>chordophylla</i>		<1	4
<i>Indigofera</i>	<i>monophylla</i>		1.5	0.3
<i>Petalostylis</i>	<i>labicheoides</i>		3	1-2
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.25
<i>Ptilotus</i>	<i>calostachyus</i>		1	0.8
<i>Scaevola</i>	<i>browniana</i>		<1	0.25
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.2
<i>Sida</i>	<i>arenicola</i>		<1	0.9
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		7	0.4
<i>Triodia</i>	<i>wiseana</i>		10	0.3-1

Site	Site AY076
Date	28/05/2011
Recorder	JB/EP
Photo	JB640
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700583
Northing	7489325
Habitat	Hillcrest (HCR)
Aspect	150°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Red Ironstone - lateritic/ pesplitic (orange/black - minor outcrops, cobbles, pebbles)
% Leaves:Logs	<1:1.5
Vegetation Condition	Very Good
Disturbance Type	Fire (young 1-2 yrs - Old 5-10 yrs); Access track nearby
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.15
<i>Acacia</i>	<i>atkinsiana</i>		2	0.4-1.5
<i>Acacia</i>	<i>hilliana</i>		<1	0.25
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Capparis</i>	<i>lasiantha</i>		<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		0.25	0.2-0.4
<i>Eriachne</i>	<i>lanata</i>		<1	0.2
<i>Eriachne</i>	<i>mucronata</i>		<1	0.35
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>gamophylla</i>		7	1-2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	4-6
<i>Gompholobium</i>	<i>oreophilum</i>		2	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.2
<i>Hakea</i>	<i>chordophylla</i>		1	4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		0.25	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.8
<i>Sida</i>	<i>arenicola</i>		<1	0.7
<i>Themeda</i>	<i>triandra</i>		0.5	0.6
<i>Triodia</i>	<i>pungens</i>		1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		2	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		10	0.5-0.8

Site	Site AY077
Date	29/05/2011
Recorder	PS/GH
Photo	AY077
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7487547
Northing	699483
Habitat	Hillslope (HSL)
Aspect	
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Red Ironstone (scree)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Weeds
Fire Age	Moderate
Vegetation	<i>Eucalyptus</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		0.5	0.8-1.5
<i>Acacia</i>	<i>pyrifolia</i>		<1	0.4
<i>Acacia</i>	<i>tetragonophylla</i>		0.25	3
<i>Capparis</i>	<i>lasiantha</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.4
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.4
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.4
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.3
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.25
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	12	3-5
<i>Goodenia</i>	<i>cusackiana</i>		<1	0.15
<i>Indigofera</i>	<i>monophylla</i>		<1	0.15
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	0.6
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.5
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	0.5	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5
<i>Sida</i>	<i>arenicola</i>		<1	0.4
<i>Sida</i>	<i>cardiophylla</i>		<1	0.3
<i>Sida</i>	<i>echinocarpa</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		4	0.6
<i>Triodia</i>	<i>wiseana</i>		15	0.8

Site	Site AY078
Date	29/05/2011
Recorder	JB/EP
Photo	JB641
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702356
Northing	7488321
Habitat	Hillcrest (HCR)
Aspect	70°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Red Ironstone; Chert (cobbles, pebbles)
% Leaves:Logs	0:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Young 1-2 yrs); Access track nearby
Fire Age	Young
Vegetation	Triodia Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		0.25	0.4-1.5
<i>Acacia</i>	<i>hilliana</i>		1	0.15
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.6
<i>Cassytha</i>	<i>capillaris</i>		<1	Cr
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		<1	1
<i>Eriachne</i>	<i>mucronata</i>		0.25	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	4	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	3-7
<i>Fimbristylis</i>	<i>simulans</i>		1.5	0.15
<i>Goodenia</i>	<i>microptera</i>		<1	0.05
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.1
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3-0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	0.5-1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Polygala</i>	<i>isingii</i>		<1	0.01
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>olgiophylla</i>	<1	0.4
<i>Stylobasium</i>	<i>spathulatum</i>		0.5	0.5-1.2
<i>Triodia</i>	<i>brizoides</i>		15	0.3-0.4
<i>Acacia</i>	<i>bivenosa</i>		0.25	0.4-1.5
<i>Acacia</i>	<i>hilliana</i>		1	0.15
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Cassytha</i>	<i>capillaris</i>		<1	Cr
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		<1	1
<i>Eriachne</i>	<i>mucronata</i>		0.25	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	4	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	3-7
<i>Fimbristylis</i>	<i>simulans</i>		1.5	0.15
<i>Goodenia</i>	<i>microptera</i>		<1	0.05
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.1
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3-0.4
<i>Hakea</i>	<i>chordophylla</i>		<1	0.5-1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Polygala</i>	<i>isingii</i>		<1	0.01
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>olgiophylla</i>	<1	0.4
<i>Stylobasium</i>	<i>spathulatum</i>		0.5	0.5-1.2
<i>Triodia</i>	<i>brizoides</i>		15	0.3-0.4

Site	Site AY079
Date	29/05/2011
Recorder	PS/GH
Photo	AY079
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698557
Northing	7486324
Habitat	Drainage Depression (DDE)
Aspect	170°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Mixed riverine gravels
% Leaves:Logs	4:5
Vegetation Condition	Very Good
Disturbance Type	Fire (Old 5-10 yrs); Livestock; Weeds
Fire Age	Old
Vegetation	<i>Melhania</i> Open Heath

Genus	Species	subsp./var.	% Cover	Height
<i>*Sonchus</i>	<i>oleraceus</i>		<1	0.1
<i>Acacia</i>	<i>ampliceps</i>		17	1-4
<i>Acacia</i>	<i>bivenosa</i>		0.5	2
<i>Acacia</i>	<i>bivenosa</i>		<1	2-4
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	3	1.5
<i>Acacia</i>	<i>monticola</i>		1	1-2
<i>Acacia</i>	<i>pyrifolia</i>		1	3
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	1	2
<i>Androcalva</i>	<i>luteiflora</i>		1	2-4
<i>Atalaya</i>	<i>hemiglauca</i>		<1	1.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Corchorus</i>	<i>sidiioides</i>	subsp. <i>sidiioides</i>	<1	0.4
<i>Corchorus</i>	<i>sidiioides</i>	subsp. <i>sidiioides</i>	2	0.5
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.3
<i>Cymbopogon</i>	<i>procerus</i>		2	1.2
<i>Cyperus</i>	<i>vaginatus</i>		18	1.1
<i>Dodonaea</i>	<i>lanceolata</i>		<1	1
<i>Eremophila</i>	<i>longifolia</i>		1	2
<i>Eucalyptus</i>	<i>victrix</i>		3	8-10
<i>Eucalyptus</i>	<i>camaldulensis</i>		30	8-15
<i>Eulalia</i>	<i>aurea</i>		1.5	0.8
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		3.5	0.2
<i>Gossypium</i>	<i>robinsonii</i>		<1	4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	3-4
<i>Heliotropium</i>	<i>chrysocarpum</i>			
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1

Genus	Species	subsp./var.	% Cover	Height
<i>Melaleuca</i>	<i>bracteata</i>		24	2
<i>Melhania</i>	<i>glomerata</i>		40	3-4
<i>Petalostylis</i>	<i>labicheoides</i>		4	3-4
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.3
<i>Pluchea</i>	<i>tetranthera</i>		3.5	0.2
<i>Schoenoplectus</i>	<i>subulatus</i>		<1	1.6
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>X artemisioides</i>	<1	0.4
<i>Solanum</i>	<i>horridum</i>		<1	0.2
<i>Sorghum</i>	<i>stipoideum</i>		7	1-2.5
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Stylobasium</i>	<i>spathulatum</i>		<1	0.6
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	2	0.5
<i>Themeda</i>	<i>triandra</i>		5	0.6-2
<i>Waltheria</i>	<i>indica</i>		<1	0.3

Site	Site AY080
Date	29/05/2011
Recorder	JB/EP
Photo	JB643
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	703338
Northing	7488727
Habitat	Drainage Depression (DDE)
Aspect	170°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Mixed - Ironstone; Chert; Riverine gravels
% Leaves:Logs	3:3
Vegetation Condition	Very Good
Disturbance Type	Livestock; Weeds
Fire Age	Old
Vegetation	<i>Themeda</i> Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.4
<i>*Flaveria</i>	<i>trinervia</i>		<1	0.3
<i>*Setaria</i>	<i>vertillicata</i>		<1	0.4
<i>Abutilon</i>	<i>macrum</i>		<1	0.2
<i>Acacia</i>	<i>bivenosa</i>		<1	0.5-1
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	1	2-5
<i>Acacia</i>	<i>dictyophleba</i>		3	0.5-1
<i>Acacia</i>	<i>maitlandii</i>		<1	1-2
<i>Acacia</i>	<i>monticola</i>		0.5	0.5-1.5
<i>Acacia</i>	<i>pyrifolia</i>		3	0.5-1.5
<i>Amaranthus</i>	<i>undulatus</i>		<1	0.6
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.5
<i>Atalaya</i>	<i>hemiglauca</i>		<1	1-2
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Chrysopogon</i>	<i>fallax</i>		3	1-1.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	0.25	0.5
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Corymbia</i>	<i>hamersleyana</i>		1	8
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.3
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		1.5	1-1.5
<i>Cyperus</i>	<i>vaginatus</i>		0.5	0.6
<i>Digitaria</i>	<i>ctenantha</i>		<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>lindleyanus</i>		<1	0.35
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.35

Genus	Species	subsp./var.	% Cover	Height
<i>Enneapogon</i>	<i>robustissimus</i>		1.5	0.5-1
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.1
<i>Eremophila</i>	<i>longifolia</i>		1.5	1-2
<i>Eriachne</i>	<i>tenuiculmis</i>		7	0.5
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>victrix</i>		6.5	8-15
<i>Eulalia</i>	<i>aurea</i>		12	0.5-1
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.4
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Gossypium</i>	<i>australe</i>		1.5	0.5-1
<i>Gossypium</i>	<i>robinsonii</i>		4.5	1-2.5
<i>Hakea</i>	<i>chordophylla</i>		<1	5
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.3
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.5-1
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.35
<i>Indigofera</i>	<i>rugosa</i>		<1	0.35
<i>Isotropis</i>	<i>forrestii</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.5-1
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.3
<i>Melhania</i>	<i>oblongifolia</i>		<1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.5
<i>Peripleura</i>	<i>hispidula</i>		<1	0.5
<i>Petalostylis</i>	<i>labicheoides</i>		0.5	1-2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.4
<i>Pluchea</i>	<i>dentex</i>		<1	0.35
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.3
<i>Polymeria</i>	<i>ambigua</i>		025	Cr
<i>Ptilotus</i>	<i>astrolasius</i>			0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.6
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.5
<i>Rhodanthe</i>	<i>margarethae</i>		<1	0.4
<i>Salsola</i>	<i>australis</i>		2-5	0.5-1
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Sida</i>	<i>echinocarpa</i>		<1	Prost
<i>Sida</i>	<i>echinocarpa</i>		<1	0.5
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.3
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.3
<i>Tephrosia</i>	sp. Bungaroo Creek (M.E. Trudgen 11601)		<1	0.3
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	2	0.5
<i>Themeda</i>	<i>triandra</i>		25	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Trachymene</i>	<i>oleracea</i>		<1	0.5
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		<1	0.5-1
<i>Triodia</i>	<i>pungens</i>		2	0.4

Site	Site AY081
Date	29/05/2011
Recorder	PS/GH
Photo	AY081
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699648
Northing	7486668
Habitat	Hillslope (HSL)
Aspect	120°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Dolerite (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	Senna Low Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		1	1.2-5
<i>Aristida</i>	<i>contorta</i>		1	0.3
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>caerulescens</i>		20	0.4
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Enneapogon</i>	<i>caerulescens</i>		20	0.4
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eremophila</i>	<i>fraseri</i>		1	0.6
<i>Eriachne</i>	<i>pulchella</i>		0.5	0.15
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.15
<i>Haloragis</i>	<i>gossei</i>		<1	0.2
<i>Heliotropium</i>	<i>heteranthum</i>		<1	Cr
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Ptilotus</i>	<i>aervoides</i>		<1	Cr
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Ptilotus</i>	<i>aervoides</i>		<1	Cr
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Ptilotus</i>	<i>aervoides</i>		<1	Cr
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Salsola</i>	<i>australis</i>		<1	0.2
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	0.5	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	10	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	0.5	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	<i>echinocarpa</i>		<1	0.3
<i>Sida</i>	<i>fibulifera</i>		<1	0.2
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.15
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Tribulus</i>	<i>macrocarpus</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		4	0.6

Site	Site AY082
Date	29/05/2011
Recorder	JB/EP
Photo	JB644
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702728
Northing	7489289
Habitat	Hillslope (HSL)
Aspect	320°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Pale Ironstone - black pisolitic (cobbles, pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Minimal disturbance; Weeds
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.35
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1
<i>Acacia</i>	<i>aptaneura</i>		0.5	1-2
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2
<i>Acacia</i>	<i>bivenosa</i>		<1	2-2.5
<i>Acacia</i>	<i>maitlandii</i>		<1	0.5-1
<i>Acacia</i>	<i>synchronicia</i>		1	2-3
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1.2
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	<1	1-2
<i>Eriachne</i>	<i>lanata</i>		0.5	0.5
<i>Eriachne</i>	<i>mucronata</i>		<1	0.35
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	3-6
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		<1	1-2
<i>Portulaca</i>	<i>oleracea</i>		<1	0.25
<i>Santalum</i>	<i>lanceolatum</i>		<1	2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.7
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Triodia</i>	<i>pungens</i>		10	1-1.5
<i>Triodia</i>	<i>wiseana</i>		55	0.5-1

Site	Site AY083
Date	29/05/2011
Recorder	PS/GH
Photo	AY083
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700459
Northing	7486740
Habitat	Plain (PLA)
Aspect	200°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles, gravels) with lateritic outcrops
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	<i>Eriachne</i> Open Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	0.2
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.3
<i>Acacia</i>	<i>maitlandii</i>		<1	0.3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	0.5
<i>Acacia</i>	<i>tetragonophylla</i>		<1	1
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.6
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.8
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.3
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>latrobei</i>	<1	0.7
<i>Eriachne</i>	<i>mucronata</i>		2	0.4
<i>Eriachne</i>	<i>lanata</i>		12	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	5-8
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.5
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.5
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.7
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.7
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.6
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	<i>cardiophylla</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote)		<1	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.3
<i>Themeda</i>	<i>triandra</i>		1	0.6
<i>Triodia</i>	<i>pungens</i>		1	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		3	0.3
<i>Triodia</i>	<i>wiseana</i>		8	0.4

Site	Site AY084
Date	29/05/2011
Recorder	JB/EP
Photo	JB646
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701575
Northing	7488438
Habitat	Hillcrest (HCR)
Aspect	120°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Red Ironstone - pisolitic (outcrops, cobbles, pebbles - Black/orange quartz)
% Leaves:Logs	0:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Young 1-2 yrs); Access track nearby
Fire Age	Young
Vegetation	Triodia Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.4
<i>Acacia</i>	<i>bivenosa</i>		1	0.5-1.5
<i>Acacia</i>	<i>synchronicia</i>		<1	0.4
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.25
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Bonamia</i>	<i>erecta</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	6
<i>Gompholobium</i>	<i>oreophilum</i>		0.25	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		1.5	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3
<i>Polygala</i>	<i>isingii</i>		<1	0.02
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.2-1.5
<i>Sida</i>	<i>arenicola</i>		<1	0.4
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		<1	0.2
<i>Tephrosia</i>	sp. Cathedral Gorge (F.H. Mollemans 2420)		<1	0.05
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		5	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		8	0.3
<i>Triodia</i>	<i>brizoides</i>		3	0.3

Site	Site AY085
Date	30/05/2001
Recorder	PS/GH
Photo	AY085
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698120
Northing	7493698
Habitat	Footslope (FOO)
Aspect	150°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Dolerite (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5yrs); Livestock; Weeds
Fire Age	Moderate
Vegetation	<i>Aristida</i> Open Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>otocarpum</i>		1	0.3
<i>Abutilon</i>	sp. Dioicum (A.A. Mitchell PRP1618)		<1	1
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		1	1-1.5
<i>Acacia</i>	<i>aptaneura</i>		<1	0.6
<i>Acacia</i>	<i>atkinsiana</i>		5	0.3-1
<i>Acacia</i>	<i>inaequilatera</i>		2	1-2
<i>Acacia</i>	<i>monticola</i>		0.5	1
<i>Acacia</i>	<i>pachyacra</i>		0.25	1-1.5
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	12	0.5
<i>Aristida</i>	<i>obscura</i>		7	0.25
<i>Boerhavia</i>	sp. indet		3	0.15
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1
<i>Corchorus</i>	<i>sidioides</i>	subsp. <i>sidioides</i>	<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>polyphyllus</i>		7	0.3
<i>Enteropogon</i>	<i>robustissimus</i>		<1	0.25
<i>Eremophila</i>	<i>longifolia</i>		0.5	1.2
<i>Eucalyptus</i>	<i>gamophylla</i>		10	2-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	2
<i>Euphorbia</i>	<i>schantzii</i>		0.5	0.2
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		1.5	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Gossypium</i>	<i>australe</i>		<1	0.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.25	1-2
<i>Hakea</i>	<i>chordophylla</i>		<1	1.7
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	1	0.3
<i>Indigofera</i>	<i>monophylla</i>		3	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.4
<i>Phyllanthus</i>	<i>maderaspatensis</i>		<1	0.2
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.1
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Ptilotus</i>	<i>auriculifolius</i>		3	0.3
<i>Ptilotus</i>	<i>nobilis</i>		2	0.5
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.5
<i>Salsola</i>	<i>australis</i>		1.5	0.3
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	<1	1.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	2	0.6
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5
<i>Senna</i>	<i>notabilis</i>		0.5	0.25
<i>Sida</i>	<i>arenicola</i>		<1	0.6
<i>Sida</i>	<i>cardiophylla</i>		0.5	0.5
<i>Sida</i>	<i>echinocarpa</i>		1.5	0.3
<i>Sida</i>	<i>fibulifera</i>		<1	0.15
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.2
<i>Sporobolus</i>	<i>australasicus</i>		0.25	0.2
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Tribulus</i>	<i>macrocarpus</i>		<1	Cr
<i>Triodia</i>	<i>pungens</i>		4	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		5	0.5

Site	Site AY086
Date	29/05/2011
Recorder	JB/EP
Photo	JB647
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701455
Northing	7487208
Habitat	Hillslope (HSL)
Aspect	80°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert (mainly pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Near access track; Cattle yards; Fire (Young 1-2 yrs); Livestock; Old access track through site
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1.2
<i>Acacia</i>	<i>bivenosa</i>		1	1-2
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.1
<i>Acacia</i>	<i>synchronicia</i>		<1	0.4
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.1
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5
<i>Capparis</i>	<i>lasiantha</i>		<1	0.3
<i>Chrysopogon</i>	<i>fallax</i>		<1	1
<i>Corchorus</i>	<i>tectus</i>		<1	0.25
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.8
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	0.5	0.1
<i>Eriachne</i>	<i>obtusa</i>		<1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	1-5
<i>Goodenia</i>	<i>microptera</i>		<1	0.25
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.25
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Paspalidium</i>	<i>basycladium</i>		<1	0.3
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>notabilis</i>		<1	0.25
<i>Sida</i>	<i>arenicola</i>		<1	1.5
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.2
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.15
<i>Streptoglossa</i>	sp. indet		0.5	0.3
<i>Themeda</i>	<i>triandra</i>		<1	1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		8	0.15
<i>Triodia</i>	<i>wiseana</i>		10	0.2-1

Site	Site AY087
Date	30/05/2001
Recorder	PS/GH
Photo	AY087
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698504
Northing	7492462
Habitat	Footslope (FOO)
Aspect	70°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (pea gravel)
% Leaves:Logs	<1:2
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Eucalyptus</i> Open Mallee

Site	Site AY088
Date	30/05/2001
Recorder	JB/EP
Photo	JB648
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702818
Northing	7486789
Habitat	Hillslope (HSL)
Aspect	50°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Red Ironstone; Chert; Silcrete; Greenstone; Dolerite (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Livestock; Yandi road nearby
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.15
<i>Acacia</i>	<i>ancistrocarpa</i>		1.5	1
<i>Acacia</i>	<i>bivenosa</i>		<1	1.2
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5-1
<i>Acacia</i>	<i>inaequilatera</i>		<1	1-2
<i>Acacia</i>	<i>maitlandii</i>		<1	0.4
<i>Acacia</i>	<i>tenuissima</i>		<1	0.5
<i>Aristida</i>	<i>contorta</i>		<1	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.7
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		<1	3
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.6
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	2-5
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispidula</i>	<1	0.1
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.25
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.3
<i>Gossypium</i>	<i>australe</i>		<1	0.2-0.47
<i>Haloragis</i>	<i>gossei</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	subsp. <i>indet</i>	<1	0.1
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Indigofera</i>	<i>rugosa</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.02
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.5
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.5-1
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Themeda</i>	<i>triandra</i>		<1	0.5-1
<i>Tribulus</i>	<i>platyptera</i>		<1	0.35
<i>Triodia</i>	<i>brizoides</i>		40	0.6
<i>Triodia</i>	<i>wiseana</i>		15	0.6

Site	Site AY089
Date	30/05/2001
Recorder	PS/GH
Photo	AY089
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699342
Northing	7492670
Habitat	Footslope (FOO)
Aspect	240°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (pea gravel)
% Leaves:Logs	<1:1
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5 yrs); Livestock
Fire Age	Moderate
Vegetation	<i>Indigofera</i> Low Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>trudgenii</i>		<1	0.3
<i>Acacia</i>	<i>maitlandii</i>		<1	0.3
<i>Acacia</i>	<i>pachyacra</i>		<1	0.4
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.2
<i>Aristida</i>	<i>inaequiglumis</i>		<1	1
<i>Aristida</i>	<i>obscura</i>		5	0.3
<i>Brunonia</i>	<i>australis</i>		<1	0.3
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.3
<i>Corchorus</i>	<i>sidooides</i>	subsp. <i>sidooides</i>	1	0.25
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	<1	0.8
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	3-7
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>stellata</i>		<1	0.05
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	0.5
<i>Hibiscus</i>	<i>coatesii</i>		<1	1.3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		3	0.25
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		1	0.3
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.15
<i>Portulaca</i>	<i>oleracea</i>		<1	0.02
<i>Psydrax</i>	<i>sauveleons</i>		0.5	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.2
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Senna</i>	<i>notabilis</i>		<1	0.3
<i>Sida</i>	<i>cardiophylla</i>		2	0.4
<i>Sida</i>	<i>echinocarpa</i>		0.5	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.2
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.4
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		3	0.3

Site	Site AY090
Date	30/05/2001
Recorder	JB/EP
Photo	JB653, 654
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702363
Northing	7486273
Habitat	Stream Channel (STC)
Aspect	70°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam, sandy
Rock Type	Mixed riverine gravels
% Leaves:Logs	70:15
Vegetation Condition	Very Good
Disturbance Type	Weeds; Livestock; Access road
Fire Age	Very Old
Vegetation	<i>Eucalyptus</i> Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		<1	0.15
<i>*Malvastrum</i>	<i>americanum</i>		<1	0.3
<i>*Setaria</i>	<i>verticillata</i>		<1	0.3
<i>*Sigesbeckia</i>	<i>orientalis</i>		<1	0.2
<i>*Sonchus</i>	<i>oleraceus</i>		3	0.15
<i>*Vachellia</i>	<i>farnesiana</i>		3	0.5
<i>Acacia</i>	<i>ampliceps</i>		6	2-6
<i>Acacia</i>	<i>coriacea</i>	subsp. <i>pendens</i>	8	4-8
<i>Acacia</i>	<i>pyrifolia</i>		<1	0.5-2
<i>Acacia</i>	<i>tetragonophylla</i>		<1	2.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	<1	2-3
<i>Alternanthera</i>	<i>nana</i>		<1	0.15
<i>Androcalva</i>	<i>luteiflora</i>		<1	0.5-1.5
<i>Atalaya</i>	<i>hemiglauca</i>		1	3-5
<i>Boerhavia</i>	<i>coccinea</i>		<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.35
<i>Corchorus</i>	<i>crozophorifolius</i>		<1	0.5-1
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.4
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		<1	1-2
<i>Cyperus</i>	<i>vaginatus</i>		8	0.5-1
<i>Digitaria</i>	<i>ctenantha</i>		<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enteropogon</i>	<i>ramosus</i>		0.25	0.5-1.5
<i>Eriachne</i>	<i>tenuiculmis</i>		<1	0.5
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	45	10-20
<i>Eucalyptus</i>	<i>victrix</i>		5	8-12
<i>Eulalia</i>	<i>aurea</i>		0.5	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	Prost
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.2
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.1
<i>Glycine</i>	<i>canescens</i>		<1	Cr
<i>Gomphrena</i>	<i>canescens</i>	subsp. <i>canescens</i>	<1	0.4
<i>Gossypium</i>	<i>robinsonii</i>		<1	2
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	1	8
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.25
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.35
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	3	Cl
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.3
<i>Melaleuca</i>	<i>argentea</i>		5	8-15
<i>Melaleuca</i>	<i>bracteata</i>		<1	2-5
<i>Melaleuca</i>	<i>glomerata</i>		20	3-8
<i>Myoporum</i>	<i>montanum</i>		5	2-3
<i>Paspalidium</i>	<i>basicladium</i>		1.5	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		<1	2.5
<i>Phyllanthus</i>	<i>maderaspatensis</i>		5	0.5
<i>Pluchea</i>	<i>dentex</i>		<1	0.3
<i>Potamogeton</i>	<i>tricarinatus</i>		10	Water Plant
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.35
<i>Ptilotus</i>	<i>obovatus</i>		<1	0.4
<i>Rhynchosia</i>	<i>minima</i>		<1	Cl
<i>Samolus</i>	<i>repens</i>		<1	0.6
<i>Santalum</i>	<i>lanceolatum</i>		<1	0.5
<i>Schoenoplectus</i>	<i>subulatus</i>		0.25	1-2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filifolia</i>	<1	2.2
<i>Setaria</i>	<i>dielsii</i>		<1	0.35
<i>Setaria</i>	<i>surgens</i>		<1	0.4
<i>Sorghum</i>	<i>plumosum</i>		<1	1-1.5
<i>Sporobolus</i>	<i>australasicus</i>		1	0.2
<i>Stylobasium</i>	<i>spathulatum</i>		<1	2-3
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	1	0.3
<i>Themeda</i>	<i>triandra</i>		2.5	0.5-1
<i>Triodia</i>	<i>longiceps</i>		1	0.5-1.5
<i>Triodia</i>	<i>pungens</i>		1	0.4-1
<i>Triodia</i>	<i>wiseana</i>		<1	1.3
<i>Typha</i>	<i>domingensis</i>		12	1.5-2.5
<i>Waltheria</i>	<i>indica</i>		<1	0.3

Site	Site AY091
Date	30/05/2001
Recorder	PS/GH
Photo	AY091
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699496
Northing	7493483
Habitat	Hillslope (HSL)
Aspect	350°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles, gravel with minor lateritic)
% Leaves:Logs	<1:2
Vegetation Condition	Excellent
Disturbance Type	Fire scars in places; Livestock
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.7
<i>Acacia</i>	<i>aptaneura</i>		<1	0.4
<i>Acacia</i>	<i>atkinsiana</i>		8	0.5-2.5
<i>Acacia</i>	<i>maitlandii</i>		<1	0.5
<i>Acacia</i>	<i>tetragonophylla</i>		0.5	2.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.25
<i>Androcalva</i>	<i>luteiflora</i>		0.5	1.1
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.25
<i>Brunonia</i>	<i>australis</i>		0.25	0.25
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.6
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	0.5	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		<1	4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	4-6
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		1	0.3
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.25
<i>Gossypium</i>	<i>australe</i>		<1	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1.5-2
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.6
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		1	1-2
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		2	0.6-1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.7

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	<1	0.5
<i>Sida</i>	<i>arenicola</i>		0.75	0.7
<i>Sida</i>	<i>echinocarpa</i>		<1	0.6
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Tephrosia</i>	sp. Bungaroo Creek		<1	0.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		10	0.7
<i>Triodia</i>	<i>wiseana</i>		16	0.7-1.2

Site	Site AY092
Date	30/05/2001
Recorder	JB/EP
Photo	JB657
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702500
Northing	7485615
Habitat	Hillslope (HSL)
Aspect	90°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Dolerite; Chert (outcropping, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Access tracks nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	1-1.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	1-2
<i>Acacia</i>	<i>inaequilatera</i>		1.5	1.5-3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	<1	0.3
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.25
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.5
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.3
<i>Gossypium</i>	<i>australe</i>		<1	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1.5-2.5
<i>Indigofera</i>	<i>monophylla</i>		<1	0.1
<i>Indigofera</i>	<i>rugosa</i>		0.5	0.5
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.15
<i>Ptilotus</i>	<i>aervoides</i>		<1	Prost
<i>Ptilotus</i>	<i>auriculifolius</i>		0.25	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Ptilotus</i>	<i>fusiformis</i>		-	0.35
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.1
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Sida</i>	<i>echinocarpa</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Swainsona</i>	<i>decurrens</i>		<1	0.3
<i>Trachymene</i>	<i>oleracea</i>		<1	0.3-0.4
<i>Tribulus</i>	<i>hirsutus</i>		<1	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		75	0.5-1.2

Site	Site AY093
Date	30/05/2001
Recorder	PS/GH
Photo	459
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700562
Northing	7492433
Habitat	Flood-out (FLD)
Aspect	310°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Brown Ironstone (pea gravel)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		4	2
<i>Acacia</i>	<i>aptaneura</i>		6	3-4
<i>Acacia</i>	<i>dictyophleba</i>		<1	1-1.5
<i>Acacia</i>	<i>pruinocarpa</i>		8	1-3
<i>Acacia</i>	<i>sibirica</i>		<1	1
<i>Acacia</i>	<i>tenuissima</i>		4	1.6
<i>Aristida</i>	<i>contorta</i>		0.5	0.5
<i>Aristida</i>	<i>inaequiglumis</i>		0.5	0.8
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		<1	0.4
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	6-8
<i>Eucalyptus</i>	<i>xerothermica</i>		8	4-6
<i>Eulalia</i>	<i>aurea</i>		1	0.5
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.2
<i>Goodenia</i>	<i>microptera</i>		<1	0.15
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	0.5	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filiformis</i>	<1	1.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.7
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	1	0.6
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.1
<i>Themeda</i>	<i>triandra</i>		2.5	0.7
<i>Triodia</i>	<i>melvillei</i>		25	2
<i>Triodia</i>	<i>wiseana</i>		25	1.2

Site	Site AY094
Date	30/05/2001
Recorder	JB/EP
Photo	JB659
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701680
Northing	7485559
Habitat	Hillcrest (HCR)
Aspect	310°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Pale Calcrete (cobbles, pebbles)
% Leaves:Logs	2:2
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>bivenosa</i>		12	2-3.5
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	7	2-3
<i>Heliotropium</i>	<i>chrysocarpum</i>		<1	0.15
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Triodia</i>	<i>angusta</i>		8	0.5-1.3
<i>Triodia</i>	<i>wiseana</i>		60	0.5-1

Site	Site AY095
Date	31/05/2011
Recorder	PS/GH
Photo	AY095
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701939
Northing	7495515
Habitat	Hillslope (HSL)
Aspect	140°
Slope	Moderately Inclined (MO) (5° 46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	6	0.3
<i>Acacia</i>	<i>elachantha</i>		<1	0.5
<i>Acacia</i>	<i>hilliana</i>		3.5	0.3
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.5	4-5
<i>Corymbia</i>	<i>hamersleyana</i>		1	4-5
<i>Dodonaea</i>	<i>pachyneura</i>		<1	0.7
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	1-2
<i>Exocarpos</i>	<i>sparteus</i>		<1	1
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-2
<i>Hakea</i>	<i>chordophylla</i>		3	2-3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	6	0.4
<i>Mirbelia</i>	<i>viminalis</i>		1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.4
<i>Senna</i>	<i>glaucifolia</i>		<1	1.1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote)		<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.25

Genus	Species	subsp./var.	% Cover	Height
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		15	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		22	0.5

Site	Site AY096
Date	30/05/2001
Recorder	JB/EP
Photo	JB661
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701601
Northing	7486541
Habitat	Hillslope (HSL)
Aspect	240°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Silty loam
Rock Type	Red Calcrete (outcrops, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Main Yandi road nearby; Fire (Young 1-2 yrs)
Fire Age	Young
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5
<i>Acacia</i>	<i>bivenosa</i>		1	0.5-1.5
<i>Acacia</i>	<i>inaequilatera</i>		<1	0.5-2.5
<i>Acacia</i>	<i>synchronicia</i>		<1	1
<i>Acacia</i>	<i>tetragonophylla</i>		<1	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		1	2-5
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.5-0.6
<i>Dicanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	<1	0.4
<i>Enneapogon</i>	<i>caerulescens</i>		0.25	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	7
<i>Eucalyptus</i>	<i>xerothermica</i>		0.5	7
<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)		<1	0.1
<i>Gossypium</i>	<i>robinsonii</i>		<1	0.5-1.5
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.25	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.35
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.25
<i>Ptilotus</i>	<i>clementii</i>		<1	0.25
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.25
<i>Rostellularia</i>	<i>adscendens</i>	var. <i>latifolia</i>	<1	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.25	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5-1
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.15
<i>Themeda</i>	<i>triandra</i>		<1	0.5
<i>Triodia</i>	<i>wisearna</i>		40	0.35

Site	Site AY097
Date	31/05/2011
Recorder	PS/GH
Photo	AY097
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702376
Northing	7494300
Habitat	Drainage Depression (DDE)
Aspect	350°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (pea gravel)
% Leaves:Logs	1:1
Vegetation Condition	Very Good
Disturbance Type	Livestock; Fire (Mod 2-5 yrs, Old 5-10 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		4	1-2
<i>Acacia</i>	<i>aptaneura</i>		<1	2
<i>Acacia</i>	<i>elachantha</i>		<1	1
<i>Acacia</i>	<i>tenuissima</i>		2	1-2
<i>Amphipogon</i>	<i>sericeus</i>		1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		1	0.6
<i>Brunonia</i>	<i>australis</i>		<1	0.4
<i>Codonocarpus</i>	<i>cotinifolius</i>		1	5
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	<1	0.2
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3	5-8
<i>Dicrastylis</i>	<i>cordifolia</i>		<1	0.3
<i>Duperreya</i>	<i>commixta</i>		<1	CL
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.05
<i>Eucalyptus</i>	<i>gamophylla</i>		6	2-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	4-8
<i>Eulalia</i>	<i>aurea</i>		0.5	0.5
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.5
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	0.8-3
<i>Hakea</i>	<i>chordophylla</i>		1	4
<i>Indigofera</i>	<i>monophylla</i>		2	0.25
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	1.8
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.8
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.3
<i>Sida</i>	<i>arenicola</i>		1	1.1
<i>Sida</i>	<i>cardiophylla</i>		1.5	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.25
<i>Themeda</i>	<i>triandra</i>		0.5	0.6
<i>Triodia</i>	<i>pungens</i>		3	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	1

Site	Site AY098
Date	30/05/2001
Recorder	JB/EP
Photo	668
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699963
Northing	7491098
Habitat	Footslope (FOO)
Aspect	0°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Orange Ironstone (outcrops, cobbles, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Young 1-2 yrs)
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Flaveria</i>	<i>trinervia</i>		<1	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		<1	0.5
<i>Acacia</i>	<i>atkinsiana</i>		<1	0.5
<i>Acacia</i>	<i>bivenosa</i>		<1	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Acacia</i>	<i>tenuissima</i>		<1	0.5
<i>Amhipogon</i>	<i>sericeus</i>		<1	0.35
<i>Aristida</i>	<i>contorta</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5-1
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.05
<i>Capparis</i>	<i>lasiantha</i>		<1	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	1-2
<i>Corchorus</i>	<i>tectus</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4.5	2-7
<i>Goodenia</i>	<i>microptera</i>		<1	0.3
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.35
<i>Goodenia</i>	<i>stobbsiana</i>		0.25	0.15
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		0.25	0.5-1
<i>Ptilotus</i>	<i>fusiformis</i>		<1	3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-1.5
<i>Sida</i>	<i>arenicola</i>		0.5	0.5-1.5
<i>Sida</i>	<i>cardiophylla</i>		<1	0.3
<i>Sida</i>	<i>echinocarpa</i>		<1	0.1
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.4
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Triodia</i>	<i>wiseana</i>		2	0.3
<i>Triodia</i>	<i>pungens</i>		0.5	0.35
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		15	0.5

Site	Site AY099
Date	31/05/2011
Recorder	PS/GH
Photo	AY099
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	703824
Northing	7495281
Habitat	Drainage Depression (DDE)
Aspect	210°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam
Rock Type	None evident
% Leaves:Logs	2:1.5
Vegetation Condition	Very Good
Disturbance Type	Livestock; Weeds
Fire Age	Old
Vegetation	<i>Themeda</i> Closed Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		1	0.5
<i>*Malvastrum</i>	<i>americanum</i>		0.5	0.6
<i>Acacia</i>	<i>aptaneura</i>		15	6-10
<i>Acacia</i>	<i>dictyophleba</i>		0.5	2
<i>Acacia</i>	<i>steadmanii</i>	subsp. <i>borealis</i>	1.5	1.5-2
<i>Acacia</i>	<i>tenuissima</i>		<1	2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	6	1-2.5
<i>Alternanthera</i>	<i>nana</i>		1	0.3
<i>Androcalva</i>	<i>luteiflora</i>		1	1-3
<i>Aristida</i>	<i>contorta</i>		<1	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.8
<i>Boerhavia</i>	<i>coccinea</i>		<1	Cr
<i>Brunonia</i>	<i>australis</i>		0.5	0.4
<i>Chrysopogon</i>	<i>fallax</i>		4	1
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Eragrostis</i>	<i>eriopoda</i>		1	0.5
<i>Eremophila</i>	<i>longifolia</i>		0.5	1
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	1
<i>Eucalyptus</i>	<i>xerothermica</i>		6	2-7
<i>Eulalia</i>	<i>aurea</i>		25	0.7
<i>Euphorbia</i>	<i>coghlanii</i>		<1	0.3
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.3
<i>Gastrolobium</i>	<i>grandiflorum</i>		2	1.6
<i>Goodenia</i>	<i>heterochila</i>		1.5	0.25
<i>Goodenia</i>	<i>prostrata</i>		<1	0.1
<i>Goodenia</i>	<i>stellata</i>		<1	0.2
<i>Gossypium</i>	<i>robinsonii</i>		0.5	2-3

Genus	Species	subsp./var.	% Cover	Height
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Indigofera</i>	<i>georgei</i>		<1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Paraneurachne</i>	<i>muelleri</i>		2	0.4
<i>Perotis</i>	<i>rara</i>		<1	0.2
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>filiformis</i>	<1	0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.2
<i>Setaria</i>	<i>surgens</i>		2	0.5
<i>Sida</i>	<i>fibulifera</i>		0.5	0.3
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.4
<i>Themeda</i>	<i>triandra</i>		50	1.1
<i>Triodia</i>	<i>pungens</i>		1.5	1.1
<i>Vittadinia</i>	sp. Coondewanna Flats (S. Van Leeuwen 4684)		<1	0.4

Site	Site AY100
Date	30/05/2001
Recorder	JB/EP
Photo	669
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	699037
Northing	7490923
Habitat	Plain (PLA)
Aspect	270°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Orange Ironstone (fine gravel, pebbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Access track nearby; Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	2
<i>Acacia</i>	<i>aptaneura</i>		2.5	1-2
<i>Acacia</i>	<i>aptaneura</i>		<1	2-4
<i>Acacia</i>	<i>atkinsiana</i>		<1	1-2
<i>Acacia</i>	<i>maitlandii</i>		<1	1-1.5
<i>Acacia</i>	<i>monticola</i>		<1	3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1-2
<i>Acacia</i>	<i>tenuissima</i>		<1	1-2
<i>Aristida</i>	<i>contorta</i>		0.25	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.25	0.35
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.5-1
<i>Codonocarpus</i>	<i>cotinifolius</i>		<1	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		<1	4
<i>Digitaria</i>	<i>brownii</i>		<1	0.6
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		0.25	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.45
<i>Eucalyptus</i>	<i>gamophylla</i>		<1	2-3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	3
<i>Eucalyptus</i>	<i>trivalva</i>		<1	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		1.5	3-6
<i>Eulalia</i>	<i>aurea</i>		<1	0.6
<i>Iseilema</i>	<i>dolichotrichum</i>		<1	0.2
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.5
<i>Paspalidium</i>	<i>rarum</i>		<1	0.3
<i>Portulaca</i>	<i>oleracea</i>		<1	0.05
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	Cl
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Triodia</i>	<i>wiseana</i>		50	1-1.5

Site	Site AY101
Date	31/05/2011
Recorder	PS/GH
Photo	AY101
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	703679
Northing	7496594
Habitat	Drainage Depression (DDE)
Aspect	180°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles, gravel)
% Leaves:Logs	1:1.5
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Acacia</i> Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4	0.5
<i>Acacia</i>	<i>hilliana</i>		0.5	0.4
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1.5-3
<i>Acacia</i>	<i>monticola</i>		8	1-2
<i>Acacia</i>	<i>tenuissima</i>		3.5	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	1	1-2
<i>Androcalva</i>	<i>luteiflora</i>		3	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Brunonia</i>	<i>australis</i>		<1	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		3	5-6
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>gamophylla</i>		1	1-2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	6-7
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		3	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	1-2
<i>Hakea</i>	<i>chordophylla</i>		1	4-5
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		1	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	6	0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.3
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>astrolasius</i>		0.5	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Santalum</i>	<i>lanceolatum</i>		1	1-1.5
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.2
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.4
<i>Senna</i>	<i>venusta</i>		<1	0.3
<i>Sida</i>	<i>arenicola</i>		0.5	0.6
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.4
<i>Themeda</i>	<i>triandra</i>		6	1
<i>Triodia</i>	<i>pungens</i>		13.5	0.7
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		15	0.7

Site	Site AY102
Date	31/05/2011
Recorder	JB/EP
Photo	670
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	708246
Northing	7496529
Habitat	Hillslope (HSL)
Aspect	170°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (outcrops, cobbles, pebbles)
% Leaves:Logs	1:2
Vegetation Condition	Excellent
Disturbance Type	Old access track nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	6.5	0.35
<i>Acacia</i>	<i>elachantha</i>		<1	0.5-1
<i>Acacia</i>	<i>hilliana</i>		2	0.4
<i>Acacia</i>	<i>monticola</i>		3	0.5-2
<i>Androcalva</i>	<i>luteiflora</i>		0.5	1
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	<1	0.1
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.1
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		1.5	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		3.5	5-8
<i>Dodonaea</i>	<i>lanceolata</i>		<1	0.5
<i>Eriachne</i>	<i>lanata</i>		<1	0.5
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	5-8
<i>Exocarpos</i>	<i>sparteus</i>		<1	1-1.5
<i>Fimbristylis</i>	<i>dichotoma</i>		<1	0.3
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Goodenia</i>	<i>cusackiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Gossypium</i>	<i>robinsonii</i>		<1	0.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	1-2.5
<i>Hakea</i>	<i>chordophylla</i>		<1	1.2-1.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.35
<i>Indigofera</i>	<i>monophylla</i>		1	0.25
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.6
<i>Santalum</i>	<i>lanceolatum</i>		0.5	1-1.5

Genus	Species	subsp./var.	% Cover	Height
<i>Scaevola</i>	<i>browniana</i>		<1	0.35
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		0.25	0.5-1.5
<i>Tephrosia</i>	<i>arenicola</i>		<1	0.5-1
<i>Triodia</i>	<i>pungens</i>		65	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		6	0.6

Site	Site AY103
Date	31/05/2011
Recorder	PS/GH
Photo	AY103
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702483
Northing	7496917
Habitat	Footslope (FOO)
Aspect	180°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Livestock
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2	0.3
<i>Acacia</i>	<i>elachantha</i>		<1	0.5
<i>Acacia</i>	<i>hilliana</i>		2	0.4
<i>Acacia</i>	<i>inaequilatera</i>		1	3-4
<i>Acacia</i>	<i>monticola</i>		1.5	1-2
<i>Amphipogon</i>	<i>sericeus</i>		0.5	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		4	4-8
<i>Eriachne</i>	<i>lanata</i>		0.5	0.4
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	6	4-10
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.2
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.2
<i>Exocarpos</i>	<i>sparteus</i>		<1	1
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		0.5	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	1-4
<i>Hakea</i>	<i>chordophylla</i>		0.5	2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.2
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.25
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.7
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.4
<i>Mirbelia</i>	<i>viminalis</i>		<1	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Psydrax</i>	<i>sauveleons</i>		<1	0.7
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.4
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.6
<i>Senna</i>	<i>notabilis</i>		<1	0.2
<i>Sida</i>	<i>arenicola</i>		0.5	0.6
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1.6
<i>Themeda</i>	<i>triandra</i>		1	0.6
<i>Triodia</i>	<i>pungens</i>		3	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		35	0.5

Site	Site AY104
Date	31/05/2011
Recorder	JB/EP
Photo	671
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	707145
Northing	7496503
Habitat	Hillcrest (HCR)
Aspect	350°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Red Slaty Ironstone (cobbles, pebbles, minor outcropping)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Minimal; Old fire scars
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	10	0.25
<i>Acacia</i>	<i>elachantha</i>		<1	0.4
<i>Acacia</i>	<i>tenuissima</i>		1	1-2
<i>Acacia</i>	<i>validinervia</i>		<1	1-2
<i>Amphipogon</i>	<i>sericeus</i>		0.25	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	0.5	3-4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		2.5	1-2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2.5	2-6
<i>Exocarpos</i>	<i>sparteus</i>		<1	1-2
<i>Fimbristylis</i>	<i>dichotoma</i>		<1	0.2
<i>Fimbristylis</i>	<i>simulans</i>		0.5	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		1.5	0.3
<i>Goodenia</i>	<i>cusackiana</i>		<1	0.25
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.1
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.25
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	0.5
<i>Hakea</i>	<i>chordophylla</i>		<1	3-4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	0.25	0.2
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.15
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	4.5	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		<1	1
<i>Ptilotus</i>	<i>rotundifolius</i>		<1	0.5
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5-1
<i>Sida</i>	sp. Golden calyces glabrous (H.N. Foote 32)		<1	0.15
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.1
<i>Triodia</i>	<i>brizoides</i>		<1	0.4-0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		60	0.5
<i>Triodia</i>	<i>wiseana</i>		2	1.2

Site	Site AY105
Date	1/06/2011
Recorder	PS/GH
Photo	AY105
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712676
Northing	7496401
Habitat	Hillslope (HSL)
Aspect	240°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs); Old access
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	5	0.3
<i>Acacia</i>	<i>adsurgens</i>		<1	0.4
<i>Acacia</i>	<i>hilliana</i>		6	0.4
<i>Acacia</i>	<i>inaequilatera</i>		<1	2
<i>Acacia</i>	sp. indet		<1	0.15
<i>Acacia</i>	<i>tenuissima</i>		<1	0.5
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.3
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.1
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		1	4-5
<i>Dampiera</i>	<i>candicans</i>		<1	0.4
<i>Eriachne</i>	<i>lanata</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	5-7
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.2
<i>Exocarpos</i>	<i>sparteus</i>		<1	1.7
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.5	1-2
<i>Hakea</i>	<i>chordophylla</i>		1	2-4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.25
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.1
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1

Genus	Species	subsp./var.	% Cover	Height
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	3	0.2
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.15
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.8
<i>Schizachyrium</i>	<i>fragile</i>		1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glaucifolia</i>		<1	0.7
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.4
<i>Sida</i>	<i>arenicola</i>		<1	0.5
<i>Sida</i>	<i>cardiophylla</i>		1.5	0.25
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5-1
<i>Solanum</i>	<i>phlomoides</i>		<1	0.5
<i>Tephrosia</i>	<i>arenicola</i>		<1	0.4
<i>Tephrosia</i>	sp. Cathedral Gorge (F.H. Mollemans 2420)		<1	0.1
<i>Triodia</i>	<i>brizoides</i>		32	0.5
<i>Triodia</i>	<i>pungens</i>		5	0.4

Site	Site AY106
Date	31/05/2011
Recorder	JB/EP
Photo	672
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	705238
Northing	7497218
Habitat	Drainage Depression (DDE)
Aspect	260°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert (scattered pebbles)
% Leaves:Logs	3.5:2
Vegetation Condition	Excellent
Disturbance Type	Livestock; Access track nearby; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.4
<i>Acacia</i>	<i>bivenosa</i>		<1	0.5
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.5
<i>Acacia</i>	<i>elachantha</i>		7	1-2
<i>Acacia</i>	<i>hilliana</i>		<1	0.3
<i>Acacia</i>	<i>tenuissima</i>		<1	
<i>Acacia</i>	<i>validinervia</i>		<1	1
<i>Androcalva</i>	<i>luteiflora</i>		<1	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	1	0.5
<i>Bonamia</i>	<i>erecta</i>		4	0.4
<i>Capparis</i>	<i>lasiantha</i>		<1	0.5
<i>Chrysopogon</i>	<i>fallax</i>		5.5	1-1.2
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	<1	8
<i>Corymbia</i>	<i>hamersleyana</i>		2	3-8
<i>Dicrastylis</i>	<i>cordifolia</i>		<1	0.4
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		4.5	1.5-3
<i>Eucalyptus</i>	<i>xerothermica</i>		2	4-6
<i>Eulalia</i>	<i>aurea</i>		1	0.6
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.4
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	1	1-3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platyklamys</i>	<1	0.6
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.35
<i>Indigofera</i>	<i>monophylla</i>		<1	0.25

Genus	Species	subsp./var.	% Cover	Height
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1.5	0.4
<i>Maytenus</i>	sp. Mt Windell (S. van Leeuwen 846)		0.5	1-2.5
<i>Rhyncharrhena</i>	<i>linearis</i>		<1	0.3
<i>Santalum</i>	<i>lanceolatum</i>		<1	1-1.5
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	1	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1.5	0.5
<i>Sida</i>	<i>cardiophylla</i>		3.5	0.7
<i>Sida</i>	<i>fibulifera</i>		<1	0.35
<i>Themeda</i>	<i>triandra</i>		3	0.5-1.2
<i>Triodia</i>	<i>pungens</i>		21	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		0.5	0.5

Site	Site AY107
Date	1/06/2011
Recorder	PS/GH
Photo	AY107
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	711580
Northing	7496402
Habitat	Drainage Depression (DDE)
Aspect	
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam
Rock Type	sandy Brown Ironstone (cobbles, pebbles with outcropping)
% Leaves:Logs	3.5:2
Vegetation Condition	Pristine
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Acacia</i> Open Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	sp. Dioicum (A.A. Mitchell PRP1618)		2	1
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1.5	0.4
<i>Acacia</i>	<i>pyrifolia</i>		4	3-4
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	30	2-4
<i>Acrachne</i>	<i>racemosa</i>		<1	0.3
<i>Amaranthus</i>	<i>undulatus</i>		<1	0.15
<i>Androcalva</i>	<i>luteiflora</i>		6	1-3
<i>Atalaya</i>	<i>hemiglauca</i>		<1	2
<i>Capparis</i>	<i>lasiantha</i>		<1	CI
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		3	5-6
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.4
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		6	1.8
<i>Dodonaea</i>	<i>lanceolata</i>		1	2.5
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Enneapogon</i>	<i>lindleyanus</i>		6	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	6-8
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	<1	0.4
<i>Ficus</i>	<i>brachypoda</i>		<1	2
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Gossypium</i>	<i>robinsonii</i>		7	2-4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	5	2-6
<i>Hakea</i>	<i>chordophylla</i>		<1	2.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		1.5	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Peripleura</i>	<i>hispidula</i>		<1	0.2
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.15
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.05
<i>Ptilotus</i>	<i>obovatus</i>		0.5	0.6
<i>Rhodanthe</i>	<i>margarethae</i>		<1	0.15
<i>Santalum</i>	<i>lanceolatum</i>		<1	1.6
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	3
<i>Stylobasium</i>	<i>spathulatum</i>		2	1-2
<i>Tephrosia</i>	<i>rosea</i>	var. <i>Fortescue creeks</i> (M.I.H. Brooker 2186)	2	0.4
<i>Themeda</i>	<i>triandra</i>		9	0.8
<i>Trachymene</i>	<i>oleracea</i>		<1	0.2
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.1
<i>Triodia</i>	<i>pungens</i>		12	1

Site	Site AY108
Date	31/05/2011
Recorder	JB/EP
Photo	673
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	705506
Northing	7496509
Habitat	Footslope (FOO)
Aspect	160°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Slatey Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	Livestock in area
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2	0.2
<i>Acacia</i>	<i>bivenosa</i>		<1	1
<i>Acacia</i>	<i>elachantha</i>		<1	0.5-1
<i>Acacia</i>	<i>inaequilatera</i>		<1	2-3
<i>Acacia</i>	<i>sericophylla</i>		1	1-3
<i>Acacia</i>	<i>tenuissima</i>		<1	0.5-1
<i>Acacia</i>	<i>adsurgens</i>		<1	0.5
<i>Antholbolus</i>	<i>leptomerioides</i>		<1	0.5-1
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Bonamia</i>	<i>erecta</i>		0.5	0.35
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.5
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eremophila</i>	<i>longifolia</i>		<1	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	2-3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	5-8
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		0.25	0.3-0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1-2
<i>Hakea</i>	<i>chordophylla</i>		0.5	3
<i>Indigofera</i>	<i>monophylla</i>		0.25	0.35
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	3	0.4-1
<i>Paraneurachne</i>	<i>muelleri</i>		0.25	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.25	0.25
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	2.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	1.2
<i>Sida</i>	<i>arenicola</i>		0.75	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	<i>cardiophylla</i>		<1	0.5
<i>Solanum</i>	<i>phlomoides</i>		<1	0.4
<i>Triodia</i>	<i>pungens</i>		1	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		63	0.4

Site	Site AY109
Date	1/06/2011
Recorder	PS/GH
Photo	AY109
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	711689
Northing	7495549
Habitat	Hillslope (HSL)
Aspect	90°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3	0.3
<i>Acacia</i>	<i>hilliana</i>		8	0.3
<i>Acacia</i>	<i>inaequilatera</i>		<1	1.2
<i>Acacia</i>	<i>pruinocarpa</i>		1	1
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.3
<i>Corymbia</i>	<i>hamerlseyana</i>		1	3-5
<i>Dampiera</i>	<i>candicans</i>		<1	0.6
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	8	1-6
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.25
<i>Gossypium</i>	<i>robinsonii</i>		<1	0.6
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2.5	1-2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.2
<i>Indigofera</i>	<i>monophylla</i>		1	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.4
<i>Mirbelia</i>	<i>viminalis</i>		<1	0.7
<i>Scaevola</i>	<i>browniana</i>		<1	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1
<i>Sida</i>	<i>cardiophylla</i>		<1	0.3
<i>Tricoryne</i>	sp. Hamersley Range (S. Van Leeuwen 915)		<1	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		29	0.4
<i>Triodia</i>	<i>pungens</i>		6	0.4

Site	Site AY110
Date	1/06/2011
Recorder	JB/EP
Photo	674
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	704375
Northing	7496614
Habitat	Drainage Depression (DDE)
Aspect	180°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam
Rock Type	Orange Ironstone (scattered pebbles)
% Leaves:Logs	10:6
Vegetation Condition	Excellent
Disturbance Type	Access track nearby; Livestock nearby
Fire Age	Old
Vegetation	<i>Themeda</i> Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.35
<i>Acacia</i>	<i>aptaneura</i>		1	1-3
<i>Acacia</i>	<i>bivenosa</i>		0.5	1-2
<i>Acacia</i>	<i>elachantha</i>		5.5	2-4
<i>Acacia</i>	<i>monticola</i>		<1	2.2
<i>Acacia</i>	<i>tenuissima</i>		0.5	1.5-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	<1	2
<i>Acacia</i>	<i>validinervia</i>		0.5	2
<i>Androcalva</i>	<i>luteiflora</i>		4.5	1.5-2.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.5
<i>Aristida</i>	<i>inaequiglumis</i>		<1	0.6
<i>Bonamia</i>	<i>erecta</i>		<1	0.3
<i>Chrysopogon</i>	<i>fallax</i>		1.5	1.5
<i>Corchorus</i>	<i>tridens</i>		<1	0.1
<i>Corymbia</i>	<i>hamersleyana</i>		6	3-8
<i>Dodonaea</i>	<i>lanceolata</i>		1	2
<i>Duperreya</i>	<i>commixta</i>		<1	Cl
<i>Eremophila</i>	<i>longifolia</i>		1	2-2.5
<i>Eucalyptus</i>	<i>xerothermica</i>		4	3-6
<i>Eulalia</i>	<i>aurea</i>		5	0.5-1
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.3
<i>Gastrolobium</i>	<i>grandiflorum</i>		35	1.5-2.5
<i>Goodenia</i>	<i>heterochila</i>		<1	0.15-0.2
<i>Goodenia</i>	<i>stellata</i>		0.5	0.1
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	<1	0.25
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>georgei</i>		0.5	0.5-1

Genus	Species	subsp./var.	% Cover	Height
<i>Indigofera</i>	<i>monophylla</i>		<1	0.35
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Salsola</i>	<i>australis</i>		1.5	0.5-1
<i>Scaevola</i>	<i>amblyanthera</i>	var. <i>centralis</i>	<1	0.35
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	<1	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.3
<i>Senna</i>	<i>notabilis</i>		<1	0.2
<i>Setaria</i>	<i>surgens</i>		<1	0.4
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Themeda</i>	<i>triandra</i>		75	1.5
<i>Triodia</i>	<i>pungens</i>		0.3	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.4

Site	Site AY111
Date	1/06/2011
Recorder	PS/GH
Photo	AY111
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712388
Northing	7495766
Habitat	Hillcrest (HCR)
Aspect	
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.3
<i>Acacia</i>	<i>hilliana</i>		<1	0.3
<i>Acacia</i>	<i>inaequilatera</i>		<1	2
<i>Acacia</i>	<i>tenuissima</i>		<1	0.6
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3.5	3-6
<i>Fimbristylis</i>	<i>simulans</i>		2	0.15
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-3
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	0.5	1
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.6
<i>Triodia</i>	<i>pungens</i>		0.5	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		60	0.6

Site	Site AY112
Date	1/06/2011
Recorder	JB/EP
Photo	675
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714639
Northing	7496193
Habitat	Gully (GUL)
Aspect	40°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	1:1
Vegetation Condition	Excellent
Disturbance Type	Rail, Access road nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2.5	0.4
<i>Acacia</i>	<i>elachantha</i>		<1	1.5
<i>Acacia</i>	<i>hilliana</i>		<1	0.3
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2-4
<i>Acacia</i>	<i>monticola</i>		4	1-2.5
<i>Acacia</i>	<i>pyrifolia</i>		<1	3
<i>Acacia</i>	<i>spondylophylla</i>		4.5	0.4
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	2	1-2
<i>Amaranthus</i>	<i>undulatus</i>		<1	0.1
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.5
<i>Atalaya</i>	<i>hemiglauca</i>		<1	3
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.15
<i>Cheilanthes</i>	<i>brownii</i>		<1	0.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.6
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	0.5-1
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.5-1
<i>Corymbia</i>	<i>hamersleyana</i>		3	3-6
<i>Crotalaria</i>	<i>novae-hollandiae</i>	subsp. <i>novae-hollandiae</i>	<1	0.4
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	1
<i>Cymbopogon</i>	<i>obtectus</i>		<1	0.8
<i>Eriachne</i>	<i>mucronata</i>		<1	0.4
<i>Eucalyptus</i>	<i>gamophylla</i>		2.5	2-3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	2-4
<i>Euphorbia</i>	<i>biconvexa</i>		<1	0.3
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	<1	0.5
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.1
<i>Gossypium</i>	<i>robinsonii</i>		7	2-3

Genus	Species	subsp./var.	% Cover	Height
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	8	2-4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.35
<i>Indigofera</i>	<i>monophylla</i>		<1	0.4-0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	4	0.4
<i>Nicotiana</i>	<i>benthamiana</i>		<1	0.3
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.35
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.3
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		<1	0.1
<i>Santalum</i>	<i>lanceolatum</i>		<1	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Sida</i>	sp. Articulation below (A.A. Mitchell PRP1605)		<1	0.5-1
<i>Solanum</i>	<i>phlomoides</i>		<1	0.5-1
<i>Themeda</i>	<i>triandra</i>		0.5	0.5-1
<i>Trachymene</i>	<i>oleracea</i>		<1	0.15-1
<i>Triodia</i>	<i>pungens</i>		80	0.5-1.2

Site	Site AY113
Date	1/06/2011
Recorder	PS/GH
Photo	AY113
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	713691
Northing	7496789
Habitat	Hillslope (HSL)
Aspect	20°
Slope	Steep (ST) (18°1' to 30°)
Soil	Sandy loam
Rock Type	Brown Ironstone (cobbles, pebbles with outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3.<1	0.3
<i>Acacia</i>	<i>hilliana</i>		1	0.4
<i>Acacia</i>	<i>inaequilatera</i>		1.5	1-3
<i>Acacia</i>	<i>monticola</i>		1.5	0.61
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Bonamia</i>	sp. Dampier (A.A. Mitchell PRP 217)		<1	0.1
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		<1	2
<i>Dampiera</i>	<i>candicans</i>		0.5	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	1	0.15
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	6-8
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.25
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Gossypium</i>	<i>robinsonii</i>		<1	1-2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	1-2
<i>Hakea</i>	<i>chordophylla</i>		1	2-5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.1
<i>Polycarpaea</i>	<i>longiflora</i>		1	0.25
<i>Santalum</i>	<i>lanceolatum</i>		0.5	1-2
<i>Schizachyrium</i>	<i>fragile</i>		20	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.25

Genus	Species	subsp./var.	% Cover	Height
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Tephrosia</i>	<i>arenicola</i>		<1	0.4-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.5
<i>Triodia</i>	<i>wiseana</i>		18	0.6

Site	Site AY114
Date	1/06/2011
Recorder	JB/EP
Photo	682
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715485
Northing	7496320
Habitat	Hillcrest (HCR)
Aspect	320°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (outcrops, cobbles, pebbles)
% Leaves:Logs	1:1
Vegetation Condition	Excellent
Disturbance Type	Minimal
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4	0.4
<i>Acacia</i>	<i>hilliana</i>		9	0.4
<i>Acacia</i>	<i>monticola</i>		0.5	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		<1	2.5
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.4
<i>Cassytha</i>	<i>capillaris</i>		<1	Cl
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.5
<i>Corymbia</i>	<i>hamerlseyana</i>		1.5	4-5
<i>Eriachne</i>	<i>lanata</i>		<1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	4-6
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.25
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	7	2-4
<i>Hakea</i>	<i>chordophylla</i>		1	1-5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	<1	0.3-0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Sida</i>	sp. Articulation below (A.A. Mitchell PRP1605)		<1	1-2
<i>Solanum</i>	<i>phlomoides</i>		<1	0.3-5
<i>Tephrosia</i>	<i>arenicola</i>		4	0.5-1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.5-0.6
<i>Triodia</i>	<i>pungens</i>		<1	0.6-0.7

Site	Site AY115
Date	2/06/2011
Recorder	PS/GH
Photo	AY115
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715115
Northing	7491669
Habitat	Plain (PLA)
Aspect	270°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	0.5:<1
Vegetation Condition	Very Good
Disturbance Type	Livestock; Rail; Access track
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>dictyophleba</i>		1.5	1-1.5
<i>Acacia</i>	<i>inaequilatera</i>		<1	2
<i>Acacia</i>	<i>pyrifolia</i>		3	2-4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	2	0.35
<i>Brunonia</i>	<i>australis</i>		2	0.4
<i>Chrysopogon</i>	<i>fallax</i>		<1	1.2
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	0.4
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	1	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		1.5	4-7
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Dicrastylis</i>	<i>cordifolia</i>		<1	0.4
<i>Dodonaea</i>	<i>lanceolata</i>		<1	1.5
<i>Eragrostis</i>	<i>eriopoda</i>		<1	0.4
<i>Eucalyptus</i>	sp. indet		1.5	3
<i>Eucalyptus</i>	<i>xerothermica</i>		1	2-6
<i>Eulalia</i>	<i>aurea</i>		4	0.25
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Goodenia</i>	<i>stellata</i>		0.5	0.1
<i>Gossypium</i>	<i>robinsonii</i>		<1	2
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Heliotropium</i>	<i>pachyphyllum</i>		<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Paraneurachne</i>	<i>muelleri</i>		2	0.3
<i>Polymeria</i>	<i>ambigua</i>		<1	0.1
<i>Ptilotus</i>	<i>astrolasius</i>		2.5	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		<1	1
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.15

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>nobilis</i>		<1	1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.25
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.6
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	<i>fibulifera</i>		<1	0.3
<i>Stemodia</i>	<i>grossa</i>		1	0.25
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.6
<i>Tephrosia</i>	sp. Bungaroo Creek		<1	0.2
<i>Themeda</i>	<i>triandra</i>		6.5	0.7
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	0.6
<i>Triodia</i>	<i>pungens</i>		25	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		1.5	0.6

Site	Site AY116
Date	1/06/2011
Recorder	JB/EP
Photo	683
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715505
Northing	7495634
Habitat	Hillslope (HSL)
Aspect	50°
Slope	Steep (ST) (18°1' to 30°)
Soil	Loamy Sand
Rock Type	Red Ironstone (orange-red - cliffs, outcrops, cobbles, pebbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Minimal; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	
<i>Acacia</i>	<i>maitlandii</i>		<1	0.5-1.5
<i>Acacia</i>	<i>maitlandii</i>		0.5	1-2
<i>Amaranthus</i>	<i>undulatus</i>		<1	0.3
<i>Aristida</i>	<i>burbridgeae</i>		<1	0.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.3
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		2	1.6
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.1
<i>Corymbia</i>	<i>ferritcola</i>		<1	4
<i>Corymbia</i>	<i>hamersleyana</i>		1	2-4
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.5-1
<i>Eriachne</i>	<i>mucronata</i>		1.5	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	2-6
<i>Fimbristylis</i>	<i>dichotoma</i>		0.5	0.5-1
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.5	1-2
<i>Newcastelia</i>	sp. Hamersley Range (S. van Leeuwen 4264)		<1	0.5-1
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.1
<i>Paraneurachne</i>	<i>muelleri</i>		<1	0.4
<i>Paspalidium</i>	<i>clementii</i>		<1	0.1
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5-1
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.4
<i>Schizachyrium</i>	<i>fragile</i>		<1	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Trachymene</i>	<i>oleracea</i>		<1	0.2
<i>Triodia</i>	<i>pungens</i>		6	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.5
<i>Triodia</i>	<i>wiseana</i>		35	0.5-1
<i>Triumfetta</i>	<i>maconochieana</i>		<1	0.4

Site	Site AY117
Date	2/06/2011
Recorder	PS/GH
Photo	AY117
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714426
Northing	7490395
Habitat	Hillcrest (HCR)
Aspect	320°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Brown Loamy Sand
Rock Type	Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.3
<i>Acacia</i>	<i>hilliana</i>		<1	0.3
<i>Acacia</i>	<i>maitlandii</i>		<1	0.3
<i>Acacia</i>	<i>pruinocarpa</i>		<1	1
<i>Amphipogon</i>	<i>sericeus</i>		3	0.4
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.05
<i>Calytrix</i>	<i>carinata</i>		<1	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2.5	4-5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	6
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		0.5	0.25-0.4
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.3
<i>Hakea</i>	<i>chordophylla</i>		<1	2-4
<i>Polycarphaea</i>	<i>longiflora</i>		<1	0.02
<i>Ptilotus</i>	<i>astrolasius</i>		<1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		0.5	0.8
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.2
<i>Senna</i>	<i>symonii</i>		0.5	1.1
<i>Sida</i>	<i>arenicola</i>		<1	1
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote)		<1	0.25
<i>Stackhousia</i>	<i>intermedia</i>		<1	0.15
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		12	0.3

Site	Site AY118
Date	2/06/2011
Recorder	JB/EP
Photo	698, 699
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	713880
Northing	7494727
Habitat	Cliff (CLI)
Aspect	220°
Slope	Precipitous (PR) (45°1' to 72°)
Soil	Loamy Sand
Rock Type	Red Ironstone (BIF) - (cliffline, boulders, cobbles)
% Leaves:Logs	3:5
Vegetation Condition	Very Good
Disturbance Type	Adjacent to rail line & access tracks; Fire patchy (young 1-2 yrs, Old 5-10 yrs)
Fire Age	Young to Old
Vegetation	<i>Themeda</i> Open Tussock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>hamersleyensis</i>		3	1.5-4
<i>Acacia</i>	<i>pruinocarpa</i>		<1	2-6
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	<1	2-3
<i>Amaranthus</i>	<i>undulatus</i>		<1	0.5
<i>Androcalva</i>	<i>luteiflora</i>		<1	1-2
<i>Aristida</i>	<i>burbridgeae</i>		<1	0.4
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	<1	1-2
<i>Bulbostylis</i>	<i>barbata</i>		<1	0.2
<i>Capparis</i>	<i>spinosa</i>	var. <i>nummularia</i>	<1	1-2
<i>Cassytha</i>	<i>capillaris</i>		<1	CI
<i>Centipeda</i>	<i>minima</i>	subsp. <i>macrocephala</i>	OC	OC
<i>Cheilanthes</i>	<i>sieberi</i>	subsp. <i>sieberi</i>	<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.5
<i>Corymbia</i>	<i>ferriticola</i>		1.5	2-4
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>ambiguus</i>		1	1
<i>Dodonaea</i>	<i>pachyneura</i>		1	1-2
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.15
<i>Eragrostis</i>	<i>elongata</i>		OC	OC
<i>Eremophila</i>	<i>jucunda</i>	subsp. <i>pulcherrima</i>	0.5	0.5-1.5
<i>Eriachne</i>	<i>mucronata</i>		4	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	6
<i>Ficus</i>	<i>brachypoda</i>		1	1-3
<i>Fimbristylis</i>	aff. <i>elegans</i>		OC	OC
<i>Fimbristylis</i>	<i>dichotoma</i>		OC	OC
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Gossypium</i>	<i>robinsonii</i>		<1	1.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.5	2-3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.4
<i>Hybanthus</i>	<i>aurantiacus</i>		1	1-1.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Lipocarpa</i>	<i>microcephala</i>		OC	OC
<i>Marsilea</i>	<i>hirsuta</i>		OC	OC
<i>Nicotiana</i>	<i>benthamiana</i>		1	0.5-1
<i>Nicotiana</i>	<i>benthamiana</i>		<1	0.4
<i>Oldenlandia</i>	<i>galioides</i>		OC	OC
<i>Paspalidium</i>	<i>clementii</i>		5	0.35
<i>Pluchea</i>	<i>dentex</i>		<1	0.4
<i>Rotala</i>	<i>diandra</i>		OC	OC
<i>Santalum</i>	<i>lanceolatum</i>		<1	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Senna</i>	<i>venusta</i>		<1	0.2
<i>Solanum</i>	<i>horridum</i>		<1	0.2
<i>Themeda</i>	<i>triandra</i>		10	0.5
<i>Tinospora</i>	<i>smilacina</i>		<1	CI
<i>Trachymene</i>	<i>oleracea</i>		<1	0.3
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	1-2
<i>Triodia</i>	<i>pungens</i>		10	0.5-1.2
<i>Triumfetta</i>	<i>leptacantha</i>		0.5	0.5-1

Site	Site AY119
Date	2/06/2011
Recorder	PS/GH
Photo	AY118
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714177
Northing	7489202
Habitat	Hillslope (HSL)
Aspect	60°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Loamy Sand
Rock Type	Brown Ironstone (cobbles, pebbles (Shales))
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire (Old 5-10 yrs)
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		2	1-3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		0.5	0.4
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	0.5	0.3
<i>Eriachne</i>	<i>aristidea</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	0.5	1-2
<i>Hakea</i>	<i>chordophylla</i>		<1	1
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.3
<i>Indigofera</i>	<i>rugosa</i>		0.5	0.3
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	0.7
<i>Mollugo</i>	<i>molluginis</i>		<1	0.1
<i>Polycarpha</i>	<i>holtzei</i>		<1	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		1	0.3
<i>Ptilotus</i>	<i>auriculifolius</i>		2	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		2	0.5-1
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.4
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.25	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5
<i>Tribulus</i>	<i>macrocarpus</i>		1	0.1
<i>Triodia</i>	<i>brizoides</i>		8	0.5
<i>Triodia</i>	<i>wiseana</i>		40	0.5

Site	Site AY120
Date	2/06/2011
Recorder	JB/EP
Photo	700
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714854
Northing	7495024
Habitat	Hillslope (HSL)
Aspect	190°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Loamy Sand
Rock Type	Brown Slatey Ironstone (outcrops, cobbles)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Access road nearby; Fire (Mod 2-5 yrs)
Fire Age	Moderate
Vegetation	<i>Corymbia</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	7	0.25-3
<i>Acacia</i>	<i>hilliana</i>		1.5	0.2
<i>Acacia</i>	<i>monticola</i>		1.5	0.5-1.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	<1	1-2
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	<1	Cr
<i>Cassytha</i>	<i>capillaris</i>		<1	Cl
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	0.5	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		7	2-6
<i>Cucumis</i>	<i>maderaspatana</i>		<1	Cl
<i>Dampiera</i>	<i>candicans</i>		2	0.5
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4.5	3-6
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	<1	0.15
<i>Euphorbia</i>	sp. indet		<1	0.10
<i>Exocarpos</i>	<i>spateus</i>		<1	1-1.2
<i>Fimbristylis</i>	<i>dichotoma</i>		<1	0.2
<i>Goodenia</i>	<i>cusackiana</i>		<1	0.15
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1.5	2-3
<i>Hakea</i>	<i>chordophylla</i>		<1	2.5
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.4
<i>Indigofera</i>	<i>monophylla</i>		<1	0.25
<i>Mirbelia</i>	<i>viminalis</i>		1	0.5
<i>Oldenlandia</i>	<i>crouchiana</i>		<1	0.15
<i>Paraneurachne</i>	<i>muelleri</i>		1.5	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.3
<i>Senna</i>	<i>ferraria</i>		<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5-1
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		1	1-2
<i>Solanum</i>	<i>phlomoides</i>		<1	0.35
<i>Themeda</i>	<i>triandra</i>		3	0.6
<i>Tricoryne</i>	sp. Hamersley Range (S. Van Leeuwen 915)		0.5	0.4
<i>Triodia</i>	<i>pungens</i>		10	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		15	0.6

Site	Site AY121
Date	2/06/2011
Recorder	PS/GH
Photo	AY121
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715865
Northing	7489325
Habitat	Drainage Depression (DDE)
Aspect	210°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Clay loam, sandy
Rock Type	Brown Mixed riverine gravels
% Leaves:Logs	6:3
Vegetation Condition	Excellent
Disturbance Type	Access track, Rail
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Sonchus</i>	<i>oleraceus</i>		<1	0.2
<i>*Sonchus</i>	<i>oleraceus</i>		<1	0.2
<i>Abutilon</i>	sp. Dioicum (A.A. Mitchell PRP1618)		<1	1-2
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.4
<i>Acacia</i>	<i>bivenosa</i>		1	1-1.5
<i>Acacia</i>	<i>maitlandii</i>		<1	0.4
<i>Acacia</i>	<i>pyrifolia</i>		2	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	10	2-4
<i>Adriana</i>	<i>tomentosa</i>		0.5	2
<i>Alternanthera</i>	<i>nana</i>		1	0.2-0.4
<i>Atalaya</i>	<i>hemiglauca</i>		<1	2-3
<i>Chrysocephalum</i>	<i>apiculatum</i>		<1	0.2
<i>Cleome</i>	<i>viscosa</i>		<1	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		<1	1
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	<1	0.4
<i>Cucumis</i>	<i>maderaspatana</i>		<1	CI
<i>Cymbopogon</i>	<i>procerus</i>		1.5	1.3
<i>Cyperus</i>	<i>vaginatus</i>		9	1.5
<i>Dodonaea</i>	<i>lanceolata</i>		<1	1
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Enneapogon</i>	<i>lindleyanus</i>		0.5	0.4
<i>Eragrostis</i>	<i>cumingii</i>		<1	0.4
<i>Eragrostis</i>	<i>tenellula</i>		0.5	0.5
<i>Eriachne</i>	<i>mucronata</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.15
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	40	10-12

Genus	Species	subsp./var.	% Cover	Height
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	4	1-2
<i>Eulalia</i>	<i>aurea</i>		27	1
<i>Fimbristylis</i>	<i>simulans</i>		<1	0.15
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.15
<i>Goodenia</i>	<i>nuda</i>		<1	0.25
<i>Gossypium</i>	<i>robinsonii</i>		5	3-5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2.5	2-3
<i>Heliotropium</i>	<i>pachyphyllum</i>		<1	0.3
<i>Hibiscus</i>	<i>coatesii</i>		<1	1.2
<i>Melhania</i>	<i>glomerata</i>		3	1-2
<i>Oldenlandia</i>	<i>galioides</i>		<1	0.1
<i>Peripleura</i>	<i>hispidula</i>		<1	0.2
<i>Petalostylis</i>	<i>labicheoides</i>		<1	2.5
<i>Phyllanthus</i>	<i>maderaspatensis</i>		0.5	0.4
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.2
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1
<i>Setaria</i>	<i>surgens</i>		<1	0.3
<i>Sporobolus</i>	<i>australasicus</i>		<1	0.2
<i>Stemodia</i>	<i>grossa</i>		<1	0.25
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.7
<i>Themeda</i>	<i>triandra</i>		5	0.8
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	1.2
<i>Vigna</i>	<i>lanceolata</i>	var. <i>lanceolata</i>	<1	Cl
<i>Wahlenbergia</i>	<i>tumidifructa</i>		<1	0.3

Site	Site AY122
Date	2/06/2011
Recorder	JB/EP
Photo	701
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715369
Northing	7494024
Habitat	Drainage Depression (DDE)
Aspect	220°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone; Conglomerate (outcrops, cobbles, pebbles)
% Leaves:Logs	2:3
Vegetation Condition	Very Good
Disturbance Type	Downstream of access track; Access track nearby
Fire Age	Very Old
Vegetation	<i>Acacia</i> Closed Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.4
<i>Acacia</i>	<i>maitlandii</i>		2	1-3
<i>Acacia</i>	<i>monticola</i>		2	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	70	2-4
<i>Androcalva</i>	<i>luteiflora</i>		3	1-2
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	<1	Cr
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	<1	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		8	6
<i>Cymbopogon</i>	<i>ambiguus</i>		<1	0.5
<i>Dampiera</i>	<i>candicans</i>		<1	0.5
<i>Dodonaea</i>	<i>lanceolata</i>		<1	1
<i>Eriachne</i>	<i>lanata</i>		<1	0.5
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.35
<i>Eriachne</i>	<i>tenuiculmis</i>		0.5	0.4
<i>Gossypium</i>	<i>robinsonii</i>		2	1.5-3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	5	2-3
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.5
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Peripleura</i>	<i>hispidula</i>		<1	0.4
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.5
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.3
<i>Santalum</i>	<i>lanceolatum</i>		1	01-2
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		1	1-2
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	2	0.6
<i>Themeda</i>	<i>triandra</i>		1	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>pungens</i>		20	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.5

Site	Site AY123
Date	2/06/2011
Recorder	JB/EP
Photo	704
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	716164
Northing	7489595
Habitat	Hillcrest (HCR)
Aspect	230°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Orange Ironstone (cobbles, pebbles)
% Leaves:Logs	3:1.5
Vegetation Condition	Very Good
Disturbance Type	Drill pad nearby; Railway construction nearby; Vehicle has driven through site
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		20	1-2
<i>Acacia</i>	<i>dictyophleba</i>		<1	0.3
<i>Acacia</i>	<i>inaequilatera</i>		1	3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	<1	0.4
<i>Bonamia</i>	<i>erecta</i>		<1	0.4
<i>Corymbia</i>	<i>ferriticola</i>		<1	3
<i>Corymbia</i>	<i>hamersleyana</i>		<1	5
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Dysphania</i>	cf. <i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.05
<i>Enneapogon</i>	<i>caerulescens</i>		<1	0.35
<i>Eremophila</i>	<i>longifolia</i>		<1	1-1.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispidula</i>	<1	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	6	1-2.5
<i>Hakea</i>	<i>chordophylla</i>		<1	1-2
<i>Hibiscus</i>	<i>coatesii</i>		<1	0.7
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.35
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	CI
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.35
<i>Santalum</i>	<i>lanceolatum</i>		<1	1-1.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	<1	1-2
<i>Senna</i>	<i>notabilis</i>		<1	0.1
<i>Triodia</i>	<i>pungens</i>		1	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		65	0.6

Site	Site AY124
Date	2/06/2011
Recorder	JB/EP
Photo	703
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715365
Northing	7491708
Habitat	Flood-out (FLD)
Aspect	270°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red mixed riverine gravels; Ironstone; Chert
% Leaves:Logs	5:2
Vegetation Condition	Very Good
Disturbance Type	Rail line nearby; Potential altered drainage line; earthmoving for construction
Fire Age	Old
Vegetation	<i>Acacia</i> High Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1.5	0.4
<i>Acacia</i>	<i>dictyophleba</i>		1.5	1-2
<i>Acacia</i>	<i>hilliana</i>		<1	0.35
<i>Acacia</i>	<i>maitlandii</i>		1	1-2
<i>Acacia</i>	<i>monticola</i>		<1	1
<i>Acacia</i>	<i>pyrifolia</i>		8	1-2.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	4	2-3
<i>Androcalva</i>	<i>luteiflora</i>		5	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.5
<i>Bonamia</i>	<i>erecta</i>		<1	0.3
<i>Chrysocephalum</i>	<i>apiculatum</i>		<1	0.4
<i>Chrysopogon</i>	<i>fallax</i>		<1	1.5
<i>Cleome</i>	<i>viscosa</i>		<1	0.6
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	6	0.5-1
<i>Corymbia</i>	<i>hamersleyana</i>		4	6-8
<i>Cymbopogon</i>	<i>procerus</i>		4.5	1-2
<i>Dampiera</i>	<i>candicans</i>		<1	0.4
<i>Dicrastylis</i>	<i>cordifolia</i>		<1	0.3
<i>Dodonaea</i>	<i>lanceolata</i>		<1	1-1.5
<i>Duperreya</i>	<i>commixta</i>		<1	CI
<i>Eremophila</i>	<i>longifolia</i>		1	1-2
<i>Eriachne</i>	<i>mucronata</i>		1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	<1	0.1
<i>Eriachne</i>	<i>tenuiculmis</i>		<1	0.5
<i>Eucalyptus</i>	<i>xerothematica</i>		1.5	6
<i>Eulalia</i>	<i>aurea</i>		<1	0.5-1
<i>Euphorbia</i>	<i>schultzii</i>		<1	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>decumbens</i>	<1	0.2
<i>Gomphrena</i>	<i>cunninghamii</i>		<1	0.1
<i>Goodenia</i>	<i>stellata</i>		<1	0.1
<i>Gossypium</i>	<i>robinsonii</i>		2	1.5-3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	4	1.5-3.5
<i>Hakea</i>	<i>chordophylla</i>		<1	2
<i>Heliotropium</i>	<i>pachyphyllum</i>		<1	0.2
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		<1	0.3
<i>Indigofera</i>	<i>georgei</i>		1.5	0.5-1
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.5
<i>Isotropis</i>	<i>atropurpurea</i>		<1	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	<1	Cl
<i>Leptopus</i>	<i>decaisnei</i>		<1	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		2	0.4
<i>Peripleura</i>	<i>hispidula</i>		<1	0.3
<i>Petalostylis</i>	<i>labicheoides</i>		3	2-3
<i>Polycarpaea</i>	<i>longiflora</i>		<1	0.15
<i>Polymeria</i>	<i>ambigua</i>		<1	Cr
<i>Ptilotus</i>	<i>astrolasius</i>		0.5	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		<1	0.5
<i>Ptilotus</i>	<i>fusiformis</i>		<1	0.4
<i>Ptilotus</i>	<i>nobilis</i>		<1	0.5-1
<i>Santalum</i>	<i>lanceolatum</i>		<1	2
<i>Scaevola</i>	<i>amblyanthera</i>	var. <i>centralis</i>	<1	0.2
<i>Senna</i>	<i>notabilis</i>		<1	0.15
<i>Sida</i>	<i>arenicola</i>		<1	0.5
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	0.5
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		<1	1-2
<i>Sida</i>	sp. verrucose glands (F.H. Mollemans 2423)		<1	0.2
<i>Solanum</i>	<i>phlomoides</i>		<1	0.5
<i>Tephrosia</i>	<i>arenicola</i>		<1	0.4
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	<1	0.4
<i>Themeda</i>	<i>triandra</i>		20	0.7
<i>Trachymene</i>	<i>oleracea</i>		<1	0.05
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	<1	1-2
<i>Triodia</i>	<i>pungens</i>		15	0.5-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		<1	0.5
<i>Waltheria</i>	<i>indica</i>		<1	0.5

Site	Site AY125
Date	2/06/2011
Recorder	JB/EP
Photo	705
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	716202
Northing	7488282
Habitat	Hillcrest (HCR)
Aspect	310°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Old rehabilitation nearby; Rail line nearby
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	<1	0.2
<i>Acacia</i>	<i>bivenosa</i>		<1	0.5
<i>Acacia</i>	<i>hilliana</i>		1	0.2
<i>Acacia</i>	<i>tenuissima</i>		<1	0.5
<i>Amphipogon</i>	<i>sericeus</i>		3	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.2-0.4
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	<1	Cr
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	0.5	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	3-6
<i>Dampiera</i>	<i>candicans</i>		<1	0.3
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	<1	0.1
<i>Eriachne</i>	<i>aristidea</i>		<1	0.25
<i>Eriachne</i>	<i>lanata</i>		<1	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	0.5	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	2-3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	<1	8
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispidula</i>	<1	0.5-1
<i>Gompholobium</i>	<i>oreophilum</i>		<1	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		0.5	0.35
<i>Goodenia</i>	<i>triodiophila</i>		<1	0.25
<i>Gossypium</i>	<i>australe</i>		<1	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	<1	1-2
<i>Hakea</i>	<i>chordophylla</i>		<1	3-5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	2.5
<i>Heliotropium</i>	<i>tenuifolium</i>		<1	0.15
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	<1	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.4
<i>Polycarpha</i>	<i>holtzei</i>		<1	0.02

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>astrolasius</i>		1	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		<1	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		2.5	0.5-1
<i>Schoenoplectus</i>	<i>subulatus</i>		2	0.15
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.5-1
<i>Sida</i>	<i>arenicola</i>		<1	0.5
<i>Solanum</i>	<i>lasiophyllum</i>		<1	0.45
<i>Solanum</i>	<i>phlomoides</i>		<1	0.25
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.4
<i>Waltheria</i>	<i>indica</i>		<1	0.2

Site	Site AY126
Date	2/06/2011
Recorder	JB/EP
Photo	712
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	716716
Northing	7487620
Habitat	Footslope (FOO)
Aspect	140°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Yandi village access road nearby; Access tracks; Minor rehabilitation
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3	0.25
<i>Acacia</i>	<i>dictyophleba</i>		1.5	1-2
<i>Acacia</i>	<i>inaequilatera</i>		0.5	2-4
<i>Acacia</i>	<i>maitlandii</i>		1.5	0.5-1.5
<i>Acacia</i>	<i>pachyacra</i>		0.5	2-3
<i>Amphipogon</i>	<i>sericeus</i>		<1	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	1	0.3
<i>Eriachne</i>	<i>aristidea</i>		<1	0.3
<i>Eriachne</i>	<i>mucronata</i>		<1	0.35
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	3-7
<i>Fimbristylis</i>	<i>simulans</i>		2	0.15
<i>Goodenia</i>	<i>microptera</i>		<1	0.15
<i>Goodenia</i>	<i>muelleriana</i>		<1	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		<1	0.2
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	<1	2-3
<i>Indigofera</i>	<i>monophylla</i>		<1	0.35
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Polycarpaea</i>	<i>corymbosa</i>		<1	0.05
<i>Polycarpaea</i>	<i>holtzei</i>		<1	0.2
<i>Ptilotus</i>	<i>astrolasius</i>		0.5	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		0.5	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	<1	0.35
<i>Senna</i>	<i>ferraria</i>		<1	1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	<1	0.1
<i>Sida</i>	<i>arenicola</i>		<1	1-2
<i>Sida</i>	<i>cardiophylla</i>		<1	0.3
<i>Solanum</i>	<i>phlomoides</i>		<1	0.35

Genus	Species	subsp./var.	% Cover	Height
<i>Trachymene</i>	<i>oleracea</i>		<1	0.1
<i>Triodia</i>	<i>wiseana</i>		45	0.5-1
<i>Yakirra</i>	<i>australiensis</i>		<1	0.2

Site	Site AY127
Date	20/07/2012
Recorder	JB/DR
Photo	DSC 00705, 102-0213
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	707652
Northing	7482086
Habitat	Footslope (FOO)
Aspect	10°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Loamy Sand
Rock Type	Brown Ironstone (pebbles, cobbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Access tracks, Rehabilitation site, Powerline
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.5
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1
<i>Acacia</i>	<i>bivenosa</i>		1	1.5
<i>Acacia</i>	<i>hilliana</i>		+	0.45
<i>Acacia</i>	<i>maitlandii</i>		+	1-2
<i>Acacia</i>	<i>pachyneura</i>		+	0.5
<i>Eriachne</i>	<i>mucronata</i>		+	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	5-8
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>pruinosa</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>symonii</i>		+	1
<i>Triodia</i>	<i>brizoides</i>		3	1-1.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		2	0.5
<i>Triodia</i>	<i>wiseana</i>		75	1-1.5

Site	Site AY128
Date	20/07/2012
Recorder	JB/DR
Photo	DSC 00706, 102-0214
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	706687
Northing	7481760
Habitat	Hillslope (HSL)
Aspect	310°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Ironstone (pebbles, cobbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Access track, Powerline
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	0.5	0.5
<i>Acacia</i>	<i>hilliana</i>		5	1-1.3
<i>Acacia</i>	<i>pruinocarpa</i>		1	2-4
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	1	0.5
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.5
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Eriachne</i>	<i>lanata</i>		1	0.35
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	5-8
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.5-1
<i>Goodenia</i>	<i>triodiophila</i>		+	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1-2
<i>Hakea</i>	<i>chordophylla</i>		0.5	3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1.5
<i>Themeda</i>	<i>triandra</i>		+	0.4
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		50	1
<i>Triodia</i>	<i>wiseana</i>		30	1-1.5

Site	Site AY129
Date	20/07/2012
Recorder	JB/DR
Photo	DSC00707, 102-0222
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	706397
Northing	7482592
Habitat	Plain (PLA)
Aspect	90°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Loamy Sand
Rock Type	Brown Ironstone (pebbles, cobbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Access track
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		+	0.2
<i>Abutilon</i>	<i>otocarpum</i>		+	0.2
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1.5-3
<i>Acacia</i>	<i>inaequilatera</i>		0.5	0.8
<i>Acacia</i>	<i>maitlandii</i>		+	1-2
<i>Acacia</i>	<i>monticola</i>		+	1
<i>Acacia</i>	<i>pruinocarpa</i>		1	2
<i>Acacia</i>	<i>rhodophloia</i> hybrid		1	2-2.5
<i>Acacia</i>	<i>sibirica</i> (or <i>rhodophloia</i> hybrid)		+	2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	+	3
<i>Aristida</i>	<i>contorta</i>		+	0.4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Bonamia</i>	<i>erecta</i>		+	0.2
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.5
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Enneapogon</i>	<i>lindleyanus</i>		+	0.4
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.3
<i>Eragrostis</i>	<i>cumingii</i>		+	0.1
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	4	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	15	3-6
<i>Eucalyptus</i>	<i>xerothermica</i>		5	3-5
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	+	0.2
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Goodenia</i>	<i>microptera</i>		+	0.30.1
<i>Gossypium</i>	<i>australe</i>		+	0.8

Genus	Species	subsp./var.	% Cover	Height
<i>Hakea</i>	<i>chordophylla</i>		+	1.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	1-2
<i>Heliotropium</i>	<i>pachyphyllum</i>		+	0.1
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		+	2-3
<i>Polycarpaea</i>	<i>corymbosa</i>		0.5	0.2
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.1
<i>Polycarpaea</i>	<i>longiflora</i>		+	0.2
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	1-1.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5-1
<i>Senna</i>	<i>glaucifolia</i>		+	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	1
<i>Senna</i>	<i>notabilis</i>		+	0.1
<i>Sida</i>	<i>fibulifera</i>		+	0.25
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.6
<i>Sporobolus</i>	<i>australasicus</i>		+	0.05
<i>Streptoglossa</i>	<i>decurrens</i>		+	0.3
<i>Tephrosia</i>	sp. Bungaroo Creek		+	0.15
<i>Themeda</i>	<i>triandra</i>		+	0.5
<i>Trachymene</i>	<i>oleracea</i>		+	0.3
<i>Triodia</i>	<i>pungens</i>		17	1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		+	1
<i>Triodia</i>	<i>wiseana</i>		37	1-1.5

Site	Site AY130
Date	20/07/2012
Recorder	JB/DR
Photo	DSC00708, 102-00224
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	705723
Northing	7483076
Habitat	Hillcrest (HCR)
Aspect	70°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Silty loam
Rock Type	Red Dolerite; Some ironstone (cobbles, outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		+	0.2
<i>Acacia</i>	<i>aptaneura</i>		+	2.5
<i>Acacia</i>	<i>inaequilatera</i>		+	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		+	1-2
<i>Acacia</i>	<i>tetragonophylla</i>		+	1-1.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Boerhavia</i>	<i>coccinea</i>		+	0.3
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cleome</i>	<i>viscosa</i>		+	0.2
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	+	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		0.25	4.5
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.5-1
<i>Enneapogon</i>	<i>caerulescens</i>		+	0.2
<i>Enneapogon</i>	<i>lindleyanus</i>		+	0.5
<i>Eremophila</i>	<i>fraseri</i>		1	0.5-2
<i>Eremophila</i>	<i>longifolia</i>		+	1-2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	+	3
<i>Euphorbia</i>	<i>trigonosperma</i>		+	0.2
<i>Indigofera</i>	<i>rugosa</i>		0.5	0.55
<i>Iseilema</i>	<i>dolichotrichum</i>		+	0.1
<i>Polycarpaea</i>	<i>corymbosa</i>		+	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Polycarpaea</i>	<i>longiflora</i>		+	0.2
<i>Ptilotus</i>	<i>clementii</i>		+	0.5
<i>Rhynchosia</i>	<i>minima</i>		+	0.2
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	
<i>Sida</i>	<i>echinocarpa</i>		+	0.15
<i>Sporobolus</i>	<i>australasicus</i>		+	0.1
<i>Swainsona</i>	<i>decurrens</i>		+	0.25
<i>Themeda</i>	<i>triandra</i>		+	0.5
<i>Triodia</i>	<i>wiseana</i>		80	1.4

Site	Site AY131
Date	22/07/2012
Recorder	JB/DR
Photo	DSC00710, 102-0244
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	709700
Northing	7489295
Habitat	Hillslope (HSL)
Aspect	10°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (broken sheets - slatey)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Very Good
Disturbance Type	Regrowth ~ 2 years
Fire Age	Young
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4.5	0.35
<i>Acacia</i>	<i>hilliana</i>		3	0.35
<i>Amphipogon</i>	<i>sericeus</i>		2	0.3
<i>Bulbostylis</i>	<i>barbata</i>		+	0.05
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		+	2-4
<i>Dampiera</i>	<i>candicans</i>		+	0.4
<i>Dodonaea</i>	<i>coriacea</i>		+	0.5
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.15
<i>Eucalyptus</i>	<i>gamophylla</i>		0.5	2.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	4-8
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.25
<i>Indigofera</i>	<i>monophylla</i>		+	0.3
<i>Isotropis</i>	<i>atropurpurea</i>		+	0.3
<i>Mirbelia</i>	<i>viminalis</i>		0.5	0.6
<i>Paspalidium</i>	<i>clementii</i>		+	0.1
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.6
<i>Ptilotus</i>	<i>calostachyus</i>		0.5	1-1.2
<i>Ptilotus</i>	<i>clementii</i>		+	0.4
<i>Ptilotus</i>	<i>fusiformis</i>		+	0.3
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-1.3
<i>Sida</i>	<i>arenicola</i>		+	1

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote		+	0.25
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.5-1
<i>Triodia</i>	<i>wiseana</i>		8	0.5-1
<i>Triodia</i>	<i>brizoides</i>		10	0.55

Site	Site AY132
Date	22/07/2012
Recorder	JB/DR
Photo	102-0247
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	710557
Northing	7489115
Habitat	Risecrest (REC)
Aspect	190°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Access track; Fire - Moderate 2-5yrs
Fire Age	Moderate
Vegetation	<i>Triodia</i> Open Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>arida</i>		0.5	0.5-1.7
<i>Acacia</i>	<i>pruinocarpa</i>		+	1-2
<i>Amphipogon</i>	<i>sericeus</i>		1.5	0.35
<i>Bonamia</i>	<i>erecta</i>		+	0.3
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	+	0.05
<i>Calytrix</i>	<i>carinata</i>		+	0.2
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	0.5	0.5-1
<i>Corymbia</i>	<i>hamersleyana</i>		+	0.5
<i>Eriachne</i>	<i>aristidea</i>		+	0.2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	6
<i>Goodenia</i>	<i>microptera</i>		+	-
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1-2
<i>Hakea</i>	<i>chordophylla</i>		0.5	3
<i>Heliotropium</i>	<i>pachyphyllum</i>		+	0.3
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		3	1
<i>Scaevola</i>	<i>browniana</i>		+	0.2
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	1
<i>Sida</i>	<i>arenicola</i>		+	1.2
<i>Triodia</i>	<i>pungens</i>		+	1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		22	0.55

Site	Site AY133
Date	22/07/2012
Recorder	JB/DR
Photo	102-0256
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	711270
Northing	7488241
Habitat	Riseslope (RES)
Aspect	180°
Slope	Very Steep (VS) (30°1' to 45°)
Soil	Silty loam
Rock Type	Brown Lateritic/ Sandstone (boulders, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire - Moderate 2-5yrs
Fire Age	Moderate
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1-3
<i>Acacia</i>	<i>tenuissima</i>		+	1
<i>Amaranthus</i>	<i>undulatus</i>		+	0.3
<i>Aristida</i>	<i>contorta</i>		+	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	0.2
<i>Cucumis</i>	<i>maderaspatana</i>		+	CI
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.6
<i>Eremophila</i>	<i>longifolia</i>		+	0.2
<i>Eriachne</i>	<i>aristidea</i>		+	0.2
<i>Eriachne</i>	<i>mucronata</i>		1.5	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	1.5	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	1-5-6
<i>Euphorbia</i>	cf. <i>biconvexa</i>		+	0.1
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.15
<i>Gomphrena</i>	<i>cunninghamii</i>		+	0.1
<i>Hibiscus</i>	<i>burtonii</i>		+	0.5
<i>Iseilema</i>	<i>dolichotrichum</i>		2.5	0.05
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	CI
<i>Paspalidium</i>	<i>clementii</i>		+	0.15
<i>Peripleura</i>	<i>virgata</i>		+	0.15
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Psydrax</i>	<i>sauveleons</i>		+	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Ptilotus</i>	<i>nobilis</i>		+	0.2
<i>Schizachyrium</i>	<i>fragile</i>		1.5	0.05
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	1.5	0.5-1
<i>Sida</i>	<i>echinocarpa</i>		+	0.5
<i>Sida</i>	sp. Golden Calyces glabrous (H.N. Foote)		+	0.3
<i>Streptoglossa</i>	<i>bubakii</i>		+	0.3
<i>Themeda</i>	<i>triandra</i>		2	0.65
<i>Triodia</i>	<i>wiseana</i>		15	0.4
<i>Triodia</i>	<i>brizoides</i>		35	0.6

Site	Site AY134
Date	22/07/2012
Recorder	JB/DR
Photo	102-0258, DSC00713
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	7487706
Northing	713489
Habitat	Hillslope (HSL) Gently Inclined (GE) (1°46' to 5°45')
Aspect	160°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Sandy loam, Brown, Ironstone; Dolerite (slate, broken sleats, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	1-1.5
<i>Acacia</i>	<i>inaequilatera</i>		6	1-2
<i>Acacia</i>	<i>pruinocarpa</i>		+	1
<i>Acacia</i>	<i>tenuissima</i>		1	+
<i>Boerhavia</i>	<i>coccinea</i>		+	0.2
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cleome</i>	<i>viscosa</i>		+	0.3
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	0.4
<i>Corymbia</i>	<i>hamersleyana</i>		+	4-8
<i>Cucumis</i>	<i>maderaspatana</i>		+	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Enneapogon</i>	<i>caerulescens</i>		+	0.3
<i>Eremophila</i>	<i>longifolia</i>		1	1
<i>Eriachne</i>	<i>aristidea</i>		+	0.35
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Euphorbia</i>	cf. <i>biconvexa</i>		+	0.1
<i>Gossypium</i>	<i>australe</i>		+	1
<i>Gossypium</i>	<i>robinsonii</i>		1	+
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	1.5
<i>Heliotropium</i>	<i>cunninghamii</i>		+	0.15
<i>Indigofera</i>	<i>rugosa</i>		+	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	0.5
<i>Oldenlandia</i>	<i>crouchiana</i>		+	0.15
<i>Paspalidium</i>	<i>clementii</i>		+	0.1
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		+	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>nobilis</i>		+	0.4
<i>Ptilotus</i>	<i>obovatus</i>		+	0.6
<i>Santalum</i>	<i>lanceolatum</i>		+	0.5-1.5
<i>Schizachyrium</i>	<i>fragile</i>		+	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1-1.2
<i>Sida</i>	<i>echinocarpa</i>		+	0.7
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.3
<i>Sporobolus</i>	<i>australasicus</i>		+	0.1
<i>Tribulus</i>	<i>hirsutus</i>		+	0..05
<i>Triodia</i>	<i>wiseana</i>		70	1-1.3

Site	Site AY135
Date	22/07/2012
Recorder	JB/DR
Photo	102-0258, DSC00713
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	713489
Northing	7487706
Habitat	Hillslope (HSL)
Aspect	160°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Sandy loam
Rock Type	Brown Ironstone; Dolerite (slate, broken sleats, cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4	0.3
<i>Acacia</i>	<i>bivenosa</i>		+	1
<i>Acacia</i>	<i>inaequilatera</i>		+	2
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	+	0.05
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cleome</i>	<i>viscosa</i>		+	0.3
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.65
<i>Dodonaea</i>	<i>pachyneura</i>		+	1-2
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.3
<i>Eremophila</i>	<i>longifolia</i>		+	1-1.5
<i>Eriachne</i>	<i>aristidea</i>		+	0.2
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	4-6
<i>Euphorbia</i>	cf. <i>biconvexa</i>		+	0.35
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.2
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	2
<i>Hibiscus</i>	<i>coatesii</i>		+	0.4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.2
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Paspalidium</i>	<i>clementii</i>		+	0.2
<i>Polycarpea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Santalum</i>	<i>lanceolatum</i>		+	1
<i>Schizachyrium</i>	<i>fragile</i>		+	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1-1.5

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.4
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.4
<i>Solanum</i>	<i>phlomoides</i>		+	0.35
<i>Tephrosia</i>	<i>densa</i>		+	0.4
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	+	0.5
<i>Triodia</i>	<i>brizoides</i>		15	0.1-- 1.2
<i>Triodia</i>	<i>wiseana</i>		55	0.5- 1.2

Site	Site AY136
Date	23/07/2012
Recorder	JB/DR
Photo	102-0262, DSC00715
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715425
Northing	7488379
Habitat	Hillcrest (HCR)
Aspect	110°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown, Ironstone (cobbles, outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 5-10 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.6
<i>Acacia</i>	<i>hilliana</i>		1	0.5
<i>Acacia</i>	<i>inaequilatera</i>		+	1-1.5
<i>Acacia</i>	<i>maitlandii</i>		+	0.5
<i>Amaranthus</i>	<i>undulatus</i>		+	0.3
<i>Amphipogon</i>	<i>sericeus</i>		+	0.5
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.7
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	5-8
<i>Fimbristylis</i>	<i>simulans</i>		+	0.1
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.25
<i>Gossypium</i>	<i>robinsonii</i>		+	0.5
<i>Mirbelia</i>	<i>viminalis</i>		+	1-1.2
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.8
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1.5
<i>Solanum</i>	<i>phlomoides</i>		+	0.4
<i>Tephrosia</i>	sp. Fortescue (A.A. Mitchell 606)		+	0.45
<i>Themeda</i>	<i>triandra</i>		1	0.7
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		45+	0.6
<i>Triodia</i>	<i>wiseana</i>		10	1

Site	Site AY137
Date	23/07/2012
Recorder	JB/DR
Photo	102-0277, DSC0716
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714168
Northing	7488320
Habitat	Hillslope (HSL)
Aspect	90°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown, Dolerite (outcrops, boulders, cobbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>inaequilatera</i>		2.5	1-3.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.2
<i>Cleome</i>	<i>viscosa</i>		+	0.3
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	1.3
<i>Corymbia</i>	<i>hamersleyana</i>		+	2
<i>Crotalaria</i>	<i>medicaginea</i>	var. <i>neglecta</i>	+	0.2
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1
<i>Enneapogon</i>	<i>caerulescens</i>		1	0.15
<i>Enneapogon</i>	<i>lindleyanus</i>		+	0.5
<i>Eremophila</i>	<i>longifolia</i>		+	1
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.2
<i>Gomphrena</i>	<i>cunninghamii</i>		+	0.2
<i>Goodenia</i>	<i>muelleriana</i>		+	0.3
<i>Gossypium</i>	<i>australe</i>		+	0.5-1.5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	1-1.2
<i>Indigofera</i>	<i>rugosa</i>		1	0.45
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1-2
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Rhynchosia</i>	<i>minima</i>		+	CI
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1
<i>Sida</i>	<i>echinocarpa</i>		+	0.4
<i>Swainsona</i>	<i>decurrens</i>		+	0.3
<i>Tribulus</i>	<i>platypterus</i>		+	0.25-0.5
<i>Triodia</i>	<i>brizoides</i>		8	0.4-1

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	<i>wiseana</i>		65	0.4-1.2

Site	Site AY138
Date	23/07/2012
Recorder	JB/DR
Photo	102-0281/0282, DSC00717
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714603
Northing	7487449
Habitat	Drainage Depression (DDE)
Aspect	
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sand
Rock Type	Orange Mixed riverine gravels
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Gossypium</i> High Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.5
<i>Acacia</i>	<i>inaequilatera</i>		+	2
<i>Acacia</i>	<i>maitlandii</i>		2.5	1-2.5
<i>Acacia</i>	<i>monticola</i>		7	1-3
<i>Acacia</i>	<i>pruinocarpa</i>		+	2
<i>Alternanthera</i>	<i>nana</i>		+	0.15
<i>Androcalva</i>	<i>luteiflora</i>		8	2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Cleome</i>	<i>viscosa</i>		+	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>indet</i>	+	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		4	5-7
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1.2
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.3
<i>Eremophila</i>	<i>longifolia</i>		+	1
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eriachne</i>	<i>tenuiculmis</i>		3	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	3	4-7
<i>Evolvulus</i>	<i>alsinoides</i>	subsp. <i>indet</i>	+	0.1
<i>Gossypium</i>	<i>australe</i>		+	1-2
<i>Gossypium</i>	<i>robinsonii</i>		5	2-3
<i>Hakea</i>	<i>chordophylla</i>		+	2.5
<i>Indigofera</i>	<i>monophylla</i>		+	0.35
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.4
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	4
<i>Mollugo</i>	<i>molluginea</i>		+	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		+	2
<i>Phyllanthus</i>	<i>maderaspatensis</i>		+	0.5
<i>Ptilotus</i>	<i>astrolasius</i>		0.5	0.4
<i>Ptilotus</i>	<i>nobilis</i>		+	0.3
<i>Santalum</i>	<i>lanceolatum</i>		0.5	1-2.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5--1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>notabilis</i>		+	0.1
<i>Themeda</i>	<i>triandra</i>		25	1.3
<i>Triodia</i>	<i>wiseana</i>		25	0.5-1.5

Site	Site AY139
Date	23/07/2012
Recorder	JB/DR
Photo	DSC00720
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715294
Northing	7493223
Habitat	Hillcrest (HCR)
Aspect	170°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:0
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Young 1-2 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1.5	0.3
<i>Acacia</i>	<i>hilliana</i>		1	0.3
<i>Amphipogon</i>	<i>sericeus</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	1.5	1.5-5
<i>Corymbia</i>	<i>hamersleyana</i>		+	5
<i>Dampiera</i>	<i>candicans</i>		+	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	3-8
<i>Fimbristylis</i>	<i>simulans</i>		1	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		2	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.2
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1-1.5
<i>Hakea</i>	<i>chordophylla</i>		+	1
<i>Polycarpha</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>calostachyus</i>		1	0.5-1
<i>Sida</i>	<i>arenicola</i>		+	0.6-1.5
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.35
<i>Solanum</i>	<i>phlomoides</i>		+	0.1
<i>Tephrosia</i>	<i>arenicola</i>		+	1-1.3
<i>Trianthema</i>	<i>glossostigma</i>		+	0.05
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		33	0.2-0.5

Site	Site AY140
Date	23/07/2012
Recorder	JB/DR
Photo	102-0289, DSC00721
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	715899
Northing	7490915
Habitat	Hillslope (HSL)
Aspect	260°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (pebbles, cobbles, outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	2	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		+	0.5
<i>Acacia</i>	<i>dictyophleba</i>		+	1
<i>Acacia</i>	<i>hilliana</i>		+	0.2
<i>Acacia</i>	<i>inaequilatera</i>		2	2-4
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.2
<i>Dampiera</i>	<i>candicans</i>		+	0.4
<i>Dodonaea</i>	<i>coriacea</i>		+	0.5
<i>Eriachne</i>	<i>lanata</i>		3	0.5
<i>Eriachne</i>	<i>mucronata</i>		+	0.35
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	2-7
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.25
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	0.5
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Paspalidium</i>	<i>clementii</i>		+	0.1
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		1	1-1.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	0.45
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1-2
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.3
<i>Themeda</i>	<i>triandra</i>		0.5	0.75
<i>Triodia</i>	<i>brizoides</i>		35	0.3-1.1
<i>Triodia</i>	<i>pungens</i>		1	1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	0.1-0.7

Site	Site AY141
Date	24/07/2012
Recorder	JB/DR
Photo	102-0287, DSC00237
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	694204
Northing	7481660
Habitat	Drainage Depression (DDE)
Aspect	330°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Pisolitic Ironstone (cobbles, pebbles - gravelly channel bed)
% Leaves:Logs	12:2
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Very Old
Vegetation	<i>Acacia</i> Closed Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>aptaneura</i>		4.5	2-5
<i>Acacia</i>	<i>atkinsiana</i>		65	2-3
<i>Acacia</i>	<i>bivenosa</i>		+	1.5
<i>Acacia</i>	<i>monticola</i>		3	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		+	1
<i>Acacia</i>	<i>sibirica</i> (or <i>rhodophloia</i> hybrid)		+	2.3
<i>Acacia</i>	<i>synchronicia</i>		+	0.2
<i>Acacia</i>	<i>tetragonophylla</i>		1.5	2
<i>Amyema</i>	<i>preissii</i>		+	Parasite
<i>Aristida</i>	<i>contorta</i>		+	0.2
<i>Capparis</i>	<i>lasiantha</i>		+	1
<i>Diplatia</i>	<i>grandibractea</i>		+	Parasite
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Eragrostis</i>	<i>eriopoda</i>		+	1
<i>Eriachne</i>	<i>mucronata</i>		5	0.35
<i>Eucalyptus</i>	<i>gamophylla</i>		+	2-3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	6	5-7
<i>Eucalyptus</i>	<i>xerothermica</i>		1	4
<i>Eulalia</i>	<i>aurea</i>		+	0.6
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	3
<i>Petalostylis</i>	<i>labicheoides</i>		3	2-3
<i>Psydrax</i>	<i>sauveleons</i>		+	2.5
<i>Ptilotus</i>	<i>nobilis</i>		+	0.35
<i>Santalum</i>	<i>lanceolatum</i>		2	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2

Genus	Species	subsp./var.	% Cover	Height
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.2
<i>Themeda</i>	<i>triandra</i>		4	0.5-1
<i>Triodia</i>	<i>wiseana</i>		22	0.5
<i>Triodia</i>	<i>pungens</i>		5	1.2

Site	Site AY142
Date	24/07/2012
Recorder	JB/DR
Photo	102-0288, DSC00724
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	693290
Northing	7481612
Habitat	
Aspect	350°
Slope	Riseslope (RES), Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Red Ironstone (pebbles)
% Leaves:Logs	1.5:1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5 yrs/ Very Old >10yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpus</i>		+	1-1.2
<i>Acacia</i>	<i>atkinsiana</i>		4	1-2
<i>Acacia</i>	<i>ayersiana</i>		+	0.5-1
<i>Acacia</i>	<i>bivenosa</i>		+	1-1.8
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	2-4
<i>Aristida</i>	<i>contorta</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.6
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	0.5-3
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	+	0.6
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2	3-5
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.35
<i>Eragrostis</i>	<i>eriopoda</i>		+	1.2
<i>Eragrostis</i>	<i>eriopoda</i>		+	0.5
<i>Eremophila</i>	<i>longifolia</i>		+	0.5-1
<i>Eriachne</i>	<i>mucronata</i>		+	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.05
<i>Eucalyptus</i>	<i>gamophylla</i>		2	2
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	0.5-1.5
<i>Hakea</i>	<i>chordophylla</i>		+	1-3
<i>Indigofera</i>	<i>monophylla</i>		+	0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	1-1.5
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.35
<i>Psydrax</i>	<i>sauveleons</i>		+	1
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.8
<i>Ptilotus</i>	<i>calostachyus</i>		+	1

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1
<i>Themeda</i>	<i>triandra</i>		0.5	0.8-1
<i>Trianthema</i>	<i>glossostigma</i>		+	0.05
<i>Triodia</i>	<i>pungens</i>		15	0.8-1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		30	1-1.2
<i>Triodia</i>	<i>wiseana</i>		+	1.2

Site	Site AY143
Date	24/07/2012
Recorder	JB/DR
Photo	102-0290, DSC00725
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	687859
Northing	7478131
Habitat	Plain (PLA)
Aspect	340°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown, Ironstone (pebbles, cobbles)
% Leaves:Logs	2:1
Vegetation Condition	Very Good
Disturbance Type	Fire; Cattle; Patchy burn
Fire Age	Moderate 2-5 yrs/ Very Old >10yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>otocarpum</i>		+	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		4	1-2
<i>Acacia</i>	<i>aneura</i>		0.5	3
<i>Acacia</i>	<i>atkinsiana</i>		11	1-3
<i>Acacia</i>	<i>bivenosa</i>		+	2
<i>Acacia</i>	<i>maitlandii</i>		+	1.5
<i>Acacia</i>	<i>pruinocarpa</i>		4	2-3
<i>Alternanthera</i>	<i>nana</i>		+	0.2
<i>Amphipogon</i>	<i>sericeus</i>		+	0.3
<i>Anthobolus</i>	<i>leptomerioides</i>		+	0.5-1
<i>Aristida</i>	<i>contorta</i>		+	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		+	1
<i>Boerhavia</i>	<i>coccinea</i>		+	0.2
<i>Cleome</i>	<i>viscosa</i>		+	0.3
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	1-2
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>parvus</i>	+	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2	3-5
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.55
<i>Digitaria</i>	<i>brownii</i>		+	0.6
<i>Dodonaea</i>	<i>pachyneura</i>		+	1.5
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Enneapogon</i>	<i>polyphyllus</i>		0.5	0.4
<i>eragrostis</i>	<i>eriopoda</i>		+	1.3
<i>Eremophila</i>	<i>forrestii</i>	subsp. <i>forrestii</i>	+	0.8
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	+	2
<i>Eremophila</i>	<i>longifolia</i>		+	1.2
<i>Eucalyptus</i>	<i>gamophylla</i>		3	2-4

Genus	Species	subsp./var.	% Cover	Height
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1.5	3-6
<i>Eucalyptus</i>	<i>xerothermica</i>		+	5
<i>Eulalia</i>	<i>aurea</i>		+	0.6
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	+	0.1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	+	0.3
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.2
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Gossypium</i>	<i>australe</i>		+	1.2
<i>Gossypium</i>	<i>robinsonii</i>		0.5	2-3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	+	0.3
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.3
<i>Maireana</i>	<i>villosa</i>		+	0.3
<i>Panicum</i>	<i>effusum</i>		+	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Psyrax</i>	<i>latifolia</i>		+	1-2
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.5
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		+	1.5
<i>Ptilotus</i>	<i>nobilis</i>		+	0.6
<i>Ptilotus</i>	<i>obovatus</i>		+	0.4
<i>Santalum</i>	<i>lanceolatum</i>		+	2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.3
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	sp. indet	2	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	0.5	1
<i>Senna</i>	<i>notabilis</i>		+	0.1
<i>Sida</i>	? sp. Barlee Range (S. van Leeuwen 1642)		+	0.3
<i>Sida</i>	<i>cardiophylla</i>		+	0.4
<i>Sida</i>	<i>echinocarpa</i>		+	0.4
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.5
<i>Triodia</i>	<i>pungens</i>		3	1.25
<i>Triodia</i>	<i>wiseana</i>		45	0.3-1.2

Site	Site AY144
Date	25/07/2012
Recorder	JB/DR
Photo	102-0327, DSC00727
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	689628
Northing	7480256
Habitat	Plain (PLA)
Aspect	300°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone (cobbles, pebbles)
% Leaves:Logs	1:1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Old 5-10 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adsurgens</i>		+	2
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	2
<i>Acacia</i>	<i>aptaneura</i>		5.5	2-3
<i>Acacia</i>	<i>atkinsiana</i>		7	2
<i>Acacia</i>	<i>bivenosa</i>		1.5	2
<i>Acacia</i>	<i>inaequilatera</i>		1.5	2-3
<i>Acacia</i>	<i>pruinocarpa</i>		2	2-3
<i>Acacia</i>	<i>sibirica (or rhodophloia hybrid)</i>		1	3
<i>Acacia</i>	<i>tenuissima</i>		0.5	1-2
<i>Acacia</i>	<i>adsurgens rhodophloia</i>	X	+	1-2
<i>Amyema</i>	<i>sanguinea</i>	subsp. <i>pulchella</i>	+	Parasite
<i>Aristida</i>	<i>contorta</i>		+	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	0.4-1
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>parvus</i>	+	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	3	5
<i>Cullen</i>	<i>martinii</i>		+	0.1
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.4
<i>Digitaria</i>	<i>brownii</i>		+	0.6
<i>Dodonaea</i>	<i>pachyneura</i>		+	2
<i>Dodonaea</i>	<i>pachyneura</i>		+	1
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Dysphania</i>	<i>glomulifera</i>		+	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		0.5	0.4
<i>Eremophila</i>	<i>latrobei</i>	subsp. <i>filiformis</i>	+	0.5-1.7
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>xerothermica</i>		2	6

Genus	Species	subsp./var.	% Cover	Height
<i>Eucalyptus</i>	<i>xerothermica</i>		0.5	2-3
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispida</i>	+	0.2
<i>Euphorbia</i>	sp. indet		+	0.1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	+	0.1
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Hibiscus</i>	<i>burtonii</i>		+	0.2
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	1-2.5
<i>Paraneurachne</i>	<i>muelleri</i>		+	+
<i>Paspalidium</i>	<i>clementii</i>		1	0.1
<i>Psydrax</i>	<i>latifolia</i>		+	0.5-1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.5
<i>Ptilotus</i>	<i>helipteroides</i>		+	0.2
<i>Ptilotus</i>	<i>nobilis</i>		+	0.7
<i>Rhyncharhena</i>	<i>linearis</i>		+	Cl
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>notabilis</i>		+	0.15
<i>Senna</i>	<i>pleurocarpa</i>	subsp. <i>augustifolia</i>	+	0.4
<i>Sida</i>	aff. <i>fibulifera</i>		+	0.3
<i>Sida</i>	<i>echinocarpa</i>		+	0.4
<i>Solanum</i>	<i>ferocissimum</i>		+	0.2
<i>Triodia</i>	<i>wiseana</i>		65	0.5-1.5

Site	Site AY145
Date	26/07/2012
Recorder	JB/JW
Photo	102-0369/0370, DSC00729/00730
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712512
Northing	7495085
Habitat	Drainage Depression (DDE)
Aspect	140°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Loamy Sand
Rock Type	Brown BIF; Ironstone (cliffs, boulders, cobbles)
% Leaves:Logs	30:3
Vegetation Condition	Excellent
Disturbance Type	Flood damage
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>hamersleyensis</i>		2	4-6
<i>Acacia</i>	<i>pyrifolia</i>		+	2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	40	2-5
<i>Androcalva</i>	<i>luteiflora</i>		5	2-2.5
<i>Atalaya</i>	<i>hemiglauca</i>		1	2
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Centipeda</i>	<i>minima</i>	subsp. <i>macrocephala</i>	+	0.2
<i>Corchorus</i>	<i>laniflorus</i>		1.5	1-1.5
<i>Corymbia</i>	<i>ferriticola</i>		1	1.5-5
<i>Cucumis</i>	<i>maderaspatana</i>		+	CI
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.5-1
<i>Cymbopogon</i>	<i>procerus</i>		15	1-2
<i>Dodonaea</i>	<i>pachyneura</i>		+	1-2
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Eremophila</i>	<i>jucunda</i>	subsp. <i>pulcherrima</i>	+	0.1
<i>Eriachne</i>	<i>mucronata</i>		1.5	0.35
<i>Eriachne</i>	<i>tenuiculmis</i>		5	0.5
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	40	8-20
<i>Eulalia</i>	<i>aurea</i>		20	0.5-1
<i>Euphorbia</i>	<i>careyi</i>		+	0.2
<i>Euphorbia</i>	<i>coghlanii</i>		+	0.15
<i>Ficus</i>	<i>brachypoda</i>		2.5	2-3
<i>Goodenia</i>	<i>lamprosperma</i>		+	0.3
<i>Gossypium</i>	<i>robinsonii</i>		3	2
<i>Grevillea</i>	<i>pyramidalis</i>	subsp. <i>leucadendron</i>	0.5	1-4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	7	2-4
<i>Paspalidium</i>	<i>clementii</i>		+	0.2
<i>Phyllanthus</i>	<i>reticulatus</i>		1	2-2.5

Genus	Species	subsp./var.	% Cover	Height
<i>Pluchea</i>	<i>dentex</i>		0.5	0.4
<i>Prostanthera</i>	<i>albiflora</i>		0.5	0.5-1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.3-1
<i>Rhodanthe</i>	<i>margarethae</i>		+	0.5
<i>Rhynchosia</i>	<i>bungarensis</i>		+	0.6
<i>Sauropus</i>	sp. Koodaideri detritals (J. Naaykens & J. Hurter JH 11213)		+	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>venusta</i>		+	0.4
<i>Sida</i>	sp. Barlee Range (S. van Leeuwen 1642)		+	0.25
<i>Solanum</i>	<i>gabrielae</i>		+	0.35
<i>Stemoda</i>	<i>grossa</i>		0.5	0.5
<i>Themeda</i>	<i>triandra</i>		7	0.5
<i>Tinospora</i>	<i>smilacina</i>		+	CI
<i>Triodia</i>	<i>pungens</i>		2	0.5-1.5
<i>Triumfetta</i>	<i>leptacantha</i>		+	0.4
<i>Typha</i>	<i>domingensis</i>		+	1-2

Site	Site AY146
Date	26/07/2012
Recorder	JB/JW
Photo	102-0371, DSC00731
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712442
Northing	7494508
Habitat	Hillcrest (HCR)
Aspect	50°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Ironstone
% Leaves:Logs	0.5:1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	6	0.4
<i>Acacia</i>	<i>adsurgens</i>		+	1-1.5
<i>Acacia</i>	<i>hilliana</i>		20	0.3
<i>Acacia</i>	<i>tenuissima</i>		0.5	1.2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	+	1-2
<i>Aristida</i>	<i>inaequiglumis</i>		2	0.5-2
<i>Bulbostylis</i>	<i>barbata</i>		+	0.05
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	+	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	2
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.6
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.3
<i>Eriachne</i>	<i>mucronata</i>		+	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	3-4
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Goodenia</i>	<i>muelleriana</i>		+	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.4
<i>Goodenia</i>	<i>triodiophila</i>		+	0.4
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	2
<i>Hakea</i>	<i>chordophylla</i>		+	1.5
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	1	Cl
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	1	0.5
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.6
<i>Santalum</i>	<i>lanceolatum</i>		+	2.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	2
<i>Solanum</i>	<i>phlomoides</i>		+	0.3
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		45	0.5
<i>Triodia</i>	<i>wiseana</i>		1	0.8

Site	Site AY147
Date	26/07/2012
Recorder	JB/JW
Photo	102-0383/0384, DSC732
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714491
Northing	7497260
Habitat	Hillslope (HSL)
Aspect	160°
Slope	Steep (ST) (18°1' to 30°)
Soil	Silty loam
Rock Type	Brown Ironstone (outcropping, slate, cobbles, pebbles)
% Leaves:Logs	1:0.5
Vegetation Condition	Excellent
Disturbance Type	Rail nearby; Access track nearby
Fire Age	Very Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.6
<i>Acacia</i>	<i>inaequilatera</i>		1	-
<i>Acacia</i>	<i>maitlandii</i>		5	1-3
<i>Acacia</i>	<i>pruinocarpa</i>		1	2
<i>Acacia</i>	<i>tenuissima</i>		1	2
<i>Amphipogon</i>	<i>sericeus</i>		+	0.3
<i>Cassytha</i>	<i>capillaris</i>		+	Cl
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	+	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		2	2-3
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.7
<i>Dampiera</i>	<i>candicans</i>		+	0.7
<i>Eremophila</i>	<i>jucunda</i>	subsp. <i>pulcherrima</i>	+	0.5
<i>Eriachne</i>	<i>mucronata</i>		+	0.35
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	8	1-5
<i>Euphorbia</i>	<i>coghlanii</i>		+	0.15
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.35
<i>Gossypium</i>	<i>robinsonii</i>		0.5	1-2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	2
<i>Hakea</i>	<i>chordophylla</i>		1	4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1-2
<i>Oldenlandia</i>	<i>crouchiana</i>		+	0.2
<i>Polycarpha</i>	<i>longiflora</i>		+	0.2
<i>Polygala</i>	<i>isingii</i>		+	0.02
<i>Solanum</i>	<i>phlomoides</i>		+	0.5
<i>Tephrosia</i>	<i>densa</i>		+	0.4
<i>Themeda</i>	<i>triandra</i>		+	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		25	0.7
<i>Triodia</i>	<i>wiseana</i>		50	1.3

Site	Site AY148
Date	27/07/2012
Recorder	JB/JW
Photo	102-0390, DSC 00734
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	714252
Northing	7492806
Habitat	Hillslope (HSL)
Aspect	180°
Slope	Hillslope (HSL), Moderately Inclined (MO) (5° 46' to 18°)
Soil	Silty loam
Rock Type	Brown Ironstone
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5 yrs
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	4	0.4
<i>Acacia</i>	<i>hilliana</i>		+	0.2
<i>Acacia</i>	<i>inaequilatera</i>		+	2
<i>Acacia</i>	<i>monticola</i>		1	1.5
<i>Acacia</i>	<i>pruinocarpa</i>		+	1
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	+	1
<i>Amphipogon</i>	<i>sericeus</i>		0.5	0.4
<i>Androcalva</i>	<i>luteiflora</i>		+	1.5
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		2	1-3
<i>Dampiera</i>	<i>candicans</i>		0.5	0.4
<i>Eriachne</i>	<i>lanata</i>		+	0.5
<i>Eriachne</i>	<i>mucronata</i>		1	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	4	2-5
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	2
<i>Hakea</i>	<i>chordophylla</i>		+	1.5
<i>Hibiscus</i>	<i>coatesii</i>		+	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.2
<i>Hybanthus</i>	<i>aurantiacus</i>		+	0.35
<i>Indigofera</i>	<i>monophylla</i>		+	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	0.5-1
<i>Mirbelia</i>	<i>viminalis</i>		+	0.5
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.8
<i>Santalum</i>	<i>lanceolatum</i>		+	1-2

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1
<i>Sida</i>	<i>arenicola</i>		+	0.7
<i>Themeda</i>	<i>triandra</i>		1	0.6
<i>Tricoryne</i>	sp. Hamersley Range (S. van Leeuwen 915)		1	0.5
<i>Triodia</i>	<i>pungens</i>		30	0.8
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		40	0.6
<i>Triodia</i>	<i>wiseana</i>		1	1

Site	Site AY149
Date	27/07/2012
Recorder	JB/JW
Photo	101-0391, DSC00730
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	713717
Northing	7493632
Habitat	Hillcrest (HCR)
Aspect	90°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5yrs/ Old 5-10yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.5
<i>Acacia</i>	<i>adsurgens</i>		+	1-1.5
<i>Acacia</i>	<i>elachantha</i>		0.5	2-3
<i>Acacia</i>	<i>tenuissima</i>		+	1-2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Calytrix</i>	<i>carinata</i>		+	1
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	0.6-2
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2.5	2-4
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	2.5-4
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	+	4
<i>Fimbristylis</i>	<i>simulans</i>		+	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		0.5	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	1	1-2
<i>Hakea</i>	<i>chordophylla</i>		+	0.5-2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	CI
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.02
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.35
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.5
<i>Ptilotus</i>	<i>nobilis</i>		+	0.6
<i>Ptilotus</i>	<i>obovatus</i>		+	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>luerssenii</i>	+	2
<i>Solanum</i>	<i>phlomoides</i>		+	0.6
<i>Trianthema</i>	<i>glossostigma</i>		+	0.02

Genus	Species	subsp./var.	% Cover	Height
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		50	0.5

Site	Site AY150
Date	27/07/2012
Recorder	JB/JW
Photo	102-0393, DSC00739
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712551
Northing	7493512
Habitat	Drainage Depression (DDE)
Aspect	130°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Pisolitic Ironstone; Chert
% Leaves:Logs	10:0.5
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	Acacia Closed Scrub

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.3
<i>Acacia</i>	<i>monticola</i>		+	2
<i>Acacia</i>	<i>spondylophylla</i>		10	0.5-1
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	55	2-4
<i>Androcalva</i>	<i>luteiflora</i>		15	1-2
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.5-1
<i>Corymbia</i>	<i>hamersleyana</i>		8	3-8
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1
<i>Dodonaea</i>	<i>lanceolata</i>		0.5	1-2
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Eriachne</i>	<i>lanata</i>		+	0.6
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.35
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5-1
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.2
<i>Gossypium</i>	<i>robinsonii</i>		+	1
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	2	2-4
<i>Hakea</i>	<i>chordophylla</i>		+	3
<i>Hybanthus</i>	<i>aurantiacus</i>		+	0.5
<i>Indigofera</i>	<i>monophylla</i>		+	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Petalostylis</i>	<i>labicheoides</i>		25	2-4
<i>Santalum</i>	<i>lanceolatum</i>		+	2
<i>Sida</i>	sp. Rabbit Flat (B.J. Carter 626)		+	1
<i>Solanum</i>	<i>phlomoides</i>		+	1
<i>Themeda</i>	<i>triandra</i>		3	1
<i>Triodia</i>	<i>pungens</i>		15	0.5-1.5

Site	Site AY151
Date	27/07/2012
Recorder	JB/JW
Photo	102-0397, DSC00740
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	712447
Northing	7492656
Habitat	Hillslope (HSL)
Aspect	Steep (ST) (18°1' to 30°)
Slope	220°
Soil	Silty loam
Rock Type	Brown Ironstone; BIF; Chert 9slate, cobbles, pebbles, some outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.5
<i>Acacia</i>	<i>dicytophleba</i>		+	1-2
<i>Acacia</i>	<i>inaequilatera</i>		+	2-3
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cleome</i>	<i>viscosa</i>		+	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.2
<i>Corymbia</i>	<i>hamersleyana</i>		+	3
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1
<i>Dodonaea</i>	<i>coriacea</i>		+	0.7
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.2
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2	8
<i>Euphorbia</i>	<i>coghlanii</i>		+	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Gomphrena</i>	<i>cunninghamii</i>		+	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		+	-
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hakea</i>	<i>chordophylla</i>		+	1-2
<i>Hibiscus</i>	<i>coatesii</i>		+	0.3
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.2
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.01
<i>Polycarpaea</i>	<i>longiflora</i>		+	0.2
<i>Polygala</i>	<i>isingii</i>		+	0.02
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.5-1
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1-2
<i>Triodia</i>	<i>brizoides</i>		50	1
<i>Triodia</i>	<i>wiseana</i>		2	0.1-0.8

Site	Site AY152
Date	27/07/2012
Recorder	JB/JW
Photo	102-0404, DSC00741
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	713379
Northing	7492791
Habitat	Hillcrest (HCR)
Aspect	110°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Pisolitic Ironstone (gravels, pebbles, outcrops)
% Leaves:Logs	1.5:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>pruinocarpa</i>		+	1-2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	+	1.5
<i>Amphipogon</i>	<i>sericeus</i>		+	0.35
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	+	0.05
<i>Corchorus</i>	<i>lasiocarpus</i>		0.5	0.5
<i>Eriachne</i>	<i>lanata</i>		1.5	0.4
<i>Eriachne</i>	<i>mucronata</i>		+	0.35
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	0.5	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	9	5-8
<i>Euphorbia</i>	<i>coghlanii</i>		+	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Goodenia</i>	<i>cusackiana</i>		+	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.4
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Santalum</i>	<i>lanceolatum</i>		+	2
<i>Senna</i>	<i>glaucifolia</i>		+	1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	0.2
<i>Sida</i>	<i>arenicola</i>		+	0.5-1
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.5
<i>Sida</i>	sp. Rabbit Flat (B.J. Carter 626)		+	1-2
<i>Solanum</i>	<i>phlomoides</i>		+	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Tephrosia</i>	sp. Cathedral Gorge (F.H. Mollemans 2420)		+	0.1
<i>Triodia</i>	<i>pungens</i>		12	0.4-1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		35	0.5

Site	Site AY153
Date	28/07/2012
Recorder	JB/JW
Photo	102-0408/0409, DSC00742
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700294
Northing	7488523
Habitat	Hillslope (HSL)
Aspect	30°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Dolerite
% Leaves:Logs	1:<1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>lepidium</i>		+	0.6
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1
<i>Acacia</i>	<i>arida</i>		+	0.2
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1-2
<i>Aristida</i>	<i>contorta</i>		0.5	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	1	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		+	0.45
<i>Boerhavia</i>	<i>coccinea</i>		+	0.3
<i>Bonamia</i>	<i>media</i>	var. <i>villosa</i>	+	0.1
<i>Corchorus</i>	<i>lasiocarpus</i>	subsp. <i>lasiocarpus</i>	+	0.3
<i>Corymbia</i>	<i>hamersleyana</i>		0.5	2-4
<i>Cullen</i>	<i>leucochaites</i>		+	0.1
<i>Cullen</i>	<i>leucochaites</i>		+	1-2
<i>Cymbopogon</i>	<i>ambiguus</i>		0.5	0.5-1
<i>Enneapogon</i>	<i>caerulescens</i>		5	0.3
<i>Enneapogon</i>	<i>lindleyanus</i>		+	0.3
<i>Enneapogon</i>	<i>polyphyllus</i>		1	0.25
<i>Eriachne</i>	<i>aristidea</i>		0.5	0.25
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.15
<i>Euphorbia</i>	<i>australis</i>	var. <i>subtomentosa</i>	+	0.1
<i>Euphorbia</i>	<i>biconvexa</i>		+	0.3
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	+	0.2
<i>Goodenia</i>	<i>muelleriana</i>		+	0.3
<i>Gossypium</i>	<i>australe</i>		+	0.5
<i>Grevillea</i>	<i>pyramidalis</i>	subsp. <i>leucadendron</i>	0.5	0.5-1
<i>Hakea</i>	<i>chordophylla</i>		+	0.5
<i>Hibiscus</i>	<i>coatesii</i>		+	1.2
<i>Indigofera</i>	<i>rugosa</i>		1.5	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Phyllanthus</i>	<i>erwinii</i>		+	0.25
<i>Polygala</i>	<i>isingii</i>		+	0.01
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.1
<i>Ptilotus</i>	<i>auriculifolius</i>		1.5	0.4
<i>Ptilotus</i>	<i>nobilis</i>		+	0.25
<i>Rhynchosia</i>	<i>minima</i>		+	0.1
<i>Schizachyrium</i>	<i>fragile</i>		0.5	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	1	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1.5	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1
<i>Senna</i>	<i>glutinosa</i> (hybrid)		+	0.6
<i>Sida</i>	<i>echinocarpa</i>		+	0.6
<i>Solanum</i>	<i>horridum</i>		+	0.1
<i>Solanum</i>	<i>phlomoides</i>		+	0.4
<i>Sporobolus</i>	<i>australasicus</i>		1	0.1
<i>Tribulus</i>	<i>macrocarpus</i>		+	Cr
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	+	0.2
<i>Triodia</i>	<i>brizoides</i>		1	1
<i>Triodia</i>	<i>wiseana</i>		50	0.2-1

Site	Site AY154
Date	28/07/2012
Recorder	JB/JW
Photo	102-0413/0414, DSC00743
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698707
Northing	7487189
Habitat	1:<1
Aspect	210°
Slope	Hillslope (HSL) Moderately Inclined (MO) (5° 46' to 18°)
Soil	Silty loam
Rock Type	Brown Pisolitic Ironstone (outcrops, cobbles, pebbles)
% Leaves:Logs	
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Moderate 2-5 yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	0.5	0.3
<i>Acacia</i>	<i>arida</i>		+	0.3
<i>Acacia</i>	<i>hilliana</i>		10	0.35
<i>Acacia</i>	<i>maitlandii</i>		+	0.5
<i>Acacia</i>	<i>monticola</i>		1	0.5-1.5
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	0.5-1.5
<i>Acacia</i>	<i>pyrifolia</i>		+	0.6
<i>Aristida</i>	<i>contorta</i>		+	0.25
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Capparis</i>	<i>lasiantha</i>		+	0.5
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	1.5
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.6
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Eriachne</i>	<i>lanata</i>		+	0.55
<i>Eriachne</i>	<i>mucronata</i>		+	0.35
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	6	3-7
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Goodenia</i>	<i>triodiophila</i>		+	0.35
<i>Gossypium</i>	<i>australe</i>		1	0.2
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1.5
<i>Hakea</i>	<i>chordophylla</i>		+	2
<i>Heliotropium</i>	<i>pachyphyllum</i>		+	0.2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platyklamys</i>	+	0.3
<i>Hybathus</i>	<i>aurantiacus</i>		+	0.5
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.3

Genus	Species	subsp./var.	% Cover	Height
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	0.5
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	5	0.45
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		+	0.6
<i>Santalum</i>	<i>lanceolatum</i>		+	1-1.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	0.7
<i>Sida</i>	<i>arenicola</i>		+	1
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.4
<i>Tephrosia</i>	<i>rosea</i>	var. Fortescue creeks (M.I.H. Brooker 2186)	+	0.3
<i>Themeda</i>	<i>triandra</i>		+	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		16	0.5
<i>Triodia</i>	<i>wiseana</i>		16	0.2-1.2

Site	Site AY155
Date	28/07/2012
Recorder	JB/JW
Photo	102-0425, DSC00744
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697401
Northing	7486593
Habitat	Hillslope (HSL)
Aspect	50°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Silcrete and Eroded Calcrete
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1.4
<i>Acacia</i>	<i>aptaneura</i>		+	4
<i>Acacia</i>	<i>bivenosa</i>		1	2-3
<i>Acacia</i>	<i>hilliana</i>		1.5	0.5-1
<i>Acacia</i>	<i>maitlandii</i>		+	1
<i>Acacia</i>	<i>sibirica</i>		0.5	1-1.5
<i>Acacia</i>	<i>sibirica</i> (or <i>rhodophloia</i> hybrid)		0.5	2
<i>Acacia</i>	<i>tenuissima</i>		+	1-1.5
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Cassytha</i>	<i>capillaris</i>		+	Cl
<i>Corymbia</i>	<i>hamersleyana</i>		3	3-5
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Eriachne</i>	<i>mucronata</i>		+	0.4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	5	2-4.5
<i>Exocarpus</i>	<i>sparteus</i>		+	1.6
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hakea</i>	<i>chordophylla</i>		+	2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Keraudrenia</i>	cf. <i>nephrosperma</i>		+	0.4
<i>Polycarpaea</i>	<i>corymbosa</i>		+	0.2
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.01
<i>Polygala</i>	<i>isingii</i>		+	0.01
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-2
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.2
<i>Themeda</i>	<i>triandra</i>		+	0.5
<i>Triodia</i>	<i>wiseana</i>		80	1.6

Site	Site AY156
Date	28/07/2012
Recorder	JB/JW
Photo	102-0431, DSC00745
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697454
Northing	7485599
Habitat	Hillcrest (HCR)
Aspect	190°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Red Ironstone; Chert; Calcrete (pebbles, cobbles)
% Leaves:Logs	1:0
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		+	0.5
<i>Acacia</i>	<i>aptaneura</i>		+	1-2
<i>Acacia</i>	<i>atkinsiana</i>		+	1-1.5
<i>Acacia</i>	<i>bivenosa</i>		7	2-4
<i>Acacia</i>	<i>inaequilatera</i>		0.5	1-2
<i>Acacia</i>	<i>synchronicia</i>		0.5	1-2
<i>Acacia</i>	<i>tenuissima</i>		+	1-2
<i>Aristida</i>	<i>contorta</i>		+	0.2
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		1	5
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eriachne</i>	<i>tenuiculmis</i>		+	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	6
<i>Eucalyptus</i>	<i>xerothermica</i>		0.5	5
<i>Eucalyptus</i>	<i>gamophylla</i>		3	2-3
<i>Hakea</i>	<i>chordophylla</i>		+	5
<i>Hakea</i>	<i>lorea</i>	subsp. <i>lorea</i>	+	1-2
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	1-2
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		0.5	1
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		+	1.1
<i>Ptilotus</i>	<i>nobilis</i>		+	0.5
<i>Ptilotus</i>	<i>obovatus</i>		+	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	0.5	0.5

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1.5-2.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	1
<i>Themeda</i>	<i>triandra</i>		+	0.65
<i>Triodia</i>	<i>angusta</i>		+	0.5-1
<i>Triodia</i>	<i>wiseana</i>		65	1.2

Site	Site AY157
Date	29/07/2012
Recorder	JB/JW
Photo	102-0445/0446, DSC00746
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	708768
Northing	7494980
Habitat	Drainage Depression (DDE)
Aspect	160°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Ironstone - slate (gravel, bouldersm outcropping, cobbles, pebbles)
% Leaves:Logs	15:3
Vegetation Condition	Excellent
Disturbance Type	Flooding; Minor weeds
Fire Age	Old
Vegetation	<i>Eucalyptus</i> Open Forest

Genus	Species	subsp./var.	% Cover	Height
<i>*Sonchus</i>	<i>oleraceus</i>		+	0.1
<i>Acacia</i>	<i>arida</i>		+	1
<i>Acacia</i>	<i>bivenosa</i>		35	2
<i>Acacia</i>	<i>maitlandii</i>		+	2
<i>Acacia</i>	<i>monticola</i>		0.5	1-2
<i>Acacia</i>	<i>pyrifolia</i>		2	0.5
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	15	2-3
<i>Androcalva</i>	<i>luteiflora</i>		2	1-2
<i>Cleome</i>	<i>viscosa</i>		+	0.5
<i>Clerodendrum</i>	<i>floribundum</i>	var. <i>angustifolium</i>	+	0.1
<i>Cymbopogon</i>	<i>procerus</i>		8	1-2
<i>Cyperus</i>	<i>vaginatus</i>		25	0.6
<i>Dodonaea</i>	<i>lanceolata</i>		+	1.2
<i>Enneapogon</i>	<i>lindleyanus</i>		+	0.3
<i>Eriachne</i>	<i>tenuiculmis</i>		+	0.5
<i>Eucalyptus</i>	<i>camaldulensis</i>	subsp. <i>refulgens</i>	50	6-25
<i>Eucalyptus</i>	<i>victrix</i>		15	6-20
<i>Eulalia</i>	<i>aurea</i>		20	0.5
<i>Gossypium</i>	<i>robinsonii</i>		10	2-3
<i>Pluchea</i>	<i>dentex</i>		+	0.4
<i>Polycarpaea</i>	<i>longiflora</i>		+	0.2
<i>Rhynchosia</i>	<i>bungarensis</i>		+	0.1-0.3
<i>Stemodia</i>	<i>grossa</i>		+	0.2
<i>Themeda</i>	<i>triandra</i>		20	0.8
<i>Trachymene</i>	<i>oleracea</i>		+	0.1
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	+	0.2
<i>Typha</i>	<i>domingensis</i>		0.5	1-1.5

Site	Site AY158
Date	29/07/2012
Recorder	JB/JW
Photo	102-0460, DSC00747
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	707665
Northing	7494314
Habitat	Hillslope (HSL)
Aspect	0°
Slope	Steep (ST) (18°1' to 30°)
Soil	Silty loam
Rock Type	Red Poor Quality BIF; Slatey Ironstone (outcrops, cobbles, pebbles)
% Leaves:Logs	1:<1
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>hilliana</i>		2	0.4
<i>Acacia</i>	<i>inaequilatera</i>		2.5	1-3
<i>Acacia</i>	<i>sericophylla</i>		+	1-2
<i>Acacia</i>	<i>tenuissima</i>		+	1-2
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	3	0.4
<i>Enneapogon</i>	<i>robustissimus</i>		+	0.55
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	0.5	5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	2
<i>Hakea</i>	<i>chordophylla</i>		+	3
<i>Indigofera</i>	<i>monophylla</i>		1	0.35
<i>Ptilotus</i>	<i>fusiformis</i>		+	0.4
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1-1.5
<i>Senna</i>	<i>symonii</i>		0.5	0.4-1
<i>Sida</i>	sp. Pilbara (A.A. Mitchell PRP 1543)		+	0.1
<i>Solanum</i>	<i>phlomoides</i>		+	0.4
<i>Themeda</i>	<i>triandra</i>		0.5	0.75
<i>Trachymene</i>	<i>oleracea</i>		+	0.4
<i>Trichodesma</i>	<i>zeylanicum</i>	var. <i>zeylanicum</i>	+	0.4
<i>Triodia</i>	<i>brizoides</i>		7	0.4-1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		60	0.6
<i>Triodia</i>	<i>wiseana</i>		8	0.4-1.2
<i>Triodia</i>	<i>pungens</i>		7	0.4-1.2

Site	Site AY159
Date	29/07/2012
Recorder	JB/JW
Photo	102-0479, DSC00748
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	707412
Northing	7495102
Habitat	Hillslope (HSL)
Aspect	120°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Silty loam
Rock Type	Brown Ironstone; BIF (cobbles, pebbles, outcrops)
% Leaves:Logs	1:0
Vegetation Condition	Excellent
Disturbance Type	None evident
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	6	0.3
<i>Acacia</i>	<i>elachantha</i>		+	1
<i>Acacia</i>	<i>hilliana</i>		8	0.4
<i>Acacia</i>	<i>monticola</i>		+	1.5
<i>Acacia</i>	<i>tenuissima</i>		+	1
<i>Amphipogon</i>	<i>sericeus</i>		+	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.5
<i>Corymbia</i>	<i>hamersleyana</i>		2	2-5
<i>Dodonaea</i>	<i>coriacea</i>		+	1
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Eriachne</i>	<i>lanata</i>		+	0.4
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	7.5	2-6
<i>Exocarpus</i>	<i>sparteus</i>		+	1-2
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.2
<i>Goodenia</i>	<i>cusackiana</i>		+	0.15
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.1
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hakea</i>	<i>chordophylla</i>		+	0.5-2
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>campylochlamys</i>	+	0.25
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.2
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	2	0.4
<i>Mirbelia</i>	<i>viminalis</i>		+	0.6
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Schizachyrium</i>	<i>fragile</i>		+	0.1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.4
<i>Senna</i>	<i>ferraria</i>		+	1.5

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	+	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	0.5
<i>Tephrosia</i>	<i>arenicola</i>		+	0.5-1.5
<i>Themeda</i>	<i>triandra</i>		+	0.6
<i>Tricoryne</i>	sp. Hamersley Range (S. van Leeuwen 915)		+	0.5
<i>Triodia</i>	<i>wiseana</i>		30	0.4-1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		40	0.5

Site	Site AY160
Date	30/07/2012
Recorder	JW/EP
Photo	DSC00868, EP95
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	695375
Northing	7483824
Habitat	Hillcrest (HCR)
Aspect	90°
Slope	Gently Inclined (GE) (1°46' to 5°45')
Soil	Silty loam
Rock Type	Brown Dolertie (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Powerlines; Yandi access road nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1
<i>Acacia</i>	<i>inaequilatera</i>		1	1-3
<i>Acacia</i>	<i>pruinocarpa</i>		+	1
<i>Acacia</i>	<i>sibirica</i>		+	0.4
<i>Acacia</i>	<i>synchronicia</i>		+	0.3
<i>Aristida</i>	<i>contorta</i>		4	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Bulbostylis</i>	<i>barbata</i>		+	0.1
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.3
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.6
<i>Enneapogon</i>	<i>caerulescens</i>		0.5	0.25
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.2
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.15
<i>Euphorbia</i>	<i>tannensis</i>	subsp. <i>eremophila</i>	+	0.2
<i>Fimbristylis</i>	<i>dichotoma</i>		+	0.2
<i>Goodenia</i>	<i>muelleriana</i>		+	0.2
<i>Gossypium</i>	<i>australe</i>		+	0.2
<i>Hibiscus</i>	aff. <i>coatesii</i>		+	0.4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	+	0.3
<i>Iseilema</i>	<i>dolichotrichum</i>		+	0.1
<i>Paspalidium</i>	<i>clementii</i>		+	0.05
<i>Pluchea</i>	<i>dunlopii</i>		+	0.2
<i>Polycarpaea</i>	<i>corymbosa</i>		+	0.1
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.05
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.3
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>auriculifolius</i>		+	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>nobilis</i>		+	0.6
<i>Ptilotus</i>	<i>rotundifolius</i>		+	0.6
<i>Rhynchosia</i>	<i>minima</i>		+	0.1
<i>Salsola</i>	<i>australis</i>		+	0.4
<i>Schizachyrium</i>	<i>fragile</i>		+	0.15
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.6
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	1	1-2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1-1.2
<i>Sida</i>	<i>echinocarpa</i>		+	0.4
<i>Sida</i>	sp. spiciform panicles (E. Leyland s.n. 14/8/90)		+	1.5
<i>Solanum</i>	<i>horridum</i>		+	0.2
<i>Sporobolus</i>	<i>australasicus</i>		+	0.15
<i>Streptoglossa</i>	<i>decurrens</i>		+	0.35
<i>Swainsona</i>	<i>decurrens</i>		+	0.4
<i>Themeda</i>	<i>triandra</i>		+	0.6
<i>Tribulus</i>	<i>suberosus</i>		+	0.4
<i>Triodia</i>	<i>brizoides</i>		25	0.2-0.7
<i>Triodia</i>	<i>wiseana</i>		25	0.7-1
<i>Tripogon</i>	<i>loliiformis</i>		+	0.2

Site	Site AY161
Date	30/07/2012
Recorder	JB/DR
Photo	102-0492, DSC00749
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	704977
Northing	7481711
Habitat	Hillslope (HSL)
Aspect	30°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (pebbles, cobbles, outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Access tracks; Powerlines
Fire Age	Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	1	0.5
<i>Acacia</i>	<i>ancistrocarpa</i>		+	2
<i>Acacia</i>	<i>hilliana</i>		2	0.5
<i>Acacia</i>	<i>tetragonophylla</i>		+	2
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.5
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.4
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.3
<i>Eremophila</i>	<i>longifolia</i>		+	1.5
<i>Eriachne</i>	<i>lanata</i>		+	0.4
<i>Eriachne</i>	<i>mucronata</i>		+	0.5
<i>Euphorbia</i>	<i>australis</i>	var. <i>hispida</i>	+	0.1
<i>Evolvulus</i>	<i>alsinoides</i>	var. <i>villosicalyx</i>	+	0.1
<i>Fimbristylis</i>	<i>simulans</i>		+	0.1
<i>Hakea</i>	<i>chordophylla</i>		+	3
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Paspalidium</i>	<i>clementii</i>		+	0.1
<i>Polycarpha</i>	<i>holtzei</i>		+	0.1
<i>Ptilotus</i>	<i>obovatus</i>		+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1-1.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.5
<i>Triodia</i>	<i>wiseana</i>		75	1-1.2

Site	Site AY162
Date	30/07/2012
Recorder	JW/EP
Photo	DSC869, EP86
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	697993
Northing	7482137
Habitat	Hillcrest (HCR)
Aspect	
Slope	Level (LE) (0° to 0°35')
Soil	Silty loam
Rock Type	Brown Ironstone (cobbles, pebbles)
% Leaves:Logs	<1:<1
Vegetation Condition	Excellent
Disturbance Type	Old exploration tracks nearby
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.4
<i>Acacia</i>	<i>ancistrocarpa</i>		0.5	2
<i>Acacia</i>	<i>atkinsiana</i>		8	1-2
<i>Acacia</i>	<i>inaequilatera</i>		+	1
<i>Acacia</i>	<i>monticola</i>		+	2
<i>Acacia</i>	<i>tumida</i>	var. <i>pilbarensis</i>	1	2.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	3-6
<i>Fimbristylis</i>	<i>simulans</i>		+	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		+	0.4
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.4
<i>Hakea</i>	<i>chordophylla</i>		0.5	2.5
<i>Hibiscus</i>	<i>coatesii</i>		+	0.25
<i>Indigofera</i>	<i>monophylla</i>		+	0.4
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	2.5
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1
<i>Stackhousia</i>	<i>intermedia</i>		+	0.3
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		60	0.2-0.6

Site	Site AY163
Date	30/07/2012
Recorder	JB/DR
Photo	102-0495, DSC00750
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	702927
Northing	7482825
Habitat	Hillcrest (HCR)
Aspect	340°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Ironstone (pebbles, cobbles, outcrops)
% Leaves:Logs	<1:<1
Vegetation Condition	Very Good
Disturbance Type	Fire; Access track; Powerline; Rail
Fire Age	Moderate 2-5yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1.5
<i>Acacia</i>	<i>bivenosa</i>		+	2
<i>Acacia</i>	<i>hilliana</i>		20	0.5
<i>Acacia</i>	<i>pruinocarpa</i>		1.5	2-3
<i>Acacia</i>	<i>tenuissima</i>		+	1
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	1
<i>Dodonaea</i>	<i>coriacea</i>		+	0.5
<i>Eriachne</i>	<i>lanata</i>		+	0.4
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	1-1.4
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.1
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1-1.5
<i>Hakea</i>	<i>chordophylla</i>		+	1
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.1
<i>Themeda</i>	<i>triandra</i>		+	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		5	0.5-0.8
<i>Triodia</i>	<i>wiseana</i>		35	0.5-1

Site	Site AY164
Date	30/07/2012
Recorder	JW/EP
Photo	DSC00870, EP87
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	690927
Northing	7480395
Habitat	Plain (PLA)
Aspect	200°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Red Ironstone (scattered cobbles & pebbles)
% Leaves:Logs	1:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Old 5-10yrs
Vegetation	<i>Acacia</i> Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Portulaca</i>	<i>oleracea</i>		+	0.05
<i>Acacia</i>	<i>ancistrocarpa</i>		1	1-1.2
<i>Acacia</i>	<i>aptaneura</i>		+	5
<i>Acacia</i>	<i>atkinsiana</i>		20	1-2.5
<i>Acacia</i>	<i>inaequilatera</i>		+	0.4
<i>Acacia</i>	<i>pruinocarpa</i>		0.5	1.5
<i>Acacia</i>	<i>tenuissima</i>		+	1.3
<i>Anthobolus</i>	<i>leptomerioides</i>		+	1.3
<i>Aristida</i>	<i>contorta</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	2	0.5
<i>Aristida</i>	<i>inaequiglumis</i>		+	0.5
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	0.4
<i>Corchorus</i>	<i>lasiocarpus</i>		1	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	2.5	3-6
<i>Cymbopogon</i>	<i>obtectus</i>		+	1
<i>Duperreya</i>	<i>commixta</i>		+	Cl
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.1
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.5
<i>Eriachne</i>	<i>pulchella</i>		+	0.1
<i>Euphorbia</i>	sp. indet		+	0.1
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hibiscus</i>	<i>coatesii</i>		+	0.4
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	+	0.3
<i>Hybanthus</i>	<i>aurantiacus</i>		+	0.25
<i>Indigofera</i>	<i>georgei</i>		+	0.6

Genus	Species	subsp./var.	% Cover	Height
<i>Indigofera</i>	<i>monophylla</i>		+	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.5
<i>Maytenus</i>	sp. Mt Windell (S. Van Leeuwen 846)		+	1.7
<i>Paraneurachne</i>	<i>muelleri</i>		2	0.6
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.7
<i>Ptilotus</i>	<i>calostachyus</i>		+	1.2
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	+	0.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	0.5
<i>Senna</i>	<i>notabilis</i>		+	0.1
<i>Sida</i>	<i>arenicola</i>		+	0.4
<i>Sida</i>	<i>cardiophylla</i>		+	0.15-0.5
<i>Sida</i>	<i>echinocarpa</i>		+	0.8
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.6
<i>Solanum</i>	<i>phlomoides</i>		+	0.5
<i>Trianthema</i>	<i>glossostigma</i>		+	0.01
<i>Triodia</i>	<i>melvillei</i>		1	0.4-1.7
<i>Triodia</i>	<i>wiseana</i>		3	0.3-1.2
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		0.5	0.2-0.5

Site	Site AY165
Date	30/07/2012
Recorder	JB/DR
Photo	DSC00751, 102-0503
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	701413
Northing	7484670
Habitat	Hillcrest (HCR)
Aspect	130°
Slope	Moderately Inclined (MO) (5°46' to 18°)
Soil	Sandy loam
Rock Type	Brown Calcrete; Silcrete (pebbles, outcrops, cobbles)
% Leaves:Logs	<1:0.5
Vegetation Condition	Excellent
Disturbance Type	Access track; Powerlines
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adoxa</i>	var. <i>adoxa</i>	+	0.3
<i>Acacia</i>	<i>ancistrocarpa</i>		+	1-2
<i>Acacia</i>	<i>bivenosa</i>		20	2-4
<i>Acacia</i>	<i>hilliana</i>		1	0.5-1
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.3
<i>Cassytha</i>	<i>capillaris</i>		+	Cl
<i>Codonocarpus</i>	<i>cotinifolius</i>		+	1-1.5
<i>Corymbia</i>	<i>hamersleyana</i>		1	3-6
<i>Cymbopogon</i>	<i>ambiguus</i>		+	0.7
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.5
<i>Dampiera</i>	<i>candicans</i>		+	0.4
<i>Dodonaea</i>	<i>coriacea</i>		+	0.5
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	2-3
<i>Eucalyptus</i>	<i>socialis</i>	subsp. <i>eucentrica</i>	2.5	2-3
<i>Eucalyptus</i>	<i>xerothermica</i>		0.5	3
<i>Exocarpus</i>	<i>sparteus</i>		+	1-2
<i>Goodenia</i>	sp. East Pilbara (A.A. Mitchell PRP 727)		+	0.05
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.2
<i>Heliotropium</i>	<i>chrysocarpum</i>		+	0.2
<i>Hibiscus</i>	<i>verdcourtii</i>		+	0.2
<i>Indigofera</i>	<i>monophylla</i>		+	0.1
<i>Ptilotus</i>	<i>nobilis</i>		+	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.4
<i>Senna</i>	<i>ferraria</i>		+	0.05
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1.5-3

Genus	Species	subsp./var.	% Cover	Height
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>pruinosa</i>	+	1
<i>Stackhousia</i>	<i>intermedia</i>		+	0.2
<i>Themeda</i>	<i>triandra</i>		+	0.5-0.8
<i>Triodia</i>	<i>brizoides</i>		1	1
<i>Triodia</i>	<i>wiseana</i>		45	1-1.5

Site	Site AY166
Date	31/07/2012
Recorder	JW/EP
Photo	DSC00871, EP88
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	691754
Northing	7481321
Habitat	Hillcrest (HCR)
Aspect	10°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Sandy clay loam
Rock Type	Red Ironstone (cobbles, pebbles, gravel)
% Leaves:Logs	<1:1
Vegetation Condition	Excellent
Disturbance Type	Fire
Fire Age	Old 5-10yrs
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>atkinsiana</i>		2	0.5-2
<i>Acacia</i>	<i>inaequilatera</i>		+	1
<i>Acacia</i>	<i>maitlandii</i>		+	0.5
<i>Amphipogon</i>	<i>sericeus</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Aristida</i>	<i>inaequiglumis</i>		+	0.7
<i>Bonamia</i>	<i>erecta</i>		+	0.3
<i>Corchorus</i>	<i>lasiocarpus</i>		+	0.5
<i>Corymbia</i>	<i>deserticola</i>	subsp. <i>deserticola</i>	+	5
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eriachne</i>	<i>mucronata</i>		+	0.5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	1	4.5-5
<i>Fimbristylis</i>	<i>simulans</i>		+	0.1
<i>Goodenia</i>	<i>microptera</i>		+	0.2
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.25
<i>Grevillea</i>	<i>wickhamii</i>	subsp. <i>hispidula</i>	+	1.8
<i>Hakea</i>	<i>chordophylla</i>		+	4.5
<i>Indigofera</i>	<i>monophylla</i>		+	0.2
<i>Keraudrenia</i>	cf. <i>nephrosperma</i>		+	0.4
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	+	0.4
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.3
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.01
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.8
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	+	0.2
<i>Senna</i>	<i>glaucifolia</i>		+	1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1.5
<i>Senna</i>	<i>notabilis</i>		+	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Sida</i>	<i>arenicola</i>		+	1-1.2
<i>Solanum</i>	<i>phlomoides</i>		+	0.5
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		50	0.1-0.6

Site	Site AY167
Date	31/07/2012
Recorder	JB/DR
Photo	DSC006, 102-0505
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	704694
Northing	7483103
Habitat	Plain (PLA)
Aspect	
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Orange Ironstone (pebbles)
% Leaves:Logs	<1:2
Vegetation Condition	Very Good
Disturbance Type	Minor Weeds; Cattle
Fire Age	Old
Vegetation	<i>Acacia</i> Low Woodland

Genus	Species	subsp./var.	% Cover	Height
<i>*Bidens</i>	<i>bipinnata</i>		+	0.1
<i>*Malvastrum</i>	<i>americanum</i>		+	0.5
<i>Portulaca</i>	<i>oleracea</i>		+	0.1
<i>*Vachellia</i>	<i>farnesiana</i>		0.5	1-2.5
<i>Abutilon</i>	<i>oxycarpum</i>		+	0.25
<i>Acacia</i>	<i>aptaneura</i>		10	3-6
<i>Acacia</i>	<i>synchronicia</i>		6	1-3
<i>Acacia</i>	<i>tetragonophylla</i>		4.5	2-3
<i>Aristida</i>	<i>contorta</i>		+	0.3
<i>Aristida</i>	<i>inaequiglumis</i>		+	0.5
<i>Bergia</i>	<i>pedicellaris</i>		+	0.1
<i>Blumea</i>	<i>tenella</i>		+	0.15
<i>Bulbostylis</i>	<i>barbata</i>		1	0.1
<i>Chloris</i>	<i>pectinata</i>		1.5	0.3
<i>Corchorus</i>	<i>tridens</i>		+	0.15
<i>Dichanthium</i>	<i>sericeum</i>	subsp. <i>humilius</i>	+	0.3
<i>Enchylaena</i>	<i>tomentosa</i>		+	0.5
<i>Eragrostis</i>	sp. indet			0.4
<i>Eragrostis</i>	<i>tenellula</i>		1.5	0.35
<i>Eragrostis</i>	<i>xerophila</i>		1	0.4
<i>Eremophila</i>	<i>forrestii</i>	subsp. <i>forrestii</i>	1.5	1-2
<i>Eremophila</i>	<i>longifolia</i>		+	0.5
<i>Eriachne</i>	<i>benthamii</i>		2	0.1
<i>Eriachne</i>	<i>mucronata</i>		0.5	0.45
<i>Eriachne</i>	sp. indet		+	0.1
<i>Heliotropium</i>	<i>heteranthum</i>		+	0.05
<i>Hibiscus</i>	sp. indet		+	0.5
<i>Iseilema</i>	<i>dolichotrichum</i>		+	0.2

Genus	Species	subsp./var.	% Cover	Height
<i>Maireana</i>	<i>villosa</i>		+	0.3
<i>Mimulus</i>	<i>gracilis</i>		+	0.15
<i>Opercularia</i>	<i>acquirepala</i>		+	Cr
<i>Rhagodia</i>	<i>eremaea</i>		+	1-2
<i>Rhynchosia</i>	<i>minima</i>		+	Cl
<i>Santalum</i>	<i>lanceolatum</i>		+	1-2
<i>Sclerolaena</i>	<i>cornishiana</i>		+	0.35
<i>Senna</i>	? <i>artemisioides</i>	subsp. <i>oligophylla</i> X <i>helmsii</i>	+	0.5
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5-1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i> X <i>sp. Meekathara</i>	3	0.5-1.2
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>luerssenii</i>	0.5	0.5-1.3
<i>Sida</i>	<i>fibulifera</i>		1	0.25
<i>Sida</i>	<i>rohlena</i>	subsp. cf. <i>rohlena</i>	+	0.4
<i>Sporobolus</i>	<i>australasicus</i>		2	0.1
<i>Streptoglossa</i>	sp. indet		+	0.5
<i>Triodia</i>	<i>longiceps</i>		3	0.5-1.3
<i>Triodia</i>	<i>pungens</i>		0.5	1
<i>Triodia</i>	<i>wiseana</i>		+	1.2

Site	Site AY168
Date	31/07/2012
Recorder	JW/EP
Photo	DSC00872, EP89
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700580
Northing	7493611
Habitat	Plain (PLA)
Aspect	130°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Ironstone (pebbles)
% Leaves:Logs	0.5:0.5
Vegetation Condition	Excellent
Disturbance Type	Fire; Horses
Fire Age	Old 5-10yrs
Vegetation	Acacia Low Shrubland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>adsurgens</i>		+	1
<i>Acacia</i>	<i>ancistrocarpa</i>		5	0.5-1.2
<i>Acacia</i>	<i>aptaneura</i>		+	2
<i>Acacia</i>	<i>atkinsiana</i>		1	1
<i>Acacia</i>	<i>bivenosa</i>		+	1.2
<i>Acacia</i>	<i>dictyophleba</i>		+	1
<i>Acacia</i>	<i>tenuissima</i>		5	1
<i>Amhipogon</i>	<i>sericeus</i>		+	0.5
<i>Aristida</i>	<i>contorta</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	0.5	0.4
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	+	0.2
<i>Dodonaea</i>	<i>coriacea</i>		+	0.2
<i>Dodonaea</i>	<i>pachyneura</i>		+	1.5
<i>Dysphania</i>	<i>rhadinostachya</i>	var. <i>rhadinostachya</i>	+	0.2
<i>Eremophila</i>	<i>longifolia</i>		+	1
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		1.5	2-2.5
<i>Eucalyptus</i>	<i>trivalva</i>		+	2
<i>Eucalyptus</i>	<i>xerothermica</i>		1	3-5
<i>Euphorbia</i>	sp. indet		+	0.1
<i>Gompholobium</i>	<i>oreophilum</i>		1	0.5
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Hakea</i>	<i>chordophylla</i>		+	0.5-1.5
<i>Hibiscus</i>	<i>sturtii</i>	var. <i>platychlamys</i>	+	0.8
<i>Indigofera</i>	<i>monophylla</i>		0.5	0.4
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	CI
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.5
<i>Polycarphaea</i>	<i>corymbosa</i>		+	0.15

Genus	Species	subsp./var.	% Cover	Height
<i>Polycarpaea</i>	<i>holtzei</i>		+	0.01
<i>Ptilotus</i>	<i>astrolasius</i>		3	0.3
<i>Ptilotus</i>	<i>calostachyus</i>		+	1
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	+	0.25
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	1.4
<i>Senna</i>	<i>glaucifolia</i>		+	1
<i>Senna</i>	<i>notabilis</i>		+	0.2
<i>Sida</i>	<i>arenicola</i>		+	1
<i>Sida</i>	<i>cardiophylla</i>		+	0.6
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.6
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		20	0.2-0.8
<i>Triodia</i>	<i>wiseana</i>		2	0.2-0.8

Site	Site AY169
Date	31/07/2012
Recorder	JB/DR
Photo	DSC102, 102-0517
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	700297
Northing	7492194
Habitat	Plain (PLA)
Aspect	
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Ironstone (pebbles)
% Leaves:Logs	1:0.5
Vegetation Condition	Excellent
Disturbance Type	Access track
Fire Age	Old
Vegetation	<i>Triodia</i> Closed Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Acacia</i>	<i>ancistrocarpa</i>		6	2-2.5
<i>Acacia</i>	<i>aneura</i>		4.5	2-3
<i>Acacia</i>	<i>aptaneura</i>		2	2-3
<i>Acacia</i>	<i>atkinsiana</i>		3	2-2.5
<i>Acacia</i>	<i>bivenosa</i>		2	2
<i>Acacia</i>	<i>dictyophleba</i>		1	2-2.5
<i>Acacia</i>	<i>maitlandii</i>		0.5	2
<i>Acacia</i>	<i>pruinocarpa</i>		3	3
<i>Acacia</i>	<i>sibirica</i>		1	2
<i>Acacia</i>	<i>tenuissima</i>		1.5	2
<i>Acacia</i>	<i>tetragonophylla</i>		0.5	2-5
<i>Alternanthera</i>	<i>nana</i>		+	0.2
<i>Aristida</i>	<i>contorta</i>		+	0.2
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.35
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	+	0.3
<i>Cymbopogon</i>	<i>ambiguus</i>		+	1
<i>Cymbopogon</i>	<i>obtectus</i>		+	0.8
<i>Duperreya</i>	<i>commixta</i>		+	CI
<i>Dysphania</i>	<i>glomulifera</i>		+	0.2
<i>Enneapogon</i>	<i>polyphyllus</i>		+	0.25
<i>Eriachne</i>	<i>mucronata</i>		+	0.3
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		4	3-4
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	2.5	5-10
<i>Eucalyptus</i>	<i>xerothermica</i>		3.5	4-5
<i>Eulalia</i>	<i>aurea</i>		+	0.7
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Keraudrenia</i>	<i>velutina</i>	subsp. <i>elliptica</i>	0.5	0.4

Genus	Species	subsp./var.	% Cover	Height
<i>Paraneurachne</i>	<i>muelleri</i>		+	0.4
<i>Polycarpaea</i>	<i>corymbosa</i>		+	0.1
<i>Pterocaulon</i>	<i>sphaeranthoides</i>		+	0.15
<i>Ptilotus</i>	<i>fusiformis</i>		+	0.3
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	+	0.6
<i>Schizachyrium</i>	<i>fragile</i>		+	0.2
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	1
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>oligophylla</i>	+	0.5-1
<i>Senna</i>	<i>notabilis</i>		+	0.1
<i>Sida</i>	<i>cf. fibulifera</i>		+	0.2
<i>Sporobolus</i>	<i>australasicus</i>		+	0.1
<i>Themeda</i>	<i>triandra</i>		+	0.5
<i>Triodia</i>	<i>melvillei</i>		70	1-2
<i>Triodia</i>	<i>pungens</i>		2	1.2

Site	Site AY170
Date	31/07/2012
Recorder	JB/DR
Photo	DSC00753, 102-0519
Shape/Size	50m x 50m
Datum	GDA 94
Zone	50K
Easting	698524
Northing	7492001
Habitat	Plain (PLA)
Aspect	130°
Slope	Very Gently Inclined (VG) (0°36' to 1°45')
Soil	Silty loam
Rock Type	Brown Ironstone (pebbles)
% Leaves:Logs	1:0.5
Vegetation Condition	Very Good
Disturbance Type	Cattle; Access track
Fire Age	Old
Vegetation	<i>Triodia</i> Hummock Grassland

Genus	Species	subsp./var.	% Cover	Height
<i>Abutilon</i>	<i>malvifolium</i>		+	0.7
<i>Acacia</i>	<i>ancistrocarpa</i>		2	1-3
<i>Acacia</i>	<i>atkinsiana</i>		+	1-2
<i>Acacia</i>	<i>bivenosa</i>		0.5	1-2
<i>Acacia</i>	<i>tenuissima</i>		+	1-1.5
<i>Acacia</i>	<i>tetragonophylla</i>		+	1
<i>Amhipogon</i>	<i>sericeus</i>		+	0.3
<i>Aristida</i>	<i>holathera</i>	var. <i>holathera</i>	+	0.4
<i>Chrysopogon</i>	<i>fallax</i>		+	1
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	+	0.4
<i>Corchorus</i>	<i>sidoides</i>	subsp. <i>sidoides</i>	0.5	0.35
<i>Enneapogon</i>	<i>caerulescens</i>		+	0.2
<i>Eriachne</i>	<i>mucronata</i>		+	0.5
<i>Eriachne</i>	<i>pulchella</i>	subsp. <i>dominii</i>	+	0.1
<i>Eucalyptus</i>	<i>gamophylla</i>		4	2-5
<i>Eucalyptus</i>	<i>leucophloia</i>	subsp. <i>leucophloia</i>	+	5
<i>Eucalyptus</i>	<i>xerothermica</i>		+	4
<i>Eulalia</i>	<i>aurea</i>		+	0.5
<i>Euphorbia</i>	sp. indet		+	0.2
<i>Goodenia</i>	<i>microptera</i>		+	0.3
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.5
<i>Goodenia</i>	<i>stobbsiana</i>		+	0.3
<i>Goodenia</i>	<i>triodiophila</i>		+	0.3
<i>Hakea</i>	<i>chordophylla</i>		+	2-3
<i>Indigofera</i>	<i>monophylla</i>		1.5	0.5
<i>Jasminum</i>	<i>didymum</i>	subsp. <i>lineare</i>	+	Cl
<i>Paraneurachne</i>	<i>muelleri</i>		0.5	0.4
<i>Polycarpha</i>	<i>corymbosa</i>		+	0.1

Genus	Species	subsp./var.	% Cover	Height
<i>Ptilotus</i>	<i>astrolasius</i>		+	0.4
<i>Ptilotus</i>	<i>calostachyus</i>		1	0.5-1
<i>Ptilotus</i>	<i>fusiformis</i>		+	0.4
<i>Ptilotus</i>	<i>obovatus</i>		+	0.4
<i>Scaevola</i>	<i>parvifolia</i>	subsp. <i>pilbarae</i>	0.5	0.3
<i>Senna</i>	<i>artemisioides</i>	subsp. <i>helmsii</i>	+	0.5-1
<i>Senna</i>	<i>glutinosa</i>	subsp. <i>glutinosa</i>	+	1.5
<i>Senna</i>	sp. Meekatharra (E. Bailey 1-26)		+	0.5-1
<i>Sida</i>	<i>arenicola</i>		+	1
<i>Sida</i>	<i>cardiophylla</i>		+	0.3
<i>Solanum</i>	<i>lasiophyllum</i>		+	0.4
<i>Solanum</i>	<i>phlomoides</i>		+	0.5
<i>Sporobolus</i>	<i>australasicus</i>		+	0.15
<i>Themeda</i>	<i>triandra</i>		+	0.75
<i>Triodia</i>	<i>pungens</i>		+	1
<i>Triodia</i>	sp. Shovelanna Hill (S. van Leeuwen 3835)		40	0.6
<i>Triodia</i>	<i>wiseana</i>		1	0.3-1