

# Flora of select areas of three greenstone belts in the Yilgarn Craton: Bullfinch, Forrestania and Ravensthorpe

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## Executive Summary

Three greenstone belts in the Youanmi Terrane within the Yilgarn Craton were selected for surveys of vascular flora and environmental attributes. A total of 150 permanent quadrats were established across the survey areas of the southern Bullfinch, northern Forrestania and south-west Ravensthorpe Greenstone Belts. Site selection encompassed topographical and geological variation within the greenstone belts.

Over 2,800 collections of plant taxa were made during the survey resulting in 1365 voucher specimens, representing 66 families, for the Western Australian Herbarium. Three new plant taxa were recognised as a result of the surveys, only one of which had been previously collected. The survey identified 84 populations of 23 species of conservation status (DRF or Priority listed), including a significant range extension of over 200km for a P2 taxon. Survey plots in areas with long histories of disturbance held the majority of weed species identified; 239 records of 29 weed taxa were identified, with the southern Bullfinch Belt accounting for the majority of records and taxa.

The high beta diversity between the greenstone belts follows patterns found in other floristic surveys of greenstone belts in the south-west of Western Australia. A total of 699 taxa were recorded across all three greenstone belts, with only 21 taxa recorded from all three greenstone belts. Of the taxa ubiquitous to all surveyed belts, they were primarily perennial taxa with only five annuals recorded, including the weed taxon *Pentstemon airoides* subsp. *airoides*. There were 152 taxa distinct to the southern Bullfinch Greenstone Belt, with five and 34 taxa shared with south-west Ravensthorpe and northern Forrestania Greenstone Belts, respectively. The northern Forrestania Greenstone Belt contained 204 taxa unique to the area, sharing 43 taxa with the south-west Ravensthorpe Belt. At the south-west Ravensthorpe Greenstone Belt, 240 taxa were specific to that survey area. At the family level, Myrtaceae and Fabaceae are the dominant families for the northern Forrestania Belt and the south-west Ravensthorpe Belt. Asteraceae and Chenopodiaceae are the principal families in the southern Bullfinch Belt, which is partly attributed to the high proportion of annuals collected during the survey belonging to the Asteraceae family.

Only limited portions of the greenstone belts surveyed belong to the conservation estate. Recommendations of expanding the CAR (comprehensive and adequate reserve) system to include portions of these greenstone belts have been around for decades (i.e. Henry-Hall 1990). The flora and vegetation systems covered in this survey should be adequately represented in the conservation estate, particular in regards to the new taxa.

## **Introduction**

Recent flora and vegetation surveys have identified patterns of high beta diversity between banded ironstone ranges and associated greenstone belts (Gibson et al. 2007). Specific areas of three greenstone belts in the south-west of Western Australia were examined for floristic composition and environmental parameters. The greenstone belts selected for study were the southern Bullfinch, northern Forrestania and south-west Ravensthorpe Greenstone Belts. The greenstone belts of the Yilgarn Craton have long been of interest for pastoral settlement and resource exploration. The settlements near or within the greenstone belts in this study were established in relation to mineral exploration and mining (e.g. Bullfinch and Ravensthorpe townships).

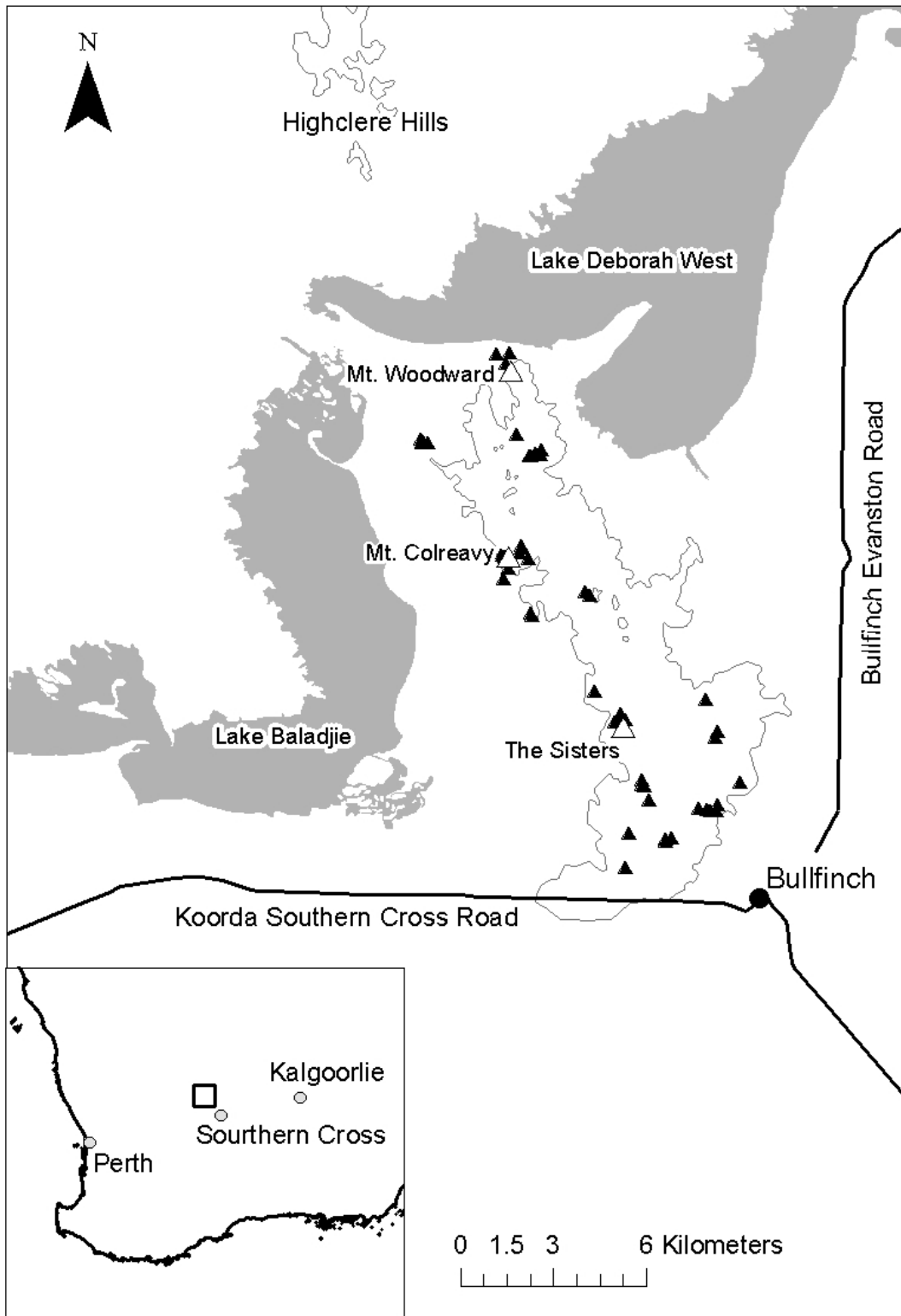
In particular, the discovery of gold in each of the respective greenstone belts has drawn attention to these areas since the 1800s. Gold was discovered in the Bullfinch area in 1887 (Chin and Smith 1983), 1915 in the Forrestania belt (Chin et al. 1984) and 1848 in the Ravensthorpe region (Thom et al. 1977). Of all the targeted survey areas, only the northern Forrestania Greenstone Belt has an operational mine at the Bounty Gold Deposit. Other mineral interests include copper and nickel, particularly in the Ravensthorpe greenstone belt (Thom et al. 1984).

The greenstone belts selected are all part of the Archaean Yilgarn Craton, a tectonically stable region within the Pre-Cambrian Western Shield (Anand and Paine 2002), formed between 3000 and 2600 Ma (Myers 1993, Myers and Swagers 1997). Within the Yilgarn Craton, the study areas sit within the Southern Cross Domain (SCD) within the Youanmi Terrane (Cassidy et al. 2006), formerly the Yellowdine Terrane (Myers and Swagers 1997) and the Southern Cross Granite-Greenstone Terrane (Tyler and Hocking 2001). The Youanmi Terrane potentially represents the geologic base on which the younger terranes (i.e. Narryer Terrane, Eastern Goldfields Superterrane) formed, due to distinct isotopic signatures (Cassidy et al. 2006).

## **Study Areas**

### **Southern Bullfinch Greenstone Belt**

The Bullfinch Greenstone Belt is situated in the central western extent of Coolgardie bioregion, near the boundary with the Avon Wheatbelt bioregion (Interim Biogeographic Regionalisation of Australia - IBRA, Thackway and Cresswell 1995). The greenstone belt extends c. 75 NNW from the township of Bullfinch, approximately 35 km northwest of Southern Cross (Figure 1). After approximately 20km, the belt trends northerly to encompass the Highclere and Woongaring Hills. The focus of this study covers the southern extent of the Bullfinch Greenstone Belt, south of Lake Deborah West and east of Lake Baladjie, c. 20km from north to south and a width c. 8-9km. The latitudinal and longitudinal boundaries of the study area are roughly 30° 45" S, 31° 00" S and 118° 55" E and 119° 105" E, respectively. Located within the Yilgarn Shire, the land tenure for the greenstone belt includes freehold, Golden Valley Pastoral lease, unallocated crown land and crown reserve.



**Figure 1.** Map showing the location of the southern Bullfinch Greenstone Belt, with major landforms and landmarks indicated. The locations of the 50 permanent quadrats are marked by solid triangles (▲). Empty triangles indicate major landforms in the belt.

## **Climate**

Bullfinch sits in the central western portion of the Coolgardie bioregion, defined as having a semi-arid climate with warm summers and mild winters. The closest weather station to the northern Bullfinch Greenstone Belt is Southern Cross, located c. 35km southeast of Bullfinch. Rainfall events occur throughout the year, with the majority falling between May and August (Bureau of Meteorology). Mean annual rainfall at Southern Cross is 294.5 mm, based on records from 1889 to 2007, with June and December recording the highest and lowest average monthly rain, respectively. The highest annual rainfall occurred in 1999 (618.2 mm) and the lowest yearly rainfall recorded to date was in 1940 (118.2 mm). The single highest rainfall event recorded 84.1 mm on 4 February 1918.

Temperature data has been recorded at Southern Cross from 1907 to 2007. The average annual maximum is 25.5<sup>0</sup> C and average annual minimum is 10.7<sup>0</sup> C. The highest temperatures occur between December and March, with mean maximum temperatures exceeding 30<sup>0</sup> C. January is the hottest month, with the record for highest mean maximum and minimum temperatures at 34.5<sup>0</sup> C and 17.2<sup>0</sup> C, respectively. The highest daily maximum on record is 47.2<sup>0</sup> C recorded 11 February 1933. The lowest daily minimum temperatures occur between May and September, where mean minimum temperatures are below 8.0<sup>0</sup> C. The coldest month of the year is July, with the mean maximum and minimum daily temperature of 16.3<sup>0</sup> C and 4.4<sup>0</sup> C, respectively. The coldest minimum temperature was recorded 10 July 2000 at -5.0<sup>0</sup> C.

## **Geology**

The Bullfinch Greenstone Belt has been mapped and described on the Jackson 1:250,000 geological sheet (Chin and Smith 1983). The Bullfinch area is characterised by low rock outcrops and lateritic duricrust, surrounded by undulating sandplain and alluvial valleys associated with a paleodrainage system (Chin and Smith 1983). The highest point in the survey area is Mt. Woodward (412 m) with the nearby salt lakes of Lake Baladjie and Lake Deborah West at c. 330 m above sea level.

The greenstone belts of the SCD trend primarily in a north – northwest direction, with Bullfinch having undergone powerful deformation to form a tightly folded structure (Griffin 1990). The Bullfinch Belt is a sequence of mafic and sedimentary rocks over a lower succession of mafic and ultramafic rocks (Chin and Smith 1983, Griffin 1990). Characteristic of the Yilgarn, vast areas of granitoid occur between the greenstone belts (Anand and Paine 2002). Within southern portion of the Bullfinch Belt, the dominant rock types are metamorphosed komatiitic basalt, metabasalt and metagabbro (Chin and Smith 1983). Isolated occurrences of talc schist, peridotite, metamorphosed conglomerate and quartz-muscovite schist are found within the study area (Chin and Smith 1983). The survey area also included foliated granites on the eastern boundary of the greenstone. Quaternary colluvium deposits dominate the slopes and pediments adjacent to the main greenstone belt, which are then surrounded by eolian and alluvial deposits associated with the salt lakes to the west (Lake Baladjie) and to the north (Lake Deborah West; Chin and Smith 1983).

Beard (1990) described the soils of the Coolgardie bioregion as predominantly brown calcareous earths. Within the Bullfinch region, soils are typically shallow calcareous loams associated with rocky hills and brown calcareous earths on the slopes and adjacent pediments (Beard 1981). Natural red earths characterise areas that have undergone extensive weathering (Beard 1981).

## **Vegetation**

The Bullfinch Greenstone Belt is part of the Coolgardie Botanical District within the Southwest Interzone (Beard 1990). The interzone represents the transitional boundary between the floristically rich south west and the desert communities of the interior. Eucalyptus woodlands are the

predominant vegetation community, reducing in density and increasing presence of chenopod understorey on calcareous substrates (Beard 1990).

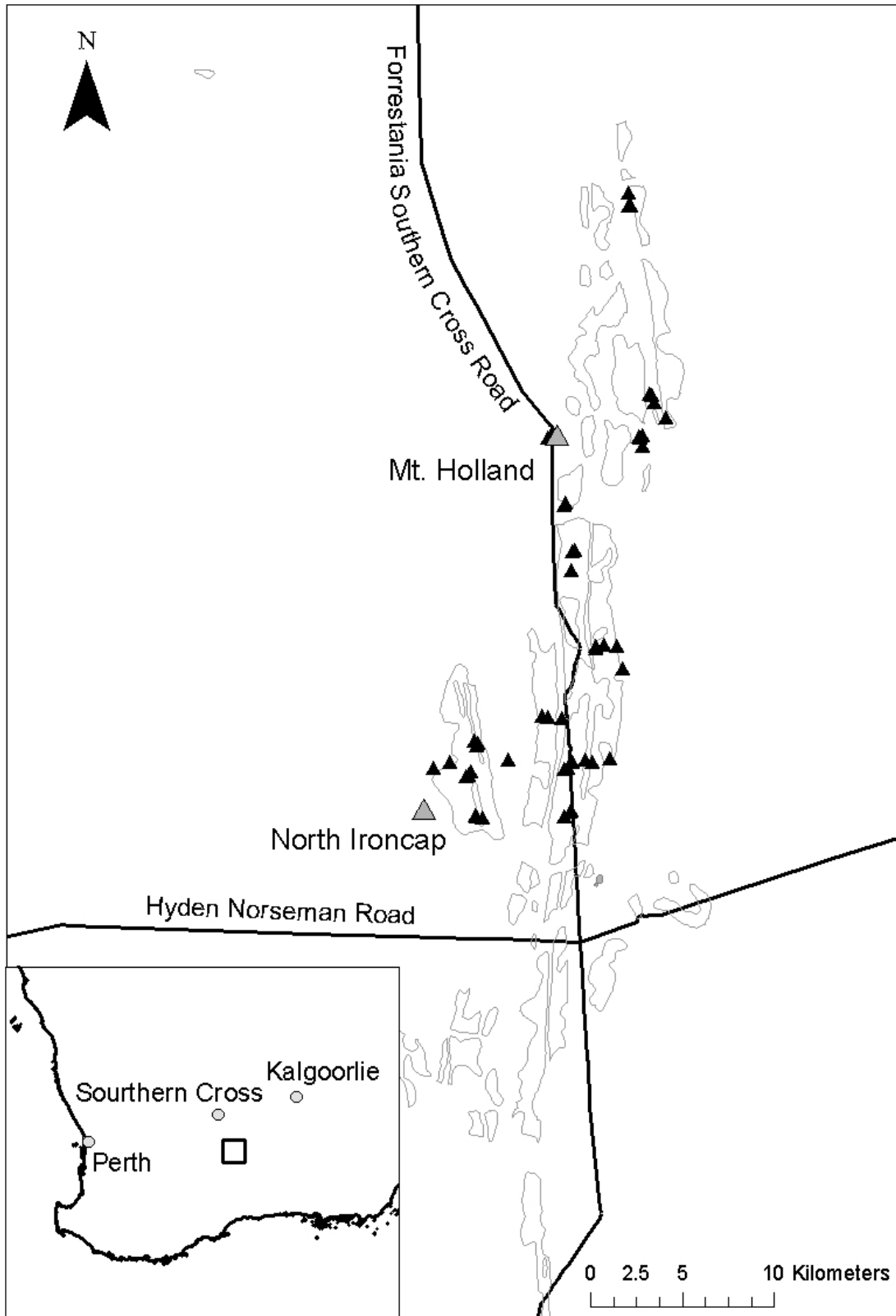
Beard (1980) mapped the southern Bullfinch Greenstone Belt as eucalypt woodland, bounded on the north by the salt lake Lake Deborah West. The greenstone belt was described as the Yilgarn Hills, part of the Yilgarn Vegetation System; however, the northern portion of the Yilgarn Hills had greater affinity to the Highclere System to the north of Lake Deborah West (Beard 1980). The central portion of the greenstone belt study area was described as mixed *Eucalyptus longicornis* and *E. lesoufeii* woodland with *E. salmonophloia* – *E. lesoufeii* woodlands to the northeast and *E. longicornis* – *E. salmonophloia* woodlands to the southwest (Beard 1980). Beard (1980) described the Highclere System as dominated by *E. longicornis* – *E. corugata* woodlands on the hills with an *Atriplex* sp. understorey. Other elements of the vegetation system include the tree species *Casuarina pauper*, *Brachychiton gregorii*, *Callitris columellaris* and the shrubs *Acacia tetragonophylla*, *A. ramulosa* and *Santalum spicatum* (Beard 1980). Where the greenstone hills approach Lake Deborah, the Eucalypt woodland communities known to persist on the hills, occur further downslope on the adjacent colluvium (Beard 1980). There are limited occurrences of ironstone ridges in the Yilgarn Hills, dominated by *A. quadrimarginea* with the occasional *Casuarina cristata*, *Brachychiton gregorii* and *Pittosporum phillyraeoides*.

The eastern goldfields regional survey provided regional overview on the vegetation in the Jackson-Kalgoorlie area. The adjacent Highclere Hills were described as supporting *Eucalyptus corrugata* woodlands on the stony upland sites with *E. salmonophloia* and *E. salubris* woodlands downslope on the colluvial deposits (Newbey and Hnatiuk 1985). Less frequently encountered are *Acacia acuminata* and *A. aff. aneura* shrubland communities, found occasionally on rocky rises and *E. longicornis* woodlands, associated with more alkaline colluvial soils (Newbey and Hnatiuk 1985).

A detailed vegetation survey of the central Bullfinch Belt, at Highclere Hills, recorded 217 native and 25 weed taxa (Gibson and Lyons 2001). Five dominant vegetation communities with two additional subgroups were identified from the survey, strongly influenced by edaphic factors. Characteristic of the Coolgardie, *Eucalyptus* woodlands defined one of the community types, featuring *E. longicornis*, *E. salubris* and/ or *E. corrugata* with a chenopod understorey (i.e. *Atriplex* sp., *Maireana* sp., *Scleroleana* sp.). Other vegetation communities included *Acacia acuminata* shrublands with *Casuarina pauper* and *Acacia tetragonophylla* and *Scaevola spinescens* associations. A single laterite community featured *Allocasuarina campestris*, *Baekkea elderiana* and *Grevillea paradoxa* (Gibson and Lyons 2001).

### **Northern Forrestania Greenstone Belt**

The northern portion of the Forrestania Greenstone Belt is situated in the south central portion of the Coolgardie bioregion near the boundary of the Mallee bioregion (IBRA, Thackway and Cresswell 1995), approximately 90km south of Southern Cross and c. 85km north east of Hyden (Figure 2). The Forrestania Greenstone Belt trends north-south, covering c. 100km with a width c. 15km. The focus of this study is the northern 40km of the belt. The latitudinal and longitudinal boundaries of the study area are roughly 32° 00" S, 32° 25" S and 119° 40" E and 119° 50" E, respectively. Located within the Yilgarn Shire, the land tenure for the greenstone belt is unallocated crown land.



**Figure 2.** Map showing the location of the northern Forrestania Greenstone Belt, with major landforms and landmarks indicated. The locations of the 50 permanent quadrats are marked by solid triangles (▲).

**Climate**



The northern Forrestania Belt sits in the southwestern portion of the Coolgardie bioregion, defined as having a semi-arid climate with hot summers and mild winters (IBRA). Rainfall events occur throughout the year, with a distinct increase in mean monthly rainfall during winter (May – August; Bureau of Meteorology). The closest weather station to the Mt. Holland area is Hyden, located c. 85km southwest of the greenstone belt. Average annual rainfall at Hyden is 343.3 mm based on records from 1928 to 2010, with the months of June and December recording the highest and lowest mean monthly rainfall, respectively. The highest annual rainfall was recorded in 1942 (569.9 mm) and the lowest rainfall recorded to date occurred in 1972 (157.8 mm). The single highest rainfall event occurred on 2 January 1966, with 100.3 mm rain recorded.

Temperatures have been recorded at Hyden from 1970 to 2009. The average annual maximum is 24.8.7<sup>0</sup> C and average annual minimum is 9.8<sup>0</sup> C. The highest temperatures occur between December and March, with mean maximum temperatures exceeding 29<sup>0</sup> C. January is the hottest month, with the record for highest mean maximum temperature at 33.5<sup>0</sup> C and February has the highest mean minimum temperatures at 15.7<sup>0</sup> C. The highest daily maximum on record is 48.6<sup>0</sup> C recorded 3 February 2007. The lowest daily minimum temperatures occur between June and September, where mean minimum temperatures are below 6.0<sup>0</sup> C. The coldest months of the year are July and August, with the average maximum (16.3<sup>0</sup> C) and minimum daily temperatures 4.6<sup>0</sup> C, respectively. The coldest minimum temperature was recorded 28 July 1982 at -5.6<sup>0</sup> C.

## **Geology**

The northern portion of the Forrestania Greenstone Belt has been mapped and described on the Hyden 1:250,000 geological sheet (Chin et al. 1984). The greenstone belt is composed of low undulating hills and ranges, surrounded by sandplains interspersed with exposed duricrust (Chin et al 1984). The northern portion of the belt sits between 400 and 450m above sea level, with Mt. Holland (477m) and North Ironcap (454m) prominent features in the landscape. The southern boundary of the study area is Lake Cronin, a designated 'A' Class Nature Reserve.

Forrestania trends northerly for most of its length, with NNW trend at the southern extent. The belt is a complex series of folds and faults along a northerly syncline (Chin et al 1984, Griffin 1990). Primary rock composition is fine and medium grained mafic amphibolites and metabasalts (Chin et al 1984). Other dominant regolith types within the study area include banded chert, tremolite and talc schists, Tertiary laterite and a segment of metamorphosed shale and siltstone in the western part of the belt (Chin et al. 1984). Adjacent to the greenstone belt are Quaternary colluvial deposits derived from the greenstone and substantial areas of remnant Tertiary sandplain, derived from the laterite (Chin et al. 1984). There are banded iron formations (BIF) within the greenstone belt, although not as substantial an element as other parts of the Yilgarn Craton. Within the northern portion of the belt, Mt. Holland and North Ironcap are the dominant BIF features in the landscape (Chin et al. 1984). The ultramafic rocks of the greenstone belt are typically of economic interest, with nickel deposits associated with these geologies; however, there is limited surface exposure (Chin et al. 1984). Lacustrine and alluvial/eolian deposits present in the area are generally associated with playa lakes (Chin et al. 1984).

The soils of the Roe Botanical District are primarily sands over clay (Beard 1990). Beard (1981) described the Forrestania Tableland, which includes the Forrestania Belt, as principally brown and grey-brown calcareous earths. Soils from the Bounty Gold Deposit, in the northern part of the study area, are predominantly yellow-red brown clayey sands with ferruginous gravel and red to light brown clay loams (Lintern 2004).

## **Vegetation**

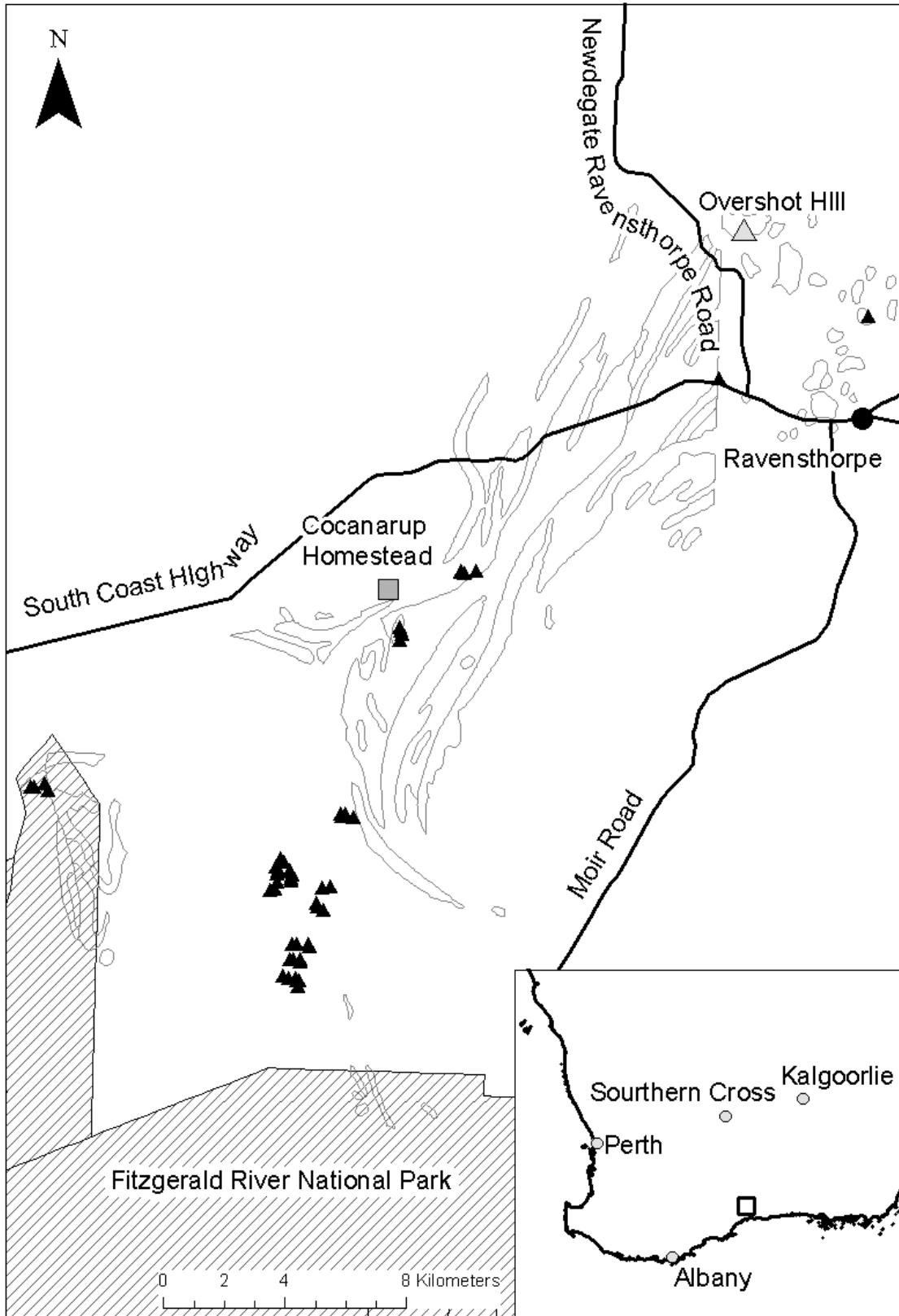
The northern Forrestania Greenstone Belt occurs within the Roe Botanical District. The Roe botanical district is predominantly mallee communities, with *Eucalyptus eremophila* a significant element (Beard 1990). Beard classified the associated vegetation as the Forrestania System, part of the Swan 1: 1,000,000 mapsheet (1981). The Forrestania System constitutes a mosaic of vegetation communities, primarily driven by local geology (Beard 1981). The primary basaltic greenstones support eucalypt woodlands, where the communities of mallee, scrub heath and thicket are generally associated with the granite and quartzite geologies (Beard 1981). Beard mapped the main portion of the Forrestania Greenstone Belt as *Eucalyptus salmonophloia* and *E. longicornis* on greenstone (1981). The northern portion, encompassing the study area, also included *E. eremophila* scrub with pockets of heterogeneous scrub heath (Beard 1981). Mt. Holland supports a dense thicket of *Casuarina* [*Allocasuarina*] *campestris* and *Calothamnus asper* (Beard 1981).

An extensive survey described the flora and vegetation of the southern portion of the Forrestania Greenstone Belt, including Middle and South Ironcap, Diggers Rock and Hatter Hill recorded 342 native taxa and three weed species (Gibson 2004). Four vegetation community types were identified, strongly influenced by associated geology and edaphic factors (Gibson 2004). Vegetation communities include species rich shrublands and mallee shrublands, associated with BIF. Mallee shrublands and *Allocasuarina* thickets on skeletal soils were found in association with massive laterites. Colluvial deposits supported *Eucalyptus urna* – *E. salubris* woodlands with *Melaleuca* sp. understorey, with colluvial flats accounting for species depauperate mallee communities with *E. calycogona* and emergent *E. salmonophloia* (Gibson 2004).

## **South-west Ravensthorpe Greenstone Belt**

### **Study Site**

The southwestern region of the Ravensthorpe Greenstone Belt is situated in the centre of the Esperance Plains bioregion (IBRA, Thackway and Cresswell 1995). The belt begins c. 25km south of the South Coast Highway near the West River, trending north- north-east toward Ravensthorpe township (Figure 3). The greenstone belt covers c. 45km from north to south and a width c. 20 km. The latitudinal and longitudinal boundaries of the target area of the Ravensthorpe Greenstone Belt are roughly 33° 30" S, 33° 50" S and 119° 45" E and 120° 05" E, respectively. Located within the Ravensthorpe Shire, the land tenure for the greenstone belt includes freehold, unallocated crown land and crown land, including the Fitzgerald National Park, Cocanarup Timber Reserve and Crown Reserve 12324 (recreation).



**Figure 3.** Map showing the location of the south-west Ravensthorpe Greenstone Belt, with major landforms and landmarks indicated. The locations of the 50 permanent quadrats are marked by solid triangles (▲).

## Climate

The southwest region of the Ravensthorpe Greenstone Belt sits in the central portion of the Esperance Plains bioregion, defined as having temperate Mediterranean climate of warm to hot summers and mild winters. Rainfall events occur throughout the year, with a slight increase in average monthly rainfall between May and September (mean >40 mm per month; Bureau of Meteorology). The closest weather station to the Ravensthorpe Greenstone Belt is Ravensthorpe township, located c. 10km northeast of the predominant survey area. Average annual rainfall at Ravensthorpe is 425.1 mm based on records from 1901 to 2010, with the months of July and December recording the highest and lowest mean monthly rainfall, respectively. The highest annual rainfall was recorded in 1951 (734.5 mm) and the lowest rainfall recorded to date occurred in 1940 (234.1 mm). The highest rainfall event for a single day occurred on 5<sup>th</sup> January 2007, with 112.8 mm of rain recorded.

Temperature data has been recorded at Ravensthorpe from 1962 to 2010. The mean annual maximum and mean minimum temperatures are 22.7<sup>0</sup> C and 10.4<sup>0</sup> C, respectively. The warmest months are from November through March, with average maximum daily temperatures above 25<sup>0</sup> C. January holds the record for the highest mean maximum daily temperature (28.9<sup>0</sup> C). The single hottest day on record is 45.9<sup>0</sup> C, which occurred 1 February 1991. The lowest daily minimum temperatures occur between May and October, where mean minimum temperatures are below 10.0<sup>0</sup> C. The coldest months of the year are July and August, with the lowest mean maximum and lowest mean minimum temperatures, respectively. The lowest minimum temperature was recorded 20 July 1987 at -1.0<sup>0</sup> C

## Geology

The southwest region of the Ravensthorpe Greenstone Belt has been mapped and described on the Newdegate (Thom et al. 1984) and Ravensthorpe (Thom et al. 1977) 1:250,000 geological sheets and straddles the 1:100,000 Cocanarup and Ravensthorpe map sheets (Witt 1994, 1995). The southwest region of the Ravensthorpe Greenstone Belt is characterised by relatively low relief, surrounded by low granite hills (Thom et al. 1984). The dominant feature in the landscape is the Ravensthorpe Range, a northwest trending of Archaean hills, northeast of the Ravensthorpe township that rises c. 400 m above sea level (Thom et al. 1984).

The majority of the Ravensthorpe Belt is composed of tonalite and volcanic associations with the western edge dominated by strongly deformed metasedimentary rocks (Witt 1997). The principal geologic units of the study area belong to Archaean Annabelle Volcanics, Manyutup Tonalite and gneissic granitoids (Witt 1994). Annabelle volcanic occur in the eastern portion of the belt, primarily composed of metamorphosed mafics to intermediate tuffs and agglomerates and the derivative fine-to-medium grained gneiss (Witt 1994). The southern extent of the study area is chiefly Manyutup Tonalite, a tonalitic complex of metamorphosed tonalite and quartz diorite (Witt 1994). Gneissic granitoid rock occupies a substantial area of the western boundary of the greenstone belt, with pockets of granitic to tonalitic pegmatite interspersed within the belt (Witt 1994). Other geologic components include amphibolites, garnetiferous mixed schist and banded quartz-amphibole-plagioclase rock (Witt 1994), which constitute the western edge of the greenstone belt.

The soils of the Esperance Plains bioregion are typically clay and ironstone gravels overlain by sands (Beard 1990). Where valleys have carved in the area, the yellow-mottled soils are generally neutral to alkaline (Beard 1990). The soils of the Ravensthorpe Range have been described as shallow calcareous loams on the greenstone uplands and cracking clays found further downslope and on the adjacent plains (Beard 1981).

## Vegetation

The Ravensthorpe Greenstone Belt occurs within the Eyre Botanical District in the Southwest Botanical Province (Beard 1990). The area is dominated by scrub- and mallee- heath sandplains, characterised by the presence of *Eucalyptus tetragona* (now *E. pleurocarpa*; Beard 1990). Beard (1980) mapped the southwest portion of the Ravensthorpe Belt as predominantly *E. nutans* mallee on greenstone with pockets of *E. loxophleba* and *E. occidentalis* woodlands and *E. redunca* scrub in the south. The western boundary of the study area, encompassing some of the Fitzgerald National Park, is chiefly mallee and mallee- heath.

The Ravensthorpe Belt belongs to the Ravensthorpe Vegetation System, (Beard 1981). Vegetation associations tend to shift with changes in topography and soils depth. The Ravensthorpe Range is dominated by thicket communities on the uplands, including *E. preissiana* and *E. lehmannii* with *Dryandra quercifolia* (Beard 1981). Mallee communities tend to be associated further downslope with *E. loxophleba* and *E. salmonophloia* woodlands occurring on the deeper valley soils (Beard 1981).

Recent surveys have focused on the flora and vegetation of the Ravensthorpe Range (i.e. Craig et al. 2008, Kern et al. 2008, Markey and Kern 2009), a narrow range of subdued relief occupying much of the northeast area of the greenstone belt. Craig et al. (2008) identified 70 vegetation units associated with the Ravensthorpe Range between Mt. Short and Kundip based on detailed vegetation mapping (1:10,000). Two-hundred permanent vegetation quadrats were established on the Ravensthorpe Range in 2007, recording 627 taxa representing 59 families (Kern et al. 2007). Dominant families identified during the survey included Fabaceae, Myrtaceae, Proteaceae and Cyperaceae with 56 taxa of conservation significance recorded (6 DRF and 50 priority listed; Kern et al. 2008). Markey and Kern (2009) described 21 floristic community types from the Ravensthorpe Range, influenced by site physical attributes and edaphic factors. No systematic surveys have recorded the floristic diversity for the southwestern Ravensthorpe Belt.

## Methodology

Between the 2<sup>nd</sup> September and 2<sup>nd</sup> November 2009, fifty 20 x 20 m permanent quadrats were established across each of the greenstone belt study areas (southern Bullfinch Greenstone Belt 2-13 September; northern Forresteria Greenstone Belt 22<sup>nd</sup> September – 7<sup>th</sup> October; south-west Ravensthorpe Belt 21<sup>st</sup> October – 2<sup>nd</sup> November). The quadrats represent topographical, geological and geomorphological variation across the length and breadth of each belt. The sites capture the vegetation communities associated with the greenstone belt and the associated geologies. Methodologies employed follow those of previous surveys on greenstone belts in the Yilgarn Craton (e.g. Markey and Dillon 2008a, b; Meissner and Caruso 2008a, b, c). Landscape positions of the sites encompass a broad topological sequence from hill crests down slope to the colluvial deposits. Vegetation communities were selected to represent minimal disturbance or modification found in the areas. The study areas have experienced various levels of fire, resource exploration, mining and/or pastoral activities. Thus, we avoided placing survey sites where evidence of heavy grazing, fire, clearing or exploration related disturbances were obvious.

The quadrats were delineated by four steel fence droppers marked by a Garmin Map76 GPS. Quadrats were named for the local area and greenstone belt (i.e. BLFN= southern Bullfinch Greenstone Belt, HLND = northern Forresteria Greenstone Belt, SWRV = south-west Ravensthorpe Greenstone Belt). Photographic records were taken at a set distance of 5m from each corner. Site physical characteristics (landform, slope, aspect, litter and bare ground cover, size of coarse fragments, cover of surface rock fragments and bedrock, soil colour and texture) were recorded as a series of descriptive attributes and semi-quantitative scales as defined by McDonald *et al.* (1990). Landform description is based on topographical position (crest, upper slope, mid-slope, lower slope or flat) and landform element type (e.g. hillcrest, hillslope, breakaway; McDonald *et al.* 1990). Coarse fragments and rock outcrop data was recorded as specific geologies present and as part of a seven-point class scale representing percent (%) cover. The seven cover classes are: zero % cover (0); <2 % cover (1); 2-10 % (2); 10-20 % (3); 20-50 % (4); 50-90 % (5); >90 % (6). Site disturbance was ranked between zero and three, with zero (0) representing no effective disturbance and three (3) being extensively cleared. Runoff was assigned to a scale of six classes (0= no runoff, 1= very slow, 2= slow, 3= moderately rapid, 4= rapid, 5= very rapid; McDonald *et al.* 1990).

Vegetation structure was determined by assigning dominant taxa to each stratum in the landscape, noting where appropriate emergent taxa, based on McDonald *et al.* (1990). All vascular plants were recorded from within the plot and assigned a cover class; material was collected for verification and vouchering at the Western Australian Herbarium (W.A. Herbarium). Additional specimens were collected adjacent to the plots, contributing to the overall species list for the survey area. Where sufficient representative plant material was available, it was lodged at the W.A. Herbarium. Nomenclature generally follows Paczkowska and Chapman (2000).

Soil chemical attributes were analysed for each quadrat. Soil was collected from 20 regularly spaced intervals across the quadrat, bulked and sieved. The <2mm fraction was analysed by a Inductively Coupled Plasma - Atomic Emission Spectrometer (ICP-AES) for B, Ca, Cd, Co, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, S and Zn using the Mehlich No. 3 procedure (Mehlich 1984). Soil pH was measured on 1:5 soil-water extracts in 0.01M CaCl<sub>2</sub> (method S3, Rayment and Higginson 1992). Organic carbon content was determined using a modified Walkley-Black method (method 6A1) and calculating soil nitrogen (N) was based on a modified kjeldahl digest (method S10, Rayment and Higginson 1992). Mean values were calculated using Statistix 7.1 (Analytical Software, Tallahassee, Florida).

## Results

### Southern Bullfinch Greenstone Belt

#### Flora

There were 218 taxa, representing 51 families and 125 genera, identified from the permanent quadrats in the southern Bullfinch Greenstone Belt. An additional six taxa were recorded from areas adjacent to the survey plots. A total of 2077 records were made from the survey with 804 collections. The families with the highest number of taxa were Asteraceae (47 taxa), Chenopodiaceae (20 taxa), Poaceae (16 taxa), Fabaceae (14 taxa) and Scrophulariaceae (9 taxa). At the genera level, the greatest representation was within *Eremophila* (9 species), *Rhodanthe* (7 species), *Acacia* (6 species), *Maireana* (5 species, plus 2 hybrids), and *Ptilotus* (5 species). The presence of weed taxa was noticeable during the survey, with 24 weed species recorded (Table 1), accounting for 224 records. Species richness within the survey plots varied considerably, ranging from five to 61 taxa recorded. The mean species richness was  $39.7 \pm 14.0$  s.d. Representation by annuals was high, with 85 taxa.

**Table 1.** Weed taxa recorded from the southern Bullfinch Greenstone Belt, including the number of populations recorded for each taxa.

Family	Taxon	No. Records
Polygonaceae	<i>Acetosa vesicaria</i>	1
Asteraceae	<i>Arctotheca calendula</i>	1
Poaceae	<i>Avellinia michelii</i>	1
Brassicaceae	<i>Brassica tournefortii</i>	19
Poaceae	<i>Bromus rubens</i>	8
Brassicaceae	<i>Carrichtera annua</i>	32
Asteraceae	<i>Cirsium vulgare</i>	1
Aizoaceae	<i>Cleretum papulosum</i> subsp. <i>papulosum</i>	2
Convolvulaceae	<i>Cuscuta planiflora</i>	15
Geraniaceae	<i>Erodium aureum</i>	13
Geraniaceae	<i>Erodium cicutarium</i>	1
Rubiaceae	<i>Galium spurium</i>	2
Poaceae	<i>Hordeum leporinum</i>	5
Asteraceae	<i>Hypochaeris glabra</i>	15
Fabaceae	<i>Medicago minima</i>	33
Aizoaceae	<i>Mesembryanthemum nodiflorum</i>	1
Asteraceae	<i>Monoculus monstrosus</i>	22
Orobanchaceae	<i>Parentucellia latifolia</i>	1
Poaceae	<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	18
Caryophyllaceae	<i>Silene nocturna</i>	7
Brassicaceae	<i>Sisymbrium orientale</i>	2
Asteraceae	<i>Sonchus oleraceus</i>	18
Asteraceae	<i>Ursinia anthemoides</i>	2
Poaceae	<i>Vulpia myuros</i> forma <i>myuros</i>	4

## Priority Taxa

Three taxa of conservation significance were recorded during the survey (Table 2). Two of the species, *Caesia* sp. Ennuin (N. Gibson & M.N. Lyons 2737) and *Austrostipa blackii*, were known to the Bullfinch Greenstone Belt north of the survey area. Only one collection of the undescribed *Caesia* sp. Ennuin (N. Gibson & M.N. Lyons 2737) exists on record in the W.A. Herbarium. This survey identified a single individual of the priority listed taxon, c 10km south of the known locality. The specimen is in good condition and may facilitate a formal taxonomic description of the species. *Austrostipa blackii* is a perennial grass known from 18 collections scattered in the Coolgardie, Avon Wheatbelt and Yalgoo bioregions. The survey efforts at Bullfinch identified three new populations of *A. blackii*.

*Tricoryne* sp. Wongan Hills (B.H. Smith 794) is a P2 species, known from seven collections from the Avon Wheatbelt and Geraldton Sandplain bioregions. Two specimens with strong resemblance to the *Tricoryne* sp. Wongan Hills (B.H. Smith 794) were collected from rocky sites c. 230km from the nearest recorded population. Without a formal description of *Tricoryne* sp. Wongan Hills (B.H. Smith 794) available to ascertain the validity of the identification, the specimens from this survey are lodged as *Tricoryne* sp. Wongan Hills (B.H. Smith 794). Further clarification regarding the taxonomic identity of the Bullfinch collections is required, particularly in regards to the geographic disparity, smaller overall size and differing substrates (G. Keighery pers. comm.<sup>1</sup>).

**Table 2:** Priority taxa recorded from the southern Bullfinch Greenstone Belt. Bioregion abbreviations: COO = Coolgardie, YAL = Yalgoo, GS = Geraldton Sandplain, AW = Avon Wheatbelt, JF = Jarrah Forest.

Family	Taxon	Status for Bullfinch	Priority	Bioregion
Hemerocallidaceae	<i>Caesia</i> sp. Ennuin (N. Gibson & M.N. Lyons 2737)	New Record	P1	COO
Hemerocallidaceae	<i>Tricoryne</i> sp. Wongan Hills (B.H. Smith 794)	New Record	P2	AW, GS, JF
Poaceae	<i>Austrostipa blackii</i>		P3	COO, YAL, AW

## Range Extensions

Two range extensions were recorded during the survey, including the P2 *Tricoryne* sp. Wongan Hills (B.H. Smith 794) anomaly already mentioned. The second range extension is of the biennial herb, *Cirsium vulgare*, a recognised weed taxon. *Cirsium vulgare* has been recorded through the southwest of Western Australia. The Bullfinch collection represents a c. 150km range extension north-east of the nearest population in the Avon Wheatbelt.

## Hybrids

Two hybrids were collected during the surveys on the northern Bullfinch Greenstone Belt. One of the hybrids, *Maireana georgei* x *Enchylaena tomentosa*, is recognised in the collection of the W.A. Herbarium. The second hybrid, *Maireana georgei* x *Enchylaena lanata*, has not been recorded in the W.A. Herbarium. However, there were eight collections of this hybrid confirmed by Chenopodiaceae taxonomist, Paul Wilson.

<sup>1</sup> Greg Keighery, Department of Environment and Conservation, Perth



## Environmental variables

The southern Bullfinch Greenstone Belt was characterised by low hills and subtle topographic variation. Variation in altitude for the survey sites ranged from 330 to 413m. Soils collected were skeletal to shallow in depth and typically brown and red brown sandy loams and sandy clay loams. The abundance of coarse rock fragments was high at most survey sites, with an average cover category of 5.18, representing 50-90% cover. The presence of exposed bedrock was variable, with 26 sites recording no surface bedrock. Where present, bedrock was identified as basalt, ironstone or undifferentiated greenstone. The majority of sites had a high proportion of bare ground (mean 95.5% + 1.6 s.d.) and sparse leaf litter present (mean 12.7% + 9.7 s.d.).

Soils chemical properties were analysed across all sites (Appendix 5). Soil pH varied from 5 to 8, with a mean of 6.5 ± 1.1 s.d. Nearly half the sites were acidic to strongly acidic, with 24 plots recording pH ≤ 6.5. The remaining plots were evenly distributed between neutral or alkaline. Those survey plots with alkaline soils (pH >7.5) also had the highest Ca content (Ca ≥ 4000 mg kg<sup>-1</sup>) and high Mg content (Mg >450 mg kg<sup>-1</sup>).

## Northern Forrestania Greenstone Belt

### Flora

A total of 313 taxa from 48 families and 122 genera were identified from the permanent quadrats and adjacent areas in the northern area of the Forrestania Greenstone Belt. The dominant families represented were Myrtaceae (63 taxa), Fabaceae (55 taxa), Proteaceae (25 taxa), Asteraceae (19 taxa) and Poaceae (14 taxa). The genera with the greatest number of distinct species were *Acacia* (31 species), *Eucalyptus* (23 species), *Melaleuca* (23 species), *Grevillea* (9 species) and *Austrostipa* (8 species). There were five weed species identified from the survey (Table 3). Three new taxa were identified during the survey; two were the first collections of the taxa.

Species richness within the quadrats varied from 12 to 38 taxa, with an average richness of 24.1 ± 6.4 s.d species per quadrat. There was a high proportion of singleton specimens collected (95 taxa, including 11 annuals) and 26 annuals identified during the survey.

**Table 3.** Weed taxa recorded from the northern Forrestania Greenstone Belt, including the number of populations recorded during the survey.

Family	Taxon	No. Records
Asteraceae	<i>Hypochaeris glabra</i>	1
Poaceae	<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	1
Poaceae	<i>Rostraria cristata</i>	1
Asteraceae	<i>Ursinia anthemoides</i>	1
Poaceae	<i>Vulpia myuros</i> forma <i>myuros</i>	3

### Rare and Priority Taxa

Two taxa classified as Declared Rare Flora (DRF) were collected during the survey (Table 4). Both populations of *Banksia sphaerocarpa* subsp. *dolichostyla* and *Eucalyptus steedmanii* were known in the W.A. Herbarium census. An additional 22 populations of 10 priority taxa were recorded during the survey; all associated collections were submitted as vouchers. Single collections of the annual

*Gnephosis intonsa* (P1) and the perennial shrubs *Acacia kerryana* (P2), *Baeckea* sp. Parker Range (M. Hislop & F. Hort MH 2968) (P3), *Dillwynia acerosa* (P3), *Eutaxia nanophylla* (P3) and *Grevillea dissecta* (P4) were made.

Other priority taxa records include two new populations of both *Acacia asepala* (P2) and *Microcorys* sp. Forrestania (P4) and five populations of *Eutaxia acanthoclada* (P3). Seven populations of the perennial herb *Stylidium sejunctum* (P2) were recorded. There are currently 21 records on the W.A. Herbarium Florabase. It is suggested that the priority status of *S. sejunctum* be changed to P3.

**Table 4:** Priority taxa recorded from the northern Forrestania Greenstone Belt. Bioregion abbreviations: COO = Coolgardie, MUR = Murchison, AW = Avon Wheatbelt, ESP = Esperance Plains, MAL = Mallee, JF = Jarrah Forest.

Family	Taxon	Conservation	
		Status	Bioregion
Proteaceae	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	DRF	COO, AW, MAL
Myrtaceae	<i>Eucalyptus steedmanii</i>	DRF	COO, ESP, MAL
Asteraceae	<i>Gnephosis intonsa</i>	P1	COO, MUR, AW, ESP, MAL
Fabaceae	<i>Acacia asepala</i>	P2	COO, MAL
Fabaceae	<i>Acacia kerryana</i>	P2	COO
Stylidiaceae	<i>Stylidium sejunctum</i>	P2	COO, MAL
Myrtaceae	<i>Baeckea</i> sp. Parker Range (M. Hislop & F. Hort MH 2968)	P3	COO, AW
Fabaceae	<i>Dillwynia acerosa</i>	P3	COO, ESP, JF, MAL
Fabaceae	<i>Eutaxia acanthoclada</i>	P3	COO, ESP, MAL
Fabaceae	<i>Eutaxia nanophylla</i>	P3	COO, JF, MAL
Proteaceae	<i>Grevillea dissecta</i>	P4	COO
Lamiaceae	<i>Microcorys</i> sp. Forrestania (V. English 2004)	P4	COO, MAL

### New Taxa

Three new taxa were identified during the survey. Single specimens of each taxa were collected. One taxon, *Hibbertia croninensis* ms had previously been collected but identified as *H. aff. oligantha* (PERTH 03033856).

*Austrostipa* sp. Mt. Holland (W.A. Thompson & J. Allen 948; PERTH 07702833) is a perennial tussock grass with narrow, erect culms. The exerted nodes are distinct with dense retrorse hairs and ligules have ciliate margins. The lemmas have margins inrolled onto the palea and short hairs near the apex (A. Williams pers. comm.<sup>2</sup>). The characteristics of this taxon are unique to *Austrostipa* in Western Australia. Further investigation is required to distinguish whether it is related to *A. setacaea*, known from eastern Australia.

*Hibbertia croninensis* ms is a perennial shrub up to 45 cm height, known from two collections in the northern Forrestania Greenstone Belt. The specimen collected during this survey has been lodged at the W.A. Herbarium (PERTH 08237166). The manuscript name stems from the proximity to Lake Cronin of the known individuals. The species is distinct for the combined characters of stamens on one side of glabrous carpels and short, tuberculate leaves (K. Thiele pers. comm.<sup>3</sup>). It shares affinities to *Hibbertia oligantha*, which has glabrous carpels but longer leaves and a softer appearance. A manuscript has been prepared with a complete taxonomic description of *H. croninensis* ms (K. Thiele pers. comm.). The two known localities do not occur on secure tenure; a conservation status of Priority 1 is proposed for this species.

<sup>2</sup> Alex Williams, Western Australian Herbarium, Department of Environment and Conservation, Perth

<sup>3</sup> Dr. Kevin Thiele, Western Australian Herbarium, Department of Environment and Conservation, Perth

*Labichea* sp. Mt. Holland (W.A. Thompson & J. Allen 949; PERTH 07702841) is a small subshrub to 50 cm height. The specimen appears to have affinities to *Labichea punctata* with equal size anthers and unifoliate leaves; however, examination of the W.A. Herbarium collection there were no close matches. In regards to distribution, there is a large disparity with *L. punctata* is only known at present on the coastal plain and Darling Scarp. *Labichea* sp. Mt. Holland, collected to the north of Mt. Holland on banded ironstone outcrop, has smaller inflorescences and flowers and it lacks the silvery sericeous hairs on the ovary of *L. punctata* (J. Ross, pers. comm.<sup>4</sup>). The specimen was collected from an outcrop of banded ironstone near a mine track. The lack of any prior material with similar affinities lodged with the W.A. Herbarium, it is suggested that the species be designated Priority 1. Additional surveying is required to determine the geographic extent of this new taxon.

### Range Extensions

A single significant range extension, c. 120km was recorded during the survey with a specimen of *Austrostipa* sp. Carlingup Road (S. Kern & R. Jasper LCH 18459) identified from the Mt. Holland area. A minor geographic extension was recorded, c. 50km for *Acacia pachypoda*, predominantly known from the central Coolgardie bioregion south of Kalgoorlie. Three taxa were recorded for the first time within the Coolgardie bioregion; all are widely distributed in other bioregions. *Melaleuca pungens* and *M. platycalyx* are both recorded in the adjacent Avon Wheatbelt and Mallee bioregions. *Cassytha aurea* var. *hirta* is primarily known from the Swan and Geraldton Sandplains bioregions, with isolated records in the Mallee and Esperance Sandplains.

### Hybrids/Intergrades

Three interspecific hybrids were collected during the survey. Two of the hybrids, *Acacia* and *Dodonaea*, were synonymous with collections vouchered in the W.A. Herbarium and the *Persoonia* hybrid is recognised in taxonomic description within Flora of Australia (Weston 1995). Five collections were made of the interspecific hybrid of *Acacia poliochroa* x *A. merrallii*, which is known to occur in the vicinity of the Forrestania Greenstone Belt. Two subspecies of *Dodonaea viscosa* are known to intergrade; this survey identified two specimens of the *Dodonaea viscosa* subsp. *angustissima*/ subsp. *spathulata* intergrade. A single collection was identified as a hybrid of *Persoonia coriacea* x *P. helix*. This hybrid is a recognised entity where the two taxa overlap in distribution. The taxonomic description also notes there is uncertainty relating to degree of twisting in the leaves, whether that is natural variation or indication of hybridization (Weston 1995).

### Environmental Variables

The Mt. Holland survey area was characterised by subtle topographic variation and gentle slopes, except for the isolated banded ironstone hills (i.e. Mt. Holland and North Ironcap). Elevation varied from 386-478m. Soils collected during the survey were skeletal to shallow in depth and typically light brown to red brown sandy loams and sandy clay loams. Seven sites were classified as loam (1), clay loam sand (1) or clay loam (5). Coarse rock fragments were abundant at most survey sites, with an average cover category 4.24, which corresponds to 20-50% cover. The majority of sites lacked surface expression of bedrock, with only 14 sites having outcrops of bedrock, which were predominantly banded ironstone. The sites typically had a high proportion of bare ground (mean 91.8%  $\pm$ 3.5 s.d.) and sparse cover of leaf litter (mean 22.4%  $\pm$ 14.8 s.d.).

Soil chemical properties were analysed across all sites (Appendix 5). Soils were typically mildly acidic with a mean pH = 6.32 $\pm$ 1.0 s.d., ranging from 4.5 to 8.0. Twelve sites recorded alkaline pH values >7.5 and 11 sites were characterised as strongly acidic soils (pH<5.5). Those sites with higher pH values (pH>7.4), concomitantly had high soil Ca content (Ca >2800 mg kg<sup>-1</sup>) and Mg levels (Mg >490

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<sup>4</sup> James H. Ross, Royal Botanic Gardens Melbourne, Melbourne

mg kg<sup>-1</sup>). Levels of the most abundant exchangeable cations (Ca, K, Mg, Na) in the soil varied; the majority of sites characterised by low Na and moderate to high K and Mg content. There were approximately even division between sites that had low or moderate calcium levels.

## South-west Ravensthorpe Greenstone Belt

### Flora

A total of 313 taxa were collected from within the quadrats in the southwest Ravensthorpe Greenstone Belt, an additional eight taxa were identified from areas adjacent to the quadrats. There were 49 families represented, principally Myrtaceae (62 taxa), Fabaceae (39), Cyperaceae (30), Proteaceae (22) and Poaceae (14). At the genera level, there were 131 different entities, with *Eucalyptus* (22 species), *Acacia* (20 species), *Lepidosperma* (19 species) and *Melaleuca* (17 species) having the highest representation. Five weed species (Table 5), representing 9 collections, were identified. All weed species, except *Pentastichis airoides* subsp. *airoides* were known to the Ravensthorpe area. There were no new taxa identified during the survey.

Species richness varied from 10 to 53 species per quadrat, with the mean species richness at  $28.7 \pm 9.1$  s.d. The majority of the taxa recorded were perennials, with only 14 annuals identified from the survey.

**Table 5.** Weed taxa recorded from the southwest region of the Ravensthorpe Greenstone Belt, with number of populations recorded during the survey.

Family	Taxon	No. Records
Asparagaceae	<i>Asparagus asparagoides</i>	1
Poaceae	<i>Ehrharta longiflora</i>	2
Primulaceae	<i>Lysimachia arvensis</i>	2
Malvaceae	<i>Malva parviflora</i>	1
Poaceae	<i>Pentastichis airoides</i> subsp. <i>airoides</i>	3

### Priority Taxa

Eight taxa of conservation significance, representing 53 populations, were identified during the survey (Table 6). All priority listed taxa recorded were known to occur in the Ravensthorpe area. At the priority one (P1) classification, 15 collections of *Lepidosperma diurnum* were made. *Lepidosperma diurnum* is widespread in the Ravensthorpe region and has been recommended for delisting (Barret et al. 2009). The survey outcomes from the southwest Ravensthorpe Greenstone Belt support that recommendation.

There were only isolated individuals collected of the following priority taxa: *Cassinia arcuata* (P2), *Melaleuca penicula* (P2) and *Eucalyptus desmondensis* (P4). Two collections of each were made of *Acacia bifaria* (P3) and *Lepidosperma gahnioides* (P3). There were numerous additional collections made of *Eucalyptus oleosa* subsp. *corvina* (P3, 12 collections) and *Eucalyptus proxima* (P4, 15 collections). Based on the current survey efforts, both *Eucalyptus* species occur frequently in the southwest Ravensthorpe Greenstone Belt; however, their distribution appears restricted to the Ravensthorpe area.

**Table 6.** : Priority taxa recorded from the southwest region of the Ravensthorpe Greenstone Belt. Bioregion abbreviations: COO= Coolgardie, MAL = Mallee, ESP= Esperance Plains.

Family	Taxon	Priority Status	Distribution
Cyperaceae	<i>Lepidosperma diurnum</i>	P1	ESP, MAL, COO
Asteraceae	<i>Cassinia arcuata</i>	P2	ESP, MAL
Myrtaceae	<i>Melaleuca penicula</i>	P2	ESP, MAL
Fabaceae	<i>Acacia bifaria</i>	P3	ESP
Myrtaceae	<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	P3	ESP, MAL
Cyperaceae	<i>Lepidosperma gahnioides</i>	P3	ESP, MAL
Myrtaceae	<i>Eucalyptus desmondensis</i>	P4	ESP
Myrtaceae	<i>Eucalyptus proxima</i>	P4	ESP, MAL

### Range Extensions

Three taxa collected during the survey represented range extensions. A single collection of *Acacia brumalis* represents c. 100km range extension to the south east of its current distribution. *Acacia brumalis* occurs as a shrub or tree and is predominantly known from the Avon Wheatbelt bioregion; this is the first record for the Esperance Plains bioregion. A slight range extension eastward (c. 40km) was recorded for *Schoenus* sp. Cape Riche Cushion (G.J. Keighery 9922), a small perennial sedge. A single collection of *Melaleuca sparsiflora* was made opportunistically from outside of the survey quadrat boundaries. This record represents a small range of extension of c. 50km; the shrub is principally known from the Mallee bioregion, north of the survey area.

### Taxa of Interest

Two species of *Austrostipa* that were collected during the survey are of taxonomic interest as they represent recognised new taxa undergoing formal description. *Austrostipa* sp. Carlingup Road (S. Kern & R. Jasper LCH18459) and *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261) were initially collected from the Ravensthorpe Range area (northwest of this survey effort), with a single collection of each lodged at the W.A. Herbarium. The survey efforts in the southwest Ravensthorpe Greenstone Belt resulted in a single additional collection of *Austrostipa* sp. Carlingup Road (S. Kern & R. Jasper LCH18459) and four new populations of *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261).

### Environmental variables

Environmental site characteristics were recorded, encompassing both site physical and soil chemical properties. Survey sites varied in altitude from 111 to 273m above sea level (mean  $182.6 \pm 36.5$  s.d.). The predominant soil textures were classified as sandy loam and sandy clay loams, with only eight sites characterised by loamy sands, loams or clay loams. All sites had coarse fragments present, with a mean cover of 4.6, which corresponds to 20-50% cover approaching 50-90% cover. The presence of bedrock on the surface was recorded at over half the sites, with 21 quadrats recording no outcrops. The sites typically had a high proportion of bare ground (mean  $92.3\% \pm 3.3$  s.d) and sparse to moderate leaf litter ( $29.8\% \pm 23.2$  s.d.).

Soils collected from the survey sites ranged from very strongly acidic (pH = 4.3) to mildly alkaline (pH=7.8). Mean soil pH was  $6.4 \pm 1.0$  s.d., with equal number of sites characterised as slightly to moderately acidic (pH 5.6 – 6.5, 18 sites) and neutral to moderately alkaline (pH 6.6-7.8, 18 sites; Bruce and Rayment 1982). Soil cations (Ca, K, Mg, Na) presence was predominantly moderate to high in the soils.

## Collecting effort and specimens vouchered

A total of 2836 collections were made during the vegetation surveys. From that, 1365 specimens were selected for vouchering at the W.A. Herbarium. Across all survey areas 699 unique taxa, representing 66 families were submitted for vouchering. Within the southern Bullfinch Greenstone Belt, 341 vouchers representing 202 taxa from 51 families were selected. In the northern Forrestania Greenstone Belt, 296 taxa from 48 families formed the basis of the 475 voucher specimens. For the south-west Ravensthorpe Greenstone Belt, 546 voucher specimens selected represented 305 taxa, from 49 families.

One of the objectives of the study was to select two representatives of each taxon for vouchering from each survey area. All specimens of taxonomic interest or conservation status (DRF or Priority) were submitted as vouchers. Where specimens were of poor quality or sterile, vouchers were excluded. At Bullfinch, 136 taxa had two specimens selected for vouchering. Single representatives were submitted for 65 taxa, with only a single taxon, *Austrostipa blackii* (P3), having three representative specimens vouchered. In the northern Forrestania Greenstone belt, the two-voucher objective was achieved for 171 taxa. For the remaining taxa, 123 had one representative and two had more than two representatives (both priority listed flora). At south-west Ravensthorpe Greenstone Belt, 179 taxa had two vouchers selected, with 114 taxa represented by a single voucher. The remaining 12 taxa had more than two vouchers submitted including 15 *Lepidosperma diurnum* (P1), 13 *Eucalyptus oleosa* subsp. *corvina* (P3) and 14 *E. proxima* (P4) collections.

## Discussion

A total of 699 taxa from 66 families were identified during the flora surveys of the selected greenstone belts. The south-west Ravensthorpe Greenstone Belt was the most species rich of the survey areas with 321 taxa, representing 49 families. Following that was the northern Forrestania Greenstone Belt with 313 taxa, covering 48 families and further north the southern Bullfinch Greenstone Belt with 224 taxa identified from 51 families. The increase in species richness moving south along the greenstone belts is typical of floristic patterns in the southwest of Western Australia.

The number of taxa recorded for the target areas is similar to previous studies along other portions of each respective greenstone belt (i.e. Gibson 2004, Gibson and Lyons 2001). The exception being the southwest Ravensthorpe Greenstone Belt, which recorded significantly fewer taxa than the Kern et al. (2008) survey efforts on the Ravensthorpe Range. However, this survey effort only established 50 quadrats with a slight increase in species richness per quadrat (28.4) compared to 25.4 from Kern et al. (2008). Dominant families were shared by both surveys, with Fabaceae, Myrtaceae, Cyperaceae and Proteaceae all prevalent for the Ravensthorpe area.

Gibson and Lyons recorded 242 taxa in the middle of the Bullfinch Greenstone Belt at Highclere Hills. The survey at the southern end of the belt, identified 224 taxa. Similar vegetation composition appeared in both sections of the greenstone belt, with a strong representation of Asteraceae, Poaceae and Chenopodiaceae found throughout. Comparable numbers of weed taxa were recorded during both surveys, Gibson and Lyons (2004) identified 25 weed taxa, while the southern end of the belt recorded 23 weed taxa including the range extension for *Cirsium vulgare*.

In the northern Forrestania Greenstone Belt, three new putative taxa were identified. One of the taxon, *Hibbertia croninensis* ms, had been collected prior to this survey but was lodged as an 'aff' of a similar taxon. The other newly identified perennial taxon, *Labichea* sp. Mt. Holland, occurs in the northern part of the Forrestania Belt. Both taxa warrant a designation of conservation status of

Priority 1 (P1). Conservation designation is particularly vital for the new taxa until further survey of the geographic distribution is undertaken. Furthermore, the area has on-going mineral exploration and an active mine over a gold deposit in the greenstone belt. Species richness was comparable to an earlier flora and vegetation of the the middle and southern Ironcaps area. Gibson (2004) identified 345 taxa during survey efforts in the middle and southern Forrestania Greenstone Belt, dominated by Myrtaceae, Proteaceae and Fabaceae (formerly Papillionaceae and Mimosaceae). The northern Forrestania Greenstone Belt surveys recorded 313 taxa, representing the same dominant families.

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## **Appendix 1. Taxa recorded across all study areas**

**Code = Conservation code**

**BLFN = Southern Bullfinch Greenstone Belt**

**HLND = Northern Forrestania Greenstone Belt**

**SWRV = South-west Ravensthorpe Belt**

Species	Code	BLFN	HLND	SWRV
<i>Abutilon cryptopetalum</i>		X		
<i>Abutilon oxycarpum</i>		X		
<i>Acacia acuminata</i>				X
<i>Acacia acutata</i>			X	
<i>Acacia asepala</i>	P2		X	
<i>Acacia assimilis</i> subsp. <i>assimilis</i>			X	
<i>Acacia beauverdiana</i>			X	
<i>Acacia bifaria</i>	P3			X
<i>Acacia binata</i>				X
<i>Acacia brachyclada</i>			X	
<i>Acacia brumalis</i>				X
<i>Acacia camptoclada</i>			X	
<i>Acacia castanostegia</i>			X	
<i>Acacia chrysellia</i>				X
<i>Acacia cyclops</i>				X
<i>Acacia deficiens</i>			X	
<i>Acacia densiflora</i>			X	
<i>Acacia erinacea</i>		X	X	X
<i>Acacia glaucoptera</i>				X
<i>Acacia gonophylla</i>				X
<i>Acacia harveyi</i>				X
<i>Acacia hemiteles</i>			X	
<i>Acacia heteroneura</i>			X	
<i>Acacia hystrix</i> subsp. <i>hystrix</i>			X	
<i>Acacia ingrata</i>				X
<i>Acacia intricata</i>			X	
<i>Acacia jennerae</i>		X		
<i>Acacia kerryana</i>	P2		X	
<i>Acacia lachnophylla</i>				X
<i>Acacia lasiocalyx</i>			X	
<i>Acacia ligulata</i>		X		
<i>Acacia merrallii</i>			X	
<i>Acacia microbotrya</i>				X
<i>Acacia mimica</i> var. <i>angusta</i>				X
<i>Acacia mutabilis</i> subsp. <i>mutabilis</i>			X	
<i>Acacia neurophylla</i> subsp. <i>erugata</i>			X	
<i>Acacia nigripilosa</i> subsp. <i>nigripilosa</i>			X	
<i>Acacia nyssophylla</i>			X	
<i>Acacia pachypoda</i>			X	
<i>Acacia poliochroa</i> x <i>merrallii</i>			X	
<i>Acacia prainii</i>			X	
<i>Acacia pravifolia</i>				X

<i>Acacia ramulosa</i> var. <i>ramulosa</i>		X		
<i>Acacia rendlei</i>			X	
<i>Acacia saligna</i> subsp. <i>lindleyi</i>				X
<i>Acacia sclerophylla</i> var. <i>sclerophylla</i>			X	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)		X	X	X
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>			X	
<i>Acacia sulcata</i> var. <i>planoconvexa</i>				X
<i>Acacia sulcata</i> var. <i>platyphylla</i>			X	X
<i>Acacia tetanophylla</i>				X
<i>Acacia tetragonophylla</i>		X		
<i>Acacia tetraptera</i>			X	
<i>Acacia viscifolia</i>			X	
<i>Acacia yorkkrakenensis</i> subsp. <i>acrita</i>			X	
<i>Acetosa vesicaria</i>		X		
<i>Acrotriche cordata</i>				X
<i>Acrotriche ramiflora</i>				X
<i>Actinobole uliginosum</i>		X	X	
<i>Allocauarina acutivalvis</i>			X	
<i>Allocauarina acutivalvis</i> subsp. <i>acutivalvis</i>			X	
<i>Allocauarina campestris</i>			X	X
<i>Allocauarina corniculata</i>			X	
<i>Allocauarina dielsiana</i>		X		
<i>Allocauarina helmsii</i>			X	
<i>Allocauarina huegeliana</i>				X
<i>Allocauarina humilis</i>				X
<i>Allocauarina microstachya</i>				X
<i>Allocauarina spinosissima</i>			X	
<i>Alyogyne wrayae</i>				X
<i>Alyxia buxifolia</i>		X	X	X
<i>Amphipogon turbinatus</i>				X
<i>Arctotheca calendula</i>		X		
<i>Argentipallium niveum</i>				X
<i>Aristida contorta</i>		X		
<i>Arthropodium curvipes</i>		X		
<i>Arthropodium dyeri</i>		X		
<i>Asparagus asparagoides</i>				X
<i>Asteridea athrixioides</i>		X	X	X
<i>Astroloma epacridis</i>				X
<i>Astroloma serratifolium</i>			X	X
<i>Astus tetragonus</i>				X
<i>Atriplex nummularia</i>		X		
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>		X		
<i>Atriplex semibaccata</i>				X
<i>Atriplex vesicaria</i>		X		
<i>Austrodanthonia caespitosa</i>		X	X	

<i>Austrodanthonia setacea</i>				X
<i>Austrostipa acrociliata</i>			X	X
<i>Austrostipa blackii</i>	<b>P3</b>	X		
<i>Austrostipa elegantissima</i>		X	X	X
<i>Austrostipa hemipogon</i>			X	X
<i>Austrostipa nitida</i>		X	X	
<i>Austrostipa pycnostachya</i>				X
<i>Austrostipa scabra</i>		X	X	
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH18459)			X	X
<i>Austrostipa</i> sp. Mt. Holland (W.A. Thompson & J Allen 948)			X	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)				X
<i>Austrostipa tenuifolia</i>		X		
<i>Austrostipa trichophylla</i>		X	X	X
<i>Austrostipa variabilis</i>		X		X
<i>Avellinia michelii</i>		X		
<i>Baeckea corynophylla</i>				X
<i>Baeckea crispiflora</i>			X	X
<i>Baeckea elderiana</i>			X	
<i>Baeckea grandibracteata</i>			X	
<i>Baeckea preissiana</i>				X
<i>Baeckea</i> sp. Parker Range (M. Hislop & F. Hort MH 2968)	<b>P3</b>		X	
<i>Banksia cirsioides</i>				X
<i>Banksia elderiana</i>			X	
<i>Banksia nivea</i> subsp. <i>nivea</i>				X
<i>Banksia purdieana</i>			X	
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	<b>DRF</b>		X	
<i>Beaufortia micrantha</i> var. <i>micrantha</i>				X
<i>Beyeria lechenaultii</i>				X
<i>Beyeria minor</i>			X	
<i>Beyeria sulcata</i> var. <i>brevipes</i>			X	
<i>Beyeria sulcata</i> var. <i>gracilis</i>			X	
<i>Beyeria sulcata</i> var. <i>sulcata</i>			X	
<i>Billardiera coriacea</i>				X
<i>Blennospora drummondii</i>		X	X	
<i>Boronia fabianoides</i>			X	
<i>Boronia inconspicua</i>				X
<i>Boronia inornata</i> subsp. <i>inornata</i>			X	X
<i>Boronia scabra</i> subsp. <i>scabra</i>				X
<i>Boronia subsessilis</i>				X
<i>Boronia ternata</i> var. <i>ternata</i>			X	
<i>Brachychiton gregorii</i>		X		
<i>Brachyscome ciliaris</i>		X		
<i>Brachyscome ciliocarpa</i>		X		
<i>Brachyscome lineariloba</i>		X		
<i>Brachyscome perpusilla</i> var. <i>tenella</i>		X	X	

<i>Brassica tournefortii</i>		X		
<i>Bromus arenarius</i>		X		
<i>Bromus rubens</i>		X		
<i>Bursaria occidentalis</i>		X		
<i>Caesia occidentalis</i>		X		
<i>Caesia</i> sp. Ennuin (N. Gibson & M.N. Lyons 2737)	<b>P1</b>	X		
<i>Caladenia hirta</i> subsp. <i>rosea</i>		X		
<i>Caladenia microchila</i>			X	
<i>Calandrinia calyptrata</i>		X	X	
<i>Calandrinia eremaea</i> complex		X	X	X
<i>Callistemon phoeniceus</i>				X
<i>Callitris canescens</i>			X	
<i>Callitris drummondii</i>				X
<i>Callitris preissii</i>			X	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>				X
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>			X	
<i>Calotis hispidula</i>		X	X	X
<i>Calytrix</i> aff. <i>leschenaultii</i>				X
<i>Calytrix leschenaultii</i>				X
<i>Calytrix sapphirina</i>			X	
<i>Carpobrotus</i> sp.				X
<i>Carrichtera annua</i>		X		
<i>Cassinia arcuata</i>	<b>P2</b>			X
<i>Cassytha aurea</i> var. <i>hirta</i>			X	
<i>Cassytha glabella</i>				X
<i>Cassytha melantha</i>			X	X
<i>Cassytha nodiflora</i>			X	
<i>Cephalopterum drummondii</i>		X		
<i>Ceratogyne obionoides</i>		X	X	
<i>Chamaexeros serra</i>				X
<i>Chamelaucium ciliatum</i>			X	X
<i>Chamelaucium pauciflorum</i> subsp. <i>pauciflorum</i>			X	
<i>Cheilanthes adiantoides</i>		X		
<i>Cheilanthes lasiophylla</i>		X		
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>		X	X	
<i>Cheiranthra brevifolia</i>				X
<i>Cheiranthra filifolia</i>				X
<i>Chenopodium curvispicatum</i>		X		
<i>Chenopodium desertorum</i> subsp. <i>microphyllum</i>			X	X
<i>Choretrum glomeratum</i> var. <i>glomeratum</i>				X
<i>Chthonocephalus pseudevax</i>		X		
<i>Cirsium vulgare</i>		X		
<i>Cleretum papulosum</i> subsp. <i>papulosum</i>		X		
<i>Codonocarpus cotinifolius</i>			X	
<i>Comesperma integerrimum</i>		X		X

Comesperma polygaloides				X
Comesperma scoparium				X
Comesperma volubile			X	
Conostylis argentea				X
Conostylis bealiana			X	
Cooperookia strophiolata				X
Crassula colligata subsp. lamprosperma			X	
Crassula colorata var. acuminata		X		
Crassula colorata var. colorata				X
Cryptandra minutifolia subsp. brevistyla			X	
Cryptandra minutifolia subsp. minutifolia			X	
Cryptandra myriantha			X	
Cryptandra nutans				X
Cryptandra pungens				X
Cryptandra wilsonii			X	
Cuscuta planiflora		X		
Cyathostemon sp. WA Thompson & J Allen 951			X	
Cynoglossum sp. Inland Ranges (C.A. Gardner 14499)		X		
Dampiera angulata subsp. angulata			X	X
Dampiera cf. obliqua			X	
Daucus glochidiatus		X	X	X
Daviesia anceps				X
Daviesia argillacea			X	
Daviesia articulata			X	
Daviesia benthamii subsp. acanthoclona			X	
Daviesia benthamii subsp. benthamii				X
Daviesia incrassata subsp. incrassata				X
Daviesia nematophylla				X
Daviesia pachyloma			X	
Daviesia pachyphylla			X	X
Daviesia scoparia			X	
Desmocladus asper				X
Dianella brevicaulis				X
Dianella revoluta var. divaricata		X	X	
Dianella revoluta var. revoluta				X
Dillwynia acerosa	<b>P3</b>		X	
Disphyma crassifolium				X
Diuris pulchella		X		
Dodonaea adenophora			X	
Dodonaea bursariifolia			X	
Dodonaea concinna				X
Dodonaea inaequifolia		X		
Dodonaea pinifolia				X
Dodonaea ptarmicaefolia			X	X
Dodonaea stenozyga		X	X	



Dodonaea viscosa ssp. Angustissima X ssp. spathulata intergrade			X	
Dodonaea viscosa subsp. angustissima		X		
Drosera browniana			X	
Drosera macrantha subsp. macrantha		X	X	
Drummondita hassellii			X	
Ehrharta longiflora				X
Einadia nutans subsp. eremaea		X		
Elymus scaber		X		
Enchylaena lanata		X		
Enchylaena tomentosa / lanata		X		
Enchylaena tomentosa var. tomentosa		X		X
Eremophila alternifolia		X		
Eremophila clarkei		X		
Eremophila decipiens subsp. decipiens		X	X	X
Eremophila dempsteri			X	
Eremophila densifolia subsp. pubiflora			X	
Eremophila interstans subsp. interstans		X		
Eremophila ionantha		X	X	
Eremophila miniata		X		
Eremophila oppositifolia subsp. angustifolia		X		
Eremophila rugosa			X	
Eremophila scoparia		X		
Eremophila serrulata		X		
Ericksonella saccharata			X	
Eriochiton sclerolaenoides		X		
Erodium aureum		X		
Erodium cicutarium		X		
Erodium cygnorum		X		
Erymophyllum ramosum subsp. ramosum		X		
Eucalyptus brachycalyx				X
Eucalyptus burracoppinensis			X	
Eucalyptus calycogona subsp. calycogona			X	X
Eucalyptus cernua				X
Eucalyptus concinna			X	
Eucalyptus corrugata		X		
Eucalyptus cylindrocarpa			X	
Eucalyptus densa subsp. improcera				X
Eucalyptus desmondensis	<b>P4</b>			X
Eucalyptus eremophila			X	
Eucalyptus ewartiana		X		
Eucalyptus extensa			X	X
Eucalyptus flocktoniae subsp. flocktoniae			X	X
Eucalyptus flocktoniae subsp. hebes			X	
Eucalyptus horistes			X	
Eucalyptus leptocalyx				X

<i>Eucalyptus livida</i>			X	
<i>Eucalyptus longicornis</i>			X	
<i>Eucalyptus longissima</i>		X		
<i>Eucalyptus myriadena</i>				X
<i>Eucalyptus myriadena</i> subsp. <i>myriadena</i>				X
<i>Eucalyptus occidentalis</i>				X
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	<b>P3</b>			X
<i>Eucalyptus oleosa</i> subsp. <i>oleosa</i>			X	
<i>Eucalyptus perangusta</i>				X
<i>Eucalyptus phaenophylla</i> subsp. <i>phaenophylla</i>				X
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>				X
<i>Eucalyptus pileata</i>			X	
<i>Eucalyptus pleurocarpa</i>				X
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>				X
<i>Eucalyptus polita</i>			X	
<i>Eucalyptus proxima</i>	<b>P4</b>			X
<i>Eucalyptus redunca</i>				X
<i>Eucalyptus rigidula</i>			X	
<i>Eucalyptus salmonophloia</i>		X	X	X
<i>Eucalyptus salubris</i>			X	
<i>Eucalyptus steedmanii</i>	<b>DRF</b>		X	
<i>Eucalyptus subangusta</i> subsp. <i>subangusta</i>			X	
<i>Eucalyptus suggrandis</i> subsp. <i>suggrandis</i>				X
<i>Eucalyptus tenera</i>			X	
<i>Eucalyptus tenuis</i>			X	
<i>Eucalyptus uncinata</i>				X
<i>Eucalyptus urna</i>			X	
<i>Eucalyptus yilgarnensis</i>		X	X	
<i>Euryomyrtus maidenii</i>			X	
<i>Eutaxia acanthoclada</i>	<b>P3</b>		X	
<i>Eutaxia cuneata</i>				X
<i>Eutaxia nanophylla</i>	<b>P3</b>		X	
<i>Eutaxia neurocalyx</i>			X	
<i>Exocarpos aphyllus</i>		X	X	X
<i>Exocarpos sparteus</i>			X	X
<i>Gahnia ancistrophylla</i>				X
<i>Gahnia aristata</i>				X
<i>Gahnia drummondii</i>				X
<i>Galium spurium</i>		X		
<i>Gastrolobium melanocarpum</i>			X	
<i>Gastrolobium musaceum</i>				X
<i>Gastrolobium spinosum</i>			X	
<i>Gastrolobium tetragonophyllum</i>				X
<i>Glischrocaryon aureum</i>				X
<i>Glischrocaryon flavescens</i>			X	X

Glycocystis beckeri				X
Gnephosis intonsa	<b>P1</b>		X	
Gompholobium confertum				X
Gompholobium obcordatum			X	
Goodenia affinis				X
Goodenia berardiana		X		
Goodenia concinna				X
Goodenia dyeri			X	
Goodenia laevis subsp. humifusa				X
Goodenia mimuloides		X		
Goodenia occidentalis		X		
Goodenia pinifolia			X	
Goodenia scapigera subsp. scapigera				X
Goodenia tripartita				X
Grevillea acuaria			X	
Grevillea concinna subsp. lemanniana				X
Grevillea didymobotrya subsp. didymobotrya			X	
Grevillea dissecta	<b>P4</b>		X	
Grevillea dolichopoda				X
Grevillea excelsior			X	
Grevillea hookeriana subsp. apiculoba			X	
Grevillea huegelii			X	X
Grevillea oligantha			X	X
Grevillea oncogyne			X	
Grevillea patentiloba subsp. patentiloba				X
Grevillea pectinata				X
Grevillea pterosperma			X	
Grevillea rigida subsp. distans				X
Grevillea sarissa subsp. sarissa		X		
Grevillea teretifolia				X
Guichenotia ledifolia				X
Guichenotia micrantha				X
Hakea commutata				X
Hakea erecta			X	
Hakea incrassata				X
Hakea laurina				X
Hakea lissocarpha				X
Hakea marginata				X
Hakea meisneriana			X	
Hakea multilineata			X	
Hakea nitida				X
Hakea pandanicarpa subsp. crassifolia				X
Hakea preissii		X		
Hakea recurva subsp. recurva		X		
Hakea scoparia subsp. scoparia			X	

Hakea subsulcata			X	
Hakea verrucosa				X
Halgania anagaloides var. Southern (A.E. Orchard 1609)				X
Halgania andromedifolia			X	X
Haloragis sp.		X		
Helichrysum leucopsideum			X	
Hemigenia aff. diplanthera			X	
Hemigenia westringioides			X	
Hibbertia croninensis ms			X	
Hibbertia eatoniae			X	
Hibbertia exasperata			X	X
Hibbertia gracilipes			X	X
Hibbertia lepidocalyx subsp. lepidocalyx			X	
Hibbertia oligantha			X	
Hibbertia recurvifolia				X
Hibbertia stowardii			X	
Hordeum leporinum		X		
Hyalosperma demissum		X	X	
Hyalosperma glutinosum subsp. glutinosum		X		
Hyalosperma zacchaeus		X		
Hybanthus floribundus subsp. adpressus				X
Hybanthus floribundus subsp. floribundus		X	X	
Hydrocotyle pilifera var. glabrata		X	X	
Hypochaeris glabra		X	X	
Hypoxis glabella var. glabella		X		
Isoetopsis graminifolia		X	X	
Isopogon gardneri			X	
Isopogon scabriusculus			X	
Isopogon scabriusculus subsp. pubifloris			X	
Isopogon sp. Fitzgerald River (D.B. Foreman 813)				X
Isotropis juncea		X		
Jacksonia nematoclada			X	
Keraudrenia cacaobrunnea subsp. cacaobrunnea			X	
Kunzea affinis				X
Kunzea cincinnata	<b>P1</b>			X
Kunzea jucunda				X
Kunzea micrantha				X
Kunzea preissiana				X
Kunzea strigosa				X
Labichea sp. WA Thompson & J Allen 949			X	
Lagenophora huegelii				X
Lasiopetalum compactum				X
Lasiopetalum ferraricollinum			X	
Lasiopetalum rosmarinifolium				X
Lawrencella rosea		X		

Lawrencia glomerata			X	
Lemooria burkittii		X		
Lepidium oxytrichum		X		
Lepidobolus preissianus				X
Lepidosperma ?diurnum				X
Lepidosperma ?fimbriatum				X
Lepidosperma ?sp. Clathrate				X
Lepidosperma ?sp. Mt Benson				X
Lepidosperma aff. amantiferrum			X	
Lepidosperma aff. diurnum				X
Lepidosperma aff. fimbriatum			X	X
Lepidosperma aff. pruinsum				X
Lepidosperma carphoides				X
Lepidosperma diurnum	<b>P1</b>			X
Lepidosperma fimbriatum				X
Lepidosperma gahnoides	<b>P3</b>			X
Lepidosperma sp. A2 Inland Flat (G.J. Keighery 7000)			X	X
Lepidosperma sp. Bandalup Scabrid (N. Eveleigh 10798)			X	X
Lepidosperma sp. Carracarrup Creek (S. Kern, R. Jasper, D. Brassington LCH 16738)				X
Lepidosperma sp. Clathrate				X
Lepidosperma sp. K Boorabbin (K.L. Wilson 2579)				X
Lepidosperma sp. Mt Benson				X
Lepidosperma sp. Mt Chester (S. Kern et al. LCH 16596)				X
Lepidosperma sp. Mt Short (S. Kern et al. LCH 17510)				X
Lepidosperma sp. Ravensthorpe (G.F. Craig 5188)				X
Lepidosperma sp. Saltbush Hill (K.R. Newbey 4118)				X
Lepidosperma sp. Shoemaker Levy (L. Ang & O. Davies 10815)				X
Lepidosperma sp. Tibialate				X
Leptomeria pachyclada			X	
Leptosema daviesioides			X	
Leptospermum ?erubescens			X	
Leptospermum erubescens				X
Leptospermum nitens				X
Leptospermum oligandrum				X
Leptospermum roei			X	
Leptospermum spinescens				X
Leucochrysum fitzgifbonii		X		
Leucopogon concinnus				X
Leucopogon cuneifolius			X	X
Leucopogon hamulosus			X	X
Leucopogon lloydiorum				X
Leucopogon obtusatus				X
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)			X	
Leucopogon sp. Newdegate (M. Hislop 3585)				X
Leucopogon sp. outer wheatbelt (M. Hislop 30)			X	

Leucopogon sulcatus			X	
Leucopogon tamminensis var. australis				X
Linum marginale				X
Logania judithiana			X	
Logania stenophylla				X
Lomandra collina				X
Lomandra effusa				X
Lomandra micrantha subsp. teretifolia				X
Lomandra mucronata				X
Lysimachia arvensis				X
Lysinema pentapetalum				X
Maireana erioclada				X
Maireana georgei		X		
Maireana georgei x Enchylaena lanata		X		
Maireana georgei x Enchylaena tomentosa		X		
Maireana marginata			X	X
Maireana planifolia		X		
Maireana suaedifolia				X
Maireana tomentosa		X		
Maireana trichoptera		X		
Maireana triptera		X		
Malva parviflora				X
Marianthus bicolor				X
Marianthus microphyllus				X
Marsdenia australis		X		
Medicago minima		X		
Melaleuca acuminata subsp. acuminata			X	X
Melaleuca adnata			X	
Melaleuca calyptroides			X	
Melaleuca carrii			X	
Melaleuca cliffortioides			X	X
Melaleuca condylosa			X	
Melaleuca cordata			X	
Melaleuca cucullata			X	X
Melaleuca depauperata			X	
Melaleuca eleuterostachya			X	
Melaleuca glaberrima				X
Melaleuca hamata		X	X	X
Melaleuca hamulosa				X
Melaleuca johnsonii			X	
Melaleuca lanceolata		X	X	
Melaleuca lateriflora subsp. lateriflora			X	X
Melaleuca laxiflora			X	
Melaleuca pauperiflora subsp. fastigiata		X	X	
Melaleuca pauperiflora subsp. pauperiflora			X	

Melaleuca penicula	P2			X
Melaleuca pentagona var. pentagona				X
Melaleuca phoidophylla			X	
Melaleuca platycalyx			X	
Melaleuca pomphostoma				X
Melaleuca pungens			X	
Melaleuca quadrifaria			X	
Melaleuca rigidifolia				X
Melaleuca scalena			X	X
Melaleuca sparsiflora				X
Melaleuca teuthidoides			X	
Melaleuca torquata				X
Melaleuca uncinata				X
Melaleuca undulata				X
Melaleuca villosisepala				X
Menkea australis		X		
Menkea sphaerocarpa		X		
Mesembryanthemum nodiflorum		X		
Mesomelaena stygia subsp. stygia				X
Microcorys glabra				X
Microcorys sp. Forrestania (V. English 2004)	P4		X	
Microcybe albiflora				X
Microcybe multiflora subsp. multiflora			X	
Micromyrtus erichsenii			X	
Micromyrtus obovata			X	
Millotia myosotidifolia		X		
Millotia perpusilla		X		
Millotia tenuifolia var. tenuifolia			X	
Mirbelia microphylla		X		
Mirbelia ramulosa				X
Monoculus monstrosus		X		
Muehlenbeckia adpressa				X
Neurachne alopecuroidea			X	X
Nicotiana occidentalis subsp. obliqua		X		
Olax benthamiana				X
Olearia adenolasia			X	
Olearia imbricata				X
Olearia muelleri		X	X	X
Olearia pimeleoides		X		
Olearia ramosissima			X	
Omphalolappula concava		X		
Oxalis perennans				X
Ozothamnus lepidophyllus				X
Parentucellia latifolia		X		
Parietaria cardiostegia		X		

Pelargonium havlasae			X	
Pentaschistis airoides subsp. airoides		X	X	X
Persoonia angustiflora			X	
Persoonia coriacea			X	
Persoonia coriacea x helix			X	
Persoonia inconspicua			X	
Persoonia striata				X
Petrophile seminuda				X
Petrophile stricta			X	
Phebalium ambiguum			X	
Phebalium filifolium			X	
Phebalium megaphyllum			X	
Phebalium tuberculosum			X	
Philothea brucei subsp. brucei		X		
Philothea gardneri subsp. gardneri				X
Philothea rhomboidea			X	
Phyllangium divergens				X
Phyllangium sulcatum		X		
Phyllanthus calycinus				X
Pimelea aeruginosa			X	
Pimelea brachyphylla				X
Pimelea erecta				X
Pimelea microcephala subsp. microcephala		X		
Pimelea suaveolens subsp. flava			X	
Pittosporum angustifolium		X		
Plantago debilis		X	X	
Plantago hispida				X
Platysace deflexa				X
Platysace maxwellii			X	
Pleurosorus rutifolius		X		
Podolepis canescens		X		
Podolepis capillaris		X		
Podolepis lessonii		X		
Podolepis rugata				X
Podotheca angustifolia		X		
Podotheca gnaphalioides		X		
Pomaderris paniculosa subsp. paniculosa				X
Prasophyllum gracile		X		
Prostanthera althoferi subsp. althoferi		X		
Psammomoya choretroides			X	
Pterostylis aff. nana			X	
Pterostylis aff. spathulata		X		X
Pterostylis mutica		X	X	
Pterostylis platypus ms				X
Pterostylis sargentii			X	



Pterostylis sp. inland (A.C. Beaglehole 11880)		X		
Ptilotus drummondii			X	
Ptilotus exaltatus		X		
Ptilotus gaudichaudii var. parviflorus		X		
Ptilotus holosericeus		X	X	X
Ptilotus obovatus		X		
Ptilotus spathulatus forma spathulatus		X		
Pultenaea aff. arida			X	
Pultenaea rotundifolia				X
Rhagodia crassifolia				X
Rhagodia drummondii		X		
Rhagodia preissii				X
Rhagodia preissii subsp. preissii			X	X
Rhodanthe haigii		X		
Rhodanthe laevis		X	X	
Rhodanthe manglesii		X		
Rhodanthe oppositifolia subsp. oppositifolia		X		
Rhodanthe pygmaea		X	X	
Rhodanthe rubella		X		
Rhodanthe stricta		X		
Rhyncharrhena linearis		X		
Rinzia carnosa			X	
Rinzia communis				X
Rinzia sessilis			X	
Rostraria cristata			X	
Salsola australis		X		
Santalum acuminatum		X	X	X
Santalum murrayanum			X	
Santalum spicatum		X		X
Scaevola bursariifolia			X	
Scaevola spinescens		X	X	
Schoenia cassiniana		X		
Schoenus breviculmis				X
Schoenus brevisetis				X
Schoenus nanus		X		
Schoenus racemosus				X
Schoenus sp. Cape Riche Cushion (G.J. Keighery 9922)				X
Schoenus subflavus subsp. hispid culms (K.R. Newbey 8278)				X
Schoenus subflavus subsp. subflavus				X
Sclerolaena diacantha		X	X	X
Sclerolaena obliquicuspis		X		
Senecio glossanthus		X	X	
Senecio pinnatifolius		X		
Senecio quadridentatus			X	X
Senna artemisioides subsp. filifolia		X	X	X

<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>		X	X	X
<i>Senna artemisioides</i> subsp. <i>x artemisioides x filifolia</i>				X
<i>Senna charlesiana</i>		X		
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)				X
<i>Senna stowardii</i>		X	X	
<i>Sida calyxhymentia</i>		X		
<i>Sida petrophila</i>		X		
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)		X		
<i>Sida</i> sp. Golden calyces glabrous (H.N. Foote 32)		X		
<i>Siegfriedia darwinioides</i>				X
<i>Silene nocturna</i>		X		
<i>Sisymbrium orientale</i>		X		
<i>Solanum lasiophyllum</i>		X		
<i>Solanum orbiculatum</i> subsp. <i>orbiculatum</i>		X		
<i>Solanum petrophilum</i>		X		
<i>Sonchus oleraceus</i>		X		
<i>Spartochloa scirpoidea</i>				X
<i>Spyridium cordatum</i>				X
<i>Stachystemon virgatus</i>				X
<i>Stackhousia monogyna</i>				X
<i>Stellaria filiformis</i>		X	X	
<i>Stenanthemum stipulosum</i>			X	
<i>Stenopetalum filifolium</i>		X		
<i>Stylidium albomontis</i>				X
<i>Stylidium involucreatum</i>			X	X
<i>Stylidium piliferum</i>				X
<i>Stylidium sejunctum</i>	<b>P2</b>		X	
<i>Styphelia exserta</i>			X	
<i>Styphelia pulchella</i>				X
<i>Swainsona</i> sp.		X		
<i>Synaphea interioris</i>				X
<i>Templetonia aculeata</i>			X	X
<i>Templetonia battii</i>			X	X
<i>Templetonia neglecta</i>				X
<i>Templetonia retusa</i>				X
<i>Templetonia sulcata</i>			X	
<i>Templetonia sulcata</i> /smithiana			X	
<i>Tetradlea</i> sp. Mt Madden (C.D. Turley 40 BP/897)				X
<i>Teucrium sessiliflorum</i>				X
<i>Thelymitra petrophila</i>			X	
<i>Thomasia foliosa</i>				X
<i>Thryptomene kochii</i>			X	
<i>Thysanotus manglesianus</i>		X	X	
<i>Thysanotus patersonii</i>			X	X
<i>Thysanotus speckii</i>		X		

Trachymene cyanopetala			X	
Trachymene ornata		X		
Trichanthodium skirrophorum		X		
Tricoryne sp. Wongan Hills (B.H. Smith 794)	<b>P2</b>	X		
Triglochin sp. A Flora of Australia (G.J. Keighery 2477)		X		
Triodia sp.			X	
Triptilodiscus pygmaeus		X		
Trymalium elachophyllum				X
Trymalium myrtillus subsp. myrtillus		X	X	
Ursinia anthemoides		X	X	
Velleia rosea		X		
Verticordia acerosa var. preissii				X
Verticordia chrysantha				X
Vittadinia cervicalis				X
Vittadinia gracilis				X
Vulpia myuros forma myuros		X	X	
Wahlenbergia gracilentia		X	X	
Waitzia acuminata var. acuminata		X	X	X
Westringia cephalantha			X	
Westringia cephalantha var. cephalantha			X	
Westringia dampieri				X
Westringia rigida			X	
Wilsonia humilis			X	X
Wurmbea tenella		X		
Zygophyllum eremaeum		X		
Zygophyllum glaucum			X	
Zygophyllum ovatum		X		

## **Appendix 2. Quadrat locations (Datum WGS 84)**

Quadrat Code	Date	Latitude (D° M' S")			Longitude (D° M' S")			Altitude (m)
		D	M	S	D	M	S	
BLFN01	2/09/2009	-30	49	56.9028	119	1	25.5950	413
BLFN02	2/09/2009	-30	49	59.2172	119	1	24.1270	407
BLFN03	3/09/2009	-30	49	47.6575	119	1	17.9907	364
BLFN04	3/09/2009	-30	49	36.6536	119	1	23.1605	334
BLFN05	3/09/2009	-30	49	37.8839	119	1	6.8489	330
BLFN06	3/09/2009	-30	51	8.7093	118	59	36.5431	351
BLFN07	4/09/2009	-30	51	11.5922	118	59	38.8376	374
BLFN08	4/09/2009	-30	51	10.3474	118	59	40.1933	360
BLFN09	4/09/2009	-30	51	11.7741	118	59	46.2268	348
BLFN10	5/09/2009	-30	53	9.1377	119	1	20.6895	394
BLFN11	5/09/2009	-30	53	8.4793	119	1	17.6252	375
BLFN12	5/09/2009	-30	53	22.0284	119	1	25.9324	357
BLFN13	5/09/2009	-30	53	32.5181	119	1	20.7233	344
BLFN14	5/09/2009	-30	53	5.3112	119	1	38.9821	385
BLFN15	6/09/2009	-30	52	59.6127	119	1	42.2168	406
BLFN16	6/09/2009	-30	52	57.7374	119	1	41.7346	404
BLFN17	6/09/2009	-30	53	11.6483	119	1	50.7798	367
BLFN18	6/09/2009	-30	51	23.9436	119	1	51.1519	376
BLFN19	7/09/2009	-30	51	21.9950	119	2	1.6983	408
BLFN20	7/09/2009	-30	51	17.3942	119	2	3.8039	404
BLFN21	7/09/2009	-30	51	23.0894	119	1	48.5445	370
BLFN22	7/09/2009	-30	51	20.8960	119	1	56.7940	389
BLFN23	7/09/2009	-30	51	1.5096	119	1	33.3373	363
BLFN24	8/09/2009	-30	54	8.0861	119	1	54.0034	384
BLFN25	8/09/2009	-30	54	10.0191	119	1	55.4998	374
BLFN26	8/09/2009	-30	53	48.6601	119	3	5.8060	404
BLFN27	8/09/2009	-30	53	45.3720	119	2	59.2423	394
BLFN28	9/09/2009	-30	56	0.2367	119	3	38.8677	408
BLFN29	9/09/2009	-30	55	57.0740	119	3	43.3013	377
BLFN30	9/09/2009	-30	55	57.9120	119	3	51.9349	377
BLFN31	9/09/2009	-30	55	51.6926	119	3	44.8453	364
BLFN32	9/09/2009	-30	55	28.7670	119	3	12.7429	384
BLFN33	10/09/2009	-30	57	5.9846	119	4	15.2869	383
BLFN34	10/09/2009	-30	57	5.7978	119	4	12.4601	377
BLFN35	10/09/2009	-30	57	0.5275	119	4	12.0838	365
BLFN36	10/09/2009	-30	57	21.4007	119	4	21.2769	369
BLFN37	10/09/2009	-30	57	29.3523	119	5	21.6586	381
BLFN38	11/09/2009	-30	58	32.1791	119	3	54.3860	378
BLFN39	11/09/2009	-30	57	56.2656	119	3	57.9735	374
BLFN40	11/09/2009	-30	57	30.5334	119	5	32.2234	383
BLFN41	11/09/2009	-30	57	31.0623	119	5	37.1787	368
BLFN42	12/09/2009	-30	57	30.9320	119	5	44.3691	361
BLFN43	12/09/2009	-30	57	24.6677	119	5	44.8401	365
BLFN44	12/09/2009	-30	57	0.5233	119	6	12.6052	373
BLFN45	12/09/2009	-30	56	14.0510	119	5	41.5206	405
BLFN46	12/09/2009	-30	56	8.5362	119	5	43.0188	395
BLFN47	12/09/2009	-30	55	34.5588	119	5	28.5080	373
BLFN48	13/09/2009	-30	58	0.7028	119	4	49.8784	384
BLFN49	13/09/2009	-30	58	1.8262	119	4	42.5330	389
BLFN50	13/09/2009	-30	58	4.2007	119	4	43.3924	382

Quadrat Code	Date	Latitude (D° M' S")			Longitude (D° M' S")			Altitude (m)
		D	M	S	D	M	S	
HLND01	24/09/2009	-32	3	33.7792	119	46	24.3966	443
HLND02	24/09/2009	-32	3	33.9917	119	46	20.0333	441
HLND03	24/09/2009	-32	3	9.6961	119	46	19.2292	435
HLND04	25/09/2009	-32	10	16.2312	119	44	4.6617	478
HLND05	25/09/2009	-32	10	16.8833	119	44	7.5211	474
HLND06	25/09/2009	-32	10	11.2155	119	44	4.0467	446
HLND07	25/09/2009	-32	10	21.2381	119	43	45.5414	420
HLND08	26/09/2009	-32	13	36.5479	119	44	41.3694	416
HLND09	26/09/2009	-32	13	34.9848	119	44	46.5157	411
HLND10	26/09/2009	-32	14	10.8458	119	44	41.8305	426
HLND11	26/09/2009	-32	16	20.1248	119	46	20.3260	395
HLND12	27/09/2009	-32	16	26.0216	119	45	34.8929	426
HLND13	27/09/2009	-32	16	21.6661	119	45	36.9252	420
HLND14	27/09/2009	-32	16	19.3849	119	45	52.7217	406
HLND15	27/09/2009	-32	16	58.3195	119	46	32.3592	400
HLND16	28/09/2009	-32	19	43.6445	119	45	35.0140	417
HLND17	28/09/2009	-32	19	43.5422	119	45	33.5550	414
HLND18	28/09/2009	-32	19	39.2942	119	45	20.7838	403
HLND19	28/09/2009	-32	19	44.0223	119	44	52.3555	418
HLND20	29/09/2009	-32	19	36.2402	119	46	10.6302	388
HLND21	29/09/2009	-32	18	29.4663	119	44	29.0077	406
HLND22	29/09/2009	-32	18	27.6160	119	44	0.0479	412
HLND23	29/09/2009	-32	18	26.2231	119	43	47.4536	419
HLND24	30/09/2009	-32	20	0.0732	119	40	5.9300	391
HLND25	30/09/2009	-32	19	50.3977	119	40	39.2965	393
HLND26	30/09/2009	-32	20	5.7528	119	41	22.7106	409
HLND27	30/09/2009	-32	20	11.5843	119	41	17.9610	412
HLND28	1/10/2009	-32	20	14.0740	119	41	14.1659	413
HLND29	1/10/2009	-32	19	18.9497	119	41	33.0681	429
HLND30	1/10/2009	-32	19	15.9567	119	41	35.5161	423
HLND31	1/10/2009	-32	19	12.1664	119	41	28.4582	418
HLND32	2/10/2009	-32	21	9.2008	119	44	52.5317	419
HLND33	2/10/2009	-32	21	11.4609	119	44	51.2239	418
HLND34	2/10/2009	-32	21	20.2906	119	44	39.7940	409
HLND35	2/10/2009	-32	19	55.2703	119	44	43.2339	430
HLND36	2/10/2009	-32	19	57.5328	119	44	36.8519	427
HLND37	3/10/2009	-32	10	30.2875	119	47	2.5153	403
HLND38	3/10/2009	-32	10	17.2342	119	46	57.9417	403
HLND39	3/10/2009	-32	10	14.6458	119	46	54.6919	409
HLND40	3/10/2009	-32	10	13.3727	119	47	0.9012	402
HLND41	4/10/2009	-32	9	13.5967	119	47	22.9862	409
HLND42	4/10/2009	-32	9	2.2977	119	47	18.4663	403
HLND43	4/10/2009	-32	8	58.9960	119	47	14.0016	400
HLND44	4/10/2009	-32	9	39.8590	119	47	48.0639	386
HLND45	5/10/2009	-32	21	23.0329	119	41	37.2582	431
HLND46	5/10/2009	-32	21	21.7955	119	41	34.2084	424
HLND47	5/10/2009	-32	21	25.3238	119	41	49.8471	422
HLND48	5/10/2009	-32	19	43.0884	119	42	39.1667	432
HLND49	6/10/2009	-32	12	16.6702	119	44	22.8088	396
HLND50	6/10/2009	-32	12	13.1940	119	44	25.9171	397

Quadrat Code	Date	Latitude (D° M' S")			Longitude (D° M' S")			Altitude (m)
SWRV01	21/10/2009	-33	38	53.6981	119	53	31.4972	182
SWRV02	21/10/2009	-33	38	57.6356	119	53	32.5041	187
SWRV03	21/10/2009	-33	38	50.8427	119	53	29.5729	179
SWRV04	21/10/2009	-33	39	4.2481	119	53	30.2950	198
SWRV05	22/10/2009	-33	42	8.2580	119	52	27.0410	207
SWRV06	22/10/2009	-33	42	11.6101	119	52	37.3131	209
SWRV07	22/10/2009	-33	42	10.5851	119	52	22.1732	206
SWRV08	23/10/2009	-33	42	8.9786	119	52	21.6502	209
SWRV09	23/10/2009	-33	43	26.8741	119	51	59.6018	205
SWRV10	23/10/2009	-33	43	24.9091	119	52	10.4949	204
SWRV11	23/10/2009	-33	43	20.3970	119	51	19.0471	167
SWRV12	23/10/2009	-33	43	17.4852	119	51	20.0359	166
SWRV13	24/10/2009	-33	43	14.4146	119	51	21.1560	176
SWRV14	24/10/2009	-33	43	9.5619	119	51	18.0012	186
SWRV15	24/10/2009	-33	43	10.9970	119	51	3.8462	195
SWRV16	24/10/2009	-33	43	6.5368	119	51	0.5520	193
SWRV17	25/10/2009	-33	44	27.0400	119	51	28.9318	139
SWRV18	25/10/2009	-33	44	27.1363	119	51	22.8748	127
SWRV19	25/10/2009	-33	44	27.2250	119	51	43.5491	165
SWRV20	25/10/2009	-33	44	28.9090	119	51	45.7295	159
SWRV21	26/10/2009	-33	44	43.3773	119	51	25.0235	128
SWRV22	26/10/2009	-33	44	43.1531	119	51	20.4674	135
SWRV23	26/10/2009	-33	44	45.8148	119	51	34.0105	145
SWRV24	26/10/2009	-33	44	43.3492	119	51	33.7540	143
SWRV25	27/10/2009	-33	34	18.5273	120	0	9.0366	219
SWRV26	27/10/2009	-33	33	9.1433	120	3	16.9098	273
SWRV27	28/10/2009	-33	37	49.1442	119	54	45.6290	190
SWRV28	28/10/2009	-33	37	51.0026	119	54	45.3408	186
SWRV29	28/10/2009	-33	37	51.3110	119	54	51.0523	163
SWRV30	28/10/2009	-33	37	48.6013	119	55	5.5456	171
SWRV31	29/10/2009	-33	43	29.0192	119	50	59.6205	204
SWRV32	29/10/2009	-33	43	31.0771	119	50	54.0267	212
SWRV33	29/10/2009	-33	43	22.5941	119	51	1.3459	186
SWRV34	29/10/2009	-33	43	13.8536	119	51	2.2334	199
SWRV35	30/10/2009	-33	45	2.9061	119	51	29.5521	130
SWRV36	30/10/2009	-33	45	5.6421	119	51	30.9462	132
SWRV37	30/10/2009	-33	45	5.3642	119	51	33.6704	136
SWRV38	30/10/2009	-33	45	11.1846	119	51	32.5802	138
SWRV39	31/10/2009	-33	43	50.2191	119	52	2.6187	209
SWRV40	31/10/2009	-33	43	43.3043	119	51	52.8215	194
SWRV41	31/10/2009	-33	45	3.2824	119	51	19.6515	116
SWRV42	31/10/2009	-33	45	0.8938	119	51	12.0743	111
SWRV43	1/11/2009	-33	42	57.7385	119	51	5.8148	204
SWRV44	1/11/2009	-33	43	0.3809	119	51	10.4195	198
SWRV45	1/11/2009	-33	43	9.5048	119	51	2.8851	192
SWRV46	1/11/2009	-33	43	46.4283	119	51	54.6383	200
SWRV47	2/11/2009	-33	41	52.1121	119	46	6.4884	222
SWRV48	2/11/2009	-33	41	44.7579	119	46	1.6363	225
SWRV49	2/11/2009	-33	41	48.8348	119	45	43.2254	259
SWRV50	2/11/2009	-33	41	48.9682	119	45	48.8920	252

## Appendix 3. Quadrat Environmental Attributes

### Abbreviations

#### Morphology

- 1 = Crest
- 2 = Upper slope
- 3 = Mid slope
- 4 = Lower slope
- 5 = Flat

#### Landform

- HCR = Hillcrest
- HSL = Hill slope
- FOO = Foothlope
- PLA = Plain
- PED = Pediment

#### Rock outcrop abundance

- 0 No bedrock exposed
- 1 Very slightly rocky <2%
- 2 Slightly rocky 2-10%
- 3 Rocky 10-20%
- 4 Very rocky 20-50%
- 5 Rockland >50%

#### Location within landform

- T Top third of the height of the landform element
- M Middle third of the height of the landform element
- B Bottom third of the height of the landform element

#### Ab = Abundance coarse fragments at the surface

- 0 No coarse fragments
- 1 Very slightly; very few <2%
- 2 Slightly; few 2%-10%
- 3 No qualifier; common 10%-20%
- 4 Moderately; many 20%-50%
- 5 Very; abundant 50%-90%
- 6 Extremely; very abundant >90%

#### Size of coarse fragments at the surface

- 1 Fine gravelly; small pebbles 2-6 mm
- 2 Medium gravelly; medium pebbles 6-20 mm
- 3 Coarse gravelly; large pebbles 20-60 mm
- 4 Cobbly; or cobbles 60-200 mm
- 5 Stony; stones 200-600 mm
- 6 Bouldery; or boulders 600 mm-2 m
- 7 Large boulders >2m

#### Shape of coarse fragments at the surface

- A Angular S Subangular
- U Subrounded R Rounded
- AT Angular tabular ST Subangular tabular
- UT Subrounded tabular RT Rounded tabular
- AP Angular platy SP Subangular platy
- UP Subrounded platy RP Rounded platy

#### Disturb = Disturbance of site

- 0 No effective disturbance
- 1 No effective disturbance except grazing by hoofed animals
- 2 Limited clearing
- 3 Extensive clearing
- 4 Highly disturbed e.g. mining, urban

#### Runoff

- 0 No runoff 3 Moderately rapid
- 1 Very slow 4 Rapid
- 2 Slow 5 Very rapid

#### Soil Texture

- CL - clay loam
- L = Loam
- LS = loamy sand
- SCL = sandy clay loam
- SL = sandy loam

#### Soil surface (dry)

- M Self-mulching
- L Loose
- S Soft
- F Firm
- H Hard setting
- C Surface crust

#### % Cover leaf litter \*

- D >70% cover
- M 30-70% cover
- S 10-30% cover
- V <10% cover

\* All bare ground = D > 70%  
Soil Profile = all uniform





Plot	Aspect	Slope	Morph	Location	Landform	Disturb	Coarse Fragment Type and Abundance																			Rock Outcrop				Soil Depth			Soil Surface								
							Type	Size							Shape							Type	Ab	Runoff	Soil Colour	Skeletal	Shallow	Texture	Soil Surface												
								Ab	1	2	3	4	5	6	7	A	U	AT	UT	AP	UP								S	R	ST	RT	SP	RP	L	S	F	H	C	%Leaf Litter	
BLFN01	E	0.5	1	T	HCR	0	basalt/greenstone	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	basalt, greenstone	2	2	red-brown	0	1	SCL	0	0	0	0	1	V		
BLFN02	SW	10	2	T	HSL	0	basalt, greenstone, some ironstone	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	basalt	1	3	red-brown	0	1	SCL	0	1	0	1	0	S		
BLFN03	NNE	9	3	M	HSL	0	basalt-greenstone	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	basalt-greenstone	2	4	red-brown	0	1	SCL	0	1	0	1	0	V		
BLFN04	NNE	3	4	B	FOO	1	basalt-greenstone	4	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	2	red-brown	0	1	SCL	0	1	0	0	1	S			
BLFN05	W	0	5	B	PLN	1	metasediments, mixed colluvium	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	red-brown	0	1	SCL	1	0	0	1	0	S			
BLFN06	NW	12	3	M	HSL	1	calcrete, basalt, duricrust	6	1	1	1	1	1	0	0	1	0	1	0	0	1	0	1	0	0	0	0	2.5	red-brown	0	1	SCL	0	0	1	0	0	V			
BLFN07	SSE	4.5	1	T	HCR	0	undifferentiated greenstone	6	1	1	1	1	1	0	1	1	1	0	1	0	1	0	1	0	0	0	iron enriched rock	4	3.5	light brown-red	1	1	SCL	0	0	1	0	0	V		
BLFN08	NNE	11.5	2	T	HSL	0	undifferentiated greenstone	6	1	1	1	1	0	0	1	1	0	1	0	0	1	1	1	0	0	0	0	3	red-brown	0	1	SCL	0	0	0	1	0	V			
BLFN09	E	1	4	B	FOO	1	ironstone, metasediments, basalt, quartz	4	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	2	red-brown	0	1	SCL	0	0	1	0	1	V			
BLFN10	W	9.5	2	T	HSL	1	basalt-greenstone, quartz	5	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	1	0	basalt	2	3	red-brown	0	1	SCL	0	0	1	0	1	S		
BLFN11	W	10	3	M	HSL	2	basalt-greenstone	6	1	1	1	1	0	0	1	0	1	0	1	1	1	1	0	0	0	0	3.5	red-brown	0	1	SCL	0	0	1	0	1	V				
BLFN12	SW	4.5	4	B	FOO	2	basalt, quartz, metasediments, calcrete	5	1	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	0	0	0	2	red-brown	0	1	SCL	0	0	1	0	1	S			
BLFN13	SSE	0	5	B	PLN	2	basalt, metasediments	2	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0.5	red-orange-brown	0	1	SCL	0	0	1	0	1	V				
BLFN14	W	9	3	M	HSL	1	basalt-greenstone	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	basalt-greenstone	2	3.5	red-brown	0	1	SCL	0	0	1	0	1	S		
BLFN15	S	2	1	T	HCR	1	basalt-greenstone	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	basalt-greenstone	3	2.5	red-brown	1	1	SCL	0	0	1	0	1	S		
BLFN16	ENE	9.5	2	T	HSL	3	basalt, greenstone, minor quartz	6	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	0	0	0	basalt-greenstone	2	3	red-brown	1	0	SCL	0	0	1	0	1	V		
BLFN17	ESE	5	4	B	FOO	2	basalt, metasediments, calcrete	4	1	1	1	1	0	0	0	1	1	1	0	0	1	1	1	0	0	0	2.5	brown	0	1	SL	0	0	1	0	1	M				
BLFN18	WNW	0.5	1	T	HCR	1	banded ironstone, quartz	6	1	1	1	1	1	0	1	0	1	1	0	1	0	0	0	1	0	0	0	banded ironstone	4	4	red-brown	1	0	SCL	0	0	0	0	1	S	
BLFN19	SW	2	1	T	HCR	0	basalt, quartz, some iron enrichment	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	basalt-greenstone	1	1	red-brown	1	1	SCL	0	0	1	0	1	S	
BLFN20	E	10	2	T	HSL	1	basalt	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	basalt	1	3	red-brown	1	1	SCL	0	0	1	0	1	S		
BLFN21	S	2	4	B	FOO	2	banded ironstone, basalt, quartz, metasediments	5	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	0	1.5	red-brown	0	1	SCL	0	0	1	0	1	S			
BLFN22	WSW	13	3	M	HSL	1	basalt, greenstone, quartz	6	1	1	1	1	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	basalt/greenstone	1	3.5	red-brown	1	1	SCL	0	0	1	0	1	V	
BLFN23	WSW	2	5	B	PLN	2	basalt, greenstone, metasediments, quartz	4	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	1	red-brown	0	1	SCL	0	0	1	0	1	V			
BLFN24	W	21	2	T	HSL	2	banded ironstone, iron enriched rock	6	1	1	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	banded ironstone	3	3.5	red-brown	1	0	SCL	0	0	1	0	1	V
BLFN25	S	11.5	3	M	HSL	2	weathered ironstone (some banding), calcrete	5	1	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	0	0	0	undifferentiated greenstone	1	3	brown	0	1	SL	0	0	1	0	1	V	
BLFN26	SSW	9	3	M	HSL	2	basalt, quartz, minor iron enriched rock	6	1	1	1	1	0	0	0	1	0	1	0	0	1	0	1	0	1	0	0	0	3	red-brown	0	1	SCL	0	0	0	1	1	V		
BLFN27	SW	10	4	B	HSL	2	basalt, metasediments, underlying calcrete	5	1	1	1	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0	3	brown	0	1	SL	0	0	1	0	1	S			
BLFN28	WNW	8.5	2	T	HSL	2	undifferentiated greenstone	6	1	1	1	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	ironstone	2	3	red-brown	1	0	SCL	0	0	1	0	1	V	
BLFN29	NE	5	3	M	HSL	1	undifferentiated greenstone	5	1	1	1	1	0	0	1	0	1	0	0	1	1	1	0	0	0	0	0	2	red-brown	0	1	SL	0	0	1	0	1	S			
BLFN30	NW	3	4	B	FOO	1	greenstone, quartz, calcrete, schist?	5	1	1	1	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0	2.5	brown	0	1	SCL	0	0	1	0	1	S			
BLFN31	N	2	4	B	FOO	2	ironstone, basalt, quartz, metasediments	4	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	0	2	red-brown	0	1	SCL	0	0	1	0	1	S			
BLFN32	SSW	6.5	2	T	HSL	1	basalt-greenstone, quartz	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	0	0	1	0	0	greenstone-basalt	1	2.5	red-brown	0	1	SCL	0	0	1	0	1	V	
BLFN33	NNW	2	1	T	HCR	2	metabasalt-greenstone, quartz, schist?	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	0	metabasalt	1	2	brown	0	1	SCL	0	0	0	1	1	S	
BLFN34	W	6	2	T	HSL	2	metabasalt, calcrete, amphibolite?	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	0	greenstone-metabasalt	2	3	red-brown	1	1	SCL	0	0	1	0	1	V	
BLFN35	NNW	1	4	B	HSL	2	metabasalt, minor quartz	5	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	1	0	0	0	1.5	red-brown	0	1	SCL	0	0	1	0	1	V			
BLFN36	S	0	5	B	PLN	1	metabasalt, quartz, metasediments	2	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	1	red-brown	0	1	SCL	0	0	1	0	1	S			
BLFN37	SW	0.5	1	T	HCR	0	metabasalt, quartz	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	metabasalt	1	0.5	red-brown	0	1	SCL	0	0	1	0	1	S	
BLFN38	WSW	0.5	1	T	HCR	1	undifferentiated greenstone	5	1	1	1	1	0	0	1	1	0	1	0	0	1	1	1	0	0	0	0	greenstone	2	1	brown	0	1	SCL	0	0	1	0	1	M	
BLFN39	SSE	5.5	2	T	HSL	2	basalt, some ironstone, metasediments	6	1	1	1	1	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	weathered basalt, duricrust?	1	3	red-brown	1	1	SCL	0	0	1	0	1	S
BLFN40	ESE	6	2	T	HSL	1	metabasalt	6	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	metabasalt	2	3	red-brown	0	1	SCL	0	0	1	0	1	V	
BLFN41	ESE	5	3	M	HSL	2	weathered metabasalt, quartz	6	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	2	red-brown	0	1	SCL	0	0	1	0	1	S			
BLFN42	ESE	1.5	4	B	FOO	1	basalt, quartz, metasediments	5	1	1	1	1	0	0	1	1	0	1	0	0	1	1	1	0	1	0	0	1	red-brown	0	1	CLS	0	0	1	0	1	S			
BLFN43	SE	0	4	B	PLN	1	undifferentiated greenstone, calcrete	5	1	1	1	0	0	0	1	0	0	0	1	1	1	0	0	0	1	0	0.5	brown	0	1	SL	0	1	0	0	1	M				
BLFN44	S	3	3	M	HSL	2	undifferentiated greenstone, calcrete	5	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	greenstone	1	2	brown	0	1	SL	0	1	0	0	0	M	
BLFN45	NNW	3	2	T	HSL	1	weathered metabasalt, calcrete, amphibolite	5	1	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	1	0	0	0	2	brown	0	1	SCL	0	1	0	0	1	M		
BLFN46	S	1.5	1	T	HCR	1	weathered greenstone, metabasalt, calcrete	5	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	0	0	0	0	1.5	brown	0	1	SL	0	1	0	0	1	S			
BLFN47	NW	1.5	4	B	FOO	1	weathered metabasalt, metasediments, calcrete	3	1	1	1	1	0	0	0	1																									

Plot	Aspect	Slope	Morph	Location	Landform	Disturb	Coarse fragment type and abundance																			Rock outcrop		SoilDepth		Soil Surface										
							Type	Ab	1	2	3	4	5	6	7	A	U	AT	UT	AP	UP	S	R	ST	RT	SP	RP	Type	Ab	Runoff	Soil Colour	Skeletal	Shallow	Texture	S	F	H	C	%Leaf_Litter	
HLND01	NNW	1.5	1	T	HCR	0	basalt, laterite duricrust fragments, possibly siltstone	5	1	1	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	laterite	1	0.5	light brown	0	1	SL	1	0	0	1	M
HLND02	W	1	3	M	HSL	0	laterite, weathered basalt	3	1	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0		0	1	brown to yellow-brown	0	1	SL	1	0	0	1	M	
HLND03	S	0	4	B	FOO	1	laterite, weathered mafic, mixed metasediments, minor iron enrichment	4	1	1	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0		0	1	brown	0	1	SL	1	0	0	1	S		
HLND04	WSW	3	2	T	HSL	1	banded ironstone	5	1	1	1	1	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0	banded ironstone	3	2.5	red-brown	1	0	SL	0	0	0	1	M	
HLND05	SE	2	3	M	HSL	1	banded ironstone, weathered banded ironstone	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	1	0	0	0	0	banded ironstone	3	2.5	red-brown	0	1	SCL	0	1	0	1	M	
HLND06	N	8	4	B	HSL	2	banded ironstone, weathered banded ironstone	5	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	0	0		0	2.5	red-brown	0	1	SCL	1	0	0	1	M			
HLND07	SSW	0.5	5	B	PLN	2	banded ironstone, quartz, metasediments	4	1	1	1	0	0	0	0	1	0	1	0	0	1	1	1	0	0		0	1	red-brown	0	1	SCL	1	0	0	1	V			
HLND08	NW	1	3	M	HSL	1	laterite, metasediments	4	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0		0	1	brown	0	1	SL	1	0	0	1	M			
HLND09	E	1	4	B	HSL	1	laterite, weathered basalt	3	1	1	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0		0	1	light brown	0	1	SCL	1	0	0	1	M			
HLND10	E	1	3	M	HSL	2	metasediments, basalt	1	1	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0		0	1	light yellow-brown	0	1	SCL	1	0	0	1	S			
HLND11	W	0.5	4	B	HSL	1	metasediments, basalt, quartz	2	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0		0	0.5	red-brown	0	1	SCL	1	0	0	1	S			
HLND12	N	1	1	T	HCR	2	basalt, greenstone with some calcrete	5	1	1	1	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0		0	1.5	brown	0	1	SCL	1	0	0	1	S		
HLND13	NE	3	2	T	HSL	2	basalt/greenstone, some calcrete	4	1	1	1	0	0	0	1	1	0	0	0	1	0	1	0	0	0		0	2.5	light brown	0	1	SCL	1	0	0	1	M			
HLND14	E	1.5	4	B	HSL	2	basalt, quartz, iron enrichment, metasediments	5	1	1	1	0	0	0	1	0	1	0	0	1	1	0	0	0	0		0	1	red-brown	0	1	SCL	1	0	0	1	V			
HLND15	ESE	0.5	5	B	PLN	1	basalt, quartz, mixed metasediments, iron enrichment	3	1	1	1	0	0	0	0	1	0	1	0	0	1	1	0	0	0		0	0.5	red-brown	0	1	SCL	1	0	0	1	M			
HLND16	N	1.5	1	T	HCR	1	basalt, greenstone	6	1	1	1	1	0	0	1	0	1	0	1	0	1	0	0	0	0	0	basalt	1	1	red-brown	1	0	SCL	0	0	1	1	V		
HLND17	WNW	3.5	2	T	HSL	2	basalt, greenstone with some underlying calcrete	6	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0		0	3	light brown	0	1	SCL	1	0	0	1	S			
HLND18	NNE	1	3	M	HSL	1	laterite, basalt	6	1	1	1	0	0	0	1	0	1	0	0	1	1	0	0	0	0		0	2	brown, slightly red	0	1	SL	1	0	0	1	V			
HLND19	NNE	2	4	B	HSL	2	basalt, metasediments, quartz	5	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0		0	0.5	red-brown	0	1	SCL	0	1	0	1	M			
HLND20	WNW	0	5	B	PLN	2	laterite/greenstone	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0		0	0.5	light red-brown	0	1	SCL	1	0	0	1	S			
HLND21	S	0	5	B	PLN	1	mixed metasediments	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0		0	0.5	light brown	0	1	SCL	1	0	0	1	M			
HLND22	E	1	2	T	HSL	1	basalt, metasediments, calcrete	2	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0		0	2	light brown	0	1	SL	1	0	0	1	V			
HLND23	E	1.5	3	M	HSL	1	basalt, metasediments, quartz	2	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0		0	2	yellow-brown	0	1	SCL	0	1	0	1	V			
HLND24	WNW	0	5	B	PLN	2	basalt, metasediments	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0		0	1	red-brown	0	1	SCL	0	1	0	1	S			
HLND25	NNW	0.5	4	B	HSL	1	mixed metasediments	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0	0.5	light brown	0	1	SL	0	1	0	1	S			
HLND26	N	1.5	3	M	HSL	1	weathered basalt, calcrete, quartz, metasediments	4	1	1	1	1	0	0	0	1	0	0	0	1	1	1	0	0	0		0	0.5	light brown	0	1	SCL	1	0	0	1	V			
HLND27	SE	0.5	1	T	HCR	0	quartz, weathered basalt/greenstone	5	1	1	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	quartz seam	2	0.5	light brown	1	1	SCL	0	1	0	1	V		
HLND28	SW	1.5	3	T	HSL	2	weathered basalt, mixed metasediments, minor quartz	4	1	1	1	0	0	0	0	1	0	0	0	1	1	0	0	0	0		0	2	red-brown	0	1	L	1	0	0	0	V			
HLND29	S	0.5	2	T	HSL	1	basalt, laterite, quartz, metasediments	6	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	weathered laterite	1	2.5	yellow-red-brown	0	1	SCL	0	0	1	0	S	
HLND30	N	2	3	M	HSL	1	basalt, ironstone, quartz	5	1	1	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0		0	2	red-brown	0	1	SCL	0	0	1	0	V			
HLND31	N	2.5	4	B	HSL	1	metasediments, basalt, ironstone	3	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0		0	2	red-brown	0	1	CL	0	1	0	1	S			
HLND32	NNE	2.5	1	T	HCR	1	undifferentiated greenstone	5	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0		0	2	light brown	0	1	CL	0	1	0	1	V			
HLND33	WNW	2.5	2	T	HSL	1	basalt, weathered greenstone	5	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0		0	2	red-brown	1	1	CL	0	1	0	1	V			
HLND34	E	2	4	B	HSL	1	ironstone, basalt, mixed metasediments	4	1	1	1	0	0	0	0	1	0	0	0	1	1	1	0	0	0		0	2	light brown	0	1	SCL	1	0	0	1	V			
HLND35	NNE	1	1	T	HCR	1	banded ironstone, laterite, weathered ironstone	6	1	1	1	1	0	0	1	1	0	1	0	1	1	0	0	0	0	0	0	(weathered) banded ironstone	2	1	red-brown	1	0	SL	0	1	0	1	V	
HLND36	W	3	3	M	HSL	2	weathered ironstone, laterite, metasediments	6	1	1	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0		0	2.5	red-brown	0	1	SCL	0	1	0	1	M			
HLND37	E	0.5	4	B	FOO	1	ironstone, mixed metasediments, minor quartz	4	1	1	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0		0	1	red-brown	0	1	CLS	0	1	0	1	M			
HLND38	NE	2	3	M	HSL	1	basalt, ironstone, quartz, mixed metasediments	5	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0		0	2.5	red-brown	0	1	SCL	0	1	0	1	S			
HLND39	SE	4.5	1	T	HCR	0	laterite, weathered ironstone	6	1	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	laterite, weathered ironstone	2	2	yellow-brown	1	1	SCL	0	1	0	1	S		
HLND40	ESE	4	2	T	HSL	0	laterite, weathered ironstone, minor quartz	6	1	1	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	laterite	1	2.5	red-yellow-brown	1	1	SCL	0	1	0	1	V		
HLND41	E	6	2	T	HSL	1	banded ironstone, weathered banded ironstone	6	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	0	0	0	0	banded ironstone	3	3	red-brown	1	0	SL	0	1	0	1	S	
HLND42	SW	3	3	M	HSL	1	laterite, weathered ironstone	6	1	1	0	0	0	0	0	1	0	0	0	0	1	1																		

Plot	Aspect	Slope	Morph	Landform	Location	Disturb	Coarse fragment type and abundance		Size														Shape										Rock outcrop				Soil Depth				Soil Surface				
							Type	Ab	Size														Type	Ab	Runoff	Soil Colour	Skeletal	Shallow	Texture	Soil Surface															
									1	2	3	4	5	6	7	A	U	AT	UT	AP	UP	S								R	ST	RT	SP	RP	M	L	S	F	H	C	%Leaf Litter				
SWRV01	W	2	3	HSL	T	1	undifferentiated greenstone, quartz	3	1	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	undifferentiated greenstone	2	1	dark brown	0	1	SCL	0	1	0	0	0	0	D						
SWRV02	NW	5	2	HSL	T	1	undifferentiated greenstone, quartz	2	1	1	1	1	1	0	0	1	0	0	1	0	1	0	0	1	0	undifferentiated greenstone	0	3	dark brown	0	1	CL	0	1	0	0	0	0	D						
SWRV03	WNW	10	3	HSL	M	1	undifferentiated greenstone, amphibolite, quartz	4	1	1	1	1	0	0	0	1	0	1	0	1	0	1	0	1	0	amphibolite?, greenstone	1	3	red-brown	0	1	SCL	0	0	0	1	0	0	M						
SWRV04	NW	2.5	1	HCR	T	1	metasediments, greenstone, quartz, some calcrete	3	1	1	1	1	0	0	0	1	0	0	0	1	1	1	0	0	0	undifferentiated greenstone	1	2	light brown	0	1	SCL	0	1	0	0	0	0	S						
SWRV05	NNW	1	2	HSL	T	1	undifferentiated greenstone, calcrete	2	1	1	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	undifferentiated greenstone	0	1	dark brown	0	1	SL	0	1	0	0	0	0	M						
SWRV06	ESE	2	3	HSL	M	1	undifferentiated greenstone, calcrete	3	1	1	1	1	0	0	0	1	0	1	0	0	1	1	0	0	0	undifferentiated greenstone	0	1	brown	0	1	SL	0	1	0	0	0	0	D						
SWRV07	ESE	1	3	HSL	T	1	quartz, weathered laterite?	5	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	undifferentiated greenstone	0	0.5	yellow-brown	0	1	LS	0	0	0	0	1	0	V						
SWRV08	NNE	0	2	HSL	T	2	undifferentiated greenstone, quartz, laterite?	4	1	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	granite	2	1	light brown	0	1	LS	0	0	0	1	0	1	S						
SWRV09	N	1.5	3	HSL	M	1	quartz, weathered greenstone, mixed metasediments, granite?	5	1	1	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	undifferentiated greenstone	0	2	light brown	0	1	SL	0	0	0	1	0	1	S						
SWRV10	NNE	1.5	2	HSL	T	1	quartz, weathered granite, weathered greenstone, tonalite?	5	1	1	1	1	1	0	0	1	0	0	0	1	1	0	0	0	0	granite, tonalite?	2	1	light brown	0	1	SL	0	0	0	1	0	1	S						
SWRV11	ENE	5	3	HSL	M	1	undifferentiated greenstone, amphibolite, mixed metasediments	5	1	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	0	undifferentiated greenstone	0	3	light brown	1	0	SCL	0	0	0	1	0	1	M						
SWRV12	SSW	5.5	3	HSL	M	1	undifferentiated greenstone, amphibolite	5	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	0	0	weathered metamorphic greenstone	2	3	light brown	0	1	SCL	0	0	0	1	0	1	M						
SWRV13	SE	5	2	HSL	T	1	diorite?, weathered metamorphic rock, quartz, metasediments	5	1	1	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	diorite?, undifferentiated greenstone	2	3	light brown	0	1	SCL	0	1	0	0	1	0	S						
SWRV14	SW	2	1	HCR	T	2	undifferentiated greenstone	4	1	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0	undifferentiated greenstone	1	2	dark brown	0	1	SCL	0	1	0	0	0	0	M							
SWRV15	N	3.5	2	HSL	T	0	weathered metamorphic rock- greenstone, some quartz	4	1	1	1	1	0	0	0	1	0	1	0	1	0	0	0	0	undifferentiated greenstone	1	3	red-brown	0	1	SCL	0	0	0	1	0	1	M							
SWRV16	NNE	4	4	HSL	B	0	weathered metamorphic rock, tonalite	4	1	1	1	1	0	0	0	1	1	0	0	0	1	0	0	0	undifferentiated greenstone	0	3	light brown	0	1	SL	0	1	0	1	0	0	M							
SWRV17	W	4	3	HSL	M	0	undifferentiated greenstone, quartz	6	1	1	1	1	0	0	0	1	1	0	1	0	1	1	0	0	0	undifferentiated greenstone	0	2.5	red-brown	0	1	SCL	0	0	0	1	0	0	S						
SWRV18	WNW	1.5	4	HSL	B	0	weathered metamorphic rock, quartz, ironstone, mixed metasediments	5	1	1	1	1	0	0	1	1	1	0	0	0	1	1	1	0	0	undifferentiated greenstone	0	2	light brown	0	1	SCL	0	0	0	1	0	1	S						
SWRV19	W	3.5	1	HCR	T	2	undifferentiated greenstone	5	1	1	1	1	0	0	1	1	1	0	0	0	1	0	1	0	0	diorite?	2	1	light red-brown	0	1	SCL	0	0	0	1	0	1	S						
SWRV20	SSE	5	2	HSL	T	0	quartz, (weathered) greenstone, mixed metasediments, gneiss/granite?	5	1	1	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	weathered mafics?, some granite element- gneiss?	1	3	light brown	1	0	SCL	0	1	0	1	0	0	S						
SWRV21	SSE	14	4	HSL	B	1	diorite, weathered greenstone/mafics	5	1	1	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0	diorite?	2	4	red-brown	0	1	SCL	0	0	0	1	0	1	S						
SWRV22	S	10	2	HSL	T	0	weathered mafics, some diorite?	5	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	undifferentiated greenstone	0	3	red-brown	0	1	L	0	0	0	1	0	1	S						
SWRV23	NW	1	1	HCR	T	1	laterite?, weathered mafics, quartz	6	1	1	1	0	0	0	1	1	1	0	1	0	1	1	0	0	0	0	weathered laterite, ironstone	2	0.5	yellow-red-brown	0	1	SCL	0	0	0	1	0	1	S					
SWRV24	NW	7	3	HSL	M	0	basalt, metamorphosed greenstone, quartz, mixed metasediments	6	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	undifferentiated greenstone	1	2.5	red-brown	1	0	SCL	0	0	0	1	0	1	S						
SWRV25	W	2.5	3	HSL	M	1	metamorphosed mafic	4	1	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	undifferentiated greenstone	0	2	red-brown	0	1	SCL	0	0	0	1	0	1	M						
SWRV26	S	5	3	HSL	M	2	weathered mafics	5	1	1	1	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	undifferentiated greenstone	0	2.5	red-brown	0	1	SCL	0	0	0	1	0	1	M					
SWRV27	NW	1.5	1	HCR	T	0	undifferentiated greenstone, amphibolite	5	1	1	1	1	0	0	0	1	1	0	1	0	0	1	1	0	0	0	dolerite, amphibolite	1	2	red-brown	0	1	SCL	0	0	1	0	0	1	S					
SWRV28	SE	13	2	HSL	T	0	diorite, weathered amphibolite	4	1	1	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	diorite, amphibolite	2	4	brown	0	1	SCL	1	1	0	0	0	0	D					
SWRV29	SE	8	4	HSL	B	1	diorite?, amphibolite	3	1	1	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	undifferentiated greenstone	0	2.5	brown	0	1	SCL	1	1	0	0	0	0	D					
SWRV30	S	6.5	3	HSL	M	1	undifferentiated greenstone, amphibolite, quartz	4	1	1	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	undifferentiated greenstone	0	2.5	brown	0	1	SCL	0	1	0	1	0	0	M					
SWRV31	ENE	5	3	HSL	M	0	amphibolite?, weathered metamorphic mafics	5	1	1	1	1	0	0	0	1	1	1	0	0	0	1	0	1	0	0	0	weathered metamorphic mafics	1	3	yellow-brown	0	1	SL	0	0	0	1	0	1	S				
SWRV32	ESE	4	1	HCR	T	0	schist?, weathered quartz	6	1	1	1	1	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	schist?	2	2	light brown	0	1	SL	0	0	1	0	0	1	S				
SWRV33	E	3	4	HSL	B	0	weathered metamorphic mafic rock, quartz	5	1	1	1	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	weathered metamorphic greenstone, mafics?	1	3	red-brown	0	1	SCL	0	0	0	1	0	1	S				
SWRV34	E	2	1	HCR	T	0	undifferentiated greenstone, quartz, calcrete	5	1	1	1	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	undifferentiated greenstone	2	1	red-brown	0	1	SCL	0	0	0	1	0	1	S					
SWRV35	N	4	3	HSL	M	1	weathered metamorphic rock, ironstone, quartzite?	6	1	1	1	1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	weathered metamorphic mafic rock	3	2.5	red-brown	0	1	SL	0	0	1	0	0	1	S					
SWRV36	NNW	4	4	HSL	M	0	weathered greenstone, mafics, plate fractures	5	1	1	1	1	0	0	0	1	0	1	0	1	0	1	0	1	0	0	0	weathered mafic rock	1	3	red-orange-brown	0	1	SL	0	0	0	1	0	1	M				
SWRV37	WNW	6.5	3	HSL	M	0	undifferentiated greenstone, quartz, ironstone	5	1	1	1	1	0	0	0	1	0	1	0	0	0	1	1	0	0	0	undifferentiated greenstone	1	2.5	yellow-brown	0	1	SL	0	0	0	0	1	1	V					
SWRV38	WNW	5	1	HCR	T	0	weathered metamorphosed ironstone, some quartz	6	1	1	1	1	1	0	0	1	0	0	0	0	1	1	1	0	0	0	undifferentiated greenstone	3	1.5	red-brown	0	1	SL	0	0	0	0	1	1	S					
SWRV39	NNE	1	1	HCR	T	0	undifferentiated greenstone (weathered)	5	1	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	diorite?	1	1	brown, grey-brown	0	1	SL	0	0	1	0	0	1	S					
SWRV40	NNE	4	3	HSL	M	1	weathered greenstone, quartz, tonalite?, Annabelle volcanics?	5	1	1	1	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	weathered greenstone?, schist?	2	2	grey, light brown	1	1	SCL	0	0	1	0	0	1	S				
SWRV41	WNW	1.5	5	PED	B	0	weathered metamorphosed ironstone, quartz, mixed metasediments	4	1	1	1	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	undifferentiated greenstone	0	1	red-brown	0	1	SL	0	0	0	1	0	1	S					
SWRV42	WNW	3.5	5	FOO	B	1	weathered metamorphic rock, mixed metasediments, quartz	3	1	1	1	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	undifferentiated greenstone	0	1	red-brown	0	1	SCL	0	0	0	1	0	1	M					
SWRV43	SE	4	1	HCR	T	1	undifferentiated greenstone (weathered)	4	1	1	1	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0	undifferentiated greenstone	0	1	light brown	0	1	SCL	0	0	1	0	0	0	M					
SWRV44	SSE	3.5	2	HSL	T	0	tonalite, diorite, granite?	4	1	1	1	1	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	diorite, granite?	1	2	light brown	0	1	SCL	0	1	0	0	0	0	M				
SWRV45	WNW	6	3	HSL	M	0	weathered metamorphosed mafic, greenstone (plate fracturing)	5	1	1	1	1	0	0	0	1	1	1	0	1	0	1	0	0	0	0	undifferentiated greenstone	1	3	red-brown	0	1	SCL	0											

## Appendix 4. Soil chemistry for all quadrats

<b>Analysed</b>	<b>Abbreviation</b>	<b>Units</b>
Electrical conductivity	EC	mS/m
Soil pH	pH	
Organic carbon	OrgC	%
Nitrogen	N	%
Boron	B	mg/kg
Calcium	Ca	mg/kg
Cadmium	Cd	mg/kg
Cobalt	Co	mg/kg
Copper	Cu	mg/kg
Iron	Fe	mg/kg
Potassium	K	mg/kg
Magnesium	Mg	mg/kg
Manganese	Mn	mg/kg
Molybdenum	Mo	mg/kg
Sodium	Na	mg/kg
Nickel	Ni	mg/kg
Phosphorus	P	mg/kg
Sulphur	S	mg/kg
Zinc	Zn	mg/kg
Arsenic	As	mg/kg
Lead	Pb	mg/kg
Selenium	Se	mg/kg

	EC	pH	OrgC	N	B	Ca	Cd	Co	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	S	Zn	As	Pb	Se
BLFN01	5	5.3	0.73	0.082	0.5	760	0.01	4.4	3.5	62	320	220	220	0.005	23	1.0	4	8	8.1	0.05	0.5	0.1
BLFN02	4	5.3	1.01	0.08	0.7	920	0.01	4.8	2.1	58	270	190	240	0.005	17	1.0	4	6	3.6	0.05	0.4	0.2
BLFN03	4	5.8	0.57	0.06	0.6	890	0.01	4.1	2.5	55	260	260	190	0.005	24	0.8	5	5	3.8	0.05	0.3	0.05
BLFN04	5	6.4	0.72	0.064	0.7	1100	0.005	3.0	2.3	44	290	170	160	0.005	17	1.0	4	4	2.5	0.05	0.5	0.05
BLFN05	24	7.3	0.49	0.049	0.6	1800	0.005	3.8	2.8	53	380	340	210	0.005	110	3.1	7	6	2.2	0.05	0.7	0.2
BLFN06	71	7.7	1.24	0.109	1.6	4600	0.01	1.6	3.7	38	380	510	210	0.005	440	1.3	9	33	2.5	0.05	0.4	0.2
BLFN07	26	7.2	2.36	0.158	1.3	3300	0.03	1.5	3.1	61	300	360	170	0.005	35	1.3	19	11	6.5	0.05	0.4	0.1
BLFN08	6	6.0	0.56	0.057	0.7	500	0.01	2.4	2.5	42	230	130	210	0.005	29	0.8	10	6	2.7	0.05	0.7	0.1
BLFN09	18	7.5	0.44	0.043	0.7	2300	0.02	2.5	5.4	49	420	340	350	0.005	65	2.7	6	6	2.6	0.05	0.5	0.3
BLFN10	19	7.5	0.99	0.098	1.0	5500	0.04	3.0	7.8	39	400	420	170	0.005	27	1.2	7	9	2.2	0.05	0.4	0.05
BLFN11	4	5.6	0.83	0.077	0.6	970	0.03	4.1	4.6	54	290	250	220	0.005	24	1.3	3	5	2.3	0.05	0.4	0.1
BLFN12	16	7.7	2.05	0.178	2.6	5500	0.02	1.8	5.9	34	550	580	150	0.005	57	1.1	10	16	1.9	0.05	0.4	0.05
BLFN13	14	7.2	0.81	0.075	1.0	2000	0.02	4.5	3.5	51	510	460	260	0.005	80	3.7	8	5	2.0	0.05	0.7	0.2
BLFN14	3	5.7	0.82	0.081	0.6	1200	0.005	4.3	5.3	62	220	370	190	0.01	25	1.3	3	4	1.7	0.05	0.4	0.2
BLFN15	8	5.7	1.31	0.136	0.8	1400	0.02	5.9	10	72	400	280	300	0.005	60	1.6	5	12	3.2	0.1	0.3	0.2
BLFN16	6	5.8	0.86	0.098	0.7	1200	0.02	6.6	7.2	64	350	290	260	0.005	29	1.9	3	8	2.4	0.05	0.2	0.2
BLFN17	19	7.9	2.93	0.239	3.6	5500	0.03	0.6	4.5	30	550	780	99	0.005	100	1.0	46	32	4.3	0.05	0.4	0.05
BLFN18	17	7.5	3.12	0.27	2.6	5500	0.02	1.5	3.7	44	510	730	64	0.005	40	2.4	13	13	1.8	0.05	0.3	0.2
BLFN19	3	5.7	1.14	0.11	0.6	1400	0.005	5.5	4.3	64	290	260	190	0.005	30	1.4	4	4	1.2	0.05	0.3	0.05
BLFN20	4	5.9	0.6	0.074	0.5	850	0.005	3.7	4.1	58	220	200	170	0.005	25	0.7	2	4	3.1	0.05	0.2	0.1
BLFN21	20	7.2	1.17	0.114	1.2	3700	0.005	4.2	4.7	43	360	460	150	0.005	47	4.8	7	8	2.8	0.05	0.6	0.1
BLFN22	5	5.9	0.83	0.089	0.7	1200	0.01	6.8	7.8	63	300	270	230	0.005	24	1.3	4	5	5.3	0.05	0.3	0.2
BLFN23	21	7.2	1.04	0.108	1.0	2800	0.04	3.9	3.7	53	390	570	140	0.005	51	5.6	8	6	2.3	0.05	0.6	0.05
BLFN24	22	5.7	1.86	0.17	0.9	980	0.05	1.7	5.3	52	520	210	140	0.005	43	1.5	15	21	3.8	0.05	0.9	0.05
BLFN25	7	6.6	1.13	0.1	1.2	1600	0.28	4.0	22	58	390	420	300	0.01	23	4.5	5	6	5.4	0.2	2.2	0.2
BLFN26	14	7.6	1.82	0.204	2.0	5500	0.05	2.1	12	36	470	490	130	0.04	19	1.5	7	10	3.7	0.2	0.5	0.2
BLFN27	16	7.7	1.91	0.192	2.7	5500	0.04	1.7	10	41	540	620	120	0.02	59	0.9	14	11	1.9	0.2	0.3	0.1
BLFN28	7	5.2	1.64	0.143	0.8	820	0.02	0.8	4.3	75	340	150	110	0.01	14	1.0	23	16	5.7	0.2	0.7	0.2
BLFN29	4	5.0	1.29	0.093	0.8	640	0.02	1.6	3.9	50	280	140	180	0.01	14	2.0	11	9	4.4	0.2	0.7	0.2
BLFN30	31	7.8	3.82	0.284	6.4	5500	0.02	0.6	2.1	40	490	940	81	0.02	120	2.1	42	47	2.5	0.2	0.3	0.2
BLFN31	4	5.3	1.31	0.115	0.4	1500	0.02	3.8	3.4	73	270	450	160	0.005	22	6.8	4	6	2.0	0.05	0.4	0.1
BLFN32	8	6.5	1.04	0.088	0.8	2200	0.02	7.2	6.9	60	390	330	270	0.005	20	5.7	4	6	1.5	0.2	0.7	0.2
BLFN33	17	7.7	1.84	0.202	2.1	4000	0.03	4.2	5.2	70	420	1100	130	0.005	20	13.0	8	9	2.8	0.2	1.0	0.05
BLFN34	6	6.5	0.97	0.094	0.5	1500	0.02	6.8	12	72	390	450	160	0.005	17	8.2	5	6	2.2	0.1	0.4	0.1
BLFN35	3	5.5	0.64	0.067	0.05	920	0.02	5.8	7.0	75	260	510	160	0.005	8	6.8	4	5	1.8	0.1	0.4	0.05
BLFN36	4	5.0	0.7	0.066	0.3	710	0.03	4.8	3.3	66	380	210	180	0.005	17	2.9	3	6	1.6	0.1	0.7	0.2

BLFN37	7	5.1	1.29	0.115	0.5	1200	0.01	7.4	4.0	65	310	290	220	0.005	37	6.9	4	19	2.7	0.1	0.4	0.3
BLFN38	42	7.8	3.36	0.193	5.8	5500	0.01	0.5	4.3	44	480	1100	52	0.005	200	2.4	18	62	1.6	0.2	0.3	0.05
BLFN39	7	5.7	2.58	0.161	1.1	1900	0.01	3.2	2.0	89	380	860	32	0.005	57	39.0	6	10	0.9	0.05	0.3	0.1
BLFN40	6	5.6	1.71	0.158	0.7	1500	0.01	7.3	5.9	66	430	210	260	0.005	28	5.1	5	11	1.5	0.1	0.4	0.2
BLFN41	10	5.0	1.8	0.159	0.5	1200	0.01	4.0	2.3	77	380	270	200	0.005	31	13.0	4	15	1.5	0.1	0.5	0.2
BLFN42	6	5.3	1.46	0.123	0.4	1700	0.01	6.4	3.9	69	300	790	210	0.005	31	16.0	3	10	1.5	0.1	0.6	0.2
BLFN43	13	7.9	1.53	0.117	2.4	5500	0.02	0.9	3.0	37	470	710	64	0.005	24	3.1	11	12	1.4	0.2	0.6	0.05
BLFN44	27	7.9	4.05	0.323	6.6	5500	0.01	0.4	1.3	45	420	1100	46	0.005	110	1.2	41	86	1.7	0.2	0.3	0.1
BLFN45	18	7.9	2.96	0.242	5.8	5500	0.01	0.3	1.7	30	320	1100	40	0.005	44	0.9	18	43	1.5	0.3	0.3	0.1
BLFN46	15	8.0	1.84	0.165	2.9	5500	0.01	0.5	1.7	39	340	1100	59	0.005	29	1.3	15	22	1.2	0.2	0.4	0.2
BLFN47	12	7.9	0.94	0.094	1.5	5500	0.02	1.0	5.1	24	440	450	99	0.005	28	2.0	11	10	0.9	0.2	0.5	0.05
BLFN48	14	7.5	0.83	0.087	0.8	3500	0.05	4.0	13	77	340	540	120	0.005	16	4.5	6	6	1.4	0.05	0.3	0.05
BLFN49	18	7.4	2.41	0.212	2.2	3800	0.02	4.0	7.2	86	380	1100	89	0.005	18	18.0	7	8	1.6	0.05	0.6	0.05
BLFN50	6	5.3	2.33	0.172	0.4	1700	0.02	6.1	8.1	100	270	910	130	0.005	29	20.0	5	8	2.0	0.1	0.4	0.1
HLND01	2	5.3	1.11	0.032	0.05	180	0.02	0.0	1.0	130	51	20	2.3	0.005	2	0.1	50	17	1.0	0.1	0.8	0.05
HLND02	2	4.5	0.92	0.037	0.05	290	0.005	0.1	0.3	74	59	47	16	0.005	2	0.2	1	4	2.6	0.05	0.4	0.05
HLND03	2	5.7	0.64	0.026	0.1	390	0.005	1.3	1.7	56	150	350	49	0.005	25	2.0	2	3	1.3	0.05	0.5	0.05
HLND04	7	5.7	3.6	0.162	0.7	1800	0.005	0.3	0.8	80	230	250	43	0.005	44	0.3	4	15	2.1	0.1	0.7	0.05
HLND05	5	5.7	2.77	0.129	0.4	1400	0.01	0.3	0.7	66	170	170	40	0.005	19	0.2	4	9	2.4	0.1	0.6	0.2
HLND06	12	6.4	1.97	0.128	0.6	2600	0.005	1.5	5.1	62	380	240	200	0.005	26	0.5	4	9	1.5	0.05	0.5	0.3
HLND07	14	7.6	1.02	0.056	1.1	3700	0.01	1.7	3.5	67	320	690	71	0.005	59	1.5	3	7	0.7	0.2	0.7	0.2
HLND08	3	5.6	1.16	0.038	0.05	480	0.01	0.2	0.4	61	56	58	30	0.005	4	0.3	3	4	1.4	0.1	0.2	0.05
HLND09	3	5.7	0.65	0.026	0.2	550	0.005	0.2	1.3	48	110	130	14	0.005	13	0.2	3	3	0.5	0.05	0.2	0.05
HLND10	15	6.8	1.08	0.048	0.7	1200	0.01	1.7	3.7	86	330	770	63	0.005	340	2.1	3	5	1.5	0.1	0.7	0.1
HLND11	4	6.1	1.39	0.076	0.6	1300	0.01	2.2	4.9	61	450	750	76	0.005	86	2.5	6	5	1.0	0.1	0.5	0.1
HLND12	22	7.8	3.17	0.193	3.9	5500	0.01	0.4	3.9	45	550	1100	88	0.005	110	1.1	12	58	1.4	0.2	0.3	0.1
HLND13	15	7.9	2.19	0.141	2.3	5500	0.005	0.5	2.6	41	550	1100	96	0.16	62	1.6	11	39	2.2	0.2	0.6	0.05
HLND14	34	7.7	1.44	0.088	2.1	5500	0.005	1.4	5.0	41	550	1100	100	0.05	390	1.7	4	16	3.3	0.2	0.7	0.2
HLND15	13	7.7	0.93	0.063	1.2	4900	0.005	1.6	4.2	58	430	490	140	0.02	21	3.3	3	8	1.8	0.1	0.9	0.1
HLND16	5	6.6	1.9	0.092	1.0	3300	0.005	2.3	5.3	65	180	1100	61	0.005	53	1.5	3	5	1.2	0.05	0.3	0.1
HLND17	17	7.8	2.37	0.145	2.8	5500	0.005	0.6	4.3	44	550	1100	97	0.06	120	1.5	5	33	1.4	0.2	0.5	0.05
HLND18	2	5.7	1.2	0.043	0.5	870	0.005	0.3	0.6	58	88	95	17	0.005	3	0.5	3	4	0.9	0.1	0.7	0.05
HLND19	7	6.3	1.57	0.058	1.3	1300	0.005	1.6	5.6	59	260	610	50	0.005	92	0.9	4	7	1.0	0.1	0.2	0.1
HLND20	5	6.6	1.04	0.051	0.9	1500	0.005	2.2	5.8	76	440	590	170	0.01	27	2.7	6	6	1.1	0.2	1	0.05
HLND21	3	5.8	0.74	0.04	0.4	630	0.005	0.4	1.0	53	160	180	22	0.005	12	0.6	4	4	1.8	0.05	0.5	0.1
HLND22	3	5.8	0.58	0.021	0.3	510	0.005	0.3	0.5	53	110	200	18	0.005	18	0.7	2	5	2.1	0.05	0.6	0.05
HLND23	11	4.8	0.94	0.031	0.3	150	0.005	0.1	0.2	92	82	78	3	0.005	38	0.2	1	10	0.4	0.05	0.7	0.05

HLND24	4	6.1	0.97	0.051	0.5	1000	0.005	1.9	3.5	73	370	430	100	0.005	38	2.7	7	5	1.3	0.2	0.8	0.1
HLND25	3	5.7	0.68	0.028	0.2	690	0.005	1.2	2.5	64	110	250	25	0.005	25	1.2	3	3	0.6	0.05	1.5	0.05
HLND26	23	7.3	1.56	0.091	1.7	2800	0.005	2.5	3.4	73	550	1100	60	0.005	500	11.0	3	8	0.6	0.2	0.5	0.1
HLND27	20	7.9	2.49	0.147	2.7	5500	0.005	1.5	2.9	97	510	1100	62	0.02	110	10.0	5	19	0.9	0.6	0.4	0.05
HLND28	23	7.7	1.64	0.093	2.3	5500	0.005	1.9	5.4	52	550	1100	50	0.005	330	6.6	3	8	0.9	0.3	0.4	0.1
HLND29	4	5.3	1.8	0.068	0.3	700	0.005	0.2	0.6	56	89	75	23	0.005	8	0.3	4	7	0.4	0.05	0.5	0.1
HLND30	4	5.6	1.32	0.052	0.4	770	0.005	0.8	3.1	43	82	110	85	0.005	18	0.7	3	7	0.7	0.2	0.4	0.1
HLND31	83	7.4	2.41	0.122	2.8	3900	0.005	2.2	6.1	48	550	1100	120	0.005	610	1.0	5	100	1.0	0.1	0.7	0.3
HLND32	25	8.0	2.72	0.174	3.9	5500	0.005	0.7	4.4	37	550	1100	72	0.06	440	1.5	7	49	1.0	0.2	0.4	0.2
HLND33	4	6.3	1.78	0.082	0.6	2900	0.005	2.4	4.7	61	160	710	50	0.01	25	1.4	2	4	0.5	0.05	0.3	0.05
HLND34	15	7.9	2.24	0.116	2.3	5500	0.005	0.4	4.7	36	550	1100	57	0.05	67	1.0	6	38	1.0	0.4	0.5	0.3
HLND35	2	5.6	0.95	0.049	0.2	420	0.005	0.2	0.5	54	78	67	12	0.005	0.5	0.2	1	4	0.3	0.1	0.2	0.05
HLND36	3	4.9	1.27	0.048	0.05	230	0.005	0.1	0.2	120	100	47	3.8	0.005	6	0.2	0.5	18	0.3	0.1	0.5	0.05
HLND37	5	6.2	1.49	0.091	0.7	1600	0.005	1.7	6.1	62	550	720	62	0.005	43	1.2	4	4	2.9	0.05	0.7	0.05
HLND38	2	5.3	1.16	0.042	0.2	520	0.005	0.4	1.6	47	100	180	21	0.005	14	0.4	2	4	1.2	0.2	0.3	0.2
HLND39	2	5.4	1.59	0.067	0.2	710	0.005	0.2	1.5	50	91	140	12	0.005	8	0.2	2	5	0.8	0.2	0.4	0.05
HLND40	2	5.4	1.62	0.06	0.2	820	0.005	0.2	1.2	46	110	170	12	0.005	10	0.2	2	5	1.8	0.05	0.4	0.05
HLND41	3	5.6	1.46	0.063	0.1	660	0.005	0.3	1.4	56	120	120	11	0.005	11	0.7	2	5	0.5	0.2	0.6	0.05
HLND42	2	5.2	1.32	0.052	0.05	520	0.005	0.4	1.9	77	99	110	12	0.005	5	1.0	1	5	0.2	0.05	0.6	0.2
HLND43	4	6.4	0.9	0.046	0.3	1400	0.005	2.5	3.3	70	310	790	43	0.005	81	6.1	3	3	0.7	0.2	0.4	0.05
HLND44	3	6.0	0.88	0.053	0.5	2000	0.005	2.4	5.9	52	400	500	110	0.005	19	2.6	2	3	0.7	0.2	0.7	0.2
HLND45	14	7.6	1.55	0.113	0.9	4900	0.005	0.9	3.3	55	170	1100	40	0.005	140	4.6	2	5	0.7	0.2	0.9	0.05
HLND46	16	8.0	1.43	0.108	2.3	5500	0.005	0.3	3.1	32	440	1100	45	0.01	270	2.6	3	17	1.1	0.4	1.1	0.2
HLND47	16	7.5	1.16	0.066	1.7	5500	0.005	1.8	6.1	43	490	970	92	0.01	68	2.1	2	12	0.6	0.3	0.5	0.1
HLND48	3	5.1	1.94	0.086	0.4	810	0.005	0.1	1.2	110	110	130	17	0.005	18	0.3	2	8	0.2	0.2	2.1	0.05
HLND49	1	5.1	0.94	0.038	0.05	350	0.005	0.2	0.2	92	44	40	7.5	0.005	0.5	0.3	2	5	0.3	0.05	0.9	0.05
HLND50	2	6.0	1.15	0.044	0.05	750	0.005	0.2	0.4	55	68	57	21	0.005	5	0.3	3	3	0.4	0.1	0.2	0.05
SWRV01	18	6.5	4	0.247	1.1	3100	0.005	0.9	3.1	71	330	1100	33	0.005	310	3.1	5	13	3.0	0.05	0.2	0.05
SWRV02	22	7.5	4.2	0.272	1.8	3300	0.005	0.9	3.0	100	330	670	95	0.005	120	1.6	8	10	2.8	0.05	0.7	0.1
SWRV03	9	5.1	3.39	0.247	0.4	2000	0.005	2.5	6.6	89	230	540	59	0.005	100	9.6	3	11	2.6	0.05	0.1	0.2
SWRV04	17	7.8	2.83	0.219	2.7	5500	0.005	1.0	7.2	39	550	1100	91	0.12	78	2.2	8	22	3.0	0.2	1.1	0.05
SWRV05	27	7.7	2.64	0.178	3.8	5500	0.005	0.5	2.9	52	550	1100	41	0.04	460	2.0	4	20	1.3	0.05	1.1	0.1
SWRV06	34	7.6	4.21	0.227	3.7	5500	0.005	0.6	4.5	52	550	1100	51	0.03	290	1.6	6	38	1.9	0.05	0.5	0.05
SWRV07	3	5.1	1.08	0.052	0.4	270	0.005	0.1	0.1	110	60	130	5.7	0.005	47	0.2	1	4	0.8	0.05	0.9	0.05
SWRV08	8	6.4	1.35	0.067	0.4	860	0.005	0.5	0.8	100	120	420	26	0.005	110	1.2	3	4	1.4	0.1	0.4	0.05
SWRV09	4	5.6	1.04	0.044	0.05	560	0.005	0.2	0.4	160	73	180	12	0.005	61	0.3	0.5	2	1.9	0.05	0.3	0.05
SWRV10	6	5.6	1.1	0.053	0.05	540	0.005	0.3	0.2	99	60	200	13	0.005	88	0.3	2	3	1.7	0.05	0.3	0.2



SWRV11	25	7.7	2.08	0.132	2.4	5500	0.005	0.7	2.7	79	550	1100	38	0.02	200	1.9	4	18	2.0	0.2	0.5	0.05
SWRV12	4	5.5	1.38	0.075	0.05	960	0.005	0.6	0.4	190	110	200	36	0.005	30	0.6	1	4	1.7	0.05	0.4	0.05
SWRV13	10	6.4	1.77	0.093	0.5	2000	0.005	0.8	1.0	180	160	570	54	0.005	140	1.2	2	7	5.4	0.05	0.3	0.05
SWRV14	24	7.4	3.74	0.204	1.9	5500	0.005	0.8	4.3	62	500	1100	54	0.005	320	1.9	4	15	2.6	0.05	0.5	0.05
SWRV15	5	6.5	2.38	0.136	0.1	1600	0.005	2.4	0.8	180	130	410	71	0.005	40	10.0	1	5	1.4	0.05	0.4	0.05
SWRV16	4	4.9	1.54	0.075	0.05	520	0.005	0.3	0.5	190	66	130	8.7	0.005	31	0.4	1	6	3.5	0.05	2.5	0.05
SWRV17	7	6.3	2.62	0.133	2.0	4600	0.005	2.2	5.8	91	370	980	99	0.005	150	9.1	0.5	10	3.8	0.05	0.3	0.05
SWRV18	3	5.6	1.06	0.107	0.05	660	0.005	0.5	2.0	89	83	210	26	0.005	49	0.5	2	2	1.3	0.05	1.2	0.05
SWRV19	8	6.5	2.19	0.104	0.4	2100	0.005	1.5	1.4	100	130	670	94	0.01	130	1.8	3	5	4.9	0.05	0.2	0.05
SWRV20	3	5.3	1.69	0.083	0.05	770	0.005	0.6	0.5	180	130	190	24	0.005	35	0.7	1	5	1.3	0.05	0.2	0.05
SWRV21	6	6.2	2.51	0.144	0.2	2800	0.08	4.6	10	110	280	610	190	0.005	83	5.5	2	6	4.8	0.1	1.2	0.05
SWRV22	5	6.7	2.12	0.148	0.2	1800	0.005	3.1	3.5	100	240	450	180	0.005	53	1.6	1	6	1.4	0.05	0.2	0.05
SWRV23	140	4.3	2.64	0.103	0.6	280	0.005	0.8	1.5	110	200	480	9.2	0.005	1100	1.6	4	160	1.3	0.05	0.8	0.05
SWRV24	10	6.0	2.46	0.128	0.4	1500	0.005	1.4	4.9	92	300	710	37	0.005	130	1.5	5	9	1.1	0.05	0.4	0.05
SWRV25	25	7.6	4.4	0.285	3.0	5500	0.01	1.7	7.8	62	550	1100	110	0.005	190	3.4	5	25	5.3	0.1	2.5	0.05
SWRV26	15	7.6	3.31	0.16	1.3	3700	0.005	2.7	8.6	97	380	1100	110	0.01	270	3.4	4	10	2.3	0.1	0.5	0.05
SWRV27	15	7.7	2.46	0.213	2.0	1700	0.005	4.7	1.3	180	240	1100	73	0.005	55	10.0	6	12	2.8	0.1	0.2	0.05
SWRV28	25	7	4.34	0.416	0.9	2800	0.005	3.6	1.0	130	280	1100	54	0.005	120	10.0	6	12	3.5	0.05	0.4	0.05
SWRV29	12	5.9	3.08	0.231	0.4	2500	0.005	1.4	1.9	88	300	620	36	0.005	170	2.4	5	7	1.4	0.05	0.5	0.05
SWRV30	12	6.5	3.92	0.26	1.0	2900	0.005	2.2	4.0	66	320	890	100	0.005	270	3.1	7	8	2.9	0.05	0.2	0.05
SWRV31	3	5	1.21	0.073	0.05	380	0.005	0.2	0.4	170	100	110	36	0.005	13	0.2	1	6	1.0	0.2	1.8	0.05
SWRV32	6	5.9	1.26	0.065	0.05	2500	0.005	1.7	3.0	130	150	590	78	0.005	52	8.1	2	6	1.8	0.2	0.6	0.2
SWRV33	5	5.8	1.1	0.059	0.05	1000	0.005	1.0	1.7	100	82	370	22	0.005	87	0.6	2	3	3.5	0.05	0.8	0.05
SWRV34	13	7.6	2.91	0.167	0.5	5500	0.005	1.2	4.8	88	290	860	30	0.005	110	1.9	2	6	1.5	0.05	0.7	0.05
SWRV35	19	7.0	2	0.112	0.5	3300	0.005	1.6	3.5	95	320	740	170	0.01	88	2.1	3	9	0.9	0.2	0.3	0.05
SWRV36	19	7.8	2.55	0.136	1.4	5500	0.005	1.0	4.4	91	290	990	120	0.005	59	1.6	5	22	1.3	0.5	0.5	0.05
SWRV37	3	5.4	1.05	0.076	0.05	780	0.005	0.9	4.6	140	170	230	47	0.005	28	0.5	1	5	1.4	0.05	1.7	0.05
SWRV38	13	5.8	3.21	0.17	0.1	2300	0.005	0.4	1.0	190	180	610	130	0.005	110	0.9	2	15	1.2	0.05	0.3	0.05
SWRV39	25	7.6	1.47	0.091	1.0	4000	0.005	0.7	3.3	88	220	850	35	0.005	240	0.8	3	13	1.3	0.05	0.7	0.05
SWRV40	21	7.4	2.8	0.179	2.1	4900	0.005	1.6	6.5	110	530	1100	85	0.005	220	2.9	12	13	1.8	0.05	0.4	0.1
SWRV41	5	6.3	1.27	0.085	0.2	1400	0.005	4.3	4.3	100	240	450	180	0.005	79	1.9	3	5	1.2	0.05	0.3	0.05
SWRV42	4	6.2	1.24	0.072	0.2	1500	0.005	2.6	3.2	110	250	430	180	0.005	62	3.1	6	4	1.3	0.05	0.6	0.05
SWRV43	23	7.8	1.94	0.108	1.5	5500	0.005	0.8	2.5	96	360	1100	37	0.005	280	3.6	2	9	1.4	0.2	0.5	0.05
SWRV44	29	7.5	3.33	0.171	2.4	5500	0.005	0.8	4.3	64	490	1100	82	0.005	260	2.6	5	20	0.9	0.05	0.7	0.05
SWRV45	18	7.5	2.17	0.122	0.6	4900	0.005	1.2	4.5	100	240	750	38	0.005	84	3.4	3	9	1.6	0.4	0.8	0.2
SWRV46	3	5.3	1.17	0.073	0.05	660	0.005	0.3	0.9	170	140	210	10	0.005	32	0.5	0.5	5	0.2	0.05	0.4	0.05
SWRV47	2	5.0	0.84	0.06	0.05	440	0.005	0.2	0.2	98	81	50	57	0.005	9	0.2	2	2	0.4	0.05	0.5	0.1

<b>SWRV48</b>	2	5.3	0.8	0.049	0.05	500	0.005	0.1	0.05	110	64	68	14	0.005	15	0.1	1	2	0.4	0.05	0.6	0.05
<b>SWRV49</b>	4	4.7	1.29	0.063	0.6	470	0.005	0.4	1.6	130	81	220	6.8	0.03	65	0.8	1	5	1.2	0.05	2.7	0.05
<b>SWRV50</b>	1	4.5	0.52	0.026	0.2	140	0.005	0.0	0.05	68	42	39	2.3	0.03	10	0.1	0.5	3	0.3	0.05	1.2	0.05

## Appendix 5. Quadrat descriptions and species list

Photographs: Jessica Allen

### Abbreviations

- H Height (centimetre or metre)
- CC Cover Class (D= >70% cover, M= 30-70% cover, S= 10-30% cover, V=<10% cover, I= Isolated plants, L= Isolated clumps).
- FL Flowering status (B=bud, FL = in flower, FR = with Fruit, H = heads [generally Poaceae or Cyperaceae], O = opercula present [*Eucalyptus* sp. only])
- CONS Conservation Status (DRF or priority listed)

## BLFN01

Date: 2 September 2009

Vegetation Description: Open woodland of *Allocasuarina dielsiana* over sparse shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) and *Eremophila clarkei* over isolated shrubs of *Solanum lasiophyllum* and *Ptilotus obovatus* with isolated forbs *Cephalopterum drummondii* and *Drosera macrantha* subsp. *macrantha*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN01. Crown Reserve 13730. Located 35 m SE of Mount Woodward and ca 5.98 km N of Mount Colreavy. Ca 18.70 km NNW of Bullfinch.

Site Description: East facing very gently inclined crest of basalt/greenstone. Slightly rocky basalt, greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	1.8 m	V	ST	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2 m	V	FL	Shrub	
<i>Allocasuarina dielsiana</i>	3 m	V	FL, FR	Tree	
<i>Aristida contorta</i>	10 cm	I	H	Grass	
<i>Caesia</i> sp. <i>Ennuin</i> (N. Gibson & M.N. Lyons 2737)	10 cm	I	B	Herb	1
<i>Calandrinia</i> sp.	4 cm	I	B	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	5 cm	I	ST	Fern	
<i>Chthonocephalus pseudevax</i>	2 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	15 cm	I	FL	Climber	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	15 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	1 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	40 cm	I	Old FL	Shrub	
<i>Erodium aureum</i>	6 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	10 cm	I	B, Old FL	Herb	
<i>Goodenia occidentalis</i>	10 cm	I	B	Herb	
<i>Haloragis</i> sp.	2 cm	I	B	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Podolepis canescens</i>	12 cm	I	FL	Herb	
<i>Pterostylis</i> sp. <i>inland</i> (A.C. Beauglehole 11880)	6 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	5 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	Old FL	Shrub	
<i>Scaevola spinescens</i>	1 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	8 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	50 cm	I	FL	Shrub	
<i>Stenopetalum filifolium</i>	10 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	10 cm	I	FL	Herb	
<i>Trachymene ornata</i>	6 cm	I	FL, B	Herb	
<i>Velleia rosea</i>	3 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	6 cm	I	FL	Herb	
<i>Wurmbea tenella</i>	10 cm	I	B	Herb	



**BLFN02**

Date: 2 September 2009

Vegetation Description: Open woodland of *Brachychiton gregorii* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *A. ramulosa* var. *ramulosa*, *A. tetragonophylla*, *Dodonaea inaequifolia* and *Eremophila clarkei* over isolated shrubs of *E. serrulata* and *Ptilotus obovatus* over isolated herbs of *Cephalopterum drummondii*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN02. Crown Reserve 13730. Located 95 m S of Mount Woodward and ca 5.92 km N of Mount Colreavy. Ca 18.62 km NNW of Bullfinch.

Site Description: South-west facing moderately inclined upper slope of basalt, greenstone, some iron enrichment. Very slightly rocky basalt outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	3 m	V	Old FR	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	1.5 m	V	FL, Old FR	Shrub	
<i>Aristida contorta</i>	12 cm	I	ST	Grass	
<i>Brachychiton gregorii</i>	3 m	V	Old FR	Tree	
<i>Brassica tournefortii</i>	20 cm	I	FL	Herb	
<i>Caesia occidentalis</i>	8 cm	I	FL, B	Herb	
<i>Calandrinia eremaea</i> complex	2 cm	I	B	Herb	
<i>Carrichtera annua</i>	10 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	7 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	4 cm	I	ST	Fern	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	10 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	80 cm	L	ST	Herb	
<i>Dodonaea inaequifolia</i>	1.5 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	15 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	1.2 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	75 cm	I	Old FL	Shrub	
<i>Erodium cygnorum</i>	6 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	12 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	B	Herb	
<i>Lawrencella rosea</i>	6 cm	I	FL	Herb	
<i>Medicago minima</i>	5 cm	I	B	Herb	
<i>Menkea sphaerocarpa</i>	5 cm	I	B	Herb	
<i>Millotia myosotidifolia</i>	6 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	7 cm	I	FR	Herb	
<i>Philothea brucei</i> subsp. <i>brucei</i>	1 m	V	FL	Shrub	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	
<i>Podolepis canescens</i>	8 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	80 cm	I	ST	Shrub	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	5 cm	I	B	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	6 cm	I	B	Herb	

<i>Ptilotus obovatus</i>	35 cm	I	Old FL	Shrub	
<i>Rhodanthe laevis</i>	7 cm	I	B	Herb	
<i>Schoenia cassiniana</i>	6 cm	I	FL	Herb	
<i>Sclerolaena sp.</i>	6 cm	I	ST	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	7 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	40 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	7 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	15cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	8 cm	I	B	Herb	
<i>Trachymene ornata</i>	6 cm	I	FL	Herb	
<i>Velleia rosea</i>	5 cm	I	FR	Herb	
<i>Wahlenbergia gracilentia</i>	6 cm	I	B	Herb	
<i>Waitzia acuminata var. acuminata</i>	10 cm	I	FL	Herb	

### BLFN03

Date: 3 September 2009

Vegetation Description: Open shrubland of *Acacia ramulosa* var. *ramulosa*, *A. tetragonophylla*, *Scaevola spinescens* and *Dodonaea inaequifolia* over sparse shrubland of *Solanum lasiophyllum* and *Eremophila clarkei* over isolated shrubs of *Ptilotus obovatus* and isolated herbs of *Cephalipterum drummondii*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN03. Crown Reserve 13730. Located 320 m NNW of Mount Woodward and ca 6.28 km N of Mount Colreavy. Ca 19.05 km NNW of Bullfinch.

Site Description: North north-east facing moderately inclined mid-slope of basalt-greenstone. Slightly rocky basalt-greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	2.5 m	V	B, FL	Shrub	
<i>Acacia tetragonophylla</i>	2 m	V	FL	Shrub	
<i>Aristida contorta</i>	10 cm	I	GL	Grass	
<i>Austrostipa elegantissima</i>	30 cm	I	GL	Grass	
<i>Austrostipa trichophylla</i>	25 cm	I	ST	Grass	
<i>Brachyscome ciliocarpa</i>	5 cm	I	FL	Herb	
<i>Caesia</i> sp.	8 cm	I	ST	Herb	
<i>Calandrinia eremaea</i> complex	7 cm	I	FL	Herb	
<i>Calotis hispidula</i>	4 cm	I	FR	Herb	
<i>Cephalipterum drummondii</i>	6 cm	I	FL	Herb	
<i>Cheilanthes lasiophylla</i>	6 cm	I	ST	Fern	
<i>Dianella revoluta</i> var. <i>divaricata</i>	40 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	1.2 m	I	FR	Shrub	
<i>Eremophila clarkei</i>	1 m	V	FL	Shrub	
<i>Erodium cygnorum</i>	7 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	6 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	8 cm	I	FL	Herb	
<i>Haloragis</i> sp.	8 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Maireana planifolia</i>	8 cm	I	FR	Shrub	
<i>Millotia myosotidifolia</i>	1 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	Old GL	Grass	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	
<i>Podolepis canescens</i>	8 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beaglehole 11880)	2 cm	I	ST	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	8 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	25 cm	I	Old FI	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	5 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	8 cm	I	FL	Herb	
<i>Sclerolaena</i> sp.	7 m	I	ST	Shrub	
<i>Sida petrophila</i>	12 cm	I	FL, FR	Shrub	
<i>Sida</i> sp. <i>Golden calyces glabrous</i> (H.N. Foote 32)	3 m	I	ST	Shrub	



<i>Solanum lasiophyllum</i>	<b>35 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Stenopetalum filifolium</i>	<b>12 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Thysanotus speckii</i>	<b>12 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Trachymene ornata</i>	<b>5 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>12 cm</b>	<b>I</b>	<b>FR</b>	<b>Herb</b>	
<i>Wahlenbergia gracilentia</i>	<b>2.5 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Wurmbea tenella</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	

## BLFN04

Date: 3 September 2009

Vegetation Description: Woodland of *Allocasuarina dielsiana* and *Acacia ramulosa* var. *ramulosa* over open shrubland of *A. sp. narrow phyllode* (B.R. Maslin 7831) over isolated shrubs of *Solanum lasiophyllum* and *Ptilotus obovatus* with sparse forbland of *Cephalipterum drummondii*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN04. Crown Reserve 13730. Located 600 m N of Mount Woodward and ca 6.59 km N of Mount Colreavy. Ca 19.26 km NNW of Bullfinch.

Site Description: North north-east facing gently inclined lower slope of basalt-greenstone with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ligulata</i>	3 m	V	FL	Shrub	
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	3 m	V	FL, FR	Shrub	
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	4.5 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	2 m	I	FL	Shrub	
<i>Allocasuarina dielsiana</i>	4.5 m	V	FR	Tree	
<i>Aristida contorta</i>	8 cm	I	GL	Grass	
<i>Austrostipa elegantissima</i>	80 cm	L	GL, H	Grass	
<i>Avellinia michelii</i>	6 cm	L	GL	Grass	
<i>Brachyscome ciliocarpa</i>	6 cm	I	FL	Herb	
<i>Calotis hispidula</i>	4 cm	I	FR	Herb	
<i>Cephalipterum drummondii</i>	7 cm	I	FL	Herb	
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	6 cm	I	ST	Fern	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	4 cm	I	FL	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	85 cm	I	ST	Herb	
<i>Enchylaena lanata</i>	30 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	6 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	6 cm	I	FL	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	2 cm	I	B	Herb	
<i>Nicotiana occidentalis</i> subsp. <i>obliqua</i>	15 cm	I	B	Herb	
<i>Phyllangium sulcatum</i>	5 cm	I	FL	Herb	
<i>Plantago debilis</i>	8 cm	I	FL	Herb	
<i>Podolepis canescens</i>	7 cm	I	FL	Herb	
<i>Prasophyllum gracile</i>	7 cm	I	FL	Herb	
<i>Pterostylis sp. inland</i> (A.C. Beauglehole 11880)	4 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	5 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	1 m	I	Old Fl	Shrub	
<i>Rhodanthe laevis</i>	8 cm	I	B	Herb	
<i>Schoenia cassiniana</i>	7 cm	I	FL	Herb	
<i>Schoenus nanus</i>	4 cm	L	GL	Grass	
<i>Sida sp. dark green fruits</i> (S. van Leeuwen 2260)	15 cm	I	FR	Shrub	
<i>Sida sp. Golden calyces glabrous</i> (H.N. Foote 32)	6 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	80 cm	V	FL	Shrub	

<i>Sonchus oleraceus</i>	5 cm	I	ST	Herb	
<i>Swainsona sp.</i>	2 cm	I	ST	Herb	
<i>Thysanotus manglesianus</i>	1 m	I	FL	Herb	
<i>Thysanotus speckii</i>	5 cm	I	B	Herb	
<i>Trachymene ornata</i>	6 cm	I	FL	Herb	
<i>Velleia rosea</i>	5 cm	I	FL	Herb	
<i>Waitzia acuminata var. acuminata</i>	7 cm	I	FL	Herb	

## BLFN05

Date: 3 September 2009

Vegetation Description: Open shrubland of *Acacia ramulosa* var. *ramulosa* and *Dodonaea viscosa* subsp. *angustissima* over open shrubland of *Senna artemisioides* subsp. *filifolia* and *Eremophila miniata* over sparse shrubland of *Rhagodia drummondii* over isolated chenopod shrubs of *Maireana trichoptera*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN05. Crown Reserve 13730. Located 735 m NW of Mount Woodward and ca 6.59 km N of Mount Colreavy. Ca 19.45 km NNW of Bullfinch.

Site Description: West level flat of metasediments, mixed colluvium with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	3 m	V	B	Shrub	
<i>Acacia tetragonophylla</i>	1.5 m	I	ST	Shrub	
<i>Aristida contorta</i>	10 cm	I	GL	Grass	
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	80 cm	I	ST	Shrub	
<i>Austrostipa</i> sp.	20 cm	I	ST	Grass	
<i>Brachyscome ciliocarpa</i>	6 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	10 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	4 cm	I	B	Herb	
<i>Calotis hispidula</i>	3 cm	I	FR	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	1 m	I	ST	Shrub	
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	3.5 m	V	ST	Shrub	
<i>Eremophila miniata</i>	1.6 m	V	FL, B	Shrub	
<i>Erodium cygnorum</i>	5 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lemooria burkittii</i>	2 cm	I	B	Herb	
<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Menkea australis</i>	2 cm	I	FL	Herb	
<i>Millotia perpusilla</i>	2 cm	I	B	Herb	
<i>Omphalolappula concava</i>	6 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	7 cm	L	GL	Grass	
<i>Pimelea microcephala</i> subsp. <i>microcephala</i>	1 m	I	FL	Shrub	
<i>Podolepis capillaris</i>	10 cm	I	FL	Herb	
<i>Podotheca angustifolia</i>	4 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	Old FL	Shrub	
<i>Rhagodia drummondii</i>	85 cm	V	FR	Shrub	
<i>Rhodanthe laevis</i>	5 cm	I	B	Herb	
<i>Scaevola spinescens</i>	1 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	6 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	15 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	1.5 m	V	FL, Old FR	Shrub	

<i>Solanum lasiophyllum</i>	<b>30 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Sonchus oleraceus</i>	<b>4 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	
<i>Stenopetalum filifolium</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Trachymene ornata</i>	<b>5 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>4 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Wurmbea tenella</i>	<b>5 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	

**BLFN06**

Date: 3 September 2009

Vegetation Description: Open woodland of *Eucalyptus corrugata* over open shrubland of *Eremophila scoparia*, *E. alternifolia* and *Scaevola spinescens* over sparse chenopod shrubland of *Maireana trichoptera* and *Eriochiton sclerolaenoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN06. Crown Lease, Lot 1580. Located ca 3.63 km SW of Mount Woodward and ca 4.76 km NW of Mount Colreavy. Ca 18.39 km NW of Bullfinch.

Site Description: North-west facing moderately inclined mid-slope of calcrete, basalt, duricrust with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Atriplex nummularia</i>	2 m	I	FR	Shrub	
<i>Atriplex vesicaria</i>	70 cm	I	FR	Shrub	
<i>Austrodanthonia caespitosa</i>	10 cm	I	ST	Grass	
<i>Austrostipa trichophylla</i>	10 cm	I	GL	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	4 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	2 cm	I	FL	Herb	
<i>Calotis hispidula</i>	3 cm	I	FR	Herb	
<i>Carrichtera annua</i>	5 cm	I	FL	Herb	
<i>Cephalipterum drummondii</i>	6 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	1.5 m	I	FR	Shrub	
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	1 m	I	ST	Shrub	
<i>Eremophila alternifolia</i>	1.8 m	V	FL	Shrub	
<i>Eremophila scoparia</i>	2 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	8 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	4 cm	I	FL	Herb	
<i>Erymophyllum ramosum</i> subsp. <i>ramosum</i>	8 cm	I	ST	Shrub	
<i>Eucalyptus corrugata</i>	9 m	S	FR	Tree	
<i>Exocarpos aphyllus</i>	1.5 m	I	FR	Shrub	
<i>Goodenia berardiana</i>	6 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena lanata</i>	25 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	12 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL, FR	Herb	
<i>Plantago debilis</i>	2 cm	I	FL	Herb	
<i>Podolepis capillaris</i>	5 cm	I	Old FL	Herb	
<i>Ptilotus exaltatus</i>	15 cm	I	FL	Shrub	
<i>Ptilotus obovatus</i>	30 cm	I	Old FL	Shrub	
<i>Rhodanthe laevis</i>	4 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	V	ST	Shrub	
<i>Sclerolaena diacantha</i>	30 cm	I	FR	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	6 cm	I	FR	Shrub	

<i>Solanum lasiophyllum</i>	<b>40 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Trichanthodium skirroporum</i>	<b>2 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Zygophyllum ovatum</i>	<b>6 cm</b>	<b>I</b>	<b>FR</b>	<b>Shrub</b>	

## BLFN07

Date: 4 September 2009

Vegetation Description: Shrubland of *Alyxia buxifolia*, *Acacia tetragonophylla*, *Dodonaea inaequifolia*, *Philotheca brucei* subsp. *brucei* and *Pittosporum angustifolium* over sparse shrubland of *Scaevola spinescens* over isolated shrubs of *Maireana planifolia*, *Rhagodia drummondii* and *Ptilotus obovatus* over isolated forbs *Parietaria cardiostegia* and *Crassula colorata* var. *acuminata*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN07. Crown Lease, Lot 1580. Located ca 3.63 km SW of Mount Woodward and ca 4.65 km NW of Mount Colreavy. Ca 18.26 km NW of Bullfinch.

Site Description: South south-east facing gently inclined crest of banded chert?, amphibolite, some quartz. Very rocky iron enriched outcrop with light brown-red skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, FR	Shrub	
<i>Alyxia buxifolia</i>	2.2 m	V	FR, FL	Shrub	
<i>Arthropodium curvipes</i>	7 cm	I	B	Herb	
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	80 cm	I	FR	Shrub	
<i>Austrodanthonia caespitosa</i>	30 cm	L	ST	Grass	
<i>Austrostipa elegantissima</i>	60 cm	L	GL, H	Grass	
<i>Austrostipa tenuifolia</i>	40 cm	L	H	Grass	
<i>Austrostipa trichophylla</i>	30 cm	L	H	Grass	
<i>Brachychiton gregorii</i>	2.2 m	I	ST	Tree	
<i>Brachyscome ciliaris</i>	5 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	8 cm	I	FL	Herb	
<i>Bromus arenarius</i>	30 cm	L	GL, H	Grass	
<i>Bromus rubens</i>	12 cm	L	H	Grass	
<i>Calandrinia eremaea</i> complex	6 cm	I	FL	Herb	
<i>Calotis hispidula</i>	4 cm	I	FR	Herb	
<i>Carrichtera annua</i>	8 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	7 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	6 cm	L	ST	Fern	
<i>Cheilanthes lasiophylla</i>	8 cm	L	ST	Fern	
<i>Comesperma integerrimum</i>	60 cm	I	ST	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	5 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FL	Shrub	
<i>Enchylaena lanata</i>	40 cm	I	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	40 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	1 m	I	ST	Shrub	
<i>Eremophila clarkei</i>	1 m	I	FL	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	1.5 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	6 cm	I	FR	Shrub	
<i>Erodium aureum</i>	4 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	5 cm	I	FL	Herb	
<i>Hypochaeris glabra</i>	8 cm	I	B	Herb	



<i>Hypoxis glabella</i> var. <i>glabella</i>	6 cm	I	FL, B	Herb	
<i>Lepidium oxytrichum</i>	10 cm	I	FR	Herb	
<i>Maireana planifolia</i>	30 cm	I	FL	Shrub	
<i>Medicago minima</i>	5 cm	I	FR	Herb	
<i>Millotia myosotidifolia</i>	5 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	12 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	20 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	9 cm	L	GL, H	Grass	
<i>Philothea brucei</i> subsp. <i>brucei</i>	1 m	I	FL	Shrub	
<i>Pittosporum angustifolium</i>	2 m	I	FL	Shrub	
<i>Ptilotus obovatus</i>	35 cm	I	FL	Shrub	
<i>Rhagodia drummondii</i>	70 cm	I	FR	Shrub	
<i>Rhodanthe stricta</i>	10 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	10 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	25 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	15 cm	I	FL	Herb	
<i>Senna charlesiana</i>	1 m	I	FL	Shrub	
<i>Sida calyxhymenia</i>	8 cm	I	FL, FR	Shrub	
<i>Sida</i> sp. <i>Golden calyces glabrous</i> (H.N. Foote 32)	4 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	10 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	30 cm	I	ST	Herb	
<i>Trachymene ornata</i>	8 cm	I	FL	Herb	
<i>Ursinia anthemoides</i>	20 cm	I	B	Herb	

## BLFN08

Date: 4 September 2009

Vegetation Description: Open shrubland of *Acacia tetragonophylla* and *Dodonaea inaequifolia* over sparse shrubland of *Scaevola spinescens* and *Eremophila clarkei* over sparse chenopod shrubland of *Maireana planifolia*, *M. georgei* x *Enchylaena lanata* and *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN08. Crown Lease, Lot 1580. Located ca 3.57 km SW of Mount Woodward and ca 4.67 km NW of Mount Colreavy. Ca 18.26 km NW of Bullfinch.

Site Description: North north-east facing moderately inclined upper slope of banded chert?, amphibolite, mixed quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	2.8 m	V	FL	Shrub	
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	50 cm	I	FL	Shrub	
<i>Austrodanthonia caespitosa</i>	12 cm	L	GL	Grass	
<i>Brachyscome lineariloba</i>	8 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	4 cm	I	FR	Herb	
<i>Calandrinia eremaea</i> complex	4 cm	I	FL	Herb	
<i>Calotis hispidula</i>	3 cm	I	FR	Herb	
<i>Carrichtera annua</i>	20 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	4 cm	I	FL	Herb	
<i>Cheilanthes lasiophylla</i>	10 cm	I	FL	Fern	
<i>Chthonocephalus pseudevax</i>	3 cm	I	FL	Herb	
<i>Cleretum papulosum</i> subsp. <i>papulosum</i>	2 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FL	Shrub	
<i>Enchylaena lanata</i>	35 cm	I	FL	Shrub	
<i>Eremophila clarkei</i>	1.2 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	4 cm	I	FL	Shrub	
<i>Erodium cygnorum</i>	8 cm	I	ST	Herb	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Hyalosperma glutinosum</i> subsp. <i>glutinosum</i>	2 cm	I	FL	Herb	
<i>Hyalosperma zacchaeus</i>	3 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena lanata</i>	40 cm	I	FL	Shrub	
<i>Maireana planifolia</i>	35 cm	I	FL	Shrub	
<i>Maireana tomentosa</i>	15 cm	I	FL	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	8 cm	I	H	Grass	
<i>Pittosporum angustifolium</i>	2.5 m	I	FL	Shrub	
<i>Plantago debilis</i>	3 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	8 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	FL	Shrub	
<i>Rhodanthe stricta</i>	12 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	40 cm	I	FL	Climber	

<i>Scaevola spinescens</i>	1.5 m	V	FL	Shrub	
<i>Sclerolaena diacantha</i>	12 cm	I	FL	Shrub	
<i>Senna charlesiana</i>	1 m	I	FL	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	20 cm	I	FL	Shrub	
<i>Solanum lasiophyllum</i>	30 cm	I	ST	Shrub	
<i>Thysanotus manglesianus</i>	60 cm	I	FL	Herb	
<i>Trachymene ornata</i>	5 cm	I	FL	Herb	
<i>Velleia rosea</i>	4 cm	I	FR	Herb	

## BLFN09

Date: 4 September 2009

Vegetation Description: Open shrubland of *Santalum spicatum*, *Acacia sp. narrow phyllode* (B.R. Maslin 7831) and *A. tetragonophylla* over sparse shrubland of *Scaevola spinescens*, *Dodonaea inaequifolia* and *Atriplex paludosa* subsp. *baudinii* over isolated chenopod shrubs of *Maireana triptera*, *M. trichoptera* and *Ptilotus obovatus* over open forbland of *Cephalipterum drummondii* and *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN09. Crown Lease, Lot 1580. Located ca 3.49 km SW of Mount Woodward and ca 4.53 km NW of Mount Colreavy. Ca 18.14 km NW of Bullfinch.

Site Description: East facing very gently inclined lower slope of iron enriched rock, metasediments, basalt, quartz, banded chert with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	2.5 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, FR	Shrub	
<i>Arctotheca calendula</i>	10 cm	I	ST	Herb	
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	1 m	V	FR	Shrub	
<i>Austrostipa nitida</i>	25 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	7 cm	I	FL	Herb	
<i>Brachyscome ciliocarpa</i>	5 cm	I	FL	Herb	
<i>Brachyscome lineariloba</i>	4 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	7 cm	I	FL	Herb	
<i>Carrichtera annua</i>	6 cm	I	FL	Herb	
<i>Cephalipterum drummondii</i>	6 cm	I	FL	Herb	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	10 cm	I	FL, FR	Herb	
<i>Dodonaea inaequifolia</i>	2 m	I	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	35 cm	I	FR	Shrub	
<i>Eriochiton sclerolaenoides</i>	4 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	6 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	15 cm	I	FR	Shrub	
<i>Maireana triptera</i>	25 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	15 cm	I	B	Herb	
<i>Parietaria cardiostegia</i>	15 cm	I	B	Herb	
<i>Plantago debilis</i>	4 cm	I	FL	Herb	
<i>Podolepis capillaris</i>	20 cm	I	FL	Herb	
<i>Pterostylis</i> aff. <i>spatulata</i>	5 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	Old FL	Shrub	
<i>Rhagodia drummondii</i>	80 cm	I	ST	Shrub	
<i>Rhodanthe laevis</i>	7 cm	I	FL	Herb	
<i>Rhodanthe manglesii</i>	5 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	20 cm	I	ST	Climber	

<i>Santalum spicatum</i>	2.5 m	I	FR	Shrub	
<i>Scaevola spinescens</i>	1 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	5 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	12 cm	I	FR	Shrub	
<i>Sclerolaena obliquicuspis</i>	12 cm	I	FR	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	6 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	45 cm	I	FL, FR	Shrub	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Velleia rosea</i>	5 cm	I	B	Herb	
<i>Wahlenbergia gracilentia</i>	5 cm	I	FL	Herb	

## BLFN10

Date: 5 September 2009

Vegetation Description: Open woodland of *Allocasuarina dielsiana* over open shrubland of *Dodonaea inaequifolia*, *Scaevola spinescens* and *Eremophila clarkei* over isolated forbs of *Trichanthodium skirrophorum* and *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN10. Golden Valley pastoral lease. Located 150 m WNW of Mount Colreavy and ca 3.11 km WNW of Hughes Hill. Ca 13.75 km NW of Bullfinch.

Site Description: West facing moderately inclined upper slope of basalt-greenstone, quartz. Slightly rocky basalt outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Abutilon oxycarpum</i>	25 cm	I	FR	Shrub	
<i>Acacia sp. narrow phyllode (B.R. Maslin 7831)</i>	1.8 m	V	FL	Shrub	
<i>Allocasuarina dielsiana</i>	7 m	V	FR	Tree	
<i>Atriplex paludosa subsp. baudinii</i>	60 cm	I	ST	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Brachyscome ciliocarpa</i>	8 cm	I	FL	Herb	
<i>Calandrinia eremaea complex</i>	4 cm	I	FL	Herb	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	6 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	4 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	10 cm	I	FL, FR	Herb	
<i>Dodonaea inaequifolia</i>	1.8 m	V	FR	Shrub	
<i>Einadia nutans subsp. eremaea</i>	30 cm	I	ST	Shrub	
<i>Enchylaena lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	1 m	I	B	Shrub	
<i>Eremophila clarkei</i>	1.2 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	15 cm	I	FR	Shrub	
<i>Erodium aureum</i>	4 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	6 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Medicago minima</i>	3 cm	I	FR	Herb	
<i>Monoculus monstrosus</i>	18 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	8 cm	I	FR	Herb	
<i>Philothea brucei subsp. brucei</i>	1 m	I	ST	Shrub	
<i>Phyllangium sulcatum</i>	5 cm	I	FL	Herb	
<i>Podolepis canescens</i>	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii var. parviflorus</i>	8 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	35 cm	I	Old FL	Shrub	
<i>Rhodanthe rubella</i>	5 cm	I	B	Herb	
<i>Scaevola spinescens</i>	1 m	V	FL	Shrub	

<i>Schoenia cassiniana</i>	10 cm	I	FL	Herb	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	20 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	45 cm	I	FL	Shrub	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Trichanthodium skirrophorum</i>	6 cm	I	FL	Herb	
<i>Velleia rosea</i>	8 cm	I	FR	Herb	
<i>Wurmbea sp.</i>	15 cm	I	ST	Herb	

## BLFN11

Date: 5 September 2009

Vegetation Description: Open woodland of *Allocasuarina dielsiana* over sparse shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Dodonaea inaequifolia* and *Eremophila clarkei* over isolated shrubs of *Solanum lasiophyllum* over isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN11. Golden Valley pastoral lease. Located 240 m WNW of Mount Colreavy and ca 3.17 km WNW of Hughes Hill. Ca 13.82 km NW of Bullfinch.

Site Description: West facing moderately inclined mid-slope of basalt-greenstone with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Abutilon oxycarpum</i>	35 cm	I	FR	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	60 cm	I	ST	Shrub	
<i>Allocasuarina dielsiana</i>	6 m	V	FR	Tree	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Brachyscome ciliocarpa</i>	6 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	5 cm	I	FR	Herb	
<i>Calandrinia eremaea</i> complex	4 cm	I	B	Herb	
<i>Cephalopterum drummondii</i>	6 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	10 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	1.2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	30 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	1 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	40 cm	I	ST	Shrub	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Marsdenia australis</i>	30 cm	I	ST	Climber	
<i>Monoculus monstrosus</i>	12 cm	I	B	Herb	
<i>Nicotiana occidentalis</i> subsp. <i>obliqua</i>	20 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Phyllangium sulcatum</i>	6 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	7 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	30 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	30 cm	I	ST	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	8 cm	I	FL	Herb	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	30 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	70 cm	I	FL	Shrub	
<i>Solanum petrophilum</i>	20 cm	I	old FR	Shrub	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	8 cm	I	B	Herb	



<i>Trachymene ornata</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>10 cm</b>	<b>I</b>	<b>FR</b>	<b>Herb</b>	
<i>Wahlenbergia gracilentia</i>	<b>5 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Wurmbea sp.</i>	<b>15 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	

## BLFN12

Date: 5 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* over sparse shrubland of *Atriplex paludosa* subsp. *baudinii* over sparse shrubland of *Dodonaea inaequifolia*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN12. Golden Valley pastoral lease. Located 350 m S of Mount Colreavy and ca 2.84 km WNW of Hughes Hill. Ca 13.37 km NW of Bullfinch.



Site Description: South-west facing gently inclined lower slope of basalt, quartz, metasediments, some underlying calcrete with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	1.2 m	V	FR	Shrub	
<i>Austrostipa nitida</i>	25 cm	I	H	Grass	
<i>Carrichtera annua</i>	10 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	6 cm	I	FL	Shrub	
<i>Dodonaea inaequifolia</i>	1 m	I	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	40 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	50 cm	I	ST	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Erodium aureum</i>	4 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	7 cm	I	FL	Herb	
<i>Eucalyptus corrugata</i>	12 m	S	FR	Tree	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena lanata</i>	40 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	15 cm	I	FR	Shrub	
<i>Medicago minima</i>	3 cm	I	FR	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	6 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	6 cm	I	ST	Shrub	
<i>Ptilotus obovatus</i>	40 cm	I	Old Fl	Shrub	
<i>Rhodanthe haigii</i>	6 cm	I	FL	Shrub	
<i>Scaevola spinescens</i>	90 cm	I	FL	Shrub	
<i>Schoenia cassiniana</i>	7 cm	I	FL	Herb	
<i>Senecio glossanthus</i>	15 cm	I	FL	Herb	
<i>Senna stowardii</i>	40 cm	I	FL	Shrub	
<i>Sida</i> sp. <i>Golden calyces glabrous</i> (H.N. Foote 32)	7 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	10 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	15 cm	I	FL	Herb	
<i>Zygophyllum ovatum</i>	10 cm	I	FR	Shrub	

## BLFN13

Date: 5 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* over sparse shrubland of *Atriplex vesicaria* over sparse chenopod shrubland of *Sclerolaena obliquicuspis* and *Maireana trichoptera* with sparse forbland of *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN13. Golden Valley pastoral lease. Located 700 m S of Mount Colreavy and ca 2.90 km W of Hughes Hill. Ca 13.19 km NW of Bullfinch.

Site Description: South south-east level flat of basalt, metasediments with red-orange-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Atriplex vesicaria</i>	1.5 m	V	FR	Shrub	
<i>Austrodanthonia caespitosa</i>	18 cm	I	H	Grass	
<i>Austrostipa nitida</i>	30 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	20 cm	I	H	Grass	
<i>Brachyscome lineariloba</i>	5 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	3 cm	I	FR	Herb	
<i>Bromus rubens</i>	8 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	2 cm	I	FL	Herb	
<i>Carrichtera annua</i>	10 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cirsium vulgare</i>	4 cm	I	ST	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	15 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	20 cm	I	FR	Herb	
<i>Dodonaea viscosa</i> subsp. <i>angustissima</i>	50 cm	I	ST	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	30 cm	I	ST	Shrub	
<i>Eriochiton sclerolaenoides</i>	15 cm	I	FR	Shrub	
<i>Erodium aureum</i>	7 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	7 cm	I	FR	Herb	
<i>Eucalyptus corrugata</i>	8 m	S	ST	Tree	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Maireana georgei</i>	35 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	30 cm	V	FR	Shrub	
<i>Medicago minima</i>	3 cm	I	FR	Herb	
<i>Mesembryanthemum nodiflorum</i>	2 cm	I	ST	Herb	
<i>Plantago debilis</i>	6 cm	I	FL	Herb	
<i>Rhodanthe pygmaea</i>	3 cm	I	FL	Herb	
<i>Sclerolaena obliquicuspis</i>	25 cm	V	FR	Shrub	
<i>Senecio glossanthus</i>	20 cm	I	FL	Herb	
<i>Solanum lasiophyllum</i>	10 cm	I	ST	Shrub	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	8 cm	I	FL	Herb	

## BLFN14

Date: 5 September 2009

Vegetation Description: Woodland of *Allocasuarina dielsiana* over sparse shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Dodonaea inaequifolia* and *Eremophila clarkei* over isolated ferns *Cheilanthes adiantoides* and isolated forbs.



Location: Southern Bullfinch Greenstone Belt survey site BLFN14. Golden Valley pastoral lease. Located 375 m ENE of Mount Colreavy and ca 2.69 km WNW of Hughes Hill. Ca 13.55 km NW of Bullfinch.

Site Description: West facing moderately inclined mid-slope of basalt-greenstone. Slightly rocky basalt-greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	4 m	V	FL	Shrub	
<i>Allocasuarina dielsiana</i>	6 m	V	FR	Tree	
<i>Aristida contorta</i>	12 cm	I	H	Grass	
<i>Austrostipa blackii</i>	10 cm	I	ST	Grass	3
<i>Brachychiton gregorii</i>	40 cm	I	ST	Tree	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	5 cm	I	FR	Herb	
<i>Calandrinia eremaea</i> complex	4 cm	I	B	Herb	
<i>Carrichtera annua</i>	8 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	6 cm	I	FL	Herb	
<i>Ceratogyne obionoides</i>	3 cm	I	FR	Herb	
<i>Cheilanthes adiantoides</i>	7 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	12 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	1.2 m	I	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	20 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	1.5 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	1 m	I	ST	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	12 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	12 cm	I	Old FL	Herb	
<i>Haloragis</i> sp.	4 cm	I	FR	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	4 cm	I	FL	Herb	
<i>Podolepis canescens</i>	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	8 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	35 cm	I	Old FL	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	5 cm	I	FL	Herb	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	15 cm	I	FR	Shrub	
<i>Solanum petrophilum</i>	70 cm	I	FL	Shrub	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	8 cm	I	B	Herb	

<i>Trachymene ornata</i>	<b>12 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Triglochin sp. A Flora of Australia (G.J. Keighery 2477)</i>	<b>5 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>8 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Wurmbea sp.</i>	<b>12 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	

## BLFN15

Date: 6 September 2009

Vegetation Description: Woodland of *Allocasuarina dielsiana* and *Acacia sp. narrow phyllode* (B.R. Maslin 7831) over sparse shrubland of *Eremophila serrulata* and *Philotheca brucei* subsp. *brucei* over sparse shrubland of *Prostanthera althoferi* subsp. *althoferi* and *Solanum lasiophyllum* with isolated chenopod shrubs of *Enchylaena lanata* and isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN15. Golden Valley pastoral lease. Located 535 m NE of Mount Colreavy and ca 2.70 km NW of Hughes Hill. Ca 13.64 km NW of Bullfinch.

Site Description: South facing gently inclined crest of basalt-greenstone. Rocky basalt-greenstone outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	2 m	I	FL	Shrub	
<i>Allocasuarina dielsiana</i>	6 m	S	FL, FR	Shrub	
<i>Austrostipa blackii</i>	25 cm	I	ST	Grass	3
<i>Austrostipa elegantissima</i>	60 cm	I	ST	Grass	
<i>Austrostipa nitida</i>	20 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	35 cm	I	H	Grass	
<i>Brachychiton gregorii</i>	2.5 m	I	FL	Shrub	
<i>Brassica tournefortii</i>	8 cm	I	B	Herb	
<i>Calandrinia calyptrata</i>	7 cm	I	B	Herb	
<i>Calandrinia eremaea complex</i>	3 cm	I	B	Herb	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Cuscuta planiflora</i>	30 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	1.6 m	I	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	20 cm	I	FL	Herb	
<i>Enchylaena lanata</i>	30 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	1.2 m	I	FL	Shrub	
<i>Eremophila serrulata</i>	1.2 m	V	FL	Shrub	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	15 cm	I	FL	Herb	
<i>Haloragis sp.</i>	10 cm	I	FR	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena lanata</i>	40 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	20 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FL	Herb	
<i>Philotheca brucei</i> subsp. <i>brucei</i>	1 m	I	FL	Shrub	
<i>Phyllangium sulcatum</i>	7 cm	I	FL	Herb	
<i>Podolepis canescens</i>	25 cm	I	FL	Herb	

<i>Podotheca gnaphalioides</i>	15 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	90 cm	V	FL	Shrub	
<i>Pterostylis</i> sp. <i>inland</i> (A.C. Beauglehole 11880)	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	10 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	35 cm	I	FL	Shrub	
<i>Rhodanthe haigii</i>	6 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	6 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	I	ST	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida petrophila</i>	35 cm	I	FL	Shrub	
<i>Sida</i> sp. <i>dark green fruits</i> (S. van Leeuwen 2260)	18 cm	I	FL	Shrub	
<i>Solanum lasiophyllum</i>	80 cm	I	FL, FR	Shrub	
<i>Solanum petrophilum</i>	15 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	6 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	8 cm	I	B	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	20 cm	I	ST	Herb	

## BLFN16

Date: 6 September 2009

Vegetation Description: Woodland of *Brachychiton gregorii* and *Acacia sp. narrow phyllode* (B.R. Maslin 7831) over sparse shrubland of *Dodonaea inaequifolia*, *Eremophila clarkei* and *Scaevola spinescens* over isolated shrubs of *Ptilotus obovatus* and isolated forbs *Podolepis canescens*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN16. Golden Valley pastoral lease. Located 565 m NE of Mount Colreavy and ca 2.75 km NW of Hughes Hill. Ca 13.73 km NW of Bullfinch.

Site Description: East north-east facing moderately inclined upper slope of basalt, greenstone, minor quartz. Slightly rocky basalt-greenstone outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Abutilon oxycarpum</i>	15 cm	I	FR	Shrub	
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	2 m	V	FL, FR	Shrub	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	25 cm	I	ST	Grass	
<i>Austrostipa trichophylla</i>	55 cm	L	H	Grass	
<i>Brachychiton gregorii</i>	3.5 m	V	ST	Shrub	
<i>Brachyscome ciliaris</i>	10 cm	I	FL	Herb	
<i>Caesia sp.</i>	15 cm	I	ST	Herb	
<i>Calandrinia eremaea complex</i>	4 cm	I	B	Herb	
<i>Carrichtera annua</i>	10 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Crassula colorata var. acuminata</i>	2 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	30 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	1.5 m	V	FL, FR	Shrub	
<i>Enchylaena lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	2 m	V	FL	Shrub	
<i>Erodium aureum</i>	7 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	12 cm	I	FL, B	Herb	
<i>Haloragis sp.</i>	12 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Menkea sphaerocarpa</i>	12 cm	I	B	Herb	
<i>Monoculus monstrosus</i>	10 cm	I	FL	Herb	
<i>Nicotiana occidentalis subsp. obliqua</i>	5 cm	I	B	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Pentaschistis airoides subsp. airoides</i>	10 cm	I	H	Grass	
<i>Philothea brucei subsp. brucei</i>	1 m	I	FL	Shrub	



<i>Podolepis canescens</i>	20 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	80 cm	I	ST	Shrub	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	10 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	FL old	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	6 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	12 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	60 cm	I	FL, B	Climber	
<i>Scaevola spinescens</i>	1.2 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	20 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	60 cm	I	FL	Shrub	
<i>Solanum petrophilum</i>	15 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	7 cm	I	B	Herb	
<i>Trachymene ornata</i>	7 cm	I	FL	Herb	
<i>Velleia rosea</i>	8 cm	I	B	Herb	
<i>Wurmbea</i> sp.	12 cm	I	ST	Herb	

## BLFN17

Date: 6 September 2009

Vegetation Description: Woodland of *Eucalyptus longissima* over open shrubland of *Atriplex paludosa* subsp. *baudinii* over sparse chenopod shrubland of *Maireana trichoptera* and *Sclerolaena diacantha*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN17. Golden Valley pastoral lease. Located 655 m E of Mount Colreavy and ca 2.32 km WNW of Hughes Hill. Ca 13.21 km NW of Bullfinch.

Site Description: East south-east facing gently inclined lower slope of basalt, metasediments, underlying calcrete with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Atriplex paludosa</i> subsp. <i>baudinii</i>	2 m	S	FR	Shrub	
<i>Carrichtera annua</i>	8 cm	I	FL	Herb	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	20 cm	I	FR	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Eucalyptus longissima</i>	15 m	S	Old FR	Tree	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Sclerolaena diacantha</i>	25 cm	I	FR	Shrub	

## BLFN18

Date: 6 September 2009

Vegetation Description: Woodland of *Brachychiton gregorii* and *Pittosporum angustifolium* over open shrubland of *Dodonaea inaequifolia*, *Eremophila alternifolia* and *Acacia tetragonophylla* over sparse shrubland of *Atriplex nummularia* and *Ptilotus obovatus* with isolated forbs.



Location: Southern Bullfinch Greenstone Belt survey site BLFN18. Golden Valley pastoral lease. Located ca 2.79 km S of Mount Woodward and ca 3.35 km N of Mount Colreavy. Ca 16.05 km NNW of Bullfinch.

Site Description: West north-west facing very gently inclined crest of banded ironstone, quartz. Very rocky banded ironstone outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, FR	Shrub	
<i>Atriplex nummularia</i>	65 cm	I	FR	Shrub	
<i>Austrostipa elegantissima</i>	40 cm	I	H	Grass	
<i>Brachychiton gregorii</i>	6 m	S	FR	Tree	
<i>Brassica tournefortii</i>	25 cm	I	FL	Herb	
<i>Bromus arenarius</i>	35 cm	I	H	Grass	
<i>Bromus rubens</i>	20 cm	I	H	Grass	
<i>Caesia</i> sp.	30 cm	I	ST	Herb	
<i>Calandrinia eremaea</i> complex	3 cm	I	B	Herb	
<i>Carrichtera annua</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Cheilanthes lasiophylla</i>	12 cm	I	ST	Fern	
<i>Chenopodium curvispicatum</i>	45 cm	I	FL	Shrub	
<i>Comesperma integerrimum</i>	1.5 m	I	FL	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	18 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2 m.	V	FR	Shrub	
<i>Enchylaena lanata</i>	50 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	2 m	V	ST	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	2 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Erodium aureum</i>	4 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Galium spurium</i>	20 cm	I	FR	Herb	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Hyalosperma zacchaeus</i>	8 cm	I	FL	Herb	
<i>Hypochaeris glabra</i>	25 cm	I	FL	Herb	
<i>Isotropis juncea</i>	10 cm	I	ST	Herb	
<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	12 cm	I	FR	Shrub	
<i>Medicago minima</i>	6 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	25 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	25 cm	I	FR	Herb	

<i>Phyllangium sulcatum</i>	8 cm	I	FL	Herb	
<i>Pittosporum angustifolium</i>	4 m	V	FR	Tree	
<i>Pterostylis sp. inland (A.C. Beauglehole 11880)</i>	10 cm	I	FL	Herb	
<i>Ptilotus exaltatus</i>	15 cm	I	FL	Shrub	
<i>Ptilotus obovatus</i>	35 cm	I	FL	Shrub	
<i>Rhodanthe stricta</i>	30 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	15 cm	I	FL	Herb	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	30 cm	I	FR	Shrub	
<i>Silene nocturna</i>	6 cm	I	B	Herb	
<i>Solanum lasiophyllum</i>	65 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	12 cm	I	B	Herb	
<i>Stellaria filiformis</i>	15 cm	I	B	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	80 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	10 cm	I	B	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Wahlenbergia gracilentia</i>	8 cm	I	B	Herb	
<i>Waitzia acuminata var. acuminata</i>	6 cm	I	FL	Herb	
<i>Zygophyllum ovatum</i>	12 cm	I	FR	Herb	

## BLFN19

Date: 7 September 2009

Vegetation Description: Open woodland of *Allocasuarina dielsiana* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) and *Dodonaea inaequifolia* over isolated shrubs of *Scaevola spinescens* and *Ptilotus obovatus*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN19. Golden Valley pastoral lease. Located ca 2.83 km SSE of Mount Woodward and ca 3.47 km NNE of Mount Colreavy. Ca 15.99 km NNW of Bullfinch.



Site Description: South-west facing gently inclined crest of basalt, quartz, some iron enriched rock. Very slightly rocky basalt-greenstone outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	FL	Shrub	
<i>Allocasuarina dielsiana</i>	5 m	V	FR	Tree	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	50 cm	I	H	Grass	
<i>Bromus arenarius</i>	30 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	7 cm	I	B	Herb	
<i>Carrichtera annua</i>	15 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	1 m	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	30 cm	I	FR	Herb	
<i>Enchylaena lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	1 m	I	FL	Shrub	
<i>Eremophila serrulata</i>	1 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	7 cm	I	FR	Shrub	
<i>Erodium aureum</i>	6 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Galium spurium</i>	4 cm	I	FR	Herb	
<i>Goodenia berardiana</i>	12 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	4 cm	I	ST	Herb	
<i>Haloragis</i> sp.	10 cm	I	B	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Medicago minima</i>	4 cm	I	FR	Herb	
<i>Monoculus monstrosus</i>	12 cm	I	B	Herb	
<i>Nicotiana occidentalis</i> subsp. <i>obliqua</i>	20 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Phyllangium sulcatum</i>	7 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	10 cm	I	FL	Herb	

<i>Ptilotus obovatus</i>	40 cm	I	FL	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Rhyncharhena linearis</i>	10 cm	I	ST	Climber	
<i>Scaevola spinescens</i>	1 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	15 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	40 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	60 cm	I	FL, FR	Shrub	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	8 cm	I	B	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	20 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	12 cm	I	ST	Herb	

## BLFN20

Date: 7 September 2009

Vegetation Description: Woodland of *Allocasuarina dielsiana* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Eremophila clarkei* and *Dodonaea inaequifolia* over isolated shrubs of *Ptilotus obovatus* and *Solanum lasiophyllum* with isolated forb *Drosera macrantha* subsp. *macrantha*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN20. Golden Valley pastoral lease. Located ca 2.72 km SSE of Mount Woodward and ca 3.63 km NNE of Mount Colreavy. Ca 16.06 km NNW of Bullfinch.

Site Description: East facing moderately inclined upper slope of basalt. Very slightly rocky basalt outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	ST	Shrub	
<i>Allocasuarina dielsiana</i>	5 m	S	FR	Tree	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Arthropodium curvipes</i>	8 cm	I	FL	Herb	
<i>Brachychiton gregorii</i>	2 m	I	ST	Tree	
<i>Caesia</i> sp.	12 cm	I	ST	Herb	
<i>Calandrinia eremaea</i> complex	10 cm	I	B	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	15 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	15 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	60 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	1.8 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	80 cm	I	old FL	Shrub	
<i>Erodium aureum</i>	8 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	15 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	15 cm	I	FL	Herb	
<i>Marsdenia australis</i>	10 cm	I	ST	Climber	
<i>Medicago minima</i>	4 cm	I	FR	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	18 cm	I	FL	Herb	
<i>Philothea brucei</i> subsp. <i>brucei</i>	1.2 m	I	FL	Shrub	
<i>Phyllangium sulcatum</i>	8 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beaglehole 11880)	15 cm	I	old FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	20 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	old FL	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1.2 m	I	FL	Shrub	
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	12 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	80 cm	I	FL	Shrub	
<i>Solanum petrophilum</i>	12 cm	I	ST	Shrub	

<i>Stenopetalum filifolium</i>	<b>20 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Thysanotus manglesianus</i>	<b>60 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Trachymene ornata</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	<b>20 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	



## BLFN21

Date: 7 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* over sparse shrubland of *Eremophila interstans* subsp. *interstans*, *E. alternifolia* and *Acacia tetragonophylla* over open shrubland of *Dodonaea inaequifolia*, *Eremophila clarkei*, *Scaevola spinescens* and *Atriplex nummularia* over sparse shrubs of *Ptilotus obovatus* and chenopod shrub *Maireana trichoptera*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN21. Golden Valley pastoral lease. Located ca 2.76 km S of Mount Woodward and ca 3.38 km N of Mount Colreavy. Ca 16.12 km NNW of Bullfinch.

Site Description: South facing gently inclined lower slope of banded ironstone, basalt, quartz, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, FR	Shrub	
<i>Arthropodium curvipes</i>	8 cm	I	FL	Herb	
<i>Atriplex nummularia</i>	1 m	I	FR	Shrub	
<i>Austrostipa elegantissima</i>	70 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	18 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	10 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	30 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	10 cm	I	FL	Herb	
<i>Carrichtera annua</i>	10 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FL, FR	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	3 m	I	ST	Shrub	
<i>Eremophila clarkei</i>	2.5 m	V	FL	Shrub	
<i>Eremophila interstans</i> subsp. <i>interstans</i>	2.5 m	I	B, FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	8 cm	I	FR	Shrub	
<i>Erodium cicutarium</i>	6 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus corrugata</i>	15 m	S	FR	Tree	
<i>Exocarpos aphyllus</i>	1.2 m	I	B	Shrub	
<i>Goodenia berardiana</i>	20 cm	I	FL	Herb	
<i>Hypochaeris glabra</i>	10 cm	I	B	Herb	
<i>Hypoxis glabella</i> var. <i>glabella</i>	10 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena tomentosa</i>	35 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Maireana triptera</i>	30 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	15 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	

<i>Phyllangium sulcatum</i>	10 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Ptilotus exaltatus</i>	20 cm	V	FL	Shrub	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	50 cm	V	old FL	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	B	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	15 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1.2 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	20 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	90 cm	I	ST	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	15 cm	I	FR	Shrub	
<i>Solanum lasiophyllum</i>	50 cm	V	FL	Shrub	
<i>Stenopetalum filifolium</i>	40 cm	I	FL	Herb	
<i>Velleia rosea</i>	7 cm	I	FL	Herb	
<i>Wahlenbergia gracilentia</i>	12 cm	I	FL	Herb	
<i>Zygophyllum ovatum</i>	8 cm	I	FR	Herb	

## BLFN22

Date: 7 September 2009

Vegetation Description: Open woodland of *Allocasuarina dielsiana* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Dodonaea inaequifolia* and *Eremophila clarkei* over isolated shrubs of *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN22. Golden Valley pastoral lease. Located ca 2.75 km SSE of Mount Woodward and ca 3.47 km NNE of Mount Colreavy. Ca 16.05 km NNW of Bullfinch.

Site Description: West south-west facing moderately inclined mid-slope of basalt, greenstone, quartz. Very slightly rocky basalt/greenstone outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	1.6 m	I	FL	Shrub	
<i>Allocasuarina dielsiana</i>	5 m	V	FR	Tree	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	70 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	6 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	15 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	80 cm	I	old stalk	Herb	
<i>Dodonaea inaequifolia</i>	2.2 m	V	FL	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	35 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	1.6 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	1.5 m	I	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	15 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	12 cm	I	B	Herb	
<i>Haloragis</i> sp.	12 cm	I	B	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	20 cm	I	FL	Herb	
<i>Medicago minima</i>	8 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	18 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	18 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	old FL	Shrub	
<i>Rhodanthe laevis</i>	7 cm	I	B	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	12 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1.2 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida petrophila</i>	20 cm	I	FL	Shrub	
<i>Sida</i> sp. dark green fruits (S. van Leeuwen 2260)	10 cm	I	FL	Shrub	
<i>Solanum lasiophyllum</i>	80 cm	I	old FL	Shrub	
<i>Stenopetalum filifolium</i>	22 cm	I	FL	Herb	
<i>Thysanotus speckii</i>	7 cm	I	B	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	

<i>Velleia rosea</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Wahlenbergia gracilentia</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Wurmbea sp.</i>	<b>12 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	

## BLFN23

Date: 7 September 2009

Vegetation Description: Open woodland of *Acacia ramulosa* var. *ramulosa* and *Santalum spicatum* over open shrubland of *Dodonaea inaequifolia*, *Atriplex nummularia* and *Acacia tetragonophylla* over sparse shrubland of *Ptilotus obovatus* and *Maireana trichoptera* over sparse forbland of *Cephalopterum drummondii* and *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site

BLFN23. Golden Valley pastoral lease. Located ca 2.03 km S of Mount Woodward and ca 3.98 km N of Mount Colreavy. Ca 16.89 km NNW of Bullfinch.

Site Description: West south-west facing gently inclined flat of basalt, greenstone, metasediments, quartz, iron enriched fragments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ramulosa</i> var. <i>ramulosa</i>	4.5 m	V	B	Shrub	
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, old FR	Shrub	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Arthropodium curvipes</i>	18 cm	I	B	Herb	
<i>Atriplex nummularia</i>	2 m	V	FR	Shrub	
<i>Austrostipa elegantissima</i>	40 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	45 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	10 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	12 cm	I	B	Herb	
<i>Calandrinia eremaea</i> complex	6 cm	I	B	Herb	
<i>Calotis hispidula</i>	8 cm	I	FR	Herb	
<i>Carrichtera annua</i>	20 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	2 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	30 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	15 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.2 m	V	FR	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Hordeum leporinum</i>	15 cm	I	ST	Grass	
<i>Hypochaeris glabra</i>	10 cm	I	FL	Herb	
<i>Hypoxis glabella</i> var. <i>glabella</i>	10 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2.5 cm	I	FL	Herb	
<i>Maireana georgei</i> x <i>Enchylaena lanata</i>	60 cm	I	FR	Shrub	
<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Maireana triptera</i>	40 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FR	Herb	
<i>Monoculus monstrosus</i>	25 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	18 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	12 cm	I	H	Grass	

<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	50 cm	I	old FL	Shrub	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Santalum spicatum</i>	4 m	V	FR	Tree	
<i>Schoenia cassiniana</i>	18 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	25 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	30 cm	I	FL	Herb	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	1.2 m	I	ST	Shrub	
<i>Sida</i> sp.	30 cm	I	FL, FR	Shrub	
<i>Silene nocturna</i>	10 cm	I	B	Herb	
<i>Sonchus oleraceus</i>	3 cm	I	ST	Herb	
<i>Sonchus oleraceus</i>	12 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	25 cm	I	FL	Herb	
<i>Vulpia myuros</i> forma <i>myuros</i>	11 cm	I	H	Grass	

## BLFN24

Date: 8 September 2009

Vegetation Description: Open woodland of *Bursaria occidentalis* over open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia*, *Eremophila clarkei* and *Philotheca brucei* subsp. *brucei* over sparse shrubland of *Ptilotus obovatus* and *Enchylaena tomentosa / lanata* over isolated forbs *Carrichtera annua* and *Parietaria cardiostegia*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN24. Golden Valley pastoral lease. Located ca 1.92 km SSE of Mount Colreavy and ca 2.13 km WSW of Hughes Hill. Ca 11.78 km NW of Bullfinch.

Site Description: West facing steep upper slope of banded ironstone, iron enriched rock. Rocky banded ironstone outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	3 m	V	FL, FR	Shrub	
<i>Acetosa vesicaria</i>	40 cm	I	FL	Herb	
<i>Arthropodium curvipes</i>	15 cm	I	B	Herb	
<i>Austrostipa elegantissima</i>	70 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	25 cm	I	H	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	10 cm	I	FR	Herb	
<i>Brassica tournefortii</i>	50 cm	I	FL	Herb	
<i>Bromus arenarius</i>	30 cm	I	H	Grass	
<i>Bromus rubens</i>	20 cm	I	H	Grass	
<i>Bursaria occidentalis</i>	4.5 m	V	B	Tree	
<i>Caesia</i> sp.	22 cm	I	ST	Herb	
<i>Calandrinia eremaea</i> complex	7 cm	I	B	Herb	
<i>Carrichtera annua</i>	18 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Crassula colorata</i> var. <i>acuminata</i>	4 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Einadia nutans</i> subsp. <i>eremaea</i>	55 cm	I	ST	Shrub	
<i>Enchylaena tomentosa / lanata</i>	50 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	2 m	V	FL	Shrub	
<i>Erodium cygnorum</i>	12 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	15 cm	I	FL	Herb	
<i>Hordeum leporinum</i>	25 cm	I	H	Grass	
<i>Hypochaeris glabra</i>	12 cm	I	B	Herb	
<i>Lawrencella rosea</i>	15 cm	I	B	Herb	
<i>Maireana trichoptera</i>	15 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	40 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	12 cm	I	FL	Herb	
<i>Pentastchistis airoides</i> subsp. <i>airoides</i>	12 cm	I	H	Grass	
<i>Philotheca brucei</i> subsp. <i>brucei</i>	1.5 m	V	FL	Shrub	

<i>Phyllangium sulcatum</i>	10 cm	I	FL	Herb	
<i>Plantago debilis</i>	10 cm	I	FL	Herb	
<i>Pleurosorus rutifolius</i>	10 cm	I	B	Fern	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	60 cm	I	ST	Shrub	
<i>Ptilotus obovatus</i>	50 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	70 cm	I	ST	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	B	Herb	
<i>Rhodanthe stricta</i>	15 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1 m	I	ST	Shrub	
<i>Schoenia cassiniana</i>	15 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	60 cm	I	ST	Shrub	
<i>Silene nocturna</i>	10 cm	I	B	Herb	
<i>Sonchus oleraceus</i>	35 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	80 cm	I	B, FL	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Ursinia anthemoides</i>	30 cm	I	B	Herb	



## BLFN25

Date: 8 September 2009

Vegetation Description: Open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia*, *Eremophila clarkei*, *Scaevola spinescens* and *Rhagodia drummondii* over sparse shrubland of *Ptilotus obovatus* over sparse forbland of *Rhodanthe oppositifolia* subsp. *oppositifolia*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN25. Golden Valley pastoral lease. Located ca 1.99 km SSE of Mount Colreavy and ca 2.10 km WSW of Hughes Hill. Ca 11.70 km NW of Bullfinch.

Site Description: South facing moderately inclined mid-slope of weathered iron enriched, marginally banded ironstone, calcrete. Very slightly rocky underlying greenstone outcrop with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	3 m	V	FL, FR	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	30 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	10 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	8 cm	I	FR	Herb	
<i>Brassica tournefortii</i>	12 cm	I	ST	Herb	
<i>Bromus arenarius</i>	18 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	8 cm	I	B	Herb	
<i>Carrichtera annua</i>	25 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	20 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Comesperma integerrimum</i>	1 m	I	ST	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	40 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.8 m	V	FL, FR	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	60 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	2.5 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Erodium aureum</i>	6 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	15 cm	I	FL	Herb	
<i>Hordeum leporinum</i>	25 cm	I	H	Grass	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	22 cm	I	FR	Shrub	
<i>Maireana triptera</i>	30 cm	I	FR	Shrub	
<i>Medicago minima</i>	10 cm	I	FL, FR	Herb	
<i>Monoculus monstrosus</i>	30 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Plantago debilis</i>	8 cm	I	FL	Herb	
<i>Podolepis canescens</i>	20 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	12 cm	I	FL	Herb	

<i>Pterostylis sp. inland (A.C. Beauglehole 11880)</i>	7 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	1.5 m	I	ST	Shrub	
<i>Rhodanthe oppositifolia subsp. oppositifolia</i>	10 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	12 cm	I	FL	Herb	
<i>Rhodanthe stricta</i>	18 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	1.8 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	20 cm	I	FL	Herb	
<i>Senecio glossanthus</i>	30 cm	I	FL	Herb	
<i>Senna artemisioides subsp. filifolia</i>	2 m	I	FL	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	10 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	50 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	10 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	45 cm	I	FL	Herb	
<i>Zygophyllum ovatum</i>	10 cm	I	FR	Herb	

**BLFN26**

Date: 8 September 2009

Vegetation Description: Open shrubland of *Acacia sp. narrow phyllode* (B.R. Maslin 7831) over open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia* and *Scaevola spinescens* over isolated shrubs of *Ptilotus obovatus* over isolated forbs *Rhodanthe rubella* and *Cephalipterum drummondii*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN26. Golden Valley pastoral lease. Located 140 m SW of Hughes Hill and ca 2.88 km ESE of Mount Colreavy. Ca 11.17 km NNW of Bullfinch.

Site Description: South south-west facing moderately inclined mid-slope of basalt, quartz, minor iron enriched rock with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3.5 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	S	FL, FR	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Austrostipa elegantissima</i>	70 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	25 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	12 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	10 cm	I	FR	Herb	
<i>Brassica tournefortii</i>	8 cm	I	ST	Herb	
<i>Caesia sp.</i>	20 cm	I	ST	Herb	
<i>Calandrinia eremaea</i> complex	3 cm	I	FL	Herb	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalipterum drummondii</i>	15 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	old FL	Herb	
<i>Cuscuta planiflora</i>	40 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	18 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.5 m	S	FL	Shrub	
<i>Enchylaena tomentosa / lanata</i>	30 cm	I	ST	Shrub	
<i>Eremophila alternifolia</i>	1.2 m	V	ST	Shrub	
<i>Eremophila serrulata</i>	1 m	I	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Exocarpos aphyllus</i>	1.2 m	I	ST	Shrub	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Haloragis sp.</i>	8 cm	I	B	Herb	
<i>Hypochaeris glabra</i>	20 cm	I	B	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	22 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	15 cm	I	FR	Herb	
<i>Plantago debilis</i>	6 cm	I	FL	Herb	
<i>Podolepis canescens</i>	20 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	FL	Herb	

<i>Ptilotus obovatus</i>	70 cm	I	old FL	Shrub	
<i>Rhodanthe laevis</i>	12 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	6 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	18 cm	I	FL	Herb	
<i>Scaevola spinescens</i>	2 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	20 cm	I	FL	Herb	
<i>Senecio glossanthus</i>	20 cm	I	B, FL	Herb	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	1.5 m	I	FL	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen</i> 2260)	6 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	12 cm	I	ST	Herb	
<i>Stellaria filiformis</i>	10 cm	I	B, FL	Herb	
<i>Stenopetalum filifolium</i>	35 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	B, FL	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	10 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	20 cm	I	ST	Herb	

**BLFN27**

Date: 8 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* over open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia*, *Eremophila alternifolia* and *Atriplex nummularia* over isolated shrubs of *Ptilotus obovatus* and *Maireana triptera* over sparse forbland of *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN27. Golden Valley pastoral lease. Located 270 m W of Hughes Hill and ca 2.70 km ESE of Mount Colreavy. Ca 11.37 km NNW of Bullfinch.

Site Description: South-west facing moderately inclined lower slope of basalt, metasediments, underlying calcrete with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia tetragonophylla</i>	2.2 m	V	FL	Shrub	
<i>Atriplex nummularia</i>	2 m	V	FR	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	20 cm	I	ST	Grass	
<i>Brachyscome ciliaris</i>	12 cm	I	FL	Herb	
<i>Bromus rubens</i>	20 cm	I	H	Grass	
<i>Calandrinia eremaea complex</i>	4 cm	I	FL	Herb	
<i>Carrichtera annua</i>	15 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	30 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.8 m	V	FR	Shrub	
<i>Enchylaena tomentosa / lanata</i>	30 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	3 m	V	B	Shrub	
<i>Eremophila scoparia</i>	1.8 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 m	I	FR	Shrub	
<i>Erodium aureum</i>	6 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus corrugata</i>	10 m	V	FR	Tree	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Hypoxis glabella var. glabella</i>	12 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Maireana triptera</i>	45 cm	V	FR	Shrub	
<i>Marsdenia australis</i>	10 cm	I	ST	Climber	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	18 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	70 cm	I	old FL	Shrub	
<i>Rhodanthe laevis</i>	12 cm	I	FL	Herb	
<i>Rhodanthe stricta</i>	12 cm	I	FL	Herb	
<i>Salsola australis</i>	10 cm	I	ST	Shrub	
<i>Scaevola spinescens</i>	1.2 m	I	FL	Shrub	
<i>Senecio pinnatifolius</i>	12 cm	I	FL	Herb	
<i>Senna artemisioides subsp. filifolia</i>	2.5 m	I	FL	Shrub	

<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	<b>4 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	
<i>Silene nocturna</i>	<b>12 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Sonchus oleraceus</i>	<b>8 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	
<i>Thysanotus manglesianus</i>	<b>2 m</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Trichanthodium skirroporum</i>	<b>7 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Zygophyllum ovatum</i>	<b>5 cm</b>	<b>I</b>	<b>FR</b>	<b>Herb</b>	

## BLFN28

Date: 9 September 2009

Vegetation Description: Open shrubland of *Santalum spicatum*, *Acacia tetragonophylla*, *Dodonaea inaequifolia* and *Eremophila clarkei* over sparse shrubland of *Ptilotus obovatus*, *Philotheca brucei* subsp. *brucei* and *Prostanthera althoferi* subsp. *althoferi* over sparse forbland of *Millotia myosotidifolia*, *Waitzia acuminata* var. *acuminata* and *Carrichtera annua* and isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN28. Golden Valley pastoral lease. Located 325 m NW of The Sisters' western peak and ca 6.32 km SE of Mount Colreavy. Ca 7.33 km NW of Bullfinch.

Site Description: West north-west facing moderately inclined upper slope of greenstone, iron enriched rock, some minor banding. Slightly rocky iron enriched rock, minor banding outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Abutilon cryptopetalum</i>	22 cm	I	FL, FR	Shrub	
<i>Acacia tetragonophylla</i>	2.5 m	V	FL, FR	Shrub	
<i>Austrostipa elegantissima</i>	50 cm	I	H	Grass	
<i>Austrostipa scabra</i>	35 cm	I	H	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	4 cm	I	FR	Herb	
<i>Calandrinia eremaea</i> complex	6 cm	I	B	Herb	
<i>Carrichtera annua</i>	18 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Cheilanthes lasiophylla</i>	12 cm	I	ST	Fern	
<i>Crassula colorata</i> var. <i>acuminata</i>	6 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	30 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	15 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Elymus scaber</i>	20 cm	I	H	Grass	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	1.8 m	V	FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	25 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	8 cm	I	B	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	18 cm	I	FL	Herb	
<i>Lepidium oxytrichum</i>	8 cm	I	FL, FR	Herb	
<i>Maireana planifolia</i>	70 cm	I	FR	Shrub	
<i>Medicago minima</i>	6 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	35 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	15 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	

<i>Philothea brucei</i> subsp. <i>brucei</i>	1 m	V	FL	Shrub	
<i>Phyllangium sulcatum</i>	8 cm	I	FL	Herb	
<i>Plantago debilis</i>	10 cm	I	B	Herb	
<i>Podolepis canescens</i>	15 cm	I	B	Herb	
<i>Podotrochea gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	80 cm	I	ST	Shrub	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	old FL	Shrub	
<i>Rhyncharrhena linearis</i>	60 cm	I	B	Climber	
<i>Santalum spicatum</i>	2.8 m	V	old FR	Tree	
<i>Scaevola spinescens</i>	1 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	6 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	20 cm	I	FL	Shrub	
<i>Silene nocturna</i>	20 cm	I	B	Herb	
<i>Solanum petrophilum</i>	30 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	25 cm	I	FL	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	50 cm	I	B	Herb	
<i>Trachymene ornata</i>	8 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	15 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	20 cm	I	ST	Herb	



**BLFN29**

Date: 9 September 2009

Vegetation Description: Woodland of *Eucalyptus longissima* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *A. tetragonophylla*, *Eremophila clarkei*, *Scaevola spinescens* and *Dodonaea inaequifolia* over isolated shrubs of *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN29. Golden Valley pastoral lease. Located 315 m NNW of The Sisters' western peak and ca 6.29 km SE of Mount Colreavy. Ca 7.33 km NW of Bullfinch.

Site Description: North-east facing gently inclined mid-slope of iron enriched rock, basalt, metamorphic rock, quartz, metasediments with red-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.8 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	6 cm	I	B	Herb	
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	10 cm	I	ST	Fern	
<i>Dodonaea inaequifolia</i>	1.8 m	V	FL	Shrub	
<i>Enchylaena lanata</i>	30 cm	I	ST	Shrub	
<i>Eremophila clarkei</i>	2.5 m	V	FL	Shrub	
<i>Erodium cygnorum</i>	18 cm	I	FL	Herb	
<i>Eucalyptus longissima</i>	8 m	S	old FR	Tree	
<i>Goodenia berardiana</i>	6 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	10 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	40 cm	I	FR	Shrub	
<i>Maireana triptera</i>	35 cm	I	ST	Shrub	
<i>Millotia myosotidifolia</i>	6 cm	I	FL	Herb	
<i>Olearia pimeleoides</i>	1 m	I	FL	Shrub	
<i>Philothea brucei</i> subsp. <i>brucei</i>	2 m	I	ST	Shrub	
<i>Podolepis canescens</i>	12 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	60 cm	I	ST	Shrub	
<i>Scaevola spinescens</i>	1 m	I	FL	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	90 cm	I	ST	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	10 cm	I	ST	Shrub	
<i>Solanum lasiophyllum</i>	15 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	30 cm	I	ST	Herb	
<i>Trachymene ornata</i>	7 cm	I	FL	Herb	
<i>Velleia rosea</i>	7 cm	I	B	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	10 cm	I	FL	Herb	

## BLFN30

Date: 9 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* and *E. longissima* over sparse shrubland of *Atriplex nummularia* over isolated chenopod shrubs of *Maireana trichoptera*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN30. Golden Valley pastoral lease. Located 255 m NNE of The Sisters' western peak and ca 6.46 km SE of Mount Colreavy. Ca 7.18 km NW of Bullfinch.



Site Description: North-west facing gently inclined lower slope of greenstone, quartz, calcrete, schist with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Atriplex nummularia</i>	2 m	V	FR	Shrub	
<i>Austrostipa elegantissima</i>	30 cm	I	ST	Grass	
<i>Austrostipa nitida</i>	30 cm	I	H	Grass	
<i>Carrichtera annua</i>	10 cm	I	ST	Herb	
<i>Dodonaea inaequifolia</i>	60 cm	I	ST	Shrub	
<i>Eremophila scoparia</i>	2.2 m	I	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Eucalyptus corrugata</i>	12 m	S	old FR	Tree	
<i>Eucalyptus longissima</i>	12 m	S	old FR	Tree	
<i>Maireana trichoptera</i>	18 cm	I	FR	Shrub	
<i>Sclerolaena diacantha</i>	15 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	70 cm	I	ST	Shrub	
<i>Sida</i> sp. <i>Golden calyces glabrous</i> (H.N. Foote 32)	8 cm	I	ST	Shrub	
<i>Sisymbrium</i> sp.	7 cm	I	FL	Herb	
<i>Zygophyllum ovatum</i>	7 cm	I	FR	Herb	

**BLFN31**

Date: 9 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus yilgarnensis* and *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *Eremophila serrulata*, *E. clarkei* and *Dodonaea inaequifolia* over isolated shrubs of *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN31. Golden Valley pastoral lease. Located 450 m N of The Sisters' western peak and ca 6.18 km SE of Mount Colereavy. Ca 7.44 km NW of Bullfinch.

Site Description: North facing gently inclined lower slope of ironstone, basalt, quartz, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	7 m	S	FL	Tree	
<i>Acacia tetragonophylla</i>	1 m	I	ST	Shrub	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa nitida</i>	35 cm	I	H	Grass	
<i>Blennospora drummondii</i>	6 cm	I	FL	Herb	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	7 cm	V	ST	Fern	
<i>Chthonocephalus pseudevax</i>	2 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	4 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	70 cm	I	ST	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	35 cm	I	ST	Shrub	
<i>Eremophila clarkei</i>	2 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	2 m	S	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus yilgarnensis</i>	7 m	V	FR	Tree	
<i>Goodenia mimuloides</i>	10 cm	I	FL	Herb	
<i>Haloragis</i> sp.	10 cm	I	B	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	2 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	5 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	15 cm	I	FR	Herb	
<i>Phyllangium sulcatum</i>	8 cm	I	FL	Herb	
<i>Plantago debilis</i>	5 cm	I	FL	Herb	
<i>Podolepis canescens</i>	5 cm	I	B	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	10 cm	I	B	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	old FL	Shrub	

<i>Rhodanthe laevis</i>	6 cm	I	B	Herb	
<i>Rhodanthe manglesii</i>	7 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	6 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	40 cm	I	B	Climber	
<i>Schoenus nanus</i>	2 cm	I	H	Grass	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	15 cm	I	ST	Shrub	
<i>Solanum petrophilum</i>	15 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Trachymene ornata</i>	12 cm	I	FL	Herb	
<i>Velleia rosea</i>	10 cm	I	FR	Herb	
<i>Wahlenbergia gracilentata</i>	7 cm	I	B	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	15 cm	I	FL	Herb	

## BLFN32

Date: 9 September 2009

Vegetation Description: Woodland of *Brachychiton gregorii* over open shrubland of *Eremophila alternifolia*, *Acacia tetragonophylla* and *A. sp. narrow phyllode* (B.R. Maslin 7831) over sparse shrubland of *Dodonaea inaequifolia*, *Eremophila clarkei*, *E. serrulata* and *Scaevola spinescens* over sparse forbland of *Carrichtera annua* and isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN32. Golden Valley pastoral lease. Located ca 1.45 km NW of The Sisters' western peak and ca 5.13 km SE of Mount Colreavy. Ca 8.52 km NW of Bullfinch.

Site Description: South south-west facing moderately inclined upper slope of basalt-greenstone, quartz. Very slightly rocky greenstone-basalt outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	3.5 m	S	old FL, FR	Shrub	
<i>Aristida contorta</i>	12 cm	I	H	Grass	
<i>Arthropodium curvipes</i>	20 cm	I	B	Herb	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	30 cm	I	H	Grass	
<i>Brachychiton gregorii</i>	6 m	S	FR	Tree	
<i>Brachyscome ciliaris</i>	10 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	35 cm	I	FL	Herb	
<i>Brassicaceae sp.</i>	12 cm	I	FL	Herb	
<i>Calandrinia eremaea complex</i>	4 cm	I	B	Herb	
<i>Carrichtera annua</i>	12 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Cuscuta planiflora</i>	30 cm	I	ST	Climber	
<i>Cynoglossum sp. Inland Ranges</i> (C.A. Gardner 14499)	4 cm	I	FR	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	3 m	V	FR	Shrub	
<i>Drosera macrantha subsp. macrantha</i>	30 cm	V	FL	Herb	
<i>Enchylaena tomentosa / lanata</i>	35 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	3 m	V	B	Shrub	
<i>Eremophila clarkei</i>	2.5 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	1.2 m	V	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Exocarpos aphyllus</i>	15 cm	I	ST	Shrub	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Goodenia occidentalis</i>	20 cm	I	B	Herb	
<i>Hordeum leporinum</i>	12 cm	I	H	Grass	
<i>Hypochaeris glabra</i>	12 cm	I	B	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Medicago minima</i>	2 cm	I	FL, FR	Herb	

<i>Millotia myosotidifolia</i>	12 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	12 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Philotheca brucei</i> subsp. <i>brucei</i>	1.2 m	I	FL	Shrub	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	
<i>Plantago debilis</i>	7 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	20 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	80 cm	I	FL	Shrub	
<i>Pterostylis</i> sp. <i>inland</i> (A.C. Beauglehole 11880)	2 cm	I	ST	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	30 cm	I	old FL	Shrub	
<i>Rhodanthe manglesii</i>	12 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	12 cm	I	FL	Herb	
<i>Rhyncharhena linearis</i>	20 cm	I	ST	Climber	
<i>Scaevola spinescens</i>	1.5 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Senecio glossanthus</i>	25 cm	I	FL	Herb	
<i>Sida</i> sp. <i>dark green fruits</i> (S. van Leeuwen 2260)	10 cm	I	ST	Shrub	
<i>Sisymbrium orientale</i>	30 cm	I	FL	Herb	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	30 cm	I	FL	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Velleia rosea</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	12 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	15 cm	I	ST	Herb	

### BLFN33

Date: 10 September 2009

Vegetation Description: Woodland of *Eucalyptus corrugata* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) and *Eremophila oppositifolia* subsp. *angustifolia* over open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia* and *Eremophila clarkei* over sparse shrubland of *Ptilotus obovatus* and sparse forbland of *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN33. Golden Valley pastoral lease. Located ca 1.98 km SSE of The Sisters' western peak and ca 8.53 km SSE of Mount Colreavy. Ca 5.19 km NW of Bullfinch.

Site Description: North north-west facing gently inclined crest of metabasalt-greenstone, quartz, schist. Very slightly rocky metabasalt outcrop with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Abutilon oxycarpum</i>	8 cm	I	old FL	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	3.2 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	V	FL	Shrub	
<i>Asteridea athrxioides</i>	12 cm	I	FL	Herb	
<i>Austrostipa elegantissima</i>	70 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	35 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	15 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	5 cm	I	FR	Herb	
<i>Brassica tournefortii</i>	10 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	4 cm	I	B	Herb	
<i>Carrichtera annua</i>	15 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	15 cm	V	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Chenopodium curvispicatum</i>	40 cm	I	FL	Shrub	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Comesperma integerrimum</i>	60 cm	I	ST	Climber	
<i>Cuscuta planiflora</i>	20 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	5 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	80 cm	I	ST	Herb	
<i>Dodonaea inaequifolia</i>	2.2 m	V	FL	Shrub	
<i>Einadia nutans</i> subsp. <i>eremaea</i>	40 cm	I	FL	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	2 m	V	FL	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	3.5 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	10 cm	I	FR	Shrub	
<i>Erodium aureum</i>	8 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Eucalyptus corrugata</i>	10 m	S	old FR	Tree	
<i>Exocarpos aphyllus</i>	1.2 m	I	ST	Shrub	
<i>Goodenia berardiana</i>	10 cm	I	FL	Herb	
<i>Haloragis</i> sp.	10 cm	I	FR	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	2 cm	I	FR	Herb	

<i>Isoetopsis graminifolia</i>	4 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Maireana triptera</i>	18 cm	I	old FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL, FR	Herb	
<i>Millotia myosotidifolia</i>	5 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	15 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	12 cm	I	FR	Herb	
<i>Philothea brucei</i> subsp. <i>brucei</i>	60 cm	I	FL	Shrub	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	
<i>Pittosporum angustifolium</i>	1 m	I	ST	Shrub	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Podolepis capillaris</i>	12 cm	I	FL	Herb	
<i>Pterostylis</i> sp. <i>inland</i> (A.C. Beauglehole 11880)	10 cm	I	FL	Herb	
<i>Ptilotus exaltatus</i>	10 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	V	old FL	Shrub	
<i>Rhagodia drummondii</i>	1 m	I	FR?	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	B	Herb	
<i>Scaevola spinescens</i>	1.5 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	8 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	10 cm	I	old FR	Shrub	
<i>Senecio glossanthus</i>	30 cm	I	ST	Herb	
<i>Sida</i> sp. <i>dark green fruits</i> (S. van Leeuwen 2260)	15 cm	I	FL	Shrub	
<i>Stellaria filiformis</i>	8 cm	I	B	Herb	
<i>Stenopetalum filifolium</i>	15 cm	I	FL	Herb	
<i>Trachymene ornata</i>	8 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	15 cm	I	ST	Herb	



## BLFN34

Date: 10 September 2009

Vegetation Description: Open woodland of *Brachychiton gregorii* and *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *A. tetragonophylla*, *Dodonaea inaequifolia* and *Eremophila alternifolia* over sparse shrubland of *Ptilotus obovatus* over sparse forbland of *Cephalopterum drummondii* and *Millotia myosotidifolia*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN34. Golden Valley pastoral lease. Located ca 1.95 km SSE of The Sisters' western peak and ca 8.50 km SSE of Mount Colreavy. Ca 5.27 km NW of Bullfinch.

Site Description: West facing moderately inclined upper slope of metabasalt, calcrete, amphibolite. Slightly rocky greenstone-metabasalt outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	3.5 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	V	FL, old FR	Shrub	
<i>Austrostipa variabilis</i>	35 cm	I	ST	Grass	
<i>Brachychiton gregorii</i>	4 m	V	old FR	Tree	
<i>Brachyscome ciliaris</i>	6 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	20 cm	I	FL	Herb	
<i>Bromus rubens</i>	15 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	5 cm	I	B	Herb	
<i>Calotis hispidula</i>	5 cm	I	FR	Herb	
<i>Carrichtera annua</i>	18 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	15 cm	V	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Cheilanthes lasiophylla</i>	15 cm	I	ST	Fern	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	2 m	I	B	Climber	
<i>Daucus glochidiatus</i>	15 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	12 cm	I	ST	Herb	
<i>Dodonaea inaequifolia</i>	2.8 m	V	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	45 cm	I	FL	Herb	
<i>Einadia nutans</i> subsp. <i>eremaea</i>	25 cm	I	ST	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	2.5 m	V	ST	Shrub	
<i>Eremophila serrulata</i>	1 m	I	old FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	12 cm	I	FR	Shrub	
<i>Erodium aureum</i>	8 cm	I	FL	Herb	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Goodenia berardiana</i>	20 cm	I	B	Herb	
<i>Hyalosperma glutinosum</i> subsp. <i>glutinosum</i>	12 cm	I	FL	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	4 cm	I	FR	Herb	
<i>Hypochaeris glabra</i>	10 cm	I	B	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	15 cm	I	FL	Herb	
<i>Lemooria burkittii</i>	2 cm	I	old FL	Herb	

<i>Maireana trichoptera</i>	20 cm	I	FR	Shrub	
<i>Medicago minima</i>	5 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	8 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	30 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	22 cm	I	FR	Herb	
<i>Pentaschistis airoides subsp. airoides</i>	12 cm	I	H	Grass	
<i>Philotheca brucei subsp. brucei</i>	70 cm	I	ST	Shrub	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	
<i>Plantago debilis</i>	8 cm	I	FL	Herb	
<i>Podolepis canescens</i>	20 cm	I	FL	Herb	
<i>Pterostylis sp. inland (A.C. Beauglehole 11880)</i>	10 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii var. parviflorus</i>	12 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	V	old FL	Shrub	
<i>Rhyncharrhena linearis</i>	15 cm	I	ST	Climber	
<i>Scaevola spinescens</i>	1.4 m	V	FL	Shrub	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Senecio glossanthus</i>	30 cm	I	old FL	Herb	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	5 cm	I	ST	Shrub	
<i>Silene nocturna</i>	20 cm	I	B	Herb	
<i>Sonchus oleraceus</i>	9 cm	I	ST	Herb	
<i>Stellaria filiformis</i>	15 cm	I	B	Herb	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	1 m	I	B, FR	Herb	
<i>Thysanotus speckii</i>	6 cm	I	FL	Herb	
<i>Trachymene ornata</i>	8 cm	I	FL	Herb	
<i>Vulpia myuros forma myuros</i>	12 cm	I	H	Grass	
<i>Wurmbea sp.</i>	12 cm	I	ST	Herb	

## BLFN35

Date: 10 September 2009

Vegetation Description: Open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *Dodonaea inaequifolia* over sparse forbland of *Rhodanthe oppositifolia* subsp. *oppositifolia*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN35. Golden Valley pastoral lease. Located 1.79 km SSE of The Sisters' western peak and ca 8.32 km SSE of Mount Colreavy. Ca 5.37 km NW of Bullfinch.



Site Description: North north-west facing very gently inclined lower slope of metabasalt, minor quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	4 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	1.2 m	I	old FR	Shrub	
<i>Actinobole uliginosum</i>	1 cm	I	FL	Herb	
<i>Aristida contorta</i>	12 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	55 cm	I	ST	Grass	
<i>Calandrinia eremaea</i> complex	6 cm	I	FL	Herb	
<i>Calotis hispidula</i>	5 cm	I	FR	Herb	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalipterum drummondii</i>	15 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	12 cm	I	ST	Fern	
<i>Comesperma integerrimum</i>	1.2 m	I	B	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.5 m	V	FL, FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	30 cm	I	ST	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Haloragis</i> sp.	8 cm	I	FR	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Hypochaeris glabra</i>	22 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lemooria burkittii</i>	2 cm	I	FL	Herb	
<i>Medicago minima</i>	6 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	8 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Phyllangium sulcatum</i>	8 cm	I	FL	Herb	
<i>Plantago debilis</i>	5 cm	I	FL	Herb	
<i>Podolepis canescens</i>	18 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	6 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	10 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	40 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	70 cm	I	ST	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	B	Herb	
<i>Rhodanthe manglesii</i>	8 cm	I	FL	Herb	

<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	<b>8 cm</b>	<b>V</b>	<b>FL</b>	<b>Herb</b>	
<i>Schoenia cassiniana</i>	<b>15 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Senecio glossanthus</i>	<b>25 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Stenopetalum filifolium</i>	<b>18 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Thysanotus manglesianus</i>	<b>70 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Thysanotus speckii</i>	<b>7 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Trachymene ornata</i>	<b>12 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>6 cm</b>	<b>I</b>	<b>FL, FR</b>	<b>Herb</b>	
<i>Vulpia myuros</i> forma <i>myuros</i>	<b>4 cm</b>	<b>I</b>	<b>H</b>	<b>Grass</b>	
<i>Wahlenbergia gracilentia</i>	<b>9 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	

**BLFN36**

Date: 10 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus longissima* and *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over sparse shrubland of *Hybanthus floribundus* subsp. *floribundus* with isolated herbs *Dianella revoluta*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN36. Golden Valley pastoral lease. Located ca 2.48 km SSE of The Sisters' western peak and ca 9.04 km SSE of Mount Colreavy. Ca 4.77 km NW of Bullfinch.

Site Description: South level flat of metabasalt, quartz, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	4.5 m	S	B	Shrub	
<i>Acacia tetragonophylla</i>	40 cm	I	ST	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	30 cm	I	H	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	6 cm	I	FR	Herb	
<i>Calotis hispidula</i>	5 cm	I	FR	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	V	ST	Fern	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	60 cm	I	ST	Herb	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	ST	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus longissima</i>	7 m	S	old FR	Tree	
<i>Hakea recurva</i> subsp. <i>recurva</i>	40 cm	I	ST	Shrub	
<i>Hyalosperma zacchaeus</i>	2 cm	I	B	Herb	
<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>	1 m	V	FL	Shrub	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Hypochaeris glabra</i>	10 cm	I	B	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Lemooria burkittii</i>	2 cm	I	FL	Herb	
<i>Maireana georgei</i>	40 cm	I	old FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Menkea australis</i>	6 cm	I	ST	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	12 cm	I	H	Grass	
<i>Phyllangium sulcatum</i>	5 cm	I	FL	Herb	
<i>Pittosporum angustifolium</i>	1 m	I	ST	Shrub	
<i>Podolepis capillaris</i>	35 cm	I	old FL	Herb	
<i>Podolepis lessonii</i>	10 cm	I	B	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	4 cm	I	ST	Herb	

<i>Ptilotus obovatus</i>	50 cm	I	old H	Shrub	
<i>Rhagodia drummondii</i>	1 m	V	FR	Shrub	
<i>Rhodanthe laevis</i>	8 cm	I	FL	Herb	
<i>Rhodanthe manglesii</i>	12 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	80 cm	I	B	Climber	
<i>Schoenia cassiniana</i>	10 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	15 cm	I	FR	Shrub	
<i>Senna artemisioides subsp. filifolia</i>	1.2 m	I	FL	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	12 cm	I	FR	Shrub	
<i>Sonchus oleraceus</i>	4 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	B	Herb	
<i>Thysanotus speckii</i>	6 cm	I	B	Herb	
<i>Trachymene ornata</i>	8 cm	I	FL	Herb	
<i>Triptilodiscus pygmaeus</i>	1 cm	I	FL	Herb	
<i>Velleia rosea</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata var. acuminata</i>	10 cm	I	FL	Herb	

**BLFN37**

Date: 10 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus ewartiana* and *Melaleuca hamata* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over sparse shrubland of *Eremophila clarkei*, *E. serrulata* and *Dodonaea inaequifolia* over isolated herbs *Dianella revoluta* var. *divaricata* and isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN37. Golden Valley pastoral lease. Located ca 3.55 km SE of The Sisters' western peak and ca 10.14 km SE of Mount Colreavy. Ca 3.51 km NW of Bullfinch.

Site Description: South-west facing very gently inclined crest of metabasalt, quartz. Very slightly rocky metabasalt outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	FL	Shrub	
<i>Aristida contorta</i>	12 cm	I	H	Grass	
<i>Arthropodium dyeri</i>	30 cm	I	B	Herb	
<i>Austrostipa blackii</i>	25 cm	I	H	Grass	3
<i>Blennospora drummondii</i>	2 cm	I	FL	Herb	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	6 cm	I	FR	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Ceratogyne obionoides</i>	3 cm	I	FR	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	V	ST	Fern	
<i>Comesperma integerrimum</i>	22 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	1 m	L	ST	Herb	
<i>Dodonaea inaequifolia</i>	2 m	V	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Eremophila clarkei</i>	3 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	1 m	V	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL, FR	Herb	
<i>Eucalyptus ewartiana</i>	7 m	V	old FR	Mallee	
<i>Goodenia berardiana</i>	10 cm	I	B	Herb	
<i>Haloragis</i> sp.	4 cm	I	B	Herb	
<i>Hyalosperma demissum</i>	<1 cm	I	FL?	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	12 cm	I	FL	Herb	
<i>Melaleuca hamata</i>	4.5 m	V	old FR	Shrub	
<i>Millotia myosotidifolia</i>	7 cm	I	FL	Herb	
<i>Philothea brucei</i> subsp. <i>brucei</i>	80 cm	I	FL	Shrub	
<i>Phyllangium sulcatum</i>	6 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	8 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	60 cm	I	ST	Shrub	
<i>Rhodanthe laevis</i>	10 cm	I	B	Herb	

<i>Rhodanthe manglesii</i>	8 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	12 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	15 cm	I	ST	Climber	
<i>Schoenia cassiniana</i>	6 cm	I	FL	Herb	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	6 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	15 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	35 cm	I	ST	Herb	
<i>Trachymene ornata</i>	6 cm	I	FL	Herb	
<i>Velleia rosea</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	4 cm	I	FL	Herb	
<i>Wurmbea</i> sp.	15 cm	I	ST	Herb	



## BLFN38

Date: 11 September 2009

Vegetation Description: Woodland of *Eucalyptus longissima* over woodland of *Melaleuca pauperiflora* subsp. *fastigiata* over open woodland of *Santalum acuminatum*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN38. Located ca 4.50 km S of The Sisters' western peak and ca 10.65 km SSE of Mount Colreavy. Ca 4.43 km WNW of Bullfinch.



Site Description: West south-west facing very gently inclined crest of greenstone, schist, minor quartz. Slightly rocky greenstone outcrop with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Atriplex</i> sp.	50 cm	I	ST	Shrub	
<i>Eucalyptus longissima</i>	9 m	S	B, FR	Tree	
<i>Maireana trichoptera</i>	12 cm	I	FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	4.5 m	S	old FR	Tree	
<i>Pterostylis mutica</i>	10 cm	I	FL	Herb	
<i>Santalum acuminatum</i>	2.2 m	V	old FR	Tree	

**BLFN39**

Date: 11 September 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open shrubland of *Acacia tetragonophylla* and *A. sp. narrow phyllode* (B.R. Maslin 7831) over open shrubland of *Olearia pimeleoides* and *Eremophila oppositifolia* subsp. *angustifolia* over sparse chenopod shrubland of *Maireana triptera*, *M. trichoptera*, *Sclerolaena diacantha* and *Eriochiton sclerolaenoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN39. Located ca 3.40 km S of The Sisters' western peak and ca 9.67 km SSE of Mount Colreavy. Ca 4.70 km WNW of Bullfinch.

Site Description: South south-east facing moderately inclined mid/upper slope of basalt, some iron enrichment, metasediments. Very slightly rocky weathered basalt, duricrust outcrop with red-brown skeletal to shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	60 cm	V	FL	Shrub	
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3.5 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	V	old FR	Shrub	
<i>Alyxia buxifolia</i>	1.6 m	I	ST	Shrub	
<i>Asteridea athrixoides</i>	10 cm	I	FL	Herb	
<i>Atriplex sp.</i>	4 cm	I	ST	Shrub	
<i>Austrostipa elegantissima</i>	40 cm	I	ST	Grass	
<i>Calandrinia eremaea complex</i>	5 cm	I	B	Herb	
<i>Cephalopterum drummondii</i>	4 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	18 cm	I	ST	Fern	
<i>Cleretum papulosum subsp. papulosum</i>	1 cm	I	B?	Herb	
<i>Crassula colorata var. acuminata</i>	1 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	4 cm	I	ST	Herb	
<i>Drosera macrantha subsp. macrantha</i>	20 cm	I	ST	Herb	
<i>Enchylaena tomentosa / lanata</i>	20 cm	I	FR	Shrub	
<i>Eremophila oppositifolia subsp. angustifolia</i>	2 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	12 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	B	Herb	
<i>Eucalyptus salmonophloia</i>	15 m	S	B	Tree	
<i>Exocarpos aphyllus</i>	1 m	I	FR?	Shrub	
<i>Goodenia berardiana</i>	8 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	7 cm	I	FL	Herb	
<i>Lepidium oxytrichum</i>	4 cm	I	FR	Herb	
<i>Leucochrysum fitzgibbonii</i>	4 cm	I	B	Herb	
<i>Maireana trichoptera</i>	30 cm	I	FR	Shrub	
<i>Maireana triptera</i>	25 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	6 cm	I	FL	Herb	
<i>Olearia pimeleoides</i>	1.2 m	V	FL	Shrub	
<i>Phyllangium sulcatum</i>	4 cm	I	FL	Herb	

<i>Pittosporum angustifolium</i>	2 m	I	FL, FR	Shrub	
<i>Plantago debilis</i>	8 cm	I	FL	Herb	
<i>Podolepis canescens</i>	12 cm	I	FL	Herb	
<i>Pterostylis sp. inland (A.C. Beauglehole 11880)</i>	2 cm	I	ST	Herb	
<i>Ptilotus exaltatus</i>	6 cm	I	ST	Shrub	
<i>Ptilotus gaudichaudii var. parviflorus</i>	6 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	old FL	Shrub	
<i>Rhagodia drummondii</i>	90 cm	I	ST	Shrub	
<i>Scaevola spinescens</i>	1.5 m	V	ST	Shrub	
<i>Sclerolaena diacantha</i>	6 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	22 cm	I	FL	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Trachymene ornata</i>	7 cm	I	FL	Herb	
<i>Trymalium myrtillus subsp. myrtillus</i>	2 m	I	FL	Shrub	
<i>Waitzia acuminata var. acuminata</i>	15 cm	I	FL	Herb	

## BLFN40

Date: 11 September 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus ewartiana* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Dodonaea inaequifolia* and *Eremophila serrulata* over open shrubland of *Prostanthera althoferi* subsp. *althoferi* over isolated ferns *Cheilanthes adiantoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN40. Located ca 3.76 km SE of The Sisters' western peak and ca 10.35 km SE of Mount Colreavy. Ca 3.31 km NNW of Bullfinch.

Site Description: East south-east facing moderately inclined upper slope of metabasalt. Slightly rocky metabasalt outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	30 cm	I	ST	Shrub	
<i>Arthropodium curvipes</i>	20 cm	I	B	Herb	
<i>Austrostipa elegantissima</i>	70 cm	L	H	Grass	
<i>Austrostipa trichophylla</i>	30 cm	I	H	Grass	
<i>Brassica tournefortii</i>	6 cm	I	B	Herb	
<i>Calandrinia eremaea</i> complex	12 cm	I	B	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	V	ST	Fern	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Comesperma integerrimum</i>	65 cm	I	ST	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	30 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	6 cm	I	FL	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	1 m	I	old stalk	Herb	
<i>Diuris pulchella</i>	30 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	2.8 m	V	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FR	Shrub	
<i>Eremophila serrulata</i>	1.2 m	V	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus ewartiana</i>	6 m	V	FR	Mallee	
<i>Goodenia berardiana</i>	20 cm	I	FL	Herb	
<i>Haloragis</i> sp.	10 cm	I	B	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Hypochaeris glabra</i>	18 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	7 cm	I	FL	Herb	
<i>Medicago minima</i>	4 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Mirbelia microphylla</i>	1.6 m	I	FL	Shrub	
<i>Monoculus monstrosus</i>	35 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	

<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Philotheca brucei</i> subsp. <i>brucei</i>	1 m	V	FL	Shrub	
<i>Phyllangium sulcatum</i>	12 cm	I	FL	Herb	
<i>Podolepis canescens</i>	18 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	10 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	B	Herb	
<i>Prasophyllum gracile</i>	20 cm	I	FL	Herb	
<i>Prostanthera althoferi</i> subsp. <i>althoferi</i>	70 cm	S	FL	Shrub	
<i>Pterostylis</i> sp. <i>inland</i> (A.C. Beauglehole 11880)	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	B	Herb	
<i>Rhodanthe laevis</i>	12 cm	I	B	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. <i>dark green fruits</i> (S. van Leeuwen 2260)	35 cm	I	ST	Shrub	
<i>Silene nocturna</i>	18 cm	I	B	Herb	
<i>Sonchus oleraceus</i>	5 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	20 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Velleia rosea</i>	8 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	12 cm	I	FL	Herb	

**BLFN41**

Date: 11 September 2009

Vegetation Description: Sparse shrubland of *Hakea recurva* subsp. *recurva*, *Acacia* sp. narrow phyllode (B.R. Maslin 7831) and *Eucalyptus ewartiana* over sparse shrubland of *Eremophila serrulata* and *Mirbelia microphylla* over sparse shrubland of *Hybanthus floribundus* subsp. *floribundus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN41. Located ca 3.89 km SE of The Sisters' western peak and ca 10.43 km SE of Mount Colreavy. Ca 3.24 km NNW of Bullfinch.

Site Description: East south-east facing gently inclined mid-slope of weathered metabasalt, quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	4.5 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	1.2 m	I	ST	Shrub	
<i>Aristida contorta</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	25 cm	V	H	Grass	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Ceratogyne obionoides</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Chthonocephalus pseudevax</i>	1 cm	I	FL	Herb	
<i>Comesperma integerrimum</i>	60 cm	I	ST	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dianella revoluta</i> var. <i>divaricata</i>	12 cm	I	ST	Herb	
<i>Dodonaea inaequifolia</i>	1.5 m	I	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	50 cm	I	FL	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	30 cm	I	FL	Shrub	
<i>Eremophila serrulata</i>	2 m	V	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus ewartiana</i>	4 m	V	FR	Mallee	
<i>Hakea recurva</i> subsp. <i>recurva</i>	5 m	V	old FR	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>	60 cm	V	FL	Shrub	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	4 cm	I	FR	Herb	
<i>Hypochaeris glabra</i>	22 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	15 cm	I	FL	Herb	
<i>Melaleuca hamata</i>	1 m	I	FR	Shrub	
<i>Millotia myosotidifolia</i>	8 cm	V	FL	Herb	
<i>Mirbelia microphylla</i>	1.8 m	V	FL	Shrub	
<i>Parentucellia latifolia</i>	6 cm	I	FL	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	5 cm	I	H	Grass	
<i>Phyllangium sulcatum</i>	10 cm	I	FL	Herb	
<i>Podolepis canescens</i>	18 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	6 cm	I	FL	Herb	

<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	B	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	old FL	Shrub	
<i>Ptilotus spathulatus</i> forma <i>spathulatus</i>	6 cm	I	FL	Herb	
<i>Rhodanthe laevis</i>	12 cm	I	FL	Herb	
<i>Rhodanthe manglesii</i>	7 cm	I	B	Herb	
<i>Schoenia cassiniana</i>	10 cm	I	FL	Herb	
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>	50 cm	I	B	Shrub	
<i>Sida</i> sp. dark green fruits ( <i>S. van Leeuwen 2260</i> )	10 cm	I	FR	Shrub	
<i>Solanum petrophilum</i>	18 cm	I	ST	Shrub	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	15 cm	I	FL	Herb	
<i>Trachymene ornata</i>	6 cm	I	FL	Herb	
<i>Tricoryne</i> sp. <i>Wongan Hills (B.H. Smith 794)</i>	15 cm	I	FL	Herb	2
<i>Velleia rosea</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	12 cm	I	FL	Herb	

## BLFN42

Date: 12 September 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus ewartiana* over open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over sparse shrubland of *Hybanthus floribundus* subsp. *floribundus*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN42. Located ca 4.03 km SE of The Sisters' western peak and ca 10.54 km SE of Mount Colreavy. Ca 3.14 km NNW of Bullfinch.



Site Description: East south-east facing gently inclined lower slope of basalt, quartz, metasediments with red-brown shallow clay loam sandy soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	2.5 m	S	B	Shrub	
<i>Acacia tetragonophylla</i>	90 cm	I	ST	Shrub	
<i>Aristida contorta</i>	12 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	30 cm	I	ST	Grass	
<i>Austrostipa trichophylla</i>	10 cm	V	ST	Grass	
<i>Carrichtera annua</i>	12 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	8 cm	I	ST	Fern	
<i>Comesperma integerrimum</i>	25 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	35 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL, FR	Herb	
<i>Eucalyptus ewartiana</i>	8 m	S	FR	Mallee	
<i>Goodenia mimuloides</i>	7 cm	I	FL	Herb	
<i>Hakea recurva</i> subsp. <i>recurva</i>	80 cm	I	ST	Shrub	
<i>Haloragis</i> sp.	6 cm	I	B	Herb	
<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>	60 cm	V	F	Shrub	
<i>Hypochaeris glabra</i>	3 cm	I	ST	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	18 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	12 cm	I	FR	Shrub	
<i>Medicago minima</i>	3 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	10 cm	I	FL	Herb	
<i>Phyllangium sulcatum</i>	6 cm	I	FL	Herb	
<i>Pittosporum angustifolium</i>	1.1 m	I	ST	Shrub	
<i>Podolepis canescens</i>	10 cm	I	B	Herb	
<i>Ptilotus exaltatus</i>	5 cm	I	ST	Shrub	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	12 cm	I	B	Herb	
<i>Ptilotus spathulatus</i> forma <i>spathulatus</i>	5 cm	I	FL	Herb	
<i>Rhodanthe manglesii</i>	8 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	7 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	10 cm	I	ST	Climber	
<i>Schoenia cassiniana</i>	8 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	20 cm	I	FR	Shrub	
<i>Stenopetalum filifolium</i>	18 cm	I	FL	Herb	



<i>Tricoryne</i> sp. Wongan Hills (B.H. Smith 794)	6 cm	I	B	Herb	2
<i>Velleia rosea</i>	6 cm	I	FL	Herb	

## BLFN43

Date: 12 September 2009

Vegetation Description: Mallee woodland of *Eucalyptus corrugata* over open shrubland of *Exocarpos aphyllus*, *Eremophila scoparia*, *Atriplex nummularia* and *Olearia pimeleoides* over isolated chenopod shrubs *Maireana trichoptera* and *Sclerolaena diacantha*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN43. Golden Valley pastoral lease. Located ca 3.92 km SE of The Sisters' western peak and ca 10.41 km SE of Mount Colreavy. Ca 3.30 km NNW of Bullfinch.

Site Description: South-east level simple slope of weathered greenstone, underlying calcrete with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia jennerae</i>	50 cm	I	ST	Shrub	
<i>Asteridea athrixoides</i>	8 cm	I	FL	Herb	
<i>Atriplex nummularia</i>	1.8 m	V	FR	Shrub	
<i>Brassica tournefortii</i>	3 cm	I	ST	Herb	
<i>Carrichtera annua</i>	15 cm	I	FR	Herb	
<i>Eremophila scoparia</i>	3 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	5 cm	I	FR	Shrub	
<i>Eucalyptus corrugata</i>	13 m	S	FR	Mallee	
<i>Exocarpos aphyllus</i>	3 m	V	FL	Shrub	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Olearia pimeleoides</i>	1 m	V	FL	Shrub	
<i>Pterostylis mutica</i>	8 cm	I	FL	Herb	
<i>Ptilotus exaltatus</i>	5 cm	I	ST	Shrub	
<i>Rhagodia drummondii</i>	50 cm	I	ST	Shrub	
<i>Scaevola spinescens</i>	1 m	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	25 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	60 cm	I	ST	Shrub	
<i>Sida</i> sp. <i>Golden calyces glabrous</i> (H.N. Foote 32)	3 cm	I	ST	Shrub	

**BLFN44**

Date: 12 September 2009

Vegetation Description: Woodland of *Eucalyptus longissima* and *E. corrugata* over open shrubland of *Melaleuca lanceolata* over sparse chenopod shrubland of *Atriplex nummularia*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN44. Golden Valley pastoral lease. Located ca 1.57 km SSE of The Sisters' eastern peak and ca 10.44 km SE of Mount Colreavy. Ca 3.79 km N of Bullfinch.

Site Description: South facing gently inclined mid-slope of greenstone (weathered), underlying calcrete. Very slightly rocky greenstone outcrop with brown shallow sandy loam soils.

<i>Species</i>	<b>H</b>	<b>CC</b>	<b>FL</b>	<b>Form</b>	<b>CONS</b>
<i>Atriplex nummularia</i>	<b>90 cm</b>	<b>V</b>	<b>old FR</b>	<b>Shrub</b>	
<i>Eucalyptus corrugata</i>	<b>9 m</b>	<b>S</b>	<b>FR</b>	<b>Tree</b>	
<i>Eucalyptus longissima</i>	<b>8 m</b>	<b>S</b>	<b>FR</b>	<b>Tree</b>	
<i>Maireana trichoptera</i>	<b>4 cm</b>	<b>I</b>	<b>FR</b>	<b>Shrub</b>	
<i>Melaleuca lanceolata</i>	<b>3.5 m</b>	<b>S</b>	<b>old FR</b>	<b>Shrub</b>	

## BLFN45

Date: 12 September 2009

Vegetation Description: Woodland of *Eucalyptus yilgarnensis* over sparse shrubland of *Eremophila oppositifolia* subsp. *angustifolia* over open shrubland of *E. ionantha*, *E. scoparia* and *Olearia pimeleoides*.

Location: Southern Bullfinch Greenstone Belt survey site BLFN45. Golden Valley pastoral lease. Located 110 m NW of The Sisters' eastern peak and ca 8.84 km SE of Mount Colreavy. Ca 5.39 km NNW of Bullfinch.



Site Description: North north-west facing gently inclined upper slope of weathered metabasalt, calcrete, amphibolite with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	40 cm	I	FL, old FR	Shrub	
<i>Atriplex nummularia</i>	1.8 m	V	old FR	Shrub	
<i>Austrostipa variabilis</i>	20 cm	I	ST	Grass	
<i>Dodonaea stenozyga</i>	80 cm	I	FR	Shrub	
<i>Eremophila ionantha</i>	1.2 m	V	old FL?	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	2.5 m	V	FL	Shrub	
<i>Eremophila scoparia</i>	1.5 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	5 cm	I	FR	Shrub	
<i>Eucalyptus yilgarnensis</i>	10 m	S	FR	Tree	
<i>Exocarpos aphyllus</i>	70 cm	I	ST	Shrub	
<i>Maireana trichoptera</i>	10 cm	I	FR	Shrub	
<i>Olearia pimeleoides</i>	70 cm	V	FL	Shrub	
<i>Scaevola spinescens</i>	1.1 m	V	FL	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Zygophyllum ovatum</i>	6 cm	I	FR	Herb	

## BLFN46

Date: 12 September 2009

Vegetation Description: Open woodland of *Eucalyptus longissima*, *E. corrugata* and *E. yilgarnensis* over open shrubland of *Santalum acuminatum* and *Eremophila oppositifolia* subsp. *angustifolia* over open shrubland of *Scaevola spinescens* and *Dodonaea stenozyga* over open shrubland of *Eremophila scoparia*, *E. ionantha* and *Olearia pimeleoides*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN46. Golden Valley pastoral lease. Located 215 m NNW of The Sisters' eastern peak and ca 8.77 km SE of Mount Colreavy. Ca 5.53 km NNW of Bullfinch.

Site Description: South facing gently inclined crest of weathered greenstone, metabasalt, underlying calcrete with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	45 cm	I	FL	Shrub	
<i>Atriplex nummularia</i>	1 m	I	ST	Shrub	
<i>Austrostipa elegantissima</i>	60 cm	L	H	Grass	
<i>Dodonaea stenozyga</i>	1.8 m	V	FR	Shrub	
<i>Eremophila ionantha</i>	1 m	I	B, FL	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	3 m	V	FL	Shrub	
<i>Eremophila scoparia</i>	1.2 m	V	ST	Shrub	
<i>Eucalyptus corrugata</i>	12 m	S	FR	Tree	
<i>Eucalyptus longissima</i>	15 m	V	FR	Tree	
<i>Eucalyptus yilgarnensis</i>	9 m	V	FR	Tree	
<i>Exocarpos aphyllus</i>	60 cm	I	ST	Shrub	
<i>Olearia pimeleoides</i>	70 cm	V	FL	Shrub	
<i>Santalum acuminatum</i>	3.5 m	V	FR	Tree	
<i>Scaevola spinescens</i>	1 m	S	ST	Shrub	

## BLFN47

Date: 12 September 2009

Vegetation Description: Open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *A. tetragonophylla*, *Dodonaea inaequifolia* and *Atriplex nummularia* over sparse forbland of *Carrichtera annua*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN47. Golden Valley pastoral lease. Located ca 1.32 km NNW of The Sisters' eastern peak and ca 7.81 km SE of Mount Colreavy. Ca 6.62 km NNW of Bullfinch.

Site Description: North-west facing gently inclined simple/lower slope of weathered metabasalt, mixed geology, underlying calcrete with brown, slightly reddish shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	4 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	2.2 m	V	FL	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Atriplex nummularia</i>	1.8 m	V	FR	Shrub	
<i>Austrostipa elegantissima</i>	65 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	35 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	12 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	30 cm	I	FL	Herb	
<i>Carrichtera annua</i>	18 cm	V	FL	Herb	
<i>Cephalopterum drummondii</i>	12 cm	I	FL	Herb	
<i>Cuscuta planiflora</i>	80 cm	I	B	Climber	
<i>Daucus glochidiatus</i>	6 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.5 m	V	FL	Shrub	
<i>Enchylaena tomentosa / lanata</i>	25 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Goodenia mimuloides</i>	10 cm	I	FL	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Maireana trichoptera</i>	8 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FR	Herb	
<i>Pittosporum angustifolium</i>	25 cm	I	ST	Shrub	
<i>Plantago debilis</i>	4 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beaglehole 11880)	7 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	12 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	12 cm	I	FL	Herb	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	
<i>Sida</i> sp. Golden calyces glabrous (H.N. Foote 32)	4 cm	I	ST	Shrub	
<i>Sonchus oleraceus</i>	12 cm	I	ST	Herb	
<i>Thysanotus manglesianus</i>	40 cm	I	FL	Herb	
<i>Trichanthodium skirrophorum</i>	10 cm	I	FL	Herb	

**BLFN48**

Date: 13 September 2009

Vegetation Description: Open shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *A. tetragonophylla*, *Dodonaea inaequifolia* and *Senna artemisioides* subsp. *filifolia* over sparse shrubland of *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN48. Located 115 m W of a track. Ca 3.87 km SSE of The Sisters' western peak and ca 10.47 km SSE of Mount Colreavy. Ca 3.45 km WNW of Bullfinch.

Site Description: North facing gently inclined mid-slope of metabasalt, greenstone with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia jennerae</i>	1.5 m	I	ST	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	3.2 m	S	FL	Shrub	
<i>Acacia tetragonophylla</i>	3 m	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	40 cm	I	H	Grass	
<i>Brachyscome ciliaris</i>	15 cm	I	FL	Herb	
<i>Brassica tournefortii</i>	30 cm	I	FL	Herb	
<i>Calandrinia eremaea</i> complex	6 cm	I	B	Herb	
<i>Carrichtera annua</i>	15 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Dodonaea inaequifolia</i>	3 m	V	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	30 cm	I	ST	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	50 cm	I	FR	Shrub	
<i>Eriochiton sclerolaenoides</i>	8 cm	I	FL	Shrub	
<i>Erodium cygnorum</i>	8 cm	I	FL	Herb	
<i>Exocarpos aphyllus</i>	2 m	V	ST	Shrub	
<i>Goodenia berardiana</i>	6 cm	I	FL	Herb	
<i>Haloragis</i> sp.	6 cm	I	B	Herb	
<i>Hypochaeris glabra</i>	15 cm	I	B	Herb	
<i>Isoetopsis graminifolia</i>	3 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	18 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	12 cm	I	FR	Shrub	
<i>Medicago minima</i>	3 cm	I	FL	Herb	
<i>Millotia myosotidifolia</i>	6 cm	I	FL	Herb	
<i>Monoculus monstrosus</i>	8 cm	I	FL, FR	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Phyllangium sulcatum</i>	7 cm	I	FL	Herb	
<i>Plantago debilis</i>	5 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Podolepis capillaris</i>	15 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	10 cm	I	FL	Herb	
<i>Ptilotus gaudichaudii</i> var. <i>parviflorus</i>	10 cm	I	B	Herb	

<i>Ptilotus obovatus</i>	60 cm	V	old FL	Shrub	
<i>Rhagodia drummondii</i>	1 m	I	ST	Shrub	
<i>Rhodanthe laevis</i>	6 cm	I	B	Herb	
<i>Scaevola spinescens</i>	1.2 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	7 cm	I	FL	Herb	
<i>Senna artemisioides subsp. filifolia</i>	1.2 m	V	B	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	1.2 m	I	FL	Shrub	
<i>Trachymene ornata</i>	7 cm	I	FL	Herb	
<i>Trichanthodium skirrophorum</i>	8 cm	I	FL	Herb	
<i>Velleia rosea</i>	8 cm	I	FL	Herb	
<i>Wahlenbergia gracilentia</i>	20 cm	I	FL	Herb	
<i>Zygophyllum eremaeum</i>	20 cm	I	FL	Herb	



**BLFN49**

Date: 13 September 2009

Vegetation Description: Mallee woodland of *Eucalyptus corrugata* over sparse shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open shrubland of *Acacia tetragonophylla*, *Dodonaea inaequifolia*, *Eremophila oppositifolia* subsp. *angustifolia* and *E. alternifolia* over isolated shrubs of *Ptilotus obovatus* and a sparse forbland.



Location: Southern Bullfinch Greenstone Belt survey site BLFN49. Located 350 m W of a track. Ca 3.85 km SSE of The Sisters' western peak and ca 10.36 km SSE of Mount Colreavy. Ca 3.58 km WNW of Bullfinch.

Site Description: North north-east facing moderately inclined crest/upper slope of metabasalt. Slightly rocky metabasalt outcrop with brown, slightly reddish skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	3.2 m	V	FL	Shrub	
<i>Acacia tetragonophylla</i>	2.2 m	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	45 cm	I	ST	Grass	
<i>Brassica tournefortii</i>	4 cm	I	ST	Herb	
<i>Bromus rubens</i>	25 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	12 cm	I	B	Herb	
<i>Carrichtera annua</i>	20 cm	I	FL	Herb	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	9 cm	I	ST	Fern	
<i>Chenopodium curvispicatum</i>	30 cm	I	ST	Shrub	
<i>Comesperma integerrimum</i>	35 cm	I	ST	Climber	
<i>Daucus glochidiatus</i>	25 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.5 m	V	FL	Shrub	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila alternifolia</i>	2.2 m	V	ST	Shrub	
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>	2.8 m	V	FL	Shrub	
<i>Eriochiton sclerolaenoides</i>	12 cm	I	FR	Shrub	
<i>Erodium cygnorum</i>	12 cm	I	FL	Herb	
<i>Eucalyptus corrugata</i>	9 m	S	FR	Mallee	
<i>Goodenia berardiana</i>	12 cm	I	FL	Herb	
<i>Haloragis</i> sp.	40 cm	I	FL	Herb	
<i>Hordeum leporinum</i>	12 cm	I	H	Grass	
<i>Hypochaeris glabra</i>	30 cm	I	FL	Herb	
<i>Lawrencella rosea</i>	20 cm	I	FL	Herb	
<i>Maireana trichoptera</i>	25 cm	I	FR	Shrub	
<i>Medicago minima</i>	4 cm	I	FR	Herb	
<i>Monoculus monstrosus</i>	40 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	25 cm	I	FR	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	12 cm	I	H	Grass	
<i>Phyllangium sulcatum</i>	12 cm	I	FL	Herb	
<i>Podolepis canescens</i>	20 cm	I	FL	Herb	
<i>Podotheca gnaphalioides</i>	12 cm	I	FL	Herb	
<i>Ptilotus exaltatus</i>	8 cm	I	FL	Shrub	

<i>Ptilotus obovatus</i>	35 cm	I	old FL	Shrub	
<i>Ptilotus spathulatus forma spathulatus</i>	6 cm	I	FL	Shrub	
<i>Rhagodia drummondii</i>	1 m	I	ST	Shrub	
<i>Rhodanthe oppositifolia subsp. oppositifolia</i>	12 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	12 cm	I	FL	Herb	
<i>Rhyncharrhena linearis</i>	10 cm	I	ST	Climber	
<i>Scaevola spinescens</i>	1.5 m	I	FL	Shrub	
<i>Schoenia cassiniana</i>	20 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senna artemisioides subsp. filifolia</i>	1.5 m	I	B	Shrub	
<i>Sida sp. dark green fruits (S. van Leeuwen 2260)</i>	12 cm	I	ST	Shrub	
<i>Sisymbrium orientale</i>	13 cm	I	FL	Herb	
<i>Sonchus oleraceus</i>	5 cm	I	ST	Herb	
<i>Stenopetalum filifolium</i>	22 cm	I	FL	Herb	
<i>Thysanotus manglesianus</i>	55 cm	I	FL	Herb	
<i>Trachymene ornata</i>	10 cm	I	FL	Herb	
<i>Waitzia acuminata var. acuminata</i>	10 cm	I	FL	Herb	

## BLFN50

Date: 13 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus longissima* and *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over shrubland of *Dodonaea inaequifolia*, *Eremophila clarkei* and *E. serrulata* over isolated shrubs of *Ptilotus obovatus*.



Location: Southern Bullfinch Greenstone Belt survey site BLFN50. Located 400 m W of a track. Ca 3.92 km SSE of The Sisters' western peak and ca 10.46 km SSE of Mount Colreavy. Ca 3.52 km WNW of Bullfinch.

Site Description: South south-east facing gently inclined lower/mid-slope of weathered basalt with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	7 m	S	FL	Tree	
<i>Austrostipa trichophylla</i>	15 cm	V	ST	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	6 cm	I	FR	Herb	
<i>Brassica tournefortii</i>	35 cm	I	FL	Herb	
<i>Bromus rubens</i>	12 cm	I	H	Grass	
<i>Cephalopterum drummondii</i>	10 cm	I	FL	Herb	
<i>Ceratogyne obionoides</i>	5 cm	I	FL	Herb	
<i>Cheilanthes adiantoides</i>	10 cm	I	ST	Fern	
<i>Comesperma integerrimum</i>	4 m	I	B, FL	Climber	
<i>Crassula colorata</i> var. <i>acuminata</i>	3 cm	I	FL	Herb	
<i>Daucus glochidiatus</i>	12 cm	I	FR	Herb	
<i>Dodonaea inaequifolia</i>	2.5 m	S	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	50 cm	I	FL	Herb	
<i>Enchylaena tomentosa</i> / <i>lanata</i>	25 cm	I	FR	Shrub	
<i>Eremophila clarkei</i>	2.2 m	V	FL	Shrub	
<i>Eremophila serrulata</i>	1.5 m	S	old FL	Shrub	
<i>Erodium cygnorum</i>	10 cm	I	FL	Herb	
<i>Eucalyptus longissima</i>	8 M	S	FR	Mallee	
<i>Goodenia berardiana</i>	18 cm	I	FL	Herb	
<i>Haloragis</i> sp.	10 cm	I	B, FL	Herb	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	3 cm	I	FR	Herb	
<i>Lawrencella rosea</i>	15 cm	I	FL	Herb	
<i>Medicago minima</i>	3 cm	I	FL	Herb	
<i>Parietaria cardiostegia</i>	10 cm	I	FR	Herb	
<i>Phyllangium sulcatum</i>	10 cm	I	FL	Herb	
<i>Podolepis canescens</i>	15 cm	I	FL	Herb	
<i>Podolepis lessonii</i>	15 cm	I	FL	Herb	
<i>Pterostylis</i> sp. inland (A.C. Beauglehole 11880)	8 cm	I	FL	Herb	
<i>Ptilotus obovatus</i>	45 cm	I	old FL	Shrub	
<i>Ptilotus spathulatus</i> forma <i>spathulatus</i>	7 cm	I	FL	Herb	
<i>Rhodanthe laevis</i>	8 cm	I	B	Herb	
<i>Rhodanthe manglesii</i>	12 cm	I	FL	Herb	
<i>Rhodanthe oppositifolia</i> subsp. <i>oppositifolia</i>	10 cm	I	FL	Herb	
<i>Rhodanthe rubella</i>	8 cm	I	FL	Herb	
<i>Schoenia cassiniana</i>	12 cm	I	FL	Herb	

<i>Sonchus oleraceus</i>	<b>5 cm</b>	<b>I</b>	<b>ST</b>	<b>Herb</b>	
<i>Stenopetalum filifolium</i>	<b>15 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Trachymene ornata</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Velleia rosea</i>	<b>10 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	
<i>Vulpia myuros forma myuros</i>	<b>12 cm</b>	<b>I</b>	<b>H</b>	<b>Grass</b>	
<i>Wahlenbergia gracilentia</i>	<b>7 cm</b>	<b>I</b>	<b>FL</b>	<b>Herb</b>	

## HLND01

Date: 24 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus livida* over open shrubland of *Allocasuarina acutivalvis* and *Melaleuca hamata* over open shrubland of *Hibbertia exasperata*, *Melaleuca depauperata* and *Rinzia sessilis*.



Location: Northern Forresteria Greenstone Belt survey site, HLND01. Unallocated Crown Land ca. 12.96 km NNE of Mount Holland. Head 11.43 km E along Jilbadji Nature Reserve's S boundary from Forresteria Southern Cross Road, then head 1.55 km S.

Site Description: North north-west facing gently inclined crest of basalt, laterite duricrust fragments, possibly siltstone. Very slightly rocky laterite outcrop with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia assimilis</i> subsp. <i>assimilis</i>	2 m	V	FL	Shrub	
<i>Acacia beauverdiana</i>	1.5 m	I	FL	Shrub	
<i>Acacia yorkrakinensis</i> subsp. <i>acrita</i>	1.8 m	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i>	2.5 m	S	FL, FR	Shrub	
<i>Baeckea elderiana</i>	1.8 m	I	FL	Shrub	
<i>Beyeria sulcata</i> var. <i>gracilis</i>	1 m	V	B	Shrub	
<i>Cassytha nodiflora</i>	1.5 m	V	B	Climber	
<i>Daviesia pachyphylla</i>	50 cm	I	ST	Shrub	
<i>Dillwynia divaricata</i>	1 m	I	FL	Shrub	
<i>Drummondita hassellii</i>	45 cm	I	FL	Shrub	
<i>Eucalyptus concinna</i>	2.2 m	V	FR	Mallee	
<i>Eucalyptus eremophila</i>	2.5 m	V	FR	Mallee	
<i>Eucalyptus horistes</i>	2.5 m	V	FR	Mallee	
<i>Eucalyptus livida</i>	4 m	V	FR	Mallee	
<i>Grevillea acuaria</i>	40 cm	I	ST	Shrub	
<i>Hakea multilineata</i>	2.5 m	V	FL, FR	Shrub	
<i>Hakea subsulcata</i>	1.2 m	I	old FL, FR	Shrub	
<i>Hibbertia exasperata</i>	80 cm	V	B, FL	Shrub	
<i>Leucopogon cuneifolius</i>	1 m	I	ST	Shrub	
<i>Melaleuca calyptroides</i>	60 cm	I	B, FR	Shrub	
<i>Melaleuca condylosa</i>	1 m	I	B, FR	Shrub	
<i>Melaleuca depauperata</i>	1 m	V	FR	Shrub	
<i>Melaleuca hamata</i>	1.5 m	S	FR	Shrub	
<i>Melaleuca laxiflora</i>	80 cm	I	FR	Shrub	
<i>Micromyrtus obovata</i>	1.2 m	V	FL	Shrub	
<i>Persoonia coriacea</i>	3.5 m	I	ST	Shrub	
<i>Phebalium filifolium</i>	1 m	V	FL	Shrub	
<i>Phebalium megaphyllum</i>	45 cm	I	B, FL	Shrub	
<i>Rinzia sessilis</i>	40 cm	V	B, FL	Shrub	
<i>Santalum acuminatum</i>	2 m	I	FR	Shrub	
<i>Thryptomene kochii</i>	1.2 m	I	B, FL	Shrub	
<i>Westringia cephalantha</i>	40 cm	I	ST	Shrub	

## HLND02

Date: 24 September 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus burracoppinensis* over open shrubland of *Allocasuarina acutivalvis* subsp. *acutivalvis* and *A. corniculata* over open shrubland of *Micromyrtus obovata*, *Thryptomene kochii*, *Melaleuca calyptroides*, *M. pungens* and *Euryomyrtus maidenii* over isolated herb *Drosera macrantha* subsp. *macrantha* .



Location: Northern Forresteria Greenstone Belt survey site, HLND02. Unallocated Crown Land c. 12.98 km NNE of Mount Holland. Head 11.43 km E along Jilbadji Nature Reserve's S boundary from Forresteria Southern Cross Road, then head 2.32 km S.

Site Description: West facing very gently inclined mid-slope of laterite, weathered basalt with brown to yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia yorkrakinensis</i> subsp. <i>acrita</i>	2.5 m	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	V	FL, FR	Tree	
<i>Allocasuarina corniculata</i>	2 m	V	FL, FR	Shrub	
<i>Baeckea elderiana</i>	2 m	V	B	Shrub	
<i>Cassytha nodiflora</i>	2 m	I	B	Climber	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	50 cm	I	FL	Herb	
<i>Drummondita hassellii</i>	35 cm	I	FL	Shrub	
<i>Eucalyptus burracoppinensis</i>	3 m	V	FR	Mallee	
<i>Euryomyrtus maidenii</i>	1 m	V	B, FL	Shrub	
<i>Grevillea didymobotrya</i> subsp. <i>didymobotrya</i>	1.2 m	I	B	Shrub	
<i>Hakea erecta</i>	2 m	S	FL, FR	Shrub	
<i>Hakea subsulcata</i>	1.5 m	I	FL	Shrub	
<i>Hemigenia</i> aff. <i>diplanthera</i>	80 cm	I	FL	Shrub	
<i>Hibbertia exasperata</i>	60 cm	I	FL	Shrub	
<i>Isopogon scabriusculus</i>	1 m	V	B	Shrub	
<i>Leptospermum roei</i>	2.5 m	V	B	Shrub	
<i>Leucopogon cuneifolius</i>	50 cm	I	ST	Shrub	
<i>Leucopogon</i> sp. <i>Coolgardie</i> (M. Hislop & F. Hort MH 3197)	70 cm	I	ST	Shrub	
<i>Leucopogon</i> sp. <i>outer wheatbelt</i> (M. Hislop 30)	80 cm	I	B	Shrub	
<i>Melaleuca calyptroides</i>	80 cm	V	old FR	Shrub	
<i>Melaleuca cordata</i>	1 m	V	B	Shrub	
<i>Melaleuca pungens</i>	1 m	V	old FR	Shrub	
<i>Micromyrtus obovata</i>	1.2 m	V	FL	Shrub	
<i>Persoonia angustiflora</i>	80 cm	I	ST	Shrub	
<i>Persoonia inconspicua</i>	1.5 m	I	FL	Shrub	
<i>Petrophile stricta</i>	1 m	V	B	Shrub	
<i>Thryptomene kochii</i>	1.2 m	V	FL	Shrub	

### HLND03

Date: 24 September 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae* over sparse shrubland of *Grevillea oncogyne* over shrubland of *Melaleuca phoidophylla*, *M. acuminata* subsp. *acuminata*, *M. lateriflora* subsp. *lateriflora*, *Daviesia benthamii* subsp. *acanthoclona* and *D. argillacea* over isolated shrubs of *Grevillea acuaria*.



Location: Northern Forresteria Greenstone Belt survey site, HLND03. Unallocated Crown Land c. 13.57 km NNE of Mount Holland. Head 11.43 km E along Jilbadji Nature Reserve's S boundary from Forresteria Southern Cross Road, then head 2.28 km S.

Site Description: South level simple/lower slope of laterite, weathered mafic sediment, mixed metasediments, minor iron enrichment with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia hemiteles</i>	80 cm	I	FL	Shrub	
<i>Acacia hystrix</i> subsp. <i>hystrix</i>	90 cm	I	FL	Shrub	
<i>Acacia merrallii</i>	40 cm	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	I	FR	Shrub	
<i>Daviesia argillacea</i>	1 m	V	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	80 cm	V	FL	Shrub	
<i>Daviesia pachyloma</i>	80 cm	I	FL	Shrub	
<i>Dianella revoluta</i> var. <i>divaricata</i>	80 cm	I	old stalk	Herb	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	4.5 m	V	FR	Mallee	
<i>Eucalyptus tenuis</i>	2.8 m	V	FR	Mallet	
<i>Exocarpos aphyllus</i>	1.1 m	V	FL	Shrub	
<i>Grevillea acuaria</i>	45 cm	I	FL	Shrub	
<i>Grevillea oncogyne</i>	2 m	V	B	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1 m	V	old FR	Shrub	
<i>Melaleuca eleuterostachya</i>	1 m	V	old FR	Shrub	
<i>Melaleuca hamata</i>	1 m	I	ST	Shrub	
<i>Melaleuca johnsonii</i>	1 m	V	old FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	1 m	V	old FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1 m	V	old FR	Shrub	
<i>Melaleuca phoidophylla</i>	80 cm	V	FL	Shrub	
<i>Melaleuca scalena</i>	1 m	I	old FR	Shrub	
<i>Melaleuca teuthidoides</i>	1 m	V	FR	Shrub	
<i>Microcybe multiflora</i> subsp. <i>multiflora</i>	40 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	1.3 m	I	ST	Shrub	

## HLND04

Date: 25 September 2009

Vegetation Description: Woodland of *Callitris preissii* over shrubland of *Calothamnus quadrifidus* subsp. *seminudus* ms and *Allocasuarina campestris* over sparse shrubland of *Hibbertia eatoniae* over isolated herbs of *Pterostylis* aff. *nana*.



Location: Northern Forresteria Greenstone Belt survey site, HLND04. Crown Reserve 13524. On Mount Holland, 20 m downslope from its peak in a WSW direction. 365 m E of Forresteria Southern Cross Road and ca. 27.2 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: West south-west facing gently inclined crest/upper slope of banded ironstone. Rocky banded ironstone outcrop with red-brown skeletal sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>	1.2 m	I	FL	Shrub	
<i>Allocasuarina campestris</i>	2.5 m	S	FR	Shrub	
<i>Alyxia buxifolia</i>	30 cm	I	ST	Shrub	
<i>Astroloma serratifolium</i>	1.6 m	I	B	Shrub	
<i>Austrodanthonia caespitosa</i>	12 cm	I	H	Grass	
<i>Banksia purdieana</i>	3 m	V	FR	Shrub	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	5 cm	I	FR	Herb	
<i>Calandrinia calyptata</i>	2 cm	I	B	Herb	
<i>Callitris preissii</i>	4 m	S	FR	Tree	
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>	2 m	S	FL	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	1.2 m	I	B	Herb	
<i>Ceratogyne obionoides</i>	4 cm	I	FL	Herb	
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	8 cm	I	ST	Fern	
<i>Comesperma volubile</i>	2 m	I	FL	Climber	
<i>Crassula colligata</i> subsp. <i>lamprosperma</i>	1 cm	I	B?	Herb	
<i>Dampiera</i> cf. <i>obliqua</i>	35 cm	I	FL	Shrub	
<i>Daucus glochidiatus</i>	10 cm	I	B	Herb	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Ericksonella saccharata</i>	8 cm	I	FL	Herb	
<i>Hakea subsulcata</i>	3.2 m	S	FR	Shrub	
<i>Hibbertia eatoniae</i>	75 cm	V	FL	Shrub	
<i>Hypochaeris glabra</i>	5 cm	I	B	Herb	
<i>Isopogon gardneri</i>	2.2 m	I	FL, old FR	Shrub	
<i>Leptospermum ?erubescens</i>	2 m	V	FL	Shrub	
<i>Leucopogon cuneifolius</i>	20 cm	I	ST	Shrub	
<i>Melaleuca cordata</i>	1.5 m	I	ST	Shrub	
<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>	3 cm	I	FL	Herb	
<i>Phyllangium</i> sp. <i>indet</i>	2 cm	I	B	Herb	
<i>Pterostylis</i> aff. <i>nana</i>	7 cm	I	FL	Herb	
<i>Pterostylis sargentii</i>	10 cm	I	FL	Herb	
<i>Rhodanthe laevis</i>	5 cm	I	B	Herb	
<i>Santalum acuminatum</i>	1.6 m	V	ST	Shrub	



<i>Stenanthemum stipulosum</i>	<b>60 cm</b>	<b>I</b>	<b>old FL</b>	<b>Shrub</b>	
<i>Thelymitra petrophila</i>	<b>13 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Thysanotus patersonii</i>	<b>15 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Trachymene cyanopetala</i>	<b>4 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Ursinia anthemoides</i>	<b>12 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	<b>13 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	

## HLND05

Date: 25 September 2009

Vegetation Description: Shrubland of *Allocasuarina campestris*, *Calothamnus quadrifidus* subsp. *seminudus* ms and *Santalum acuminatum* over sparse shrubland of *Hibbertia eatoniae* and *Stenanthemum stipulosum* over isolated herbs of *Thelymitra petrophila* ms.



Location: Northern Forresteria Greenstone Belt survey site, HLND05. Crown Reserve 13524. On Mount Holland, 70 m downslope from its peak in an ESE direction. 450 m E of Forresteria Southern Cross Road and c. 27.2 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South-east facing gently inclined mid-slope of banded ironstone, weathered banded ironstone. Rocky banded ironstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia nigripilosa</i> subsp. <i>nigripilosa</i>	1.7 m	V	FL	Shrub	
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>	1.6 m	I	FL	Shrub	
<i>Allocasuarina campestris</i>	2.2 m	S	FR	Shrub	
<i>Alyxia buxifolia</i>	30 cm	I	ST	Shrub	
<i>Austrodanthonia caespitosa</i>	20 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	60 cm	I	H	Grass	
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>	2 m	S	FL	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	1 m	I	ST	Vine	
<i>Ceratogyne obionoides</i>	4 cm	I	FL	Herb	
<i>Comesperma volubile</i>	1 m	I	FL	Climber	
<i>Crassula colligata</i> subsp. <i>lamprosperma</i>	1 cm	I	FL	Herb	
<i>Dampiera</i> cf. <i>obliqua</i>	40 cm	I	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	35 cm	I	FL	Herb	
<i>Ericksonella saccharata</i>	8 cm	I	FL	Herb	
<i>Hakea subsulcata</i>	1.8 m	V	FR	Shrub	
<i>Hibbertia eatoniae</i>	65 cm	V	FL	Shrub	
<i>Leptospermum ?erubescens</i>	1.6 m	I	FL	Shrub	
<i>Melaleuca cordata</i>	1.2 m	I	old FR	Shrub	
<i>Millotia tenuifolia</i> var. <i>tenuifolia</i>	3 cm	I	B	Herb	
<i>Platysace maxwellii</i>	70 cm	I	old calyx	Shrub	
<i>Rhodanthe laevis</i>	4 cm	I	B	Herb	
<i>Santalum acuminatum</i>	2.5 m	V	FR	Shrub	
<i>Stenanthemum stipulosum</i>	50 cm	I	old FL	Shrub	
<i>Stylidium sejunctum</i>	30 cm	I	old FL	Shrub	2
<i>Thelymitra petrophila</i>	22 cm	I	B	Herb	
<i>Thysanotus patersonii</i>	35 cm	I	FL	Herb	

## HLND06

Date: 25 September 2009

Vegetation Description: Open shrubland of *Exocarpos sparteus* and *Acacia sp. narrow phyllode* (B.R. Maslin 7831) over shrubland of *Allocasuarina campestris* and *Alyxia buxifolia* over open shrubland of *Westringia cephalantha* var. *cephalantha*.



Location: Northern Forresteria Greenstone Belt survey site, HLND06. Crown Reserve 13524. On Mount Holland, 150 m downslope from its peak in a N direction. 350 m E of Forresteria Southern Cross Road and c. 27.4 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North facing moderately inclined lower slope of banded ironstone, weathered banded ironstone with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sp. narrow phyllode</i> (B.R. Maslin 7831)	3.2 m	V	FL	Shrub	
<i>Allocasuarina campestris</i>	3 m	S	FR	Shrub	
<i>Alyxia buxifolia</i>	2.8 m	V	B, old FL	Shrub	
<i>Astroloma serratifolium</i>	50 cm	I	B, FL	Shrub	
<i>Austrostipa acrociliata</i>	30 cm	I	H	Grass	
<i>Brachyscome perpusilla</i> var. <i>tenella</i>	2 cm	I	B	Herb	
<i>Calotis hispidula</i>	4 cm	I	FL	Herb	
<i>Cassytha aurea</i> var. <i>hirta</i>	1.5 m	I	ST	Vine	
<i>Codonocarpus cotinifolius</i>	2.5 m	I	FR	Tree	
<i>Cryptandra myriantha</i>	40 cm	I	FL	Shrub	
<i>Dianella revoluta</i> var. <i>divaricata</i>	70 cm	I	old stalk	Herb	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	55 cm	I	FL	Shrub	
<i>Exocarpos sparteus</i>	3.2 m	V	B	Shrub	
<i>Glischrocaryon flavescens</i>	60 cm	I	old FL	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.2 m	I	FR	Shrub	
<i>Olearia muelleri</i>	50 cm	I	FL	Shrub	
<i>Plantago debilis</i>	3 cm	I	FL	Herb	
<i>Rhodanthe laevis</i>	4 cm	I	B	Herb	
<i>Santalum acuminatum</i>	2.2 m	I	FR	Shrub	
<i>Scaevola spinescens</i>	1 m	I	ST	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	1 m	I	FL	Shrub	
<i>Thysanotus manglesianus</i>	40 cm	I	B	Herb	
<i>Trachymene cyanopetala</i>	3 cm	I	B	Herb	
<i>Wahlenbergia gracilentia</i>	3	I	B	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	10 cm	I	FL	Herb	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	80 cm	S	old FL	Shrub	

## HLND07

Date: 25 September 2009

Vegetation Description: Open woodland of *Eucalyptus salmonophloia* over sparse mallee shrubland of *E. yilgarnensis* and *E. salubris* over open shrubland of *Dodonaea stenozyga* and *Exocarpos aphyllus* over open shrubland of *Acacia erinacea* and *Grevillea acuaria*.



Location: Northern Forresteria Greenstone Belt survey site, HLND07. Crown Reserve 13524. 540 m WSW of Mount Holland. 130 m W of Forresteria Southern Cross Road and 27.2 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South south-west facing very gently inclined flat of banded ironstone, quartz, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	45 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Cryptandra wilsonii</i>	55 cm	I	B	Shrub	
<i>Daviesia argillacea</i>	80 cm	I	FL	Shrub	
<i>Dodonaea stenozyga</i>	70 cm	S	FL	Shrub	
<i>Eremophila rugosa</i>	75 cm	I	FL	Shrub	
<i>Eucalyptus salmonophloia</i>	11 m	V	old FR	Tree	
<i>Eucalyptus salubris</i>	5 m	V	FR	Mallee	
<i>Eucalyptus yilgarnensis</i>	3 m	I	old FR	Mallee	
<i>Exocarpos aphyllus</i>	90 cm	V	FL	Shrub	
<i>Grevillea acuaria</i>	40 cm	V	FL	Shrub	
<i>Grevillea huegelii</i>	80 cm	I	B	Shrub	
<i>Grevillea oncogyne</i>	1 m	I	B	Shrub	
<i>Melaleuca johnsonii</i>	60 cm	I	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	80 cm	I	old FR	Shrub	
<i>Melaleuca phoidophylla</i>	80 cm	I	FL	Shrub	
<i>Microcorys</i> sp. <i>Forresteria</i> (V. English 2004)	30 cm	I	ST	Shrub	4
<i>Microcybe multiflora</i> subsp. <i>multiflora</i>	35 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.6 m	I	ST	Shrub	
<i>Wilsonia humilis</i>	15 cm	I	ST	Shrub	

## HLND08

Date: 26 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus eremophila* and *E. pileata* over sparse shrubland of *Melaleuca hamata* and *Allocasuarina acutivalvis* subsp. *acutivalvis* over open shrubland of *Cryptandra minutifolia* subsp. *minutifolia*, *Dodonaea bursariifolia* and *Rinzia sessilis*.



Location: Northern Forresteria Greenstone Belt survey site, HLND08. Unallocated Crown Land c. 6.27 km S of Mount Holland. 1.00 km E of Forresteria Southern Cross Road and 20.97 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North-west facing very gently inclined mid-slope of laterite, metasediments with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia densiflora</i>	1.2 m	I	old FL	Shrub	
<i>Acacia sclerophylla</i> var. <i>sclerophylla</i>	1.2 m	I	old FL	Shrub	
<i>Acacia viscifolia</i>	25 cm	I	ST	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	I	FR	Shrub	
<i>Allocasuarina corniculata</i>	1 m	I	FR	Shrub	
<i>Cassytha melantha</i>	1 m	I	B	Climber	
<i>Chamelaucium ciliatum</i>	40 cm	I	FL	Shrub	
<i>Comesperma volubile</i>	85 cm	I	FL	Climber	
<i>Cryptandra minutifolia</i> subsp. <i>minutifolia</i>	55 cm	V	FL	Shrub	
<i>Dodonaea bursariifolia</i>	80 cm	V	FR	Shrub	
<i>Eucalyptus eremophila</i>	7 m	S	FR	Mallee	
<i>Eucalyptus pileata</i>	7 m	V	FR	Mallee	
<i>Eucalyptus subangusta</i> subsp. <i>subangusta</i>	7 m	V	FR	Mallee	
<i>Hibbertia gracilipes</i>	40 cm	I	B, FL	Shrub	
<i>Hibbertia oligantha</i>	45 cm	I	FL	Shrub	
<i>Melaleuca carrii</i>	1 m	I	old FR	Shrub	
<i>Melaleuca depauperata</i>	1.2 m	I	FR	Shrub	
<i>Melaleuca hamata</i>	2.2 m	V	old FR	Shrub	
<i>Melaleuca laxiflora</i>	1.5 m	I	old FR	Shrub	
<i>Neurachne alopecuroidea</i>	6 cm	I	ST	Grass	
<i>Phebalium filifolium</i>	60 cm	I	FL	Shrub	
<i>Platysace maxwellii</i>	45 cm	I	old stalk	Shrub	
<i>Rinzia sessilis</i>	50 cm	V	FL	Shrub	
<i>Thelymitra petrophila</i>	13 cm	I	B	Herb	

## HLND09

Date: 26 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus eremophila* and *Santalum acuminatum* over shrubland of *Melaleuca johnsonii*, *M. lateriflora* subsp. *lateriflora* and *Chamelaucium ciliatum* over sparse shrubland of *Daviesia benthamii* subsp. *acanthoclona* and *Phebalium filifolium*.



Location: Northern Forrestania Greenstone Belt survey site, HLND09. Unallocated Crown Land c. 6.25 km S of Mount Holland. 1.16 km E of Forrestania Southern Cross Road and 20.97 km N of the intersection of Forrestania Southern Cross Road and Hyden Norseman Road.

Site Description: East facing very gently inclined lower slope of laterite, weathered basalt with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia densiflora</i>	1.3 m	I	old FL	Shrub	
<i>Acacia mutabilis</i> subsp. <i>mutabilis</i>	1.2 m	V	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	I	FR	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	1.5 m	I	ST	Climber	
<i>Ceratogyne obionoides</i>	5 cm	I	FL	Herb	
<i>Chamelaucium ciliatum</i>	1.6 m	V	FL	Shrub	
<i>Comesperma volubile</i>	80 cm	I	FL	Climber	
<i>Cryptandra minutifolia</i> subsp. <i>minutifolia</i>	1 m	I	FL	Shrub	
<i>Cyathostemon</i> sp. WA Thompson & J Allen 951	35 cm	I	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	75 cm	V	FL	Shrub	
<i>Dodonaea bursariifolia</i>	50 cm	I	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	65 cm	I	FL	Shrub	
<i>Eucalyptus eremophila</i>	6 m	V	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>hebes</i>	4 m	I	FR	Tree	
<i>Grevillea acuaria</i>	60 cm	V	FL	Shrub	
<i>Grevillea huegelii</i>	1.6 m	I	B	Shrub	
<i>Hibbertia oligantha</i>	50 cm	I	FL	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.6 m	I	ST	Shrub	
<i>Melaleuca hamata</i>	1.6 m	I	ST	Shrub	
<i>Melaleuca johnsonii</i>	1.7 m	S	old FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	1.5 m	V	old FR	Shrub	
<i>Phebalium filifolium</i>	80 cm	I	FL	Shrub	
<i>Platysace maxwellii</i>	65 cm	I	ST	Shrub	
<i>Rhodanthe laevis</i>	5 cm	I	FL	Herb	
<i>Santalum acuminatum</i>	3 m	V	FR	Tree	
<i>Thysanotus manglesianus</i>	30 cm	I	B	Herb	

## HLND10

Date: 26 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pileata* with parasitic climber *Cassytha aurea* var. *hirta* over sparse shrubland of *Melaleuca pauperiflora* subsp. *pauperiflora* over sparse shrubland of *Acacia tetraptera*, *Cryptandra minutifolia* subsp. *minutifolia* and *Daviesia scoparia* over sparse shrubs of *Acacia deficiens*.



Location: Northern Forresteria Greenstone Belt survey site, HLND10. Unallocated Crown Land c. 7.3 km S of Mount Holland. 0.97 km E of Forresteria Southern Cross Road and 19.91 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East facing very gently inclined mid-slope of metasediments, basalt with brown, light yellow-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia deficiens</i>	25 cm	V	FL	Shrub	
<i>Acacia erinacea</i>	30 cm	I	FL	Shrub	
<i>Acacia tetraptera</i>	1 m	V	FL	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	2 m	V	B	Vine	
<i>Cryptandra minutifolia</i> subsp. <i>minutifolia</i>	35 cm	V	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	80 cm	I	FL	Shrub	
<i>Daviesia scoparia</i>	1 m	V	B	Shrub	
<i>Dodonaea stenozyga</i>	85 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	3.8 m	I	ST	Mallet	
<i>Eucalyptus pileata</i>	4 m	S	FR	Mallee	
<i>Exocarpos aphyllus</i>	1.7 m	V	B	Shrub	
<i>Grevillea oncogyne</i>	1 m	I	ST	Shrub	
<i>Melaleuca eleuterostachya</i>	30 cm	I	ST	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1.2 m	V	B, FL, FR	Shrub	
<i>Santalum acuminatum</i>	2 m	I	ST	Tree	
<i>Wilsonia humilis</i>	10 cm	I	ST	Shrub	

## HLND11

Date: 26 September 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open mallee shrubland of *E. cylindrocarpa* over sparse shrubland of *Eremophila ionantha* and *Daviesia scoparia* over sparse shrubs of *Acacia merrallii*.



Location: Northern Forresteria Greenstone Belt survey site, HLND11. Unallocated Crown Land c. 11.87 km SSE of Mount Holland. 3.18 km E of Forresteria Southern Cross Road and 15.95 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: West facing very gently inclined lower slope of metasediments, basalt, quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia merrallii</i>	50 cm	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	50 cm	I	ST	Grass	
<i>Austrostipa scabra</i>	13 cm	I	H	Grass	
<i>Daviesia scoparia</i>	1.1 m	V	B	Shrub	
<i>Dodonaea stenozyga</i>	1.2 m	I	FL	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	35 cm	I	ST	Shrub	
<i>Eremophila ionantha</i>	1.1 m	V	ST	Shrub	
<i>Eucalyptus cylindrocarpa</i>	3.5 m	S	FR	Mallee	
<i>Eucalyptus salmonophloia</i>	20 m	S	FR	Tree	
<i>Grevillea acuaria</i>	35 cm	I	FL	Shrub	
<i>Maireana marginata</i>	2 cm	I	FR	Shrub	
<i>Melaleuca lanceolata</i>	1.5 m	I	old FR	Shrub	
<i>Olearia muelleri</i>	35 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.3 m	I	ST	Tree	
<i>Sclerolaena diacantha</i>	7 cm	I	FR	Shrub	
<i>Templetonia battii</i>	30 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	8 cm	I	ST	Shrub	



## HLND12

Date: 27 September 2009

Vegetation Description: Woodland of *Eucalyptus urna* and *E. extensa* over sparse shrubland of *Santalum acuminatum* over open shrubland of *Dodonaea stenozyga*, *Acacia pachypoda*, *Melaleuca lanceolata* and *M. pauperiflora* subsp. *pauperiflora*.



Location: Northern Forresteria Greenstone Belt survey site, HLND12. Unallocated Crown Land c. 11.70 km S of Mount Holland. 1.98 km E of Forresteria Southern Cross Road and 15.69 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North facing very gently inclined crest of basalt, greenstone with some calcrete with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	35 cm	I	FL	Shrub	
<i>Acacia merrallii</i>	35 cm	I	FL	Shrub	
<i>Acacia pachypoda</i>	80 cm	V	old FL	Shrub	
<i>Asteridea athrixoides</i>	6 cm	I	FL	Herb	
<i>Austrostipa</i> sp. <i>Carlingup Road (S. Kern &amp; R. Jasper LCH 18459)</i>	20 cm	I	H	Grass	
<i>Dodonaea stenozyga</i>	70 cm	V	FL	Shrub	
<i>Eremophila ionantha</i>	50 cm	I	ST	Shrub	
<i>Eucalyptus extensa</i>	4.5 m	S	FR	Mallet	
<i>Eucalyptus longicornis</i>	6 m	V	old FR	Tree	
<i>Eucalyptus urna</i>	4 m	S	FR	Mallet	
<i>Exocarpos aphyllus</i>	1 m	I	B	Shrub	
<i>Melaleuca lanceolata</i>	1.7 m	V	old FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1.2 m	V	FR	Shrub	
<i>Olearia muelleri</i>	50 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	2 m	V	ST	Tree	
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>	45 cm	I	B	Shrub	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	1 m	I	FL	Shrub	
<i>Westringia rigida</i>	30 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	12 cm	I	ST	Shrub	

## HLND13

Date: 27 September 2009

Vegetation Description: Woodland of *Eucalyptus longicornis* and *E. extensa* over open shrubland of *Melaleuca pauperiflora* subsp. *pauperiflora* over sparse shrubland of *Dodonaea stenozyga* and *Acacia poliochroa* x *merrallii*.



Location: Northern Forresteria Greenstone Belt survey site, HLND13. Unallocated Crown Land c. 11.56 km S of Mount Holland. 2.04 km E of Forresteria Southern Cross Road and 15.82 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North-east facing gently inclined upper slope of basalt/greenstone, some calcrete with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia poliochroa</i> x <i>merrallii</i>	25 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Cryptandra minutifolia</i> subsp. <i>minutifolia</i>	35 cm	I	FL	Shrub	
<i>Dodonaea stenozyga</i>	80 cm	V	FL	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	70 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	5.5 m	S	FL, FR	Mallet	
<i>Eucalyptus longicornis</i>	7 m	V	FR	Tree	
<i>Exocarpos aphyllus</i>	1.4 m	I	B	Shrub	
<i>Melaleuca cucullata</i>	45 cm	I	B	Shrub	
<i>Melaleuca lanceolata</i>	90 cm	I	FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1.4 m	S	FR	Shrub	
<i>Olearia muelleri</i>	45 cm	I	FL	Shrub	
<i>Pultenaea</i> aff. <i>arida</i>	15 cm	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	20 cm	I	FL	Herb	
<i>Vulpia myuros</i> forma <i>myuros</i>	9 cm	I	GL	Grass	

## HLND14

Date: 27 September 2009

Vegetation Description: Open woodland of *Eucalyptus salmonophloia* over woodland of *E. polita* and *E. calycogona* subsp. *calycogona* over open shrubland of *Melaleuca pauperiflora* subsp. *pauperiflora* over sparse shrubland of *Acacia merrallii*.



Location: Northern Forresteria Greenstone Belt survey site, HLND14. Unallocated Crown Land c. 11.61 km S of Mount Holland. 2.47 km E of Forresteria Southern Cross Road and 15.92 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East facing gently inclined lower slope of basalt, quartz, iron enriched fragments, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	30 cm	I	ST	Shrub	
<i>Acacia merrallii</i>	35 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	8 cm	I	FL	Herb	
<i>Austrostipa hemipogon</i>	55 cm	I	H	Grass	
<i>Daucus glochidiatus</i>	10 cm	I	FR	Herb	
<i>Daviesia articulata</i>	35 cm	I	ST	Shrub	
<i>Daviesia scoparia</i>	1.5 m	V	B	Shrub	
<i>Dodonaea stenozyga</i>	45 cm	I	FR	Shrub	
<i>Eremophila ionantha</i>	1.2 m	I	ST	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3.5 m	V	old FR	Mallee	
<i>Eucalyptus polita</i>	4 m	S	FR	Tree	
<i>Eucalyptus salmonophloia</i>	20 m	V	old FR	Tree	
<i>Exocarpos aphyllus</i>	1 m	V	B	Shrub	
<i>Melaleuca cucullata</i>	2.2 m	V	ST	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1.8 m	V	old FR	Shrub	
<i>Olearia muelleri</i>	45 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	2 m	V	ST	Tree	
<i>Sclerolaena diacantha</i>	7 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	25 cm	I	B, FL	Herb	
<i>Vulpia myuros</i> forma <i>myuros</i>	12 cm	I	H	Grass	
<i>Westringia rigida</i>	30 cm	I	B	Shrub	
<i>Wilsonia humilis</i>	12 cm	I	ST	Shrub	

## HLND15

Date: 27 September 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open mallee shrubland of *E. pileata* over sparse shrubland of *Daviesia scoparia* over sparse shrubland of *Templetonia battii* and *Westringia rigida*.



Location: Northern Forresteria Greenstone Belt survey site, HLND15. Unallocated Crown Land ca. 13.01 km SSE of Mount Holland. 3.36 km E of Forresteria Southern Cross Road and 14.82 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East south-east facing very gently inclined flat of basalt, quartz, mixed metasediments, iron enriched rock with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia asepala</i>	70 cm	I	FL	Shrub	2
<i>Acacia merrallii</i>	30 cm	I	FL	Shrub	
<i>Austrostipa acrociliata</i>	50 cm	I	H	Grass	
<i>Daviesia scoparia</i>	1.3 m	V	B	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	35 cm	I	ST	Shrub	
<i>Eremophila ionantha</i>	75 cm	I	ST	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3.5 m	I	FR	Mallee	
<i>Eucalyptus pileata</i>	4 m	S	FR	Mallee	
<i>Eucalyptus salmonophloia</i>	20 m	S	old FR	Tree	
<i>Grevillea acuaria</i>	20 cm	I	FL	Shrub	
<i>Grevillea huegelii</i>	60 cm	I	B	Shrub	
<i>Halgania andromedifolia</i>	65 cm	I	FL	Shrub	
<i>Melaleuca lanceolata</i>	2 m	I	FR	Shrub	
<i>Olearia muelleri</i>	45 cm	I	FL	Shrub	
<i>Pterostylis mutica</i>	8 cm	I	FI	Herb	
<i>Santalum acuminatum</i>	1 m	V	ST	Tree	
<i>Scaevola bursariifolia</i>	45 cm	I	old FL	Shrub	
<i>Templetonia battii</i>	45 cm	V	FL	Shrub	
<i>Westringia rigida</i>	40 cm	V	FL	Shrub	

## HLND16

Date: 28 September 2009

Vegetation Description: Sparse shrubland of *Melaleuca hamata* and *Dodonaea adenophora* over open shrubland of *Trymalium myrtillus* subsp. *myrtillus* and *Acacia pachypoda* over sparse shrubland of *Boronia fabianoides*.

Location: Northern Forresteria Greenstone Belt survey site HLND16. Unallocated Crown Land. Located 1.21 km E of Forresteria Southern Cross Road, 55 m S of a vehicle track.

Ca 9.70 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.82 km S of Mount Holland.



Site Description: North facing gently inclined crest of basalt, greenstone. Very slightly rocky basalt outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	50 cm	V	FL	Shrub	
<i>Acacia pachypoda</i>	45 cm	V	old FL	Shrub	
<i>Allocasuarina campestris</i>	65 cm	I	FL	Shrub	
<i>Boronia fabianoides</i>	45 cm	V	B, FL	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	1.5 m	I	B	Vine	
<i>Daviesia scoparia</i>	1.1 m	V	B	Shrub	
<i>Dodonaea adenophora</i>	1.6 m	V	FR	Shrub	
<i>Dodonaea stenozyga</i>	65 cm	I	FR	Shrub	
<i>Eucalyptus salubris</i>	3.5 m	I	FR	Mallet	
<i>Exocarpos aphyllus</i>	1.4 m	V	B	Shrub	
<i>Grevillea acuaria</i>	65 cm	I	FL	Shrub	
<i>Melaleuca hamata</i>	1.5 m	V	FR	Shrub	
<i>Senecio glossanthus</i>	15 cm	I	B, old FL	Herb	
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>	40 cm	I	old FR	Shrub	
<i>Styphelia exserta</i>	55 cm	V	FL	Shrub	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	1.1 m	S	FL	Shrub	

## HLND17

Date: 28 September 2009

Vegetation Description: Woodland of *Eucalyptus extensa* over open shrubland of *Melaleuca pauperiflora* subsp. *fastigiata*, *Dodonaea stenozyga* and *Exocarpos aphyllus* over sparse shrubland of *Acacia poliochroa* x *merrallii* with isolated herbs of *Asteridea athrixoides* and *Senecio glossanthus*.



Location: Northern Forresteria Greenstone Belt survey site HLND17. Unallocated Crown Land. Located 1.18 km E of Forresteria Southern Cross Road, 55 m S of a vehicle track. Ca 9.70 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.82 km S of Mount Holland.

Site Description: West north-west facing gently inclined upper slope of basalt, greenstone with some underlying calcrete with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	45 cm	I	FL	Shrub	
<i>Acacia pachypoda</i>	50 cm	I	FL	Shrub	
<i>Acacia poliochroa</i> x <i>merrallii</i>	35 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Herb	
<i>Austrostipa</i> sp.	30 cm	I	ST	Grass	
<i>Daviesia articulata</i>	50 cm	I	ST	Shrub	
<i>Daviesia scoparia</i>	70 cm	I	B	Shrub	
<i>Dodonaea stenozyga</i>	1.1 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	5 m	S	FR	Mallet	
<i>Eucalyptus urna</i>	4.5 m	V	old FR	Mallee	
<i>Eutaxia acanthoclada</i>	10 cm	I	FR	Shrub	3
<i>Exocarpos aphyllus</i>	1.1 m	V	B	Shrub	
<i>Melaleuca cucullata</i>	1.5 m	I	FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	1.5 m	V	FR	Shrub	
<i>Melaleuca quadrifaria</i>	45 cm	I	ST	Shrub	
<i>Pterostylis mutica</i>	18 cm	I	FL	Herb	
<i>Santalum acuminatum</i>	1.5 m	I	ST	Tree	
<i>Senecio glossanthus</i>	18 cm	I	FL	Herb	
<i>Wilsonia humilis</i>	12 cm	I	ST	Shrub	

## HLND18

Date: 28 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus horistes* over sparse shrubland of *Melaleuca hamata* over open shrubland of *Acacia sulcata* var. *platyphylla*, *Cryptandra minutifolia* subsp. *brevistyla*, *Stenanthemum stipulosum* and *Philotheca rhomboidea* with sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000).



Location: Northern Forresteria Greenstone Belt survey site HLND18. Unallocated Crown Land. Located 850 m E of Forresteria Southern Cross Road, 80 m N of a vehicle track. Ca 9.85 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.66 km S of Mount Holland.

Site Description: North north-east facing very gently inclined mid-slope of laterite, basalt with brown, slightly red shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia camptoclada</i>	40 cm	I	FL	Shrub	
<i>Acacia castanostegia</i>	65 cm	V	old FL	Shrub	
<i>Acacia erinacea</i>	35 cm	I	ST	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	45 cm	V	FL	Shrub	
<i>Allocasuarina spinosissima</i>	80 cm	I	FL, FR	Shrub	
<i>Baeckea crispiflora</i>	55 cm	I	B	Shrub	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	45 cm	V	FL	Shrub	
<i>Dodonaea bursariifolia</i>	40 cm	V	FR	Shrub	
<i>Eucalyptus eremophila</i>	2.5 m	V	FR	Mallee	
<i>Eucalyptus horistes</i>	2.5 m	V	FR	Mallee	
<i>Eucalyptus rigidula</i>	2.5 m	V	FR	Mallee	
<i>Grevillea pterosperma</i>	1 m	I	ST	Shrub	
<i>Hakea multilineata</i>	2 m	I	FL	Shrub	
<i>Hibbertia exasperata</i>	50 cm	V	FL	Shrub	
<i>Lepidosperma</i> aff. <i>amantiferrum</i>	45 cm	I	old H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	70 cm	V	old H	Sedge	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	60 cm	I	ST	Shrub	
<i>Melaleuca eleuterostachya</i>	55 cm	I	ST	Shrub	
<i>Melaleuca hamata</i>	1.8 m	V	FR	Shrub	
<i>Melaleuca johnsonii</i>	1.2 m	I	old FR	Shrub	
<i>Melaleuca laxiflora</i>	75 cm	I	FR	Shrub	
<i>Phebalium filifolium</i>	60 cm	I	FL	Shrub	
<i>Phebalium tuberculosum</i>	55 cm	I	FL	Shrub	
<i>Philotheca rhomboidea</i>	40 cm	V	B, FL	Shrub	
<i>Platysace maxwellii</i>	1 m	V	old FL	Shrub	
<i>Santalum acuminatum</i>	1.8 m	I	ST	Tree	
<i>Stenanthemum stipulosum</i>	45 cm	V	old FL	Shrub	
<i>Thryptomene kochii</i>	50 cm	I	B	Shrub	

## HLND19

Date: 28 September 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open mallee shrubland of *E. eremophila*, *E. pileata* and *E. calycogona* subsp. *calycogona* over sparse shrubland of *Dodonaea stenozyga* and *Melaleuca cliffortioides* over sparse shrubland of *Acacia intricata* and *A. deficiens*.



Location: Northern Forrestania Greenstone Belt survey site HLND19. Unallocated Crown Land. Located 110 m E of Forrestania Southern Cross Road, 55 m S of a vehicle track. Ca 9.67 km N of the intersection of Forrestania Southern Cross Road and Hyden Norseman Road. Ca 17.63 km S of Mount Holland.

Site Description: North north-east facing gently inclined lower slope of basalt, metasediments, quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia deficiens</i>	25 cm	V	FL	Shrub	
<i>Acacia intricata</i>	30 cm	V	FL	Shrub	
<i>Boronia fabianoides</i>	30 cm	I	B, FL	Shrub	
<i>Cassytha aurea</i> var. <i>hirta</i>	2 m	V	B	Vine	
<i>Cryptandra wilsonii</i>	45 cm	I	old FL	Shrub	
<i>Dodonaea stenozyga</i>	1 m	S	FR	Shrub	
<i>Eremophila densifolia</i> subsp. <i>pubiflora</i>	50 cm	I	ST	Shrub	
<i>Eremophila rugosa</i>	75 cm	I	FL	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3 m	V	FR	Mallee	
<i>Eucalyptus eremophila</i>	3.5 m	S	FR	Mallee	
<i>Eucalyptus pileata</i>	3.5 m	S	FR	Mallee	
<i>Eucalyptus salmonophloia</i>	20 m	S	FR	Tree	
<i>Eucalyptus salubris</i>	3 m	V	FR	Mallet	
<i>Eutaxia acanthoclada</i>	40 cm	V	FL	Shrub	3
<i>Exocarpos aphyllus</i>	70 cm	I	B	Shrub	
<i>Grevillea acuaria</i>	40 cm	I	ST	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	65 cm	I	FR	Shrub	
<i>Melaleuca adnata</i>	65 cm	I	ST	Shrub	
<i>Melaleuca cliffortioides</i>	65 cm	V	FL, FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	75 cm	I	FR	Shrub	
<i>Santalum acuminatum</i>	2 m	I	ST	Shrub	
<i>Scaevola bursariifolia</i>	35 cm	I	ST	Shrub	
<i>Wilsonia humilis</i>	6 cm	I	ST	Shrub	



## HLND20

Date: 29 September 2009

Vegetation Description: Woodland of Eucalyptus salmonophloia over open mallee shrubland of E. pileata over sparse shrubland of Templetonia sulcata/smithiana and Santalum acuminatum over sparse shrubland of Acacia merrallii, A. camptoclada, Eremophila ionantha and Dodonaea bursariifolia.



Location: Northern Forresteria Greenstone Belt survey site

HLND20. Unallocated Crown Land. Located 2.15 km E of Forresteria Southern Cross Road, 80 m N of a vehicle track. Ca 10.01 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.76 km S of Mount Holland.

Site Description: West north-west level flat of laterite/greenstone with light red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia asepala</i>	60 cm	I	FL	Shrub	2
<i>Acacia camptoclada</i>	90 cm	V	FL	Shrub	
<i>Acacia merrallii</i>	40 cm	V	FL	Shrub	
<i>Acacia nyssophylla</i>	55 cm	I	FL	Shrub	
<i>Austrostipa elegantissima</i>	45 cm	I	ST	Grass	
<i>Austrostipa hemipogon</i>	35 cm	I	H	Grass	
<i>Austrostipa nitida</i>	30 cm	I	H	Grass	
<i>Austrostipa scabra</i>	25 cm	I	H	Grass	
<i>Boronia inornata subsp. inornata</i>	55 cm	I	FL	Shrub	
<i>Calotis hispidula</i>	4 cm	I	FL	Herb	
<i>Chenopodium desertorum subsp. microphyllum</i>	5 cm	I	B	Shrub	
<i>Cryptandra wilsonii</i>	45 cm	I	FL	Shrub	
<i>Daucus glochidiatus</i>	10 cm	I	FL	Herb	
<i>Dodonaea bursariifolia</i>	45 cm	V	FL, FR	Shrub	
<i>Eremophila decipiens subsp. decipiens</i>	45 cm	I	ST	Shrub	
<i>Eremophila ionantha</i>	1 m	V	ST	Shrub	
<i>Eucalyptus cylindrocarpa</i>	3 m	V	FR	Mallee	
<i>Eucalyptus pileata</i>	2.8 m	V	FR	Mallee	
<i>Eucalyptus salmonophloia</i>	25 m	S	old FR	Tree	
<i>Eucalyptus yilgarnensis</i>	2.8 m	I	FL, FR	Mallee	
<i>Exocarpos aphyllus</i>	50 cm	I	ST	Shrub	
<i>Grevillea huegelii</i>	45 cm	I	B	Shrub	
<i>Melaleuca eleuterostachya</i>	1.5 m	I	FR	Shrub	
<i>Melaleuca pauperiflora subsp. fastigiata</i>	1.4 m	I	FR	Shrub	
<i>Melaleuca teuthidoides</i>	1.2 m	I	FR	Shrub	
<i>Ptilotus holosericeus</i>	7 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	2 m	V	FR	Shrub	
<i>Scaevola spinescens</i>	50 cm	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	8 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	12 cm	I	FL	Herb	
<i>Senna artemisioides subsp. filifolia</i>	1 m	I	B	Shrub	



<i>Templetonia sulcata/smithiana</i>	1.5 m	V	B, FL	Shrub	
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#### HLND21

Date: 29 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus eremophila* and *E. calycogona* subsp. *calycogona* over open shrubland of *Eremophila rugosa*, *Daviesia benthamii* subsp. *acanthoclona*, *Acacia camptoclada* and *A. densiflora* over sparse shrubland of *A. erinacea* and *Grevillea acuaria*.

Location: Northern Forresteria Greenstone Belt survey site, HLND21. Unallocated Crown Land c. 15.18 km S of Mount Holland. 265 m W of Forresteria Southern Cross Road and 11.98 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: Level flat of with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia brachyclada</i>	30 cm	I	FR	Shrub	
<i>Acacia camptoclada</i>	80 cm	V	FL	Shrub	
<i>Acacia densiflora</i>	50 cm	V	FL	Shrub	
<i>Acacia erinacea</i>	40 cm	V	FL	Shrub	
<i>Acacia hystrix</i> subsp. <i>hystrix</i>	45 cm	I	FL	Shrub	
<i>Austrostipa</i> sp.	25 cm	I	ST	Grass	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	80 cm	V	FL	Shrub	
<i>Daviesia scoparia</i>	75 cm	I	B	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	50 cm	I	FL	Shrub	
<i>Eremophila rugosa</i>	1.1 m	V	FL	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3.5 m	V	FR	Mallee	
<i>Eucalyptus eremophila</i>	3.5 m	S	FR	Mallee	
<i>Eucalyptus yilgarnensis</i>	3 m	V	FL, FR	Mallee	
<i>Exocarpos aphyllus</i>	1.3 m	I	B	Shrub	
<i>Grevillea acuaria</i>	50 cm	I	FL	Shrub	
<i>Grevillea huegelii</i>	35 cm	I	FL	Shrub	
<i>Helichrysum leucopsideum</i>	25 cm	I	B	Herb	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	80 cm	I	FR	Shrub	
<i>Melaleuca teuthidoides</i>	1.1 m	I	FR	Shrub	
<i>Olearia adenolasia</i>	65 cm	I	ST	Shrub	
<i>Olearia muelleri</i>	50 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.8 m	I	ST	Shrub	
<i>Westringia rigida</i>	30 cm	I	FL	Shrub	

## HLND22

Date: 29 September 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus tenera*, *E. flocktoniae* subsp. *flocktoniae* and *E. pileata* over open mallee shrubland of *E. cylindrocarpa* over sparse shrubland of *Acacia beauverdiana* and *Melaleuca hamata* over sparse shrubland of *Acacia hystrix* subsp. *hystrix* and *Cryptandra minutifolia* subsp. *brevistyla* and sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000).



Location: Northern Forresteria Greenstone Belt survey site, HLND22. Unallocated Crown Land c. 15.15 km S of Mount Holland. 1.03 m W of Forresteria Southern Cross Road and 12.14 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East facing very gently inclined upper slope of basalt, metasediments, calcrete with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia beauverdiana</i>	1.3 m	V	B	Shrub	
<i>Acacia camptoclada</i>	60 cm	I	FL	Shrub	
<i>Acacia densiflora</i>	60 cm	I	FL	Shrub	
<i>Acacia hystrix</i> subsp. <i>hystrix</i>	55 cm	V	FL	Shrub	
<i>Acacia merrallii</i>	30 cm	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i>	1 m	I	FL	Shrub	
<i>Allocasuarina spinosissima</i>	1.3 m	V	FR	Shrub	
<i>Callitris preissii</i>	90 cm	I	FR	Tree	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	40 cm	I	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	65 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>divaricata</i>	65 cm	I	old stalk	Herb	
<i>Dodonaea bursariifolia</i>	45 cm	I	ST	Shrub	
<i>Dodonaea stenozyga</i>	45 cm	I	FR	Shrub	
<i>Eremophila rugosa</i>	1 m	I	FL	Shrub	
<i>Eucalyptus cylindrocarpa</i>	1.8 m	S	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2.5 m	V	FR	Mallee	
<i>Eucalyptus pileata</i>	3 m	V	FR	Mallee	
<i>Eucalyptus tenera</i>	3 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	1.1 m	I	B	Shrub	
<i>Grevillea acuaria</i>	50 cm	I	FL	Shrub	
<i>Hakea scoparia</i> subsp. <i>scoparia</i>	1 m	I	old FL, FR	Shrub	
<i>Halgania andromedifolia</i>	70 cm	I	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	60 cm	V	old H	Sedge	
<i>Leptospermum ?erubescens</i>	1.1 m	V	FL	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1 m	I	ST	Shrub	
<i>Melaleuca hamata</i>	1.3 m	V	FR	Shrub	
<i>Melaleuca johnsonii</i>	1 m	I	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	1.1 m	V	FR	Shrub	
<i>Melaleuca laxiflora</i>	40 cm	I	FR	Shrub	
<i>Olearia muelleri</i>	25 cm	I	ST	Shrub	

<i>Phebalium tuberosum</i>	<b>30 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Thryptomene kochii</i>	<b>55 cm</b>	<b>I</b>	<b>B</b>	<b>Shrub</b>	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	<b>25 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	
<i>Westringia rigida</i>	<b>35 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	

## HLND23

Date: 29 September 2009

Vegetation Description: Open shrubland of *Grevillea excelsior*, *Hakea meisneriana* and *Allocasuarina corniculata* over open shrubland of *Acacia heteroneura*, *Hakea erecta* and *Melaleuca cordata* over sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) and sparse shrubland of *Psammomoya choretroides* and *Hibbertia lepidocalyx* subsp. *lepidocalyx*.



Location: Northern Forresteria Greenstone Belt survey site, HLND23. Unallocated Crown Land c. 15.03 km S of Mount Holland. 1.34 m W of Forresteria Southern Cross Road and 12.27 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East facing gently inclined mid-slope of basalt, metasediments, quartz with yellow-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia heteroneura</i>	80 cm	S	ST	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	40 cm	I	B	Shrub	
<i>Acacia yorkkrakinensis</i> subsp. <i>acrita</i>	80 cm	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	I	FR	Shrub	
<i>Allocasuarina corniculata</i>	1.6 m	V	FR	Shrub	
<i>Austrodanthonia caespitosa</i>	20 cm	I	H	Grass	
<i>Baeckea</i> sp. <i>Parker Range</i> (M. Hislop & F. Hort MH 2968)	30 cm	I	FL	Shrub	3
<i>Beyeria minor</i>	40 cm	I	B	Shrub	
<i>Callitris preissii</i>	1 m	I	FR	Tree	
<i>Cassytha aurea</i> var. <i>hirta</i>	2 m	I	ST	Vine	
<i>Chamelaucium pauciflorum</i> subsp. <i>pauciflorum</i>	40 cm	I	FL	Shrub	
<i>Comesperma volubile</i>	60 cm	I	FL	Climber	
<i>Cryptandra minutifolia</i> subsp. <i>minutifolia</i>	35 cm	I	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Drummondita hassellii</i>	30 cm	I	B	Shrub	
<i>Eucalyptus eremophila</i>	1.7 m	V	ST	Mallee	
<i>Grevillea excelsior</i>	2 m	V	B	Shrub	
<i>Hakea erecta</i>	1 m	V	FR	Shrub	
<i>Hakea meisneriana</i>	1.4 m	V	FR	Shrub	
<i>Hakea scoparia</i> subsp. <i>scoparia</i>	1 m	I	FL	Shrub	
<i>Hibbertia exasperata</i>	45 cm	I	B	Shrub	
<i>Hibbertia lepidocalyx</i> subsp. <i>lepidocalyx</i>	45 cm	I	FL	Shrub	
<i>Hibbertia stowardii</i>	40 cm	I	B	Shrub	
<i>Jacksonia nematoclada</i>	20 cm	L	ST	Shrub	
<i>Lasiopetalum ferraricollinum</i>	35 cm	I	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	1 m	V	old H	Sedge	
<i>Leucopogon sulcatus</i>	35 cm	I	FL	Shrub	
<i>Melaleuca calyptroides</i>	65 cm	I	FR	Shrub	
<i>Melaleuca condylosa</i>	90 cm	V	B	Shrub	
<i>Melaleuca cordata</i>	1.4 m	V	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	1 m	I	FR	Shrub	

<i>Phebalium ambiguum</i>	<b>30 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Psammomoya choretroides</i>	<b>45 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Stenanthemum stipulosum</i>	<b>30 cm</b>	<b>I</b>	<b>old FL</b>	<b>Shrub</b>	
<i>Stylidium involucreatum</i>	<b>3 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	
<i>Thryptomene kochii</i>	<b>35 cm</b>	<b>I</b>	<b>B</b>	<b>Shrub</b>	

## HLND24

Date: 30 September 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open mallee shrubland of *E. tenuis*, *E. urna* and *E. yilgarnensis* over open shrubland of *Daviesia scoparia*, *Santalum acuminatum* and *Melaleuca teuthidoides* over sparse shrubland of *Acacia merrallii*, *Eremophila ionantha* and *Templetonia sulcata*.



Location: Northern Forresteria Greenstone Belt survey site HLND24. Unallocated Crown Land. Located 7.41 km W of Forresteria Southern Cross Road, then 370 m S of the vehicle track. Ca 2.26 km N of North Ironcap and ca 18.98 km SSW of Mount Holland.

Site Description: West north-west level flat of basalt, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia merrallii</i>	55 cm	V	FL	Shrub	
<i>Austrodanthonia caespitosa</i>	25 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	55 cm	I	old H	Grass	
<i>Austrostipa nitida</i>	45 cm	I	H	Grass	
<i>Daviesia scoparia</i>	1.6 m	V	B	Shrub	
<i>Eremophila ionantha</i>	65 cm	V	old FL	Shrub	
<i>Eucalyptus cylindrocarpa</i>	3 m	V	FR	Mallee	
<i>Eucalyptus salmonophloia</i>	25 m	S	old FR	Tree	
<i>Eucalyptus tenuis</i>	3 m	V	FR	Mallee	
<i>Eucalyptus urna</i>	3 m	V	FR	Mallee	
<i>Eucalyptus yilgarnensis</i>	3 m	V	FL, FR	Mallee	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.1 m	I	B	Shrub	
<i>Melaleuca eleuterostachya</i>	1.3 m	I	FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	1.2 m	I	FR	Shrub	
<i>Melaleuca scalena</i>	1 m	I	ST	Shrub	
<i>Melaleuca teuthidoides</i>	1.6 m	V	B, FR	Shrub	
<i>Olearia muelleri</i>	50 cm	I	FL	Shrub	
<i>Ptilotus holosericeus</i>	4 cm	I	FL	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	75 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	2 m	V	ST	Shrub	
<i>Scaevola spinescens</i>	50 cm	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	6 cm	I	FR	Shrub	
<i>Templetonia sulcata</i>	45 cm	I	FL	Shrub	
<i>Westringia rigida</i>	35 cm	I	FL	Shrub	

## HLND25

Date: 30 September 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pileata*, *E. urna* and *E. calycogona* subsp. *calycogona* over open shrubland of *Grevillea oncogyne* and *Melaleuca teuthidoides* over sparse shrubland of *Daviesia benthamii* subsp. *acanthoclona*, *Acacia camptoclada* and *Melaleuca lateriflora* subsp. *lateriflora* over isolated shrubs of *Wilsonia humilis*.



Location: Northern Forresteria Greenstone Belt survey site HLND25. Unallocated Crown Land. Located 6.58 km W of Forresteria Southern Cross Road, then 85 m S of the vehicle track. Ca 2.85 km NNE of North Ironcap and ca 18.48 km SSW of Mount Holland.

Site Description: North north-west facing very gently inclined lower slope of mixed metasediments with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia camptoclada</i>	60 cm	V	FL	Shrub	
<i>Acacia merrallii</i>	65 cm	I	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	65 cm	V	FL	Shrub	
<i>Dodonaea stenozyga</i>	45 cm	I	FR	Shrub	
<i>Eremophila rugosa</i>	90 cm	I	FL	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3 m	V	FL, FR	Mallee	
<i>Eucalyptus eremophila</i>	3.5 m	V	FR	Mallee	
<i>Eucalyptus pileata</i>	4.5 m	S	FR	Mallee	
<i>Eucalyptus urna</i>	4 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	90 cm	I	B	Shrub	
<i>Grevillea huegelii</i>	1 m	I	B	Shrub	
<i>Grevillea oncogyne</i>	65 cm	V	B	Shrub	
<i>Melaleuca eleuterostachya</i>	65 cm	I	FR	Shrub	
<i>Melaleuca johnsonii</i>	50 cm	I	B	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	75 cm	V	FR	Shrub	
<i>Melaleuca teuthidoides</i>	1.2 m	V	FR	Shrub	
<i>Microcorys</i> sp. <i>Forresteria</i> (V. English 2004)	30 cm	I	ST	Shrub	4
<i>Microcybe multiflora</i> subsp. <i>multiflora</i>	45 cm	I	FL	Shrub	
<i>Olearia adenolasia</i>	35 cm	I	B?	Shrub	
<i>Templetonia sulcata</i>	45 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	7 cm	I	ST	Shrub	



## HLND26

Date: 30 September 2009

Vegetation Description: Woodland of *Eucalyptus longicornis* over woodland of *E. polita* and *E. salubris* over sparse shrubland of *Santalum acuminatum* and *Melaleuca pauperiflora* subsp. *fastigiata* over sparse shrubland of *Acacia intricata* with isolated chenopod shrubs *Sclerolaena diacantha*.



Location: Northern Forresteria Greenstone Belt survey site HLND26. Unallocated Crown Land. Located ca 3.23 km NE of North Ironcap and ca 10.92 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 18.71 km SSW of Mount Holland.

Site Description: North facing gently inclined mid-slope of weathered basalt, calcrete, quartz, metasediments with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia intricata</i>	25 cm	V	FL	Shrub	
<i>Acacia merrallii</i>	55 cm	I	FL	Shrub	
<i>Acacia pachypoda</i>	60 cm	I	FL	Shrub	
<i>Acacia rendlei</i>	45 cm	I	B	Shrub	
<i>Asteridea athrixoides</i>	8 cm	I	FL	Herb	
<i>Austrostipa nitida</i>	30 cm	I	H	Grass	
<i>Daviesia articulata</i>	40 cm	I	B	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	60 cm	I	B	Shrub	
<i>Daviesia scoparia</i>	1.3 m	V	B	Shrub	
<i>Dodonaea stenozyga</i>	70 cm	I	FL	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	30 cm	I	ST	Shrub	
<i>Eremophila densifolia</i> subsp. <i>pubiflora</i>	45 cm	I	ST	Shrub	
<i>Eremophila ionantha</i>	60 cm	I	ST	Shrub	
<i>Eucalyptus extensa</i>	4 m	B	FR	Mallee	
<i>Eucalyptus longicornis</i>	15 m	S	old FR	Tree	
<i>Eucalyptus polita</i>	8 m	V	old FR	Tree	
<i>Eucalyptus salubris</i>	6.5 m	V	FR	Mallee	
<i>Grevillea acuaria</i>	50 cm	I	ST	Shrub	
<i>Maireana marginata</i>	4 cm	I	FR	Shrub	
<i>Melaleuca hamata</i>	1 m	I	ST	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	75 cm	V	B, FR	Shrub	
<i>Microcybe multiflora</i> subsp. <i>multiflora</i>	70 cm	V	B	Shrub	
<i>Pterostylis mutica</i>	8 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	6 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	2.5 m	V	FR	Shrub	
<i>Sclerolaena diacantha</i>	12 cm	I	FR	Shrub	
<i>Westringia rigida</i>	30 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	20 cm	L	ST	Shrub	

## HLND27

Date: 30 September 2009

Vegetation Description: Woodland of *Eucalyptus extensa*, *E. urna* and *E. polita* over sparse shrubland of *Melaleuca pauperiflora* subsp. *pauperiflora* and *Exocarpos aphyllus* over sparse shrubland of *Dodonaea stenozyga*, *Acacia pachypoda* and *A. poliochroa x merrallii*.



Location: Northern Forresteria Greenstone Belt survey site HLND27. Unallocated Crown Land. Located ca 2.99 km NE of North Ironcap and ca 10.84 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 18.86 km SSW of Mount Holland.

Site Description: South-east facing very gently inclined crest of quartz, weathered basalt/greenstone. Slightly rocky quartz seam outcrop with light brown skeletal/shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia intricata</i>	30 cm	I	FL	Shrub	
<i>Acacia merrallii</i>	65 cm	I	FL	Shrub	
<i>Acacia pachypoda</i>	70 cm	V	FL	Shrub	
<i>Acacia poliochroa x merrallii</i>	30 cm	I	FL	Shrub	
<i>Daviesia articulata</i>	35 cm	I	B	Shrub	
<i>Daviesia scoparia</i>	70 cm	I	B	Shrub	
<i>Dodonaea stenozyga</i>	90 cm	V	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	30 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	3.5 m	V	FR	Mallet	
<i>Eucalyptus polita</i>	3.5 m	V	FR	Mallee	
<i>Eucalyptus urna</i>	3.5 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	1.2 m	V	B	Shrub	
<i>Grevillea acuaria</i>	1.8 m	I	ST	Shrub	
<i>Melaleuca eleuterostachya</i>	65 cm	I	ST	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i>	1.2 m	V	FR	Shrub	
<i>Pterostylis mutica</i>	12 cm	I	FL	Herb	
<i>Westringia rigida</i>	30 cm	I	ST	Shrub	
<i>Wilsonia humilis</i>	15 cm	I	ST	Shrub	

## HLND28

Date: 1 October 2009

Vegetation Description: Open woodland of *Eucalyptus urna* over woodland of *E. salubris* over sparse shrubland of *Melaleuca pauperiflora* subsp. *fastigiata* over sparse shrubland of *Acacia intricata* and *Daviesia articulata*.



Location: Northern Forresteria Greenstone Belt survey site HLND28. Unallocated Crown Land. Located ca 2.90 km NE of North Ironcap and ca 10.87 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 18.96 km SSW of Mount Holland.

Site Description: South-west facing gently inclined mid/upper slope of weathered basalt, ironstone gravel and mixed metasediments, minor quartz with red-brown shallow loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia intricata</i>	45 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	10 cm	I	FL	Herb	
<i>Austrostipa elegantissima</i>	50 cm	I	ST	Grass	
<i>Calandrinia eremaea complex</i>	6 cm	I	B	Herb	
<i>Daviesia articulata</i>	45 cm	V	ST	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	40 cm	I	FL	Shrub	
<i>Eucalyptus salubris</i>	6.2 m	V	FR	Tree	
<i>Eucalyptus urna</i>	18 m	V	old FR	Tree	
<i>Gnephosis intonsa</i>	3 cm	I	B	Herb	1
<i>Grevillea acuaria</i>	50 cm	I	FL	Shrub	
<i>Melaleuca cucullata</i>	1.7 m	I	ST	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	2.3 m	V	FR	Shrub	
<i>Microcybe multiflora</i> subsp. <i>multiflora</i>	55 cm	I	old B, FL	Shrub	
<i>Plantago debilis</i>	2 cm	I	B	Herb	
<i>Pterostylis mutica</i>	12 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	4 cm	I	FL	Shrub	
<i>Rhodanthe pygmaea</i>	3 cm	I	FL	Herb	
<i>Santalum acuminatum</i>	2.2 m	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senecio glossanthus</i>	10 cm	I	B, FL	Herb	
<i>Stellaria filiformis</i>	10 cm	I	B	Herb	
<i>Wilsonia humilis</i>	30 cm	V	ST	Shrub	

## HLND29

Date: 1 October 2009

Vegetation Description: Isolated trees of *Acacia lasiocalyx* over shrubland of *A. neurophylla* subsp. *erugata*, *A. steedmanii* subsp. *steedmanii*, *Allocasuarina campestris* and *Melaleuca hamata* over open shrubland of *Gastrolobium melanocarpum*, *Keraudrenia cacaobrunnea* subsp. *cacaobrunnea* ms and *Acacia sulcata* var. *platyphylla* over isolated clumps of herb *Stylidium sejunctum*.



Location: Northern Forresteria Greenstone Belt survey site HLND29. Unallocated Crown Land. Located ca 4.46 km NE of North Ironcap and ca 12.02 km NNW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.26 km SSW of Mount Holland.

Site Description: South facing very gently inclined crest/upper slope of basalt, laterite, quartz, metasediments. Very slightly rocky weathered laterite outcrop with yellow-red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia lasiocalyx</i>	3 m	I	FL	Shrub	
<i>Acacia neurophylla</i> subsp. <i>erugata</i>	2 m	S	FL	Shrub	
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>	1.7 m	V	FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	70 cm	V	FL	Shrub	
<i>Allocasuarina campestris</i>	2.2 m	V	FR	Shrub	
<i>Allocasuarina corniculata</i>	1.3 m	I	FL	Shrub	
<i>Astroloma serratifolium</i>	45 cm	I	B	Shrub	
<i>Callitris canescens</i>	1.2 m	I	ST	Tree	
<i>Comesperma volubile</i>	50 cm	I	FL	Climber	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	40 cm	I	FR	Shrub	
<i>Dampiera angulata</i> subsp. <i>angulata</i>	45 cm	I	FL	Shrub	
<i>Dodonaea viscosa</i> ssp. <i>angustissima</i> - ssp. <i>spathulata</i> intergrade	50 cm	I	FR	Shrub	
<i>Gastrolobium melanocarpum</i>	1 m	V	B, FL	Shrub	
<i>Grevillea acuaria</i>	70 cm	I	FL	Shrub	
<i>Keraudrenia cacaobrunnea</i> subsp. <i>cacaobrunnea</i>	1	I	B	Shrub	
<i>Lasiopetalum ferraricollinum</i>	60 cm	V	FL	Shrub	
<i>Leptosema daviesioides</i>	12 cm	L	FL	Shrub	
<i>Melaleuca condylosa</i>	1 m	I	FR	Shrub	
<i>Melaleuca hamata</i>	1.4 m	V	FR	Shrub	
<i>Melaleuca platycalyx</i>	70 cm	I	FR	Shrub	
<i>Phebalium tuberosum</i>	50 cm	I	FL	Shrub	
<i>Stylidium sejunctum</i>	30 cm	V	old FL	Shrub	2
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	1.4 m	I	FL	Shrub	

## HLND30

Date: 1 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus livida* over open shrubland of *Acacia neurophylla* subsp. *erugata*, *A. steedmanii* subsp. *steedmanii*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *A. campestris* and *Callitris canescens* over sparse shrubland of *Phebalium tuberculosum*, *Dodonaea viscosa* ssp. *angustissima*/spatulata intergrade and *Lasiopetalum ferraricollinum*.



Location: Northern Forresteria Greenstone Belt survey site HLND30. Unallocated Crown Land. Located ca 4.56 km NE of North Ironcap and ca 12.06 km NNW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.11 km SSW of Mount Holland.

Site Description: North facing gently inclined mid-slope of basalt, ironstone, quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	25 cm	I	FL	Shrub	
<i>Acacia neurophylla</i> subsp. <i>erugata</i>	2 m	V	FL	Shrub	
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>	2.2 m	V	FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	90 cm	I	B, Old FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	2.2 m	V	FR	Shrub	
<i>Allocasuarina campestris</i>	1.7 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	60 cm	I	B	Shrub	
<i>Caladenia microchila</i>	10 cm	I	FL	Herb	
<i>Callitris canescens</i>	1.3 m	V	FL, FR	Tree	
<i>Comesperma volubile</i>	65 cm	I	FL	Climber	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	85 cm	I	B	Shrub	
<i>Dodonaea bursariifolia</i>	35 cm	I	B	Shrub	
<i>Dodonaea viscosa</i> ssp. <i>angustissima</i> - ssp. <i>spatulata</i> intergrade	85 cm	I	B, FL, FR	Shrub	
<i>Drosera browniana</i>	10 cm	I	FL	Herb	
<i>Eucalyptus livida</i>	3.5 m	S	FR	Mallee	
<i>Gastrolobium melanocarpum</i>	75 cm	I	B	Shrub	
<i>Grevillea acuaria</i>	55 cm	I	FL	Shrub	
<i>Lasiopetalum ferraricollinum</i>	45 cm	I	FL	Shrub	
<i>Melaleuca hamata</i>	1.4 m	I	B	Shrub	
<i>Phebalium tuberculosum</i>	50 cm	V	FL	Shrub	
<i>Rinzia carnosa</i>	60 cm	I	FL	Shrub	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	75 cm	I	FL	Shrub	

## HLND31

Date: 1 October 2009

Vegetation Description: Woodland of *Eucalyptus urna* over woodland of *E. extensa* and *Melaleuca quadrifaria* over sparse shrubland of *Dodonaea stenozyga* over sparse shrubland of *Olearia muelleri*, *Acacia erinacea* and *A. deficiens*.



Location: Northern Forresteria Greenstone Belt survey site HLND31. Unallocated Crown Land. Located ca 4.54 km NE of North Ironcap and ca 12.23 km NNW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 17.02 km SSW of Mount Holland.

Site Description: North facing gently inclined lower slope of metasediments, basalt, ironstone with red-brown shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia deficiens</i>	25 cm	V	FL	Shrub	
<i>Acacia erinacea</i>	40 cm	B	FL	Shrub	
<i>Acacia intricata</i>	25 cm	I	FL	Shrub	
<i>Acacia merrallii</i>	60 cm	I	FL	Shrub	
<i>Asteridea athrixoides</i>	4 cm	I	FL	Herb	
<i>Austrostipa acrociliata</i>	1.3 m	I	H	Grass	
<i>Daviesia articulata</i>	40 cm	I	ST	Shrub	
<i>Dodonaea stenozyga</i>	1.1 m	V	FL, FR	Shrub	
<i>Drosera sp.</i>	1 cm	I	ST	Herb	
<i>Eremophila decipiens subsp. decipiens</i>	45 cm	V	FL	Shrub	
<i>Eremophila ionantha</i>	90 cm	I	ST	Shrub	
<i>Eucalyptus extensa</i>	3.2 m	V	FR	Tree	
<i>Eucalyptus urna</i>	20 m	S	FR	Tree	
<i>Eutaxia acanthoclada</i>	18 cm	I	ST	Shrub	3
<i>Grevillea acuaria</i>	35 cm	I	B	Shrub	
<i>Lawrencia glomerata</i>	12 cm	I	B	Herb	
<i>Maireana marginata</i>	5 cm	I	FR	Shrub	
<i>Melaleuca adnata</i>	1.7 m	I	FR	Shrub	
<i>Melaleuca eleuterostachya</i>	1 m	I	ST	Shrub	
<i>Melaleuca johnsonii</i>	40 cm	I	ST	Shrub	
<i>Melaleuca quadrifaria</i>	3.5 m	V	FR	Shrub	
<i>Olearia muelleri</i>	50 cm	V	FL	Shrub	
<i>Pterostylis mutica</i>	15 cm	I	FL	Herb	
<i>Sclerolaena diacantha</i>	12 cm	I	FR	Shrub	
<i>Wilsonia humilis</i>	20 cm	I	ST	Shrub	
<i>Zygophyllum glaucum</i>	12 cm	I	FL	Herb	

## HLND32

Date: 2 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa* and *E. urna* over open shrubland of *Melaleuca pauperiflora* subsp. *fastigiata* and *Dodonaea stenozyga* over sparse shrubland of *Acacia poliochroa* x *merrallii*.



Location: Northern Forresteria Greenstone Belt survey site HLND32. Unallocated Crown Land. Located 7.05 km N along Forresteria Southern Cross Road from its intersection with Hyden Norseman Road, then 115 m W of the road. Ca 7.98 km E of North Ironcap and ca 20.19 km S of Mount Holland.

Site Description: North north-east facing gently inclined crest of greenstone, weathered basalt, amphibolite, calcrete, minor quartz with light brown shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	35 cm	I	FL	Shrub	
<i>Acacia merrallii</i>	35 cm	I	FL	Shrub	
<i>Acacia pachypoda</i>	50 cm	I	FL	Shrub	
<i>Acacia poliochroa</i> x <i>merrallii</i>	20 cm	V	FL	Shrub	
<i>Asteridea athrixoides</i>	12 cm	I	FL	Shrub	
<i>Dodonaea stenozyga</i>	1.3 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	3.2 m	S	FR	Tree	
<i>Eucalyptus urna</i>	3.5 m	V	old FR	Tree	
<i>Eutaxia acanthoclada</i>	10 cm	I	ST	Shrub	3
<i>Exocarpos aphyllus</i>	90 cm	I	B	Shrub	
<i>Melaleuca cucullata</i>	2.3 m	V	FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	1.1 m	S	FR	Shrub	
<i>Senecio glossanthus</i>	13 cm	I	B, FL	Shrub	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	50 cm	I	ST	Shrub	
<i>Wilsonia humilis</i>	22 cm	I	ST	Shrub	

### HLND33

Date: 2 October 2009

Vegetation Description: Isolated trees of *Eucalyptus extensa* over shrubland of *Melaleuca cliffortioides*, *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Santalum acuminatum* and *Allocasuarina campestris* over open shrubland of *Trymalium myrtillus* subsp. *myrtillus* and *Styphelia exserta* with isolated clumps of grass *Austrostipa* sp. Mt. Holland (W.A. Thompson & J Allen 948).



Location: Northern Forrestania Greenstone Belt survey site HLND33. Unallocated Crown Land. Located 6.98 km N along Forrestania Southern Cross Road from its intersection with Hyden Norseman Road, then 155 m W of the road. Ca 7.95 km E of North Ironcap and ca 20.28 km S of Mount Holland.

Site Description: West north-west facing gently inclined upper slope of basalt, weathered greenstone with red-brown skeletal/shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	30 cm	I	ST	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	1.6 m	V	FL	Shrub	
<i>Allocasuarina campestris</i>	1.1 m	V	FR	Shrub	
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	45 cm	L	H	Grass	
<i>Blennospora drummondii</i>	1 cm	I	FL	Herb	
<i>Comesperma</i> sp.	20 cm	I	ST	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	30 cm	I	ST	Herb	
<i>Eucalyptus extensa</i>	3.5 m	I	ST	Tree	
<i>Exocarpos aphyllus</i>	70 cm	I	B	Shrub	
<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>	1 cm	I	FR	Herb	
<i>Melaleuca cliffortioides</i>	1.4 m	S	FL	Shrub	
<i>Phyllangium</i> sp.	4 cm	I	B, FL	Herb	
<i>Santalum acuminatum</i>	1.7 m	V	ST	Shrub	
<i>Styphelia exserta</i>	70 cm	V	FL	Shrub	
<i>Thysanotus patersonii</i>	25 cm	I	FL	Herb	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	60 cm	V	FL	Shrub	



## HLND34

Date: 2 October 2009

Vegetation Description: Woodland of *Eucalyptus longicornis* over open woodland of *E. extensa* over sparse shrubland of *Melaleuca quadrifaria*, *M. pauperiflora* subsp. *fastigiata* and *Dodonaea stenozyga* over isolated shrubs of *Acacia poliochroa* x *merrallii*.



Location: Northern Forresteria Greenstone Belt survey site HLND34. Unallocated Crown Land. Located 6.71 km N along Forresteria Southern Cross Road from its intersection with Hyden Norseman Road, then 475 m W of the road. Ca 7.65 km E of North Ironcap and ca 20.50 km S of Mount Holland.

Site Description: East facing gently inclined lower slope of ironstone, basalt, mixed metasediments with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia poliochroa</i> x <i>merrallii</i>	22 cm	I	FL	Shrub	
<i>Daviesia articulata</i>	40 cm	I	ST	Shrub	
<i>Dodonaea stenozyga</i>	1.3 m	V	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	65 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	4 m	V	FR	Mallet	
<i>Eucalyptus longicornis</i>	18 m	S	FR	Tree	
<i>Eutaxia acanthoclada</i>	10 cm	I	ST	Shrub	3
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	1.3 m	V	FR	Shrub	
<i>Melaleuca quadrifaria</i>	2.2 m	V	FR	Shrub	
<i>Pterostylis mutica</i>	10 cm	I	FL	Herb	
<i>Wilsonia humilis</i>	18 cm	I	ST	Shrub	

## HLND35

Date: 2 October 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus rigidula*, *Grevillea pterosperma* and *Santalum acuminatum* with isolated vines of *Cassytha nodiflora* and *Comesperma volubile* over shrubland of *Acacia sulcata* var. *platyphylla*, *Calothamnus quadrifidus* subsp. *seminudus* ms, *Stenanthemum stipulosum*, *Acacia castanostegia* and *Banksia sphaerocarpa* var. *dolichostyla* over sparse shrubland of *Hibbertia eatoniae*.



Location: Northern Forresteria Greenstone Belt survey site, HLND35. Unallocated Crown Land c. 17.88 km S of Mount Holland. 180 m W of Forresteria Southern Cross Road and 9.30 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North north-east facing very gently inclined crest of banded ironstone, laterite, weathered ironstone. Slightly rocky banded ironstone, weathered banded ironstone outcrop with red-brown skeletal sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia castanostegia</i>	65 cm	V	FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	80 cm	V	FL	Shrub	
<i>Allocasuarina campestris</i>	70 cm	V	FR	Shrub	
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	1.4 m	V	old FR	Shrub	R
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>	65 cm	V	B, FL, FR	Shrub	
<i>Cassytha nodiflora</i>	1.5 m	I	B	Vine	
<i>Comesperma volubile</i>	1 m	I	FL	Climber	
<i>Dampiera</i> cf. <i>obliqua</i>	30 cm	I	FL	Shrub	
<i>Dodonaea bursariifolia</i>	30 cm	I	FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Eucalyptus rigidula</i>	2.5 m	V	FR	Mallee	
<i>Goodenia pinifolia</i>	65 cm	I	ST	Shrub	
<i>Grevillea pterosperma</i>	1.5 m	V	B	Shrub	
<i>Hakea subsulcata</i>	1.1 m	I	FR	Shrub	
<i>Hibbertia eatoniae</i>	40 cm	V	B, FL	Shrub	
<i>Hibbertia exasperata</i>	70 cm	I	FL	Shrub	
<i>Leptomeria pachyclada</i>	1.5 m	I	FL	Shrub	
<i>Melaleuca cordata</i>	1.1 m	V	FR	Shrub	
<i>Santalum acuminatum</i>	1.8 m	V	ST	Shrub	
<i>Stenanthemum stipulosum</i>	70 cm	I	old FL	Shrub	
<i>Stylidium sejunctum</i>	18 cm	I	ST	Herb	2

## HLND36

Date: 2 October 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus horistes* over sparse shrubland of *Exocarpos sparteus*, *Grevillea pterosperma*, *Hakea multilineata*, *Acacia assimilis* subsp. *assimilis*, *Banksia purdieana*, *Thryptomene kochii* and *Hakea subsulcata* over open shrubland of *Gastrolobium spinosum*, *Melaleuca cordata* and *M. calyptroides* over isolated shrubs of *Dampiera* cf. *obliqua* and isolated herbs *Stylidium sejunctum*.



Location: Northern Forresteria Greenstone Belt survey site, HLND36. Unallocated Crown Land c. 17.90 km S of Mount Holland. 350 m W of Forresteria Southern Cross Road and 9.24 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: West facing gently inclined mid-slope of weathered ironstone, laterite, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia assimilis</i> subsp. <i>assimilis</i>	1.5 m	V	FL	Shrub	
<i>Acacia castanostegia</i>	65 cm	V	FL	Shrub	
<i>Allocasuarina campestris</i>	1 m	I	FR	Shrub	
<i>Banksia purdieana</i>	1.4 m	V	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>	75 cm	I	B, old FR	Shrub	
<i>Cassytha nodiflora</i>	1 m	V	B	Vine	
<i>Dampiera</i> cf. <i>obliqua</i>	30 cm	I	FL	Shrub	
<i>Eucalyptus horistes</i>	3 m	V	FR	Mallee	
<i>Exocarpos sparteus</i>	2.8 m	V	ST	Shrub	
<i>Gastrolobium spinosum</i>	60 cm	S	ST	Shrub	
<i>Grevillea pterosperma</i>	2.4 m	V	B	Shrub	
<i>Hakea multilineata</i>	2.4 m	V	old FL	Shrub	
<i>Hakea subsulcata</i>	1.2 m	V	old FL, FR	Shrub	
<i>Hemigenia westringioides</i>	1.1 m	I	B	Shrub	
<i>Hibbertia exasperata</i>	40 cm	I	FL	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>	70 cm	I	FL	Shrub	
<i>Melaleuca calyptroides</i>	75 cm	V	FR	Shrub	
<i>Melaleuca cordata</i>	1 m	V	FR	Shrub	
<i>Melaleuca hamata</i>	1.2 m	I	B	Shrub	
<i>Phebalium tuberosum</i>	50 cm	I	FL	Shrub	
<i>Philothea rhomboidea</i>	55 cm	I	FL	Shrub	
<i>Stenanthemum stipulosum</i>	30 cm	I	old FL	Shrub	
<i>Stylidium sejunctum</i>	25 cm	I	old FL	Herb	2
<i>Thryptomene kochii</i>	1.1 m	V	FL	Shrub	

## HLND37

Date: 3 October 2009

Vegetation Description: Mallee woodland of *Eucalyptus longicornis* and *E. tenuis* over open mallee shrubland of *Eucalyptus yilgarnensis* and *E. sp. indet.* over open shrubland of *Melaleuca lanceolata*, *M. teuthidoides* and *M. eleuterostachya* over sparse shrubland of *Acacia merrallii*.



Location: Northern Forrestania Greenstone Belt survey site, HLND37. Unallocated Crown Land. Head 4.86 km E along a vehicle track from Forrestania Southern Cross Road then 1.44 km S along a smaller track. C. 4.67 km E of Mount Holland and 26.84 km N of the intersection of Forrestania Southern Cross Road and Hyden Norseman Road.

Site Description: East facing very gently inclined lower slope/flat of ironstone, mixed metasediments, minor quartz with red-brown shallow clay loam sandy soils.

Species	H	CC	FL	Form	CONS
<i>Acacia merrallii</i>	40 cm	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	40 cm	I	ST	Grass	
<i>Calandrinia eremaea complex</i>	2 m	I	ST	Herb	
<i>Daviesia scoparia</i>	2.5 m	V	B?	Shrub	
<i>Eremophila ionantha</i>	70 cm	I	old FL	Shrub	
<i>Eucalyptus longicornis</i>	20 m	S	old FR	Tree	
<i>Eucalyptus tenuis</i>	20 m	V	FR	Mallee	
<i>Eucalyptus yilgarnensis</i>	7 m	V	FL, FR	Mallee	
<i>Grevillea huegelii</i>	60 cm	I	B	Shrub	
<i>Melaleuca eleuterostachya</i>	2.5 m	V	FR	Shrub	
<i>Melaleuca lanceolata</i>	3 m	V	FR	Shrub	
<i>Melaleuca teuthidoides</i>	2.3 m	V	FR	Shrub	
<i>Olearia muelleri</i>	55 cm	I	FL	Shrub	
<i>Scaevola bursariifolia</i>	75 cm	I	ST	Shrub	
<i>Senna artemisioides subsp. filifolia</i>	60 cm	I	ST	Shrub	
<i>Senna stowardii</i>	70 cm	I	ST	Shrub	

## HLND38

Date: 3 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus eremophila*, *E. calycogona* subsp. *calycogona* and *E. flocktoniae* subsp. *flocktoniae* over shrubland of *Melaleuca cliffortioides*, *M. hamata*, *M. eleuterostachya*, *Melaleuca acuminata* subsp. *acuminata*, *M. laxiflora*, *M. phoidophylla*, *M. lateriflora* subsp. *lateriflora*, *Daviesia scoparia* and *Dodonaea stenozyga* over sparse shrubland of *Cryptandra minutifolia* subsp. *brevistyla* and sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000).



Location: Northern Forresteria Greenstone Belt survey site, HLND38. Unallocated Crown Land. Head 4.86 km E along a vehicle track from Forresteria Southern Cross Road then 740 m S along a smaller track. C. 4.53 km E of Mount Holland and 27.12 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: North-east facing gently inclined mid-slope of basalt, ironstone, quartz, mixed metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia merrallii</i>	60 cm	I	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	2.5 m	I	FL	Shrub	
<i>Allocasuarina helmsii</i>	2.2 m	I	FR	Shrub	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	45 cm	V	old FL	Shrub	
<i>Daviesia scoparia</i>	2.6 m	V	FL	Shrub	
<i>Dodonaea bursariifolia</i>	45 cm	I	FR	Shrub	
<i>Dodonaea stenozyga</i>	1.9 m	V	FL, FR	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	55 cm	I	FL	Herb	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	4 m	V	FL, FR	Mallee	
<i>Eucalyptus eremophila</i>	4 m	V	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	6 m	V	FR	Mallee	
<i>Grevillea acuaria</i>	50 cm	I	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	55 cm	L	old H	Sedge	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.8 m	V	FL, FR	Shrub	
<i>Melaleuca cliffortioides</i>	1.7 m	V	FL, FR	Shrub	
<i>Melaleuca eleuterostachya</i>	1.6 m	V	FR	Shrub	
<i>Melaleuca hamata</i>	2.6 m	S	FR	Shrub	
<i>Melaleuca johnsonii</i>	1.4 m	I	B, FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	1.6 m	V	B, FR	Shrub	
<i>Melaleuca laxiflora</i>	1.3 m	V	B, FR	Shrub	
<i>Melaleuca phoidophylla</i>	1.3 m	V	FL, FR	Shrub	
<i>Olearia muelleri</i>	40 cm	I	FL	Shrub	
<i>Thysanotus patersonii</i>	30 cm	I	FL	Herb	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	35 cm	V	ST	Shrub	

## HLND39

Date: 3 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus eremophila* and *E. horistes* over open shrubland of *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Callitris preissii*, *Grevillea didymobotrya* subsp. *didymobotrya* and *Hakea subsulcata* over open shrubland of *Hibbertia eatoniae*, *Astroloma serratifolium* and *Acacia sulcata* var. *platyphylla* over isolated shrubs of *Stenanthemum stipulosum* and isolated clumps of herb *Conostylis bealiana*.



Location: Northern Forresteria Greenstone Belt survey site, HLND39. Unallocated Crown Land. Head 4.86 km E along a vehicle track from Forresteria Southern Cross Road then 665 m S along a smaller track. C. 4.44 km E of Mount Holland and 27.33 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South-east facing gently inclined crest of laterite, weathered ironstone. Slightly rocky laterite, weathered ironstone outcrop with yellow-brown skeletal/shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sulcata</i> var. <i>platyphylla</i>	75 cm	V	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	3 m	V	FL, FR	Shrub	
<i>Allocasuarina corniculata</i>	2.8 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	70 cm	V	B	Shrub	
<i>Baeckea crispiflora</i>	1.1 m	I	B	Shrub	
<i>Baeckea grandibracteata</i>	1.2 m	I	B, FL	Shrub	
<i>Beyeria minor</i>	1.6 m	I	B	Shrub	
<i>Beyeria sulcata</i> var. <i>sulcata</i>	1 m	I	B	Shrub	
<i>Callitris preissii</i>	3 m	V	FL, FR	Tree	
<i>Comesperma volubile</i>	70 cm	I	FL	Climber	
<i>Conostylis bealiana</i>	15 cm	L	old FL	Herb	
<i>Daviesia scoparia</i>	1.5 m	I	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	50 cm	I	FL	Herb	
<i>Eucalyptus eremophila</i>	6 m	V	FR	Mallee	
<i>Eucalyptus horistes</i>	5 m	V	FR, O	Mallee	
<i>Grevillea didymobotrya</i> subsp. <i>didymobotrya</i>	1.8 m	V	FL, FR	Shrub	
<i>Hakea subsulcata</i>	1.6 m	V	old FL, FR	Shrub	
<i>Hibbertia eatoniae</i>	60 cm	V	FL	Shrub	
<i>Hibbertia exasperata</i>	40 cm	I	B	Shrub	
<i>Isopogon scabriusculus</i> subsp. <i>pubifloris</i>	1.6 m	V	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	55 cm	L	old H	Sedge	
<i>Leucopogon hamulosus</i>	65 cm	I	B, FL	Shrub	
<i>Leucopogon sulcatus</i>	1.2 m	I	B	Shrub	
<i>Melaleuca cliffortioides</i>	65 cm	I	FL, FR	Shrub	
<i>Melaleuca cordata</i>	60 cm	I	ST	Shrub	
<i>Melaleuca hamata</i>	1.4 m	I	B	Shrub	
<i>Melaleuca johnsonii</i>	1.2 m	I	B, FR	Shrub	
<i>Persoonia coricea</i> x <i>helix</i>	90 cm	I	ST	Shrub	
<i>Phebalium filifolium</i>	1.2 m	I	FL	Shrub	

<i>Rinzia sessilis</i>	45 cm	I	FL	Shrub	
<i>Stenanthemum stipulosum</i>	50 cm	I	old FL	Shrub	
<i>Stylidium sejunctum</i>	18 cm	I	B	Herb	2
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	55 cm	I	ST	Shrub	

## HLND40

Date: 3 October 2009

Vegetation Description: Open woodland of *Eucalyptus salmonophloia* over mallee woodland of *E. oleosa* subsp. *oleosa* over sparse mallee shrubland of *E. eremophila* and *E. flocktoniae* subsp. *flocktoniae* over open shrubland of *Allocasuarina acutivalvis* subsp. *acutivalvis*, *A. corniculata*, *Hakea subsulcata*, *H. meisneriana* and *Melaleuca hamata* over open shrubland of *Gastrolobium spinosum*, *Baeckea crispiflora* and *Phebalium filifolium* with sedge *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) over sparse shrubland of *Hibbertia eatoniae* and isolated clumps of herb *Conostylis bealiana*.



Location: Northern Forresteria Greenstone Belt survey site, HLND40. Unallocated Crown Land. Head 4.86 km E along a vehicle track from Forresteria Southern Cross Road then 620 m S along a smaller track. C. 4.60 km E of Mount Holland and 27.39 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East south-east facing gently inclined upper slope of laterite, weathered ironstone, minor quartz. Very slightly rocky laterite outcrop with red-yellow-brown skeletal/shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia sulcata</i> var. <i>platyphylla</i>	55 cm	I	old FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	1.8 m	V	FL	Shrub	
<i>Allocasuarina corniculata</i>	1.8 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	70 cm	I	B	Shrub	
<i>Baeckea crispiflora</i>	75 cm	V	B	Shrub	
<i>Beyeria minor</i>	60 cm	I	B	Shrub	
<i>Beyeria sulcata</i> var. <i>sulcata</i>	1.3 m	I	B	Shrub	
<i>Callitris preissii</i>	2.8 m	V	FR	Tree	
<i>Comesperma volubile</i>	55 cm	I	FL	Climber	
<i>Conostylis bealiana</i>	14 cm	L	FL	Herb	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	45 cm	I	old FL	Shrub	
<i>Dodonaea bursariifolia</i>	30 cm	I	ST	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	40 cm	I	FL	Herb	
<i>Eucalyptus eremophila</i>	6 m	V	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3 m	V	FR, O	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>oleosa</i>	15 m	S	FR, O	Mallee	
<i>Eucalyptus salmonophloia</i>	22 m	V	old FR	Tree	
<i>Eucalyptus tenuis</i>	3 m	V	FR	Mallet	
<i>Gastrolobium spinosum</i>	60 cm	V	ST	Shrub	
<i>Grevillea acuaria</i>	30 cm	I	FL	Shrub	
<i>Hakea meisneriana</i>	2.2 m	V	FR	Shrub	
<i>Hakea subsulcata</i>	1.8 m	V	FR	Shrub	
<i>Hibbertia eatoniae</i>	50 cm	V	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	90 cm	V	old H	Sedge	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.4 m	I	FL	Shrub	
<i>Melaleuca hamata</i>	2.2 m	V	FR	Shrub	
<i>Melaleuca laxiflora</i>	1.1 m	I	FR	Shrub	
<i>Phebalium filifolium</i>	70 cm	V	FL	Shrub	



<i>Santalum acuminatum</i>	<b>3 m</b>	<b>V</b>	<b>FR</b>	<b>Tree</b>	
<i>Stenanthemum stipulosum</i>	<b>25 cm</b>	<b>I</b>	<b>old FL</b>	<b>Shrub</b>	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	<b>55 cm</b>	<b>V</b>	<b>old FL</b>	<b>Shrub</b>	

## HLND41

Date: 4 October 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus horistes* over open shrubland of *Banksia purdieana*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *A. corniculata* and *Calothamnus quadrifidus* subsp. *seminudus* ms over open shrubland of *Hakea subsulcata* and *Melaleuca cordata* over sparse shrubland of *Hibbertia eatoniae* with isolated clumps of herb *Conostylis bealiana*.



Location: Northern Forrestania Greenstone Belt survey site, HLND41. Unallocated Crown Land. 55 m W of a vehicle track running N-S. C. 5.56 km ENE of Mount Holland and 29.24 km N of the intersection of Forrestania Southern Cross Road and Hyden Norseman Road.

Site Description: East facing moderately inclined upper slope of banded ironstone, weathered banded ironstone. Rocky banded ironstone outcrop with red-brown skeletal sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia castanostegia</i>	55 cm	I	ST	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	2.2 m	V	FR, FL	Shrub	
<i>Allocasuarina campestris</i>	1.6 m	I	FR	Shrub	
<i>Allocasuarina corniculata</i>	1.6 m	V	FR	Shrub	
<i>Baeckea crispiflora</i>	75 cm	I	B	Shrub	
<i>Banksia purdieana</i>	2 m	V	FL	Shrub	
<i>Callitris preissii</i>	2.2 m	I	FR	Tree	
<i>Calothamnus quadrifidus</i> subsp. <i>seminudus</i>	1.5 m	V	B, old FR	Shrub	
<i>Cassytha nodiflora</i>	1.2 m	I	ST	Vine	
<i>Comesperma volubile</i>	60 cm	I	FL	Climber	
<i>Conostylis bealiana</i>	12 cm	L	FL	Herb	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	45 cm	I	FL	Herb	
<i>Eucalyptus horistes</i>	5 m	V	FR	Mallee	
<i>Hakea subsulcata</i>	1 m	V	B, FR	Shrub	
<i>Hibbertia eatoniae</i>	50 cm	V	B, FL	Shrub	
<i>Isopogon gardneri</i>	90 cm	I	FL	Shrub	
<i>Labichea</i> sp. WA Thompson & J Allen 949	50 cm	I	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	60 cm	L	old H	Sedge	
<i>Melaleuca cordata</i>	65 cm	V	FR	Shrub	
<i>Platysace maxwellii</i>	60 cm	I	ST	Shrub	
<i>Stenanthemum stipulosum</i>	40 cm	I	old FL	Shrub	
<i>Stylidium sejunctum</i>	18 cm	I	B	Herb	2

## HLND42

Date: 4 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus horistes* over open shrubland of *Acacia assimilis* subsp. *assimilis*, *Callitris preissii*, *Allocasuarina corniculata*, *Hakea multilineata* and *Gastrolobium spinosum* over sparse shrubland of *Acacia castanostegia*, *Hibbertia eatoniae* and *Stenanthemum stipulosum* with isolated clumps of sedge *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) over isolated clumps of herb *Conostylis bealiana*.



Location: Northern Forresteria Greenstone Belt survey site, HLND42. 75 m W of a vehicle track running N-S. Ca. 5.57 km ENE of Mount Holland and 29.62 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South-west facing gently inclined mid-slope of laterite, weathered ironstone. Very slightly rocky weathered iron enriched rock outcrop with red-yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia assimilis</i> subsp. <i>assimilis</i>	2.8 m	V	B, FL	Shrub	
<i>Acacia camptoclada</i>	90 cm	I	FL	Shrub	
<i>Acacia castanostegia</i>	40 cm	V	FL	Shrub	
<i>Allocasuarina corniculata</i>	1.8 m	V	FR	Shrub	
<i>Baeckea crispiflora</i>	60 cm	I	ST	Shrub	
<i>Baeckea grandibracteata</i>	50 cm	I	B	Shrub	
<i>Beyeria sulcata</i> var. <i>sulcata</i>	70 cm	I	B	Shrub	
<i>Callitris preissii</i>	2 m	V	FR	Tree	
<i>Cassytha nodiflora</i>	1.5 m	I	ST	Vine	
<i>Conostylis bealiana</i>	12 cm	L	FL	Herb	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	40 cm	I	old FL	Shrub	
<i>Eucalyptus eremophila</i>	3.3 m	V	FR	Mallee	
<i>Eucalyptus horistes</i>	6 m	S	old FR	Mallee	
<i>Gastrolobium spinosum</i>	1.1 m	V	ST	Shrub	
<i>Hakea multilineata</i>	2.8 m	V	old FL, FR	Shrub	
<i>Hakea subsulcata</i>	1.3 m	V	old FR	Shrub	
<i>Hibbertia eatoniae</i>	50 cm	V	FL	Shrub	
<i>Lepidosperma</i> aff. <i>amantiferrum</i>	50 cm	I	old H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	65 cm	L	old H	Sedge	
<i>Melaleuca hamata</i>	1.7 m	I	B, FR	Shrub	
<i>Persoonia coriacea</i>	60 cm	I	ST	Shrub	
<i>Phebalium filifolium</i>	75 cm	I	FL	Shrub	
<i>Platysace maxwellii</i>	55 cm	I	ST	Shrub	
<i>Stenanthemum stipulosum</i>	35 cm	I	old FL	Shrub	
<i>Templetonia aculeata</i>	15 cm	I	FL	Shrub	
<i>Thysanotus patersonii</i>	25 cm	I	FL	Herb	

## HLND43

Date: 4 October 2009

Vegetation Description: Mallee shrubland of *Eucalyptus tenuis* and *E. calycogona* subsp. *calycogona* over open shrubland of *Daviesia scoparia*, *Melaleuca eleuterostachya*, *M. acuminata* subsp. *acuminata*, *M. teuthidoides* and *Santalum acuminatum* over open shrubland of *Acacia hystrix* subsp. *hystrix* and *Boronia inornata* subsp. *inornata* and *Eremophila densifolia* subsp. *pubiflora*.



Location: Northern Forresteria Greenstone Belt survey site, HLND43. Unallocated Crown Land. 180 m W of a vehicle track running N-S. Ca. 5.50 km ENE of Mount Holland and 29.73 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South south-west facing gently inclined lower slope of ironstone, metasediments, minor quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia camptoclada</i>	60 cm	I	FL	Shrub	
<i>Acacia erinacea</i>	30 cm	I	FL	Shrub	
<i>Acacia hystrix</i> subsp. <i>hystrix</i>	55 cm	V	old FL	Shrub	
<i>Acacia merrallii</i>	50 cm	I	FL	Shrub	
<i>Acacia prainii</i>	75 cm	I	FL	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	50 cm	V	B, FL	Shrub	
<i>Calandrinia eremaea</i> complex	2 cm	I	FL	Herb	
<i>Crassula colligata</i> subsp. <i>lamprosperma</i>	2 cm	I	FL	Herb	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	40 cm	I	old FL	Shrub	
<i>Daviesia scoparia</i>	2.2 m	V	FL	Shrub	
<i>Dodonaea bursariifolia</i>	40 cm	I	ST	Shrub	
<i>Eremophila densifolia</i> subsp. <i>pubiflora</i>	40 cm	I	ST	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	4 m	S	FL, FR, O	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	5.5 m	V	FR	Mallee	
<i>Eucalyptus tenuis</i>	6 m	S	FR	Mallee	
<i>Eutaxia neurocalyx</i>	18 cm	I	ST	Shrub	
<i>Grevillea acuaria</i>	50 cm	V	FL	Shrub	
<i>Maireana marginata</i>	6 cm	I	FR	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.3 m	V	ST	Shrub	
<i>Melaleuca cliffortioides</i>	1.1 m	I	FL, FR	Shrub	
<i>Melaleuca eleuterostachya</i>	1.2 m	V	ST	Shrub	
<i>Melaleuca teuthidoides</i>	1.6 m	V	FR	Shrub	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	H	Grass	
<i>Santalum acuminatum</i>	2.8 m	V	ST	Tree	
<i>Wilsonia humilis</i>	10 cm	I	ST	Shrub	

## HLND44

Date: 4 October 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open mallee shrubland of *E. horistes* over open shrubland of *Acacia camptoclada*, *Melaleuca acuminata* subsp. *acuminata*, *Phebalium filifolium* and *Beyeria sulcata* var. *brevipes* over open shrubland of *Grevillea acuaria* and *Acacia erinacea* with sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) and *L. sp. Bandalup Scabrid* (N. Eveleigh 10798).



Location: Northern Forresteria Greenstone Belt survey site, HLND44. Unallocated Crown Land. 550 m W of a vehicle track running N-S. Ca. 5.95 km ENE of Mount Holland and 28.64 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East facing very gently inclined flat of basalt, ironstone, quartz, metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia camptoclada</i>	2 m	V	FL	Shrub	
<i>Acacia erinacea</i>	35 cm	V	FL, FR	Shrub	
<i>Acacia merrallii</i>	50 cm	I	FL	Shrub	
<i>Allocasuarina helmsii</i>	2.8 m	V	FR	Shrub	
<i>Austrostipa acrociliata</i>	25 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	25 cm	I	H	Grass	
<i>Austrostipa hemipogon</i>	50 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	25 cm	I	H	Grass	
<i>Beyeria sulcata</i> var. <i>brevipes</i>	1.3 m	V	B	Shrub	
<i>Ceratogyne obionoides</i>	2 cm	I	FL	Herb	
<i>Crassula colligata</i> subsp. <i>lamprosperma</i>	1.5 cm	I	FL	Herb	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	1 m	V	old FL	Shrub	
<i>Dianella revoluta</i> var. <i>divaricata</i>	90 cm	I	ST	Herb	
<i>Eremophila ionantha</i>	55 cm	I	ST	Shrub	
<i>Eucalyptus horistes</i>	7 m	S	FR	Mallee	
<i>Eucalyptus salmonophloia</i>		S	old FR?	Tree	
<i>Eucalyptus yilgarnensis</i>	6 m	S	FL, FR	Mallee	
<i>Grevillea acuaria</i>	90 cm	V	FL	Shrub	
<i>Helichrysum leucopsideum</i>	20 cm	I	B	Herb	
<i>Hyalosperma demissum</i>	2 cm	I	FL	Herb	
<i>Isoetopsis graminifolia</i>	2 cm	I	FL	Herb	
<i>Lepidosperma</i> aff. <i>fimbriatum</i>	45 cm	L	old H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)		V	old H	Sedge	
<i>Lepidosperma</i> sp. Bandalup Scabrid (N. Eveleigh 10798)	65 cm	V	old H	Sedge	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	2 m	V	FR	Shrub	
<i>Phebalium filifolium</i>	1.6 m	V	FL	Shrub	
<i>Phyllangium</i> sp.	2 cm	I	ST	Herb	
<i>Ptilotus drummondii</i>	7 cm	I	FL	Shrub	
<i>Ptilotus holosericeus</i>	4 cm	I	FL	Shrub	
<i>Rhodanthe pygmaea</i>	2 cm	I	FL	Herb	

<i>Santalum murrayanum</i>	<b>70 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	
<i>Senna artemisioides subsp. filifolia</i>	<b>1.2 m</b>	<b>I</b>	<b>B</b>	<b>Shrub</b>	
<i>Thelymitra petrophila</i>	<b>15 cm</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Thysanotus manglesianus</i>	<b>1 m</b>	<b>I</b>	<b>B</b>	<b>Herb</b>	
<i>Westringia cephalantha var. cephalantha</i>	<b>50 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	

## HLND45

Date: 5 October 2009

Vegetation Description: Open woodland of *Eucalyptus salubris* over open shrubland of *Santalum acuminatum*, *Allocasuarina helmsii* and *Trymalium myrtillus* subsp. *myrtillus* over open shrubland of *Acacia pachypoda*, *A. kerryana* and *Grevillea acuaria*, *Eutaxia nanophylla* and *Hemigenia* aff. *diplanthera*.



Location: Northern Forresteria Greenstone Belt survey site HLND45. Unallocated Crown Land. Located ca 2.88 km E of North Ironcap and ca 8.83 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 20.97 km SSW of Mount Holland.

Site Description: West south-west facing gently inclined crest of greenstone, basalt. Slightly rocky outcrop with red-brown shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia kerryana</i>	55 cm	V	old FL?	Shrub	2
<i>Acacia pachypoda</i>	65 cm	V	old FL	Shrub	
<i>Acacia rendlei</i>	50 cm	I	FL	Shrub	
<i>Allocasuarina helmsii</i>	1.8 m	S	FR	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	40 cm	I	B, FL	Shrub	
<i>Comesperma</i> sp.	50 cm	I	ST	Shrub	
<i>Dodonaea ptarmicaefolia</i>	80 cm	I	FR	Shrub	
<i>Dodonaea stenozyga</i>	1.3 m	I	FL, FR	Shrub	
<i>Eucalyptus salubris</i>	5 m	V	FR	Mallet	
<i>Euphorbiaceae</i> sp.	1.5 cm	I	ST	Herb	
<i>Eutaxia nanophylla</i>	30 cm	V	FL	Shrub	3
<i>Grevillea acuaria</i>	50 cm	V	B	Shrub	
<i>Hemigenia</i> aff. <i>diplanthera</i>	25 cm	V	old FL, FR	Shrub	
<i>Hibbertia croninensis</i> ms	45 cm	I	FL	Shrub	
<i>Rostraria cristata</i>	6 cm	I	H	Grass	
<i>Santalum acuminatum</i>	1.7 m	V	ST	Shrub	
<i>Stellaria filiformis</i>	6 cm	I	B	Herb	
<i>Thysanotus patersonii</i>	20 cm	I	B	Herb	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	1.4 m	V	FL	Shrub	
<i>Vulpia myuros</i> forma <i>myuros</i>	9 cm	I	H	Grass	

## HLND46

Date: 5 October 2009

Vegetation Description: Open forest of *Eucalyptus salubris* over open shrubland of *Melaleuca cucullata* and *Eremophila dempsteri* over sparse shrubland of *Dodonaea stenozyga*, *Daviesia benthamii* subsp. *acanthoclona* and *Acacia merrallii*.



Location: Northern Forresteria Greenstone Belt survey site HLND46. Unallocated Crown Land. Located ca 2.79 km E of North Ironcap and ca 8.89 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 20.95 km SSW of Mount Holland.

Site Description: West facing gently inclined mid/upper slope of greenstone, amphibolite, weathered basalt with light red-brown shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia merrallii</i>	60 cm	I	FL	Shrub	
<i>Allocasuarina helmsii</i>	1.6 m	I	FR	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	85 cm	V	FL, FR	Shrub	
<i>Dodonaea stenozyga</i>	1.4 m	V	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	20 cm	I	ST	Shrub	
<i>Eremophila dempsteri</i>	2.1 m	V	FL	Shrub	
<i>Eucalyptus salubris</i>	6 m	M	FL, FR, O	Mallet	
<i>Grevillea acuaria</i>	35 cm	I	FL	Shrub	
<i>Melaleuca cucullata</i>	2.5 m	V	FR	Shrub	
<i>Senecio glossanthus</i>	12 cm	I	FL	Herb	
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>	55 cm	I	FL	Shrub	
<i>Thysanotus patersonii</i>	30 cm	I	FL	Herb	
<i>Trymalium myrtillus</i> subsp. <i>myrtillus</i>	50 cm	I	FL	Shrub	



## HLND47

Date: 5 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus calycogona* subsp. *calycogona* and *E. pileata* over open shrubland of *Melaleuca pauperiflora* subsp. *fastigiata*, *Dodonaea stenozyga*, *Santalum acuminatum* and *Daviesia scoparia* over sparse shrubland of *Acacia intricata* and *A. erinacea*.



Location: Northern Forresteria Greenstone Belt survey site HLND47. Unallocated Crown Land. Located ca 3.20 km E of North Ironcap and ca 8.53 km NW of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road. Ca 20.96 km SSW of Mount Holland.

Site Description: East facing very gently inclined lower slope of basalt, ironstone, quartz, mixed metasediments with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia erinacea</i>	30 cm	V	FL	Shrub	
<i>Acacia intricata</i>	30 cm	V	FL	Shrub	
<i>Cryptandra minutifolia</i> subsp. <i>brevistyla</i>	50 cm	I	old FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>acanthoclona</i>	60 cm	I	FL	Shrub	
<i>Daviesia scoparia</i>	1.8 m	V	B, FL	Shrub	
<i>Dodonaea stenozyga</i>	1.6 m	V	FR	Shrub	
<i>Eremophila dempsteri</i>	60 cm	I	ST	Shrub	
<i>Eremophila ionantha</i>	55 cm	I	ST	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3 m	S	FL, FR, O	Mallee	
<i>Eucalyptus livida</i>	4 m	V	FR	Mallee	
<i>Eucalyptus pileata</i>	3 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	75 cm	I	B	Shrub	
<i>Grevillea acuaria</i>	45 cm	I	FL	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	1.4 m	V	FR	Shrub	
<i>Melaleuca hamata</i>	90 cm	I	B, FR	Shrub	
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i>	2.3 m	V	FR	Shrub	
<i>Melaleuca teuthidoides</i>	1 m	I	FR	Shrub	
<i>Olearia muelleri</i>	30 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.8 m	V	FR	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Thysanotus patersonii</i>	80 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	18 cm	I	ST	Shrub	

## HLND48

Date: 5 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus livida* and *E. steedmanii* over shrubland of *Hakea multilinea*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Callitris canescens*, *Melaleuca condylosa* and *Santalum acuminatum* over sparse shrubland of *Phebalium filifolium* with isolated vine *Comesperma volubile*.



Location: Northern Forresteria Greenstone Belt survey site HLND48. Unallocated Crown Land. Located 3.41 km W of Forresteria Southern Cross Road, then 65 m N of the vehicle track. Ca 5.26 km NE of North Ironcap and ca 17.58 km S of Mount Holland.

Site Description: North facing gently inclined mid-slope of mixed- quartz, basalt, calcrete, metasediments with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia beauverdiana</i>	1.8 m	I	FL	Shrub	
<i>Acacia mutabilis</i> subsp. <i>mutabilis</i>	50 cm	I	FL	Shrub	
<i>Acacia steedmanii</i> subsp. <i>steedmanii</i>	2 m	V	FL	Shrub	
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	2 m	S	FR	Shrub	
<i>Callitris canescens</i>	2.5 m	V	FR	Tree	
<i>Comesperma volubile</i>	1.2 m	I	FL	Climber	
<i>Dampiera angulata</i> subsp. <i>angulata</i>	30 cm	I	FL	Shrub	
<i>Dodonaea bursariifolia</i>	50 cm	I	FL	Shrub	
<i>Drosera macrantha</i> subsp. <i>macrantha</i>	45 cm	I	FL	Herb	
<i>Drummondita hassellii</i>	50 cm	I	B	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3 m	V	FR	Mallee	
<i>Eucalyptus livida</i>	6 m	S	FR	Mallee	
<i>Eucalyptus steedmanii</i>	2.5 m	V	FR	Tree	R
<i>Exocarpos aphyllus</i>	1 m	I	B	Shrub	
<i>Goodenia pinifolia</i>	55 cm	I	old stalk	Shrub	
<i>Grevillea acuaria</i>	40 cm	I	FL	Shrub	
<i>Hakea multilinea</i>	3 m	V	FL	Shrub	
<i>Leptosema daviesioides</i>	10 cm	L	FL	Shrub	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	80 cm	I	FL, FR	Shrub	
<i>Melaleuca condylosa</i>	2.2 m	V	FR	Shrub	
<i>Melaleuca cordata</i>	70 cm	I	FR	Shrub	
<i>Melaleuca hamata</i>	1.5 m	I	B, FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	50 cm	I	FR	Shrub	
<i>Melaleuca laxiflora</i>	80 cm	I	FR	Shrub	
<i>Micromyrtus erichsenii</i>	1.2 m	I	B, FL	Shrub	
<i>Phebalium filifolium</i>	1 m	V	FL	Shrub	
<i>Rinzia carnosa</i>	40 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.5 m	V	FR	Shrub	
<i>Thryptomene kochii</i>	60 cm	I	FL	Shrub	
<i>Thysanotus patersonii</i>	40 cm	I	B	Herb	



## HLND49

Date: 6 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus horistes* over open shrubland of *Acacia assimilis* subsp. *assimilis*, *Allocasuarina spinosissima*, *Santalum acuminatum* and *Hakea multilineata* over sparse shrubland of *Micromyrtus obovata* and *Phebalium filifolium* over sparse shrubland of *Calytrix sapphirina*, *Grevillea dissecta*, *Hibbertia exasperata* and *Stenanthemum stipulosum*.



Location: Northern Forresteria Greenstone Belt survey site, HLND49. Unallocated Crown Land. Drive 3.67 km S along Forresteria Southern Cross Road from the turnoff to Mount Holland then drive along a track heading SE for 760 m. The plot is 50 m N of the track. C. 3.74 km S of Mount Holland and 23.43 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: East north-east level upper slope of banded ironstone, ironstone, weathered ironstone, mixed metasediments. Slightly rocky banded ironstone outcrop with yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia assimilis</i> subsp. <i>assimilis</i>	1.3 m	V	B, FL	Shrub	
<i>Acacia castanostegia</i>	40 cm	I	FL	Shrub	
<i>Acacia nigripilosa</i> subsp. <i>nigripilosa</i>	75 cm	I	FL	Shrub	
<i>Allocasuarina spinosissima</i>	1.2 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	45 cm	I	B	Shrub	
<i>Baeckea crispiflora</i>	85 cm	I	B	Shrub	
<i>Banksia purdieana</i>	65 cm	I	ST	Shrub	
<i>Beyeria minor</i>	50 cm	I	B	Shrub	
<i>Beyeria sulcata</i> var. <i>sulcata</i>	55 cm	I	B	Shrub	
<i>Boronia ternata</i> var. <i>ternata</i>	45 cm	I	B	Shrub	
<i>Calytrix sapphirina</i>	45 cm	B	B, FL	Shrub	
<i>Dampiera</i> cf. <i>obliqua</i>	30 cm	I	FL	Herb	
<i>Eucalyptus horistes</i>	2.8 m	S	FR	Mallee	
<i>Eucalyptus pileata</i>	3.5 m	V	FR	Mallee	
<i>Gompholobium obcordatum</i>	25 cm	V	ST	Shrub	
<i>Grevillea dissecta</i>	45 cm	V	B, FL	Shrub	4
<i>Grevillea hookeriana</i> subsp. <i>apiciloba</i>	55 cm	I	FL	Shrub	
<i>Hakea meisneriana</i>	70 cm	I	B	Shrub	
<i>Hakea multilineata</i>	1.5 m	V	FL	Shrub	
<i>Hakea subsulcata</i>	1.4 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	45 cm	V	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	80 cm	L	old H	Sedge	
<i>Lepidosperma</i> sp. Bandalup Scabrid (N. Eveleigh 10798)	50 cm	L	old H	Sedge	
<i>Melaleuca calyptroides</i>	1 m	I	FR	Shrub	
<i>Micromyrtus obovata</i>	55 cm	V	FL	Shrub	
<i>Persoonia coriacea</i>	55 cm	I	old FL	Shrub	
<i>Phebalium filifolium</i>	50 cm	V	FL	Shrub	
<i>Pimelea aeruginosa</i>	45 cm	I	FL	Shrub	
<i>Platysace maxwellii</i>	60 cm	I	ST	Shrub	
<i>Rinzia sessilis</i>	30 cm	I	FL	Shrub	

<i>Santalum acuminatum</i>	1.6 m	V	FR	Shrub	
<i>Stenanthemum stipulosum</i>	40 cm	V	FL	Shrub	
<i>Stylidium sejunctum</i>	22 cm	I	old FL	Herb	2
<i>Thysanotus patersonii</i>	30 cm	I	FL	Herb	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	30 cm	I	ST	Shrub	

## HLND50

Date: 6 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pileata* and *E. eremophila* over sparse shrubland of *Melaleuca hamata* and *Santalum acuminatum* over sparse shrubland of *Phebalium filifolium*, *Hakea multilineata*, *Acacia castanostegia* and *Stenanthemum stipulosum*.



Location: Northern Forresteria Greenstone Belt survey site, HLND50. Unallocated Crown Land. Drive 3.67 km S along Forresteria Southern Cross Road from the turnoff to Mount Holland then drive along a track heading SE for 800 m. The plot is 200 m N of the track. C. 3.65 km S of Mount Holland and 23.54 km N of the intersection of Forresteria Southern Cross Road and Hyden Norseman Road.

Site Description: South-east facing gently inclined crest/upper slope of weathered ironstone. Slightly rocky weathered ironstone outcrop with yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia acutata</i>	70 cm	I	FL	Shrub	
<i>Acacia camptoclada</i>	60 cm	I	FL	Shrub	
<i>Acacia castanostegia</i>	40 cm	V	FL	Shrub	
<i>Acacia densiflora</i>	50 cm	I	FL	Shrub	
<i>Acacia nigripilosa</i> subsp. <i>nigripilosa</i>	1 m	I	FL	Shrub	
<i>Allocasuarina spinosissima</i>	70 cm	I	FR?	Shrub	
<i>Beyeria sulcata</i> var. <i>sulcata</i>	55 cm	I	B	Shrub	
<i>Boronia ternata</i> var. <i>ternata</i>	45 cm	I	FL	Shrub	
<i>Dampiera</i> cf. <i>obliqua</i>	25 cm	I	FL	Herb	
<i>Eucalyptus eremophila</i>	3 m	S	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3 m	V	FR, O	Mallee	
<i>Eucalyptus pileata</i>	4 m	S	FR	Mallee	
<i>Grevillea oligantha</i>	55 cm	I	FL	Shrub	
<i>Hakea meisneriana</i>	55 cm	I	B	Shrub	
<i>Hakea multilineata</i>	70 cm	V	FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	75 cm	L	old H	Sedge	
<i>Lepidosperma</i> sp. Bandalup Scabrid (N. Eveleigh 10798)	50 cm	L	old H	Sedge	
<i>Melaleuca hamata</i>	1.2 m	V	FR	Shrub	
<i>Melaleuca scalena</i>	70 cm	I	B	Shrub	
<i>Neurachne alopecuroidea</i>	8 cm	I	ST	Grass	
<i>Phebalium filifolium</i>	70 cm	V	FL	Shrub	
<i>Pimelea aeruginosa</i>	50 cm	I	FL	Shrub	
<i>Platysace maxwellii</i>	65 cm	I	old FR	Shrub	
<i>Rinzia sessilis</i>	30 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	2 m	V	ST	Shrub	
<i>Stenanthemum stipulosum</i>	35 cm	V	old FL	Shrub	
<i>Thelymitra petrophila</i>	30 cm	I	FL	Herb	
<i>Triodia</i> sp.	25 cm	I	ST	Grass	
<i>Westringia cephalantha</i> var. <i>cephalantha</i>	20 cm	I	ST	Shrub	

## SWRV01

Date: 21 October 2009

Vegetation Description: Open forest of *Eucalyptus salmonophloia* and *E. oleosa* subsp. *corvina* over open mallee shrubland of *E. calycogona* subsp. *calycogona* over sparse shrubland of *Dodonaea ptarmicaefolia* and *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over sparse *Rhagodia crassifolia* and *Acacia erinacea* over isolated clumps of grass *Austrostipa variabilis*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV01. Crown Reserve 30795, proposed Nature Reserve. C. 1.41 km S of Cocanarup Homestead and c. 7.23 km E of the intersection of South Coast Highway and Ongerup Road. C. 16.69 km WSW of Ravensthorpe.

Site Description: West facing gently inclined mid-slope of amphibolite, greenstone, quartz. Slightly rocky greenstone outcrop with dark brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	1.7 m	I	ST	Shrub	
<i>Acacia erinacea</i>	60 cm	V	FL, FR	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	5 m	V	old FL	Tree	
<i>Alyxia buxifolia</i>	75 cm	I	ST	Shrub	
<i>Astroloma epacridis</i>	25 cm	I	ST	Shrub	
<i>Austrodanthonia setacea</i>	18 cm	I	old H	Grass	
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH18459)	25 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	22 cm	I	H	Grass	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea ptarmicaefolia</i>	3 m	S	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	35 cm	I	FL?, FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	55 cm	I	old & new FL	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	15 m	V	FL, FR, O	Mallee	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	5 m	V	FL, FR	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	15 m	S	old FR, O	Tree	3
<i>Eucalyptus proxima</i>	2.5 m	V	FL, FR	Mallee	4
<i>Eucalyptus salmonophloia</i>	20 m	S	old FR	Tree	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	70 cm	V	old FL	Shrub	
<i>Lepidosperma diurnum</i>	50 cm	L	old H	Sedge	1
<i>Oxalis perennans</i>	2.5 cm	I	old FL	Herb	
<i>Plantago hispida</i>	7 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	4 cm	I	FL	Shrub	
<i>Rhagodia crassifolia</i>	70 cm	V	ST	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	65 cm	I	FL, FR	Shrub	
<i>Templetonia battii</i>	45 cm	I	FR	Shrub	
<i>Teucrium sessiliflorum</i>	2 cm	I	FL	Herb	

## SWRV02

Date: 21 October 2009

Vegetation Description: Open forest of *Eucalyptus extensa* over sparse shrubland of *Dodonaea ptarmicaefolia* and *Templetonia retusa* over sparse shrubland of *Rhagodia crassifolia* and *Grevillea pectinata* over isolated clumps of grass *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV02. Crown Reserve 30795, proposed Nature Reserve. C. 1.53 km S of Cocanarup Homestead and c. 7.28 km E of the intersection of South Coast Highway and Ongerup Road. C. 16.73 km WSW of Ravensthorpe.

Site Description: North-west facing gently inclined upper slope of greenstone, granite, quartz with dark brown shallow clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	95 cm	I	old FL	Shrub	
<i>Acacia erinacea</i>	30 cm	I	FL	Shrub	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	30 cm	I	H	Grass	
<i>Dodonaea ptarmicaefolia</i>	2.5 m	V	FL	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	20 cm	I	ST	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	50 cm	I	FL	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	50 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	8 m	M	FR, old O	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	1.8 m	V	FR, O	Mallee	3
<i>Grevillea pectinata</i>	60 cm	V	FL	Shrub	
<i>Lysimachia arvensis</i>	6 cm	I	old FL	Herb	
<i>Plantago hispida</i>	4 cm	I	FL	Herb	
<i>Rhagodia crassifolia</i>	45 cm	V	ST	Shrub	
<i>Santalum acuminatum</i>	1.6 m	I	ST	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	40 cm	I	ST	Shrub	
<i>Templetonia retusa</i>	2.5 m	I	FL	Shrub	



**SWRV03**

Date: 21 October 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over *Acacia* sp. narrow phyllode (B.R. Maslin 7831) over open mallee shrubland of *Eucalyptus phenax* subsp. *phenax* and *E. proxima* over shrubland of *Dodonaea ptarmicaefolia*, *Santalum spicatum*, *Acacia cyclops* and *Allocasuarina campestris* over *Hybanthus floribundus* subsp. *adpressus* over sparse sedgeland of *Lepidosperma diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV03. Crown Reserve 30795, proposed Nature Reserve. C. 1.33 km S of Cocanarup Homestead and c. 7.18 km E of the intersection of South Coast Highway and Ongerup Road. C. 16.72 km WSW of Ravensthorpe.

Site Description: West north-west facing moderately inclined mid-slope of greenstone, amphibolite, quartz. Very slightly rocky amphibolite, greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	2.5 m	V	Pods	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	5 m	V	ST	Shrub	
<i>Allocasuarina campestris</i>	2.6 m	V	FR	Shrub	
<i>Alyxia buxifolia</i>	15 cm	I	ST	Shrub	
<i>Astroloma epacridis</i>	30 cm	I	ST	Shrub	
<i>Comesperma integerrimum</i>	2 m	I	ST	Herb	
<i>Dianella revoluta</i> var. <i>revoluta</i>	45 cm	I	old stalk	Herb	
<i>Dodonaea pinifolia</i>	70 cm	I	B	Shrub	
<i>Dodonaea ptarmicaefolia</i>	2.5 m	S	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	25 cm	I	ST	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	18 cm	I	old FL	Shrub	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	3.5 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	2 m	V	FR	Mallee	4
<i>Eucalyptus salmonophloia</i>	20 m	S	ST	Tree	
<i>Exocarpos sparteus</i>	3 m	I	ST	Shrub	
<i>Guichenotia ledifolia</i>	1.6 m	V	B	Shrub	
<i>Hibbertia exasperata</i>	20 cm	I	B	Shrub	
<i>Hibbertia gracilipes</i>	35 cm	I	B	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	1 m	V	FL	Shrub	
<i>Lepidosperma diurnum</i>	55 cm	L	H	Sedge	1
<i>Mirbelia ramulosa</i>	45 cm	I	ST	Shrub	
<i>Rhagodia crassifolia</i>	50 cm	I	ST	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	1.6 m	I	B	Shrub	
<i>Santalum spicatum</i>	3 m	V	FR	Tree	
<i>Teucrium sessiliflorum</i>	4 m	I	ST	Herb	

## SWRV04

Date: 21 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus oleosa* subsp. *corvina* over sparse shrubland of *Dodonaea concinna* and *Daviesia nematophylla* over *Halgania andromedifolia* and *Olearia muelleri* over open shrubland of *Acacia lachnophylla*.

Location: South-west Ravensthorpe Greenstone Belt survey site SWRV04. Crown Reserve 30795, proposed Nature Reserve. C. 1.75 km S of Cocanarup Homestead and c. 7.23 km E of the intersection of South Coast Highway and Ongerup Road. C. 16.87 km WSW of Ravensthorpe.



Site Description: North-west facing gently inclined crest of mixed sediments, greenstone, quartz, some calcrete. Very slightly rocky weathered greenstone outcrop with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	1.2 m	I	old FL	Shrub	
<i>Acacia erinacea</i>	40 cm	V	FL	Shrub	
<i>Acacia lachnophylla</i>	45 cm	S	FL	Shrub	
<i>Cassyltha melantha</i>	2.5 m	V	FR	Climber	
<i>Daviesia nematophylla</i>	1.4 m	V	FL	Shrub	
<i>Dianella brevicaulis</i>	50 cm	I	FL	Herb	
<i>Dodonaea concinna</i>	1.3 m	V	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	25 cm	I	ST	Shrub	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	4 m	S	FR, O	Mallee	3
<i>Halgania andromedifolia</i>	80 cm	V	FL	Shrub	
<i>Olearia muelleri</i>	55 cm	V	FL	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	30 cm	I	ST	Shrub	
<i>Senna artemisioides</i> subsp. <i>x artemisioides x filifolia</i>	55 cm	I	ST	Shrub	

## SWRV05

Date: 22 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa* over *E. flocktoniae* subsp. *flocktoniae* and *E. proxima* over shrubland of *Melaleuca cucullata*, *M. torquata* and *M. undulata*.

Location: South-west Ravensthorpe Greenstone Belt survey site SWRV05. Unallocated Crown Land. 40 m E of the track and c. 7.56 km S of the Cocanarup Homestead. Ca. 21.32 km SW of Ravensthorpe.



Site Description: North north-west facing very gently inclined upper slope of some quartz, calcrete, minor weathered tonalite with dark brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	I	old FL	Shrub	
<i>Acacia lachnophylla</i>	15 cm	I	FL	Shrub	
<i>Eucalyptus extensa</i>	12 m	S	FR, O	Tree	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	6 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	2.8 m	V	FR, O	Mallee	4
<i>Hakea commutata</i>	2.2 m	V	FR	Shrub	
<i>Lepidosperma fimbriatum</i>	35 cm	I	ST	Sedge	
<i>Melaleuca cucullata</i>	2.8 m	S	B, FR	Shrub	
<i>Melaleuca torquata</i>	2.4 m	V	FR	Shrub	
<i>Melaleuca undulata</i>	1 m	V	FL, FR	Shrub	

## SWRV06

Date: 22 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa*, *E. brachycalyx* and *E. oleosa* subsp. *corvina* over open shrubland of *Melaleuca cucullata* and *M. undulata* over sparse shrubland of *Acacia glaucoptera* and *Boronia inornata* subsp. *inornata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV06. Unallocated Crown Land. 350 m E of the track and c. 7.64 km S of the Cocanarup Homestead. Ca. 21.19 km SW of Ravensthorpe.

Site Description: East south-east facing gently inclined mid-slope of weathered greenstone, some calcrete with brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	V	FL	Shrub	
<i>Acacia lachnophylla</i>	15 cm	I	FL	Shrub	
<i>Austrostipa acrociliata</i>	65 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	20 cm	I	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	65 cm	V	B, FL	Shrub	
<i>Eucalyptus brachycalyx</i>	12 m	S	FR	Tree	
<i>Eucalyptus extensa</i>	12 m	S	FR, O	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	12 m	S	FR	Mallee	3
<i>Melaleuca cucullata</i>	3.2 m	S	FR	Shrub	
<i>Melaleuca torquata</i>	2 m	V	FL, FR	Shrub	
<i>Melaleuca undulata</i>	2.8 m	V	FR	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	60 cm	I	FL, FR	Shrub	

**SWRV07**

Date: 22 October 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus uncinata* over open mallee shrubland of *Eucalyptus densa* subsp. *improcera*, *E. pluricaulis* subsp. *pluricaulis*, *E. proxima*, *Melaleuca hamata* and *Kunzea cincinnata* over sparse shrubland of *Melaleuca rigidifolia*, *M. villosisepala*, *Acacia mimica* var. *angusta* and *Daviesia benthamii* subsp. *benthamii* over sparse *Boronia inornata* subsp. *inornata* over open sedgeland of *Gahnia ancistrophylla*, *Lepidosperma* sp. *clathrate* and *L. sp. Bandalup scabrid* (N. Eveleigh 10798).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV07. Unallocated Crown Land. 60 m W of the track and c. 7.68 km S of the Cocanarup Homestead. Ca. 21.52 km SW of Ravensthorpe.

Site Description: East south-east facing very gently inclined mid-slope of quartz, weathered laterite with yellow-brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ingrata</i>	30 cm	I	B	Shrub	
<i>Acacia mimica</i> var. <i>angusta</i>	50 cm	V	B	Shrub	
<i>Acrotriche ramiflora</i>	60 cm	I	B	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	50 cm	V	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	25 cm	I	FL	Shrub	
<i>Calytrix leschenaultii</i>	45 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	1 m	V	B	Climber	
<i>Cooperookia strophiolata</i>	30 cm	I	ST	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	55 cm	V	ST	Shrub	
<i>Dodonea pinifolia</i>	65 cm	I	B, FR	Shrub	
<i>Eucalyptus densa</i> subsp. <i>improcera</i>	1.2 m	V	O, FL, FR	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.5 m	V	FR	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.5 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.2 m	V	FR	Mallee	4
<i>Eucalyptus uncinata</i>	5 m	V	FR	Mallee	
<i>Eutaxia cuneata</i>	45 cm	I	ST	Shrub	
<i>Exocarpos aphyllus</i>	85 cm	I	FL	Shrub	
<i>Gahnia ancistrophylla</i>	45 cm	V	H	Sedge	
<i>Glischrocaryon aureum</i>	25 cm	I	FL	Shrub	
<i>Gompholobium confertum</i>	1.3 m	I	B, FL	Shrub	
<i>Grevillea dolichopoda</i>	45 cm	I	old FL	Shrub	
<i>Grevillea pectinata</i>	50 cm	I	FL	Shrub	
<i>Hakea lissocarpha</i>	1.7 m	I	B?	Shrub	
<i>Hibbertia gracilipes</i>	40 cm	I	FL	Shrub	
<i>Kunzea affinis</i>	1.3 m	V	FL	Shrub	
<i>Kunzea cincinnata</i>	1.5 m	V	FL	Shrub	1
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	50 cm	L	ST	Sedge	
<i>Lepidosperma</i> sp. <i>Clathrate</i>	50 cm	V	H	Sedge	
<i>Lepidosperma</i> sp. <i>Ravensthorpe</i> (G.F. Craig 5188)	30 cm	V	H	Sedge	
<i>Leucopogon concinnus</i>	60 cm	I	ST	Shrub	

<i>Leucopogon cuneifolius</i>	50 cm	I	ST	Shrub	
<i>Leucopogon hamulosus</i>	40 cm	I	ST	Shrub	
<i>Leucopogon obtusatus</i>	75 cm	I	FL	Shrub	
<i>Melaleuca glaberrima</i>	1 m	I	FL	Shrub	
<i>Melaleuca hamata</i>	2.5 m	V	FR	Shrub	
<i>Melaleuca lateriflora subsp. lateriflora</i>	1.4 m	I	FR	Shrub	
<i>Melaleuca rigidifolia</i>	65 cm	V	FL	Shrub	
<i>Melaleuca uncinata</i>	1.8 m	I	FR	Shrub	
<i>Melaleuca undulata</i>	1.3 m	V	FR	Shrub	
<i>Melaleuca villosisepala</i>	80 cm	V	FR	Shrub	
<i>Neurachne alopecuroidea</i>	10 cm	L	H?	Grass	
<i>Petrophile seminuda</i>	70 cm	I	FL	Shrub	
<i>Rinzia communis</i>	35 cm	I	old FL	Shrub	
<i>Schoenus sp. Cape Riche Cushion (G.J. Keighery 9922)</i>	3 cm	I	ST	Shrub	
<i>Spyridium cordatum</i>	55 cm	I	B	Shrub	
<i>Stylidium involucreatum</i>	10 cm	I	B	Shrub	
<i>Verticordia acerosa var. preissii</i>	40 cm	I	FL	Shrub	

## SWRV08

Date: 23 October 2009

Vegetation Description: Mallee woodland of *Eucalyptus flocktoniae* subsp. *flocktoniae*, *Melaleuca cucullata* and *Hakea laurina* over open shrubland of *Melaleuca undulata* over open shrubland of *Grevillea pectinata* and *Daviesia benthamii* subsp. *benthamii* over sparse sedgeland of *Lepidosperma* sp. Ravensthorpe (G.F. Craig 5188).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV08. Unallocated Crown Land. 85 m W of the track and c. 7.62 km S of the Cocanarup Homestead. Ca. 21.47 km SW of Ravensthorpe.

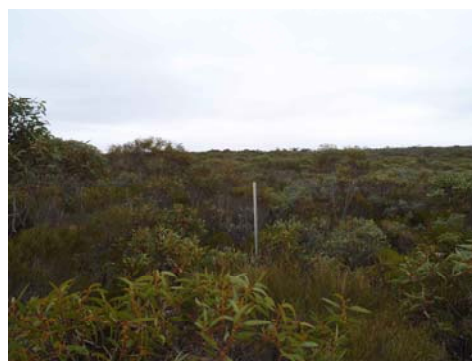
Site Description: North north-east level crest/upper slope of quartz, granite, laterite, calcrete, mixed weathered. Slightly rocky granite outcrop with light brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	80 cm	V	FL	Shrub	
<i>Acacia ingrata</i>	25 cm	I	B	Shrub	
<i>Acacia tetanophylla</i>	70 cm	I	FL	Shrub	
<i>Austrostipa pycnostachya</i>	25 cm	I	H	Grass	
<i>Austrostipa pycnostachya</i>	55 cm	I	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	55 cm	V	FL	Shrub	
<i>Cassytha melantha</i>	2 m	V	B	Climber	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	55 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea concinna</i>	1.3 m	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	8 m	S	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.5 m	V	FR, FL	Mallee	4
<i>Grevillea concinna</i> subsp. <i>lemanniana</i>	55 cm	I	ST	Shrub	
<i>Grevillea pectinata</i>	65 cm	V	FL	Shrub	
<i>Hakea commutata</i>	2.2 m	V	FR	Shrub	
<i>Hakea laurina</i>	3.5 m	V	B, FR	Tree	
<i>Lepidosperma</i> aff. <i>fimbriatum</i>	30 cm	V	H	Sedge	
<i>Lepidosperma diurnum</i>	35 cm	I	H	Sedge	1
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	18 cm	V	old H	Sedge	
<i>Melaleuca cucullata</i>	3 m	S	FL, FR	Shrub	
<i>Melaleuca torquata</i>	1.8 m	V	FL, FR	Shrub	
<i>Melaleuca undulata</i>	2 m	S	FR	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	40 cm	I	ST	Shrub	

## SWRV09

Date: 23 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae*, *E. desmondensis* and *E. proxima* over shrubland of *Acacia tetanophylla*, *Daviesia benthamii* subsp. *benthamii*, *Exocarpos aphyllus* and *Melaleuca scalena* over sparse shrubland of *Grevillea pectinata* over sparse sedgeland of *Tetraria* sp. Mt Madden (C.D. Turley 40 BP/897).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV09. Unallocated Crown Land. 85 m SW of the intersection of two tracks and c. 9.99 km S of the Cocanarup Homestead. Ca. 23.15 km SW of Ravensthorpe.

Site Description: North facing gently inclined mid-slope of quartz, weathered greenstone, mixed metasediments, granite with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	40 cm	I	ST	Shrub	
<i>Acacia ingrata</i>	35 cm	I	ST	Shrub	
<i>Acacia tetanophylla</i>	60 cm	S	FR, FL	Shrub	
<i>Baekkea corynophylla</i>	55 cm	I	FL	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	40 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	70 cm	I	FR	Climber	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	80 cm	V	FL	Shrub	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	70 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	ST	Herb	
<i>Dodonaea pinifolia</i>	40 cm	I	FR	Shrub	
<i>Eucalyptus desmondensis</i>	1.3 m	V	FR	Mallee	4
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.1 m	V	FR, O	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.2 m	S	FR	Mallee	
<i>Eucalyptus proxima</i>	1 m	V	FR	Mallee	4
<i>Eutaxia cuneata</i>	40 cm	I	ST	Shrub	
<i>Exocarpos aphyllus</i>	80 cm	V	FL	Shrub	
<i>Gahnia ancistrophylla</i>	25 cm	L	old H	Sedge	
<i>Gastrolobium musaceum</i>	70 cm	I	ST	Shrub	
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>	40 cm	I	FL	Shrub	
<i>Grevillea pectinata</i>	50 cm	V	FL	Shrub	
<i>Lasiopetalum rosmarinifolium</i>	30 cm	I	old FL	Shrub	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	25 cm	L	old H	Sedge	
<i>Melaleuca glaberrima</i>	50 cm	I	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	60 cm	I	FR	Shrub	
<i>Melaleuca scalena</i>	1 m	V	FR	Shrub	
<i>Melaleuca torquata</i>	55 cm	I	old FL	Shrub	
<i>Microcorys glabra</i>	40 cm	I	FR	Shrub	
<i>Spyridium cordatum</i>	15 cm	I	old FL	Shrub	
<i>Tetraria</i> sp. Mt Madden (C.D. Turley 40 BP/897)	20 cm	V	old H	Sedge	





## SWRV10

Date: 23 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae* and *Melaleuca uncinata* over open mallee shrubland of *Eucalyptus proxima* and *E. leptocalyx* over sparse shrubland of *Daviesia benthamii* subsp. *benthamii* over sparse sedgeland of *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV10. Unallocated Crown Land. 210 m E of the intersection of two tracks and c. 9.90 km S of the Cocanarup Homestead. Ca. 23.41 km SW of Ravensthorpe.

Site Description: North north-east facing gently inclined upper slope of quartz, weathered granite, minor weathered greenstone, tonalite. Slightly rocky granite tonalite outcrop with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	55 cm	I	FL	Shrub	
<i>Acacia ingrata</i>	35 cm	I	ST	Shrub	
<i>Acacia pravifolia</i>	15 cm	I	FL	Shrub	
<i>Acacia tetanophylla</i>	1.2 m	V	FL	Shrub	
<i>Astroloma epacridis</i>	45 cm	I	ST	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	50 cm	I	FL	Shrub	
<i>Daviesia anceps</i>	40 cm	L	old FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	55 cm	V	FL	Shrub	
<i>Dodonaea pinifolia</i>	40 cm	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	5 m	V	FR, O	Mallee	
<i>Eucalyptus leptocalyx</i>	2.5 m	V	FL, FR, O	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.5 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	2 m	V	FL, FR, O	Mallee	4
<i>Eutaxia cuneata</i>	50 cm	I	old FL	Shrub	
<i>Gahnia ancistrophylla</i>	30 cm	V	H	Sedge	
<i>Gahnia ancistrophylla</i>	50 cm	V	H	Sedge	
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>	35 cm	I	B	Shrub	
<i>Grevillea dolichopoda</i>	35 cm	I	ST	Shrub	
<i>Grevillea pectinata</i>	60 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.7 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	20 cm	I	B	Shrub	
<i>Hibbertia gracilipes</i>	40 cm	I	FL	Shrub	
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	55 cm	L	old H	Sedge	
<i>Lepidosperma</i> sp. <i>Clathrate</i>	40 cm	L	old H	Sedge	
<i>Marianthus microphyllus</i>	15 cm	I	FL	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	2.2 m	V	FR	Shrub	
<i>Melaleuca scalena</i>	40 cm	I	ST	Shrub	
<i>Melaleuca uncinata</i>	3 m	V	FR	Shrub	

## SWRV11

Date: 23 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae* and *E. oleosa* subsp. *corvina* over sparse shrubland of *Melaleuca cucullata* and *Acacia* sp. indet over open shrubland of *Boronia inconspicua*, *Daviesia benthamii* subsp. *benthamii*, *D. incrassata* subsp. *incrassata* and *Exocarpos aphyllus* over isolated clumps of sedge *Gahnia aristata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV11. Unallocated Crown Land. 147 m S of a track and 8.58 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.11 km SW of Ravensthorpe.

Site Description: East north-east facing gently inclined mid-slope of weathered greenstone, amphibolite, mixed metasediments with light brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	60 cm	I	FL	Shrub	
<i>Acacia glaucoptera</i>	60 cm	I	FL	Shrub	
<i>Acacia ingrata</i>	35 cm	I	FL	Shrub	
<i>Billardiera coriacea</i>	1.2 m	I	Imm FL	Climber	
<i>Boronia inornata</i> subsp. <i>inornata</i>	30 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	2 m	V	V	Climber	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	80 cm	V	FL	Shrub	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	75 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	45 cm	I	I	Herb	
<i>Dodonaea concinna</i>	1 m	V	FR	Shrub	
<i>Eucalyptus brachycalyx</i>	2 m	I	FR	Mallee	
<i>Eucalyptus extensa</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3 m	S	FR, O	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	3 m	S	FR, O	Mallee	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	V	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	85 cm	V	FL	Shrub	
<i>Gahnia aristata</i>	25 cm	L	H	Sedge	
<i>Goodenia laevis</i> subsp. <i>humifusa</i>	5 cm	I	FL	Shrub	
<i>Grevillea concinna</i> subsp. <i>lemanniana</i>	50 cm	I	ST	Shrub	
<i>Grevillea pectinata</i>	80 cm	V	FL	Shrub	
<i>Halgania andromedifolia</i>	55 cm	V	FL	Shrub	
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	50 cm	L	H	Sedge	
<i>Melaleuca cucullata</i>	1.2 m	V	FL, FR	Shrub	
<i>Santalum acuminatum</i>	1.6 m	I	ST	Shrub	
<i>Templetonia retusa</i>	1.3 m	I	FR	Shrub	

## SWRV12

Date: 23 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus proxima* and *Melaleuca scalena* over shrubland of *Acacia tetanophylla*, *A. glaucoptera* and *Dodonaea pinifolia* over sparse sedgeland of *Lepidosperma* sp. Saltbush Hill (K.R. Newbey 4118) and *L. diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV12. Unallocated Crown Land. 50 m S of a track and 8.54 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.06 km SW of Ravensthorpe.

Site Description: South south-west facing moderately inclined mid-slope of weathered metamorphic rock-greenstone, tonalite, amphibolite. Slightly rocky weathered metamorphic greenstone outcrop with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	70 cm	V	FL	Shrub	
<i>Acacia ingrata</i>	35 cm	I	FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	50 cm	I	ST	Shrub	
<i>Acacia tetanophylla</i>	85 cm	M	FL, FR	Shrub	
<i>Astroloma epacridis</i>	35 cm	I	ST	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1 m	V	B, FL	Shrub	
<i>Cassytha glabella</i>	1 m	I	FR	Climber	
<i>Cryptandra nutans</i>	60 cm	I	old FL	Shrub	
<i>Dodonaea pinifolia</i>	45 cm	V	FR	Shrub	
<i>Eucalyptus proxima</i>	1.7 m	V	FR, O	Mallee	4
<i>Eutaxia cuneata</i>	55 cm	I	old FL	Shrub	
<i>Eutaxia cuneata</i>	60 cm	I	ST	Shrub	
<i>Exocarpos aphyllus</i>	90 cm	I	B	Shrub	
<i>Exocarpos sparteus</i>	50 cm	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	30 cm	I	H	Sedge	
<i>Gastrolobium tetragonophyllum</i>	90 cm	I	old FL	Shrub	
<i>Grevillea dolichopoda</i>	40 cm	I	ST	Shrub	
<i>Grevillea oligantha</i>	1.3 m	I	ST	Shrub	
<i>Guichenotia micrantha</i>	55 cm	I	ST	Shrub	
<i>Hibbertia exasperata</i>	25 cm	I	B	Shrub	
<i>Lepidosperma diurnum</i>	50 cm	I	H	Sedge	1
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	60 cm	L	ST	Sedge	
<i>Lepidosperma</i> sp. Saltbush Hill (K.R. Newbey 4118)	40 cm	V	H	Sedge	
<i>Melaleuca cucullata</i>	1.7 m	V	FL	Shrub	
<i>Melaleuca glaberrima</i>	70 cm	I	FR	Shrub	
<i>Melaleuca scalena</i>	1.5 m	V	FR	Shrub	
<i>Santalum acuminatum</i>	2.2 m	I	FR	Shrub	
<i>Spartochloa scirpoidea</i>	60 cm	L	ST	Grass	
<i>Templetonia retusa</i>	1.1 m	I	Pods	Shrub	

## SWRV13

Date: 24 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus proxima*, *E. phenax* subsp. *phenax*, *Santalum acuminatum*, *Melaleuca scalena*, *Allocasuarina campestris* and *Hakea verrucosa* over sparse shrubland of *Grevillea oligantha* and *Melaleuca glaberrima* over clumps of sedge *Lepidosperma* sp. Mt Short (S. Kern et al. LCH 17510) over sparse shrubland of *Hibbertia exasperata* and sparse sedgeland of *Gahnia aristata* and *Lepidosperma* ?*diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV13. Unallocated Crown Land. 55 m N of a track and 8.48 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 23.94 km SW of Ravensthorpe.

Site Description: South-east facing gently inclined mid/upper slope of diorite, weathered metamorphic rock, quartz, metasediments. Slightly rocky diorite, metamorphosed greenstone outcrop with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	55 cm	V	ST	Shrub	
<i>Acacia glaucoptera</i>	50 cm	V	FL	Shrub	
<i>Acacia ingrata</i>	50 cm	V	FL	Shrub	
<i>Acrotriche ramiflora</i>	35 cm	I	ST	Shrub	
<i>Allocasuarina campestris</i>	2 m	V	ST	Shrub	
<i>Allocasuarina campestris</i>	1.5 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	40 cm	I	ST	Shrub	
<i>Austrostipa hemipogon</i>	40 cm	I	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	35 cm	I	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	35 cm	I	FL	Shrub	
<i>Callitris drummondii</i>	1.5 m	V	FR	Tree	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.5 m	V	FL, FR	Shrub	
<i>Calytrix leschenaultii</i>	45 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	1 m	L	ST	Climber	
<i>Cassytha melantha</i>	2 m	V	FR	Climber	
<i>Dodonaea concinna</i>	1.3 m	I	ST	Shrub	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.2 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.8 m	S	FL, FR, O	Mallee	4
<i>Eutaxia cuneata</i>	1.1 m	I	old FL	Shrub	
<i>Gahnia ancistrophylla</i>	40 cm	L	H	Sedge	
<i>Gahnia aristata</i>	45 cm	V	old H	Sedge	
<i>Gastrolobium musaceum</i>	1.6 m	I	FR	Shrub	
<i>Gastrolobium tetragonophyllum</i>	35 cm	I	ST	Shrub	
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>	1.3 m	I	FL	Shrub	
<i>Grevillea oligantha</i>	75 cm	V	FL	Shrub	
<i>Hakea verrucosa</i>	2 m	V	B, FR	Shrub	
<i>Hibbertia exasperata</i>	50 cm	V	B	Shrub	
<i>Hibbertia gracilipes</i>	35 cm	I	B	Shrub	
<i>Lepidosperma</i> ? <i>diurnum</i>	50 cm	V	H	Sedge	

<i>Lepidosperma sp. Clathrate</i>	50 cm	L	H	Sedge	
<i>Lepidosperma sp. Mt Short (S. Kern et al. LCH 17510)</i>	60 cm	V	H	Sedge	
<i>Lepidosperma sp. Shoemaker Levy (L. Ang &amp; O. Davies 10815)</i>	30 cm	L	H	Sedge	
<i>Leptospermum erubescens</i>	1.7 m	V	old FL	Shrub	
<i>Marianthus microphyllus</i>	12 cm	I	FL	Shrub	
<i>Melaleuca glaberrima</i>	85 cm	V	FL, FR	Shrub	
<i>Melaleuca pomphostoma</i>	60 cm	I	old FL, FR	Shrub	
<i>Melaleuca scalena</i>	3 m	V	FR	Shrub	
<i>Neurachne alopecuroidea</i>	25 cm	I	old H	Grass	
<i>Santalum acuminatum</i>	1.8 m	V	ST	Shrub	
<i>Stylidium involucreatum</i>	10 cm	I	FL	Shrub	
<i>Templetonia neglecta</i>	70 cm	I	FR	Shrub	
<i>Thysanotus patersonii</i>	30 cm	I	old FL	Herb	
<i>Wilsonia humilis</i>	7 cm	I	ST	Shrub	

## SWRV14

Date: 24 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa* over open shrubland of *Melaleuca cucullata* and *M. torquata* over sparse shrubland of *Senna* sp. Pallinup River (J.W. Green 4847) over sparse sedgeland *Lepidosperma diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV14. Unallocated Crown Land. 180 m N of a track and 8.34 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 23.90 km SW of Ravensthorpe.

Site Description: South-west facing gently inclined crest of weathered metamorphic rock, granular diorite. Very slightly rocky metamorphic greenstone diorite outcrop with dark brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	65 cm	I	FL	Shrub	
<i>Austrodanthonia setacea</i>	20 cm	I	H	Grass	
<i>Austrostipa trichophylla</i>	20 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	25 cm	I	H	Grass	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	ST	Herb	
<i>Dodonaea concinna</i>	1.6 m	V	FR	Shrub	
<i>Dodonaea pinifolia</i>	70 cm	I	FR	Shrub	
<i>Eucalyptus extensa</i>	12 m	S	FR, O	Tree	
<i>Exocarpos aphyllus</i>	1.3 m	I	B	Shrub	
<i>Grevillea oligantha</i>	65 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.4 m	I	B, FR	Shrub	
<i>Lepidosperma</i> aff. <i>diurnum</i>	35 cm	L	H	Sedge	
<i>Lepidosperma diurnum</i>	50 cm	V	H	Sedge	1
<i>Malva parviflora</i>	4 cm	I	ST	Herb	
<i>Melaleuca cliffortioides</i>	1.6 m	V	old FL	Shrub	
<i>Melaleuca cucullata</i>	2.6 m	V	FR	Shrub	
<i>Melaleuca pomphostoma</i>	1.3 m	V	old FL	Shrub	
<i>Melaleuca torquata</i>	2.3 m	V	FR	Shrub	
<i>Oxalis perennans</i>	6 cm	I	B	Herb	
<i>Phyllangium divergens</i>	7 cm	I	B	Herb	
<i>Santalum acuminatum</i>	1.8 m	I	ST	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	60 cm	V	FL, FR	Shrub	
<i>Templetonia neglecta</i>	55 cm	I	ST	Shrub	
<i>Thysanotus patersonii</i>	50 cm	I	B	Herb	

## SWRV15

Date: 24 October 2009

Vegetation Description: Sparse mallee shrubland of *Eucalyptus pleurocarpa* over shrubland of *Allocasuarina campestris*, *Hakea verrucosa*, *Melaleuca hamata* and *Calothamnus quadrifidus* subsp. *quadrifidus* ms over open shrubland of *Hybanthus floribundus* subsp. *adpressus* with clumps of sedge *Lepidosperma diurnum* over open shrubland of *Hibbertia exasperata* with open sedgeland of *Lepidosperma* sp. Mt Short (S. Kern et al. LCH 17510) and *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV15. Unallocated Crown Land. 45 m N of a track and 8.11 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.20 km SW of Ravensthorpe.

Site Description: North facing gently inclined upper slope of weathered metamorphic rock- greenstone, some quartz. Very slightly rocky metamorphic greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ingrata</i>	50 cm	V	old FL	Shrub	
<i>Allocasuarina campestris</i>	2 m	S	FR	Shrub	
<i>Astroloma serratifolium</i>	45 cm	I	FR	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	15 cm	I	B, FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	35 cm	I	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.7 m	V	FR	Shrub	
<i>Calytrix leschenaultii</i>	30 cm	I	ST	Shrub	
<i>Daviesia anceps</i>	80 cm	I	old FL	Shrub	
<i>Dodonaea pinifolia</i>	55 cm	I	FR	Shrub	
<i>Eucalyptus pleurocarpa</i>	7 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	75 cm	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	50 cm	V	H	Sedge	
<i>Grevillea oligantha</i>	60 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.4 m	S	FR	Shrub	
<i>Hibbertia exasperata</i>	45 cm	V	B	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	90 cm	V	FL	Shrub	
<i>Isopogon</i> sp. <i>Fitzgerald River (D.B. Foreman 813)</i>	85 cm	I	old FL	Shrub	
<i>Kunzea affinis</i>	1.4 m	I	B	Shrub	
<i>Kunzea strigosa</i>	1.4 m	I	FL	Shrub	
<i>Lepidosperma diurnum</i>	65 cm	V	H	Sedge	1
<i>Lepidosperma</i> sp. <i>Clathrate</i>	40 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. <i>Mt Short (S. Kern et al. LCH 17510)</i>	60 cm	V	H	Sedge	
<i>Leucopogon cuneifolius</i>	1.2 m	V	FL	Shrub	
<i>Leucopogon lloydiorum</i>	40 cm	I	ST	Shrub	
<i>Melaleuca cliffortioides</i>	1 m	I	FR	Shrub	
<i>Melaleuca hamata</i>	1.4 m	V	B, FR	Shrub	
<i>Melaleuca pomphostoma</i>	1.3 m	V	old FL, FR	Shrub	
<i>Santalum acuminatum</i>	50 cm	I	ST	Shrub	
<i>Stylidium albomontis</i>	50 cm	I	old FR	Herb	



## SWRV16

Date: 24 October 2009

Vegetation Description: Mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae*, *E. uncinata*, *Melaleuca hamata*, *Allocasuarina campestris*, *Acacia tetanophylla*, *A. mimica* var. *angusta*, *Hakea verrucosa*, *Leucopogon cuneifolius* and *Kunzea affinis* over sparse shrubland of *Daviesia benthamii* subsp. *benthamii* and *Lasiopetalum rosmarinifolium* over open sedgeland of *Lepidosperma* sp. *Bandalup Scabrid* (N. Eveleigh 10798) and *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV16. Unallocated Crown Land. 150 m N of a track and 7.93 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.20 km SW of Ravensthorpe.

Site Description: North north-east facing gently inclined lower slope of weathered metamorphic rock, tonalite with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	85 cm	I	FL	Shrub	
<i>Acacia ingrata</i>	40 cm	I	FL	Shrub	
<i>Acacia mimica</i> var. <i>angusta</i>	75 cm	V	B	Shrub	
<i>Acacia tetanophylla</i>	1.3 m	S	FL	Shrub	
<i>Allocasuarina campestris</i>	1.7 m	V	FR	Shrub	
<i>Astroloma serratifolium</i>	60 cm	I	B	Shrub	
<i>Boronia inconspicua</i>	40 cm	I	FR	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	55 cm	I	FL	Shrub	
<i>Calytrix leschenaultii</i>	45 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	2 m	V	FR	Climber	
<i>Dampiera angulata</i> subsp. <i>angulata</i>	45 cm	I	FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	70 cm	V	FL	Shrub	
<i>Daviesia pachyphylla</i>	60 cm	I	ST	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.8 m	V	B, FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.5 m	V	FR, O	Mallee	4
<i>Eucalyptus uncinata</i>	2.5 m	S	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	1.6 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	50 cm	V	H	Sedge	
<i>Gastrolobium musaceum</i>	55 cm	I	B	Shrub	
<i>Grevillea pectinata</i>	80 cm	I	FL	Shrub	
<i>Hakea verrucosa</i>	2 m	S	B, FR	Shrub	
<i>Hibbertia exasperata</i>	30 cm	I	B	Shrub	
<i>Kunzea affinis</i>	1.3 m	V	FL	Shrub	
<i>Lasiopetalum rosmarinifolium</i>	1 m	V	old FL	Shrub	
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	55 cm	V	H	Sedge	
<i>Lepidosperma</i> sp. <i>Ravensthorpe</i> (G.F. Craig 5188)	30 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. <i>Tibialate</i>	40 cm	L	H	Sedge	
<i>Leucopogon cuneifolius</i>	1.4 m	I	old FL	Shrub	
<i>Melaleuca glaberrima</i>	60 cm	I	FR	Shrub	

<i>Melaleuca hamata</i>	2.7 m	V	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	50 cm	I	FR	Shrub	
<i>Melaleuca villosisepala</i>	80 cm	I	FR	Shrub	
<i>Rinzia communis</i>	50 cm	I	FL	Shrub	
<i>Spyridium cordatum</i>	12 cm	I	old FL	Shrub	
<i>Stylidium albomontis</i>	20 cm	I	old FR	Herb	
<i>Trymalium elachophyllum</i>	45 cm	I	old FL	Shrub	

## SWRV17

Date: 25 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus extensa*, *E. pleurocarpa*, *E. flocktoniae* subsp. *flocktoniae* and *Exocarpos sparteus* over open shrubland of *Melaleuca hamata*, *Hakea verrucosa*, *Calothamnus quadrifidus* subsp. *quadrifidus* ms, *Hybanthus floribundus* subsp. *adpressus* and *Dodonaea pinifolia* over sparse sedgeland of *Lepidosperma diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV17. Unallocated Crown Land. 330 m W of a track and 10.33 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 25.31 km SW of Ravensthorpe.

Site Description: West facing gently inclined mid-slope of weathered greenstone, mafics, minor quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	3 m	I	FR	Tree	
<i>Acacia glaucoptera</i>	60 cm	I	ST	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	75 cm	V	old FL	Shrub	
<i>Allocasuarina campestris</i>	90 cm	I	FL	Shrub	
<i>Billardiera coriacea</i>	1.2 m	I	FR	Climber	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.5 m	V	FL, FR	Shrub	
<i>Daviesia anceps</i>	55 cm	I	ST	Shrub	
<i>Dodonaea pinifolia</i>	1.1 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	4 m	V	FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2.5 m	S	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	V	FR	Mallee	
<i>Eucalyptus pleurocarpa</i>	4 m	V	FR	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.8 m	V	FR, O	Mallee	
<i>Eucalyptus proxima</i>	2 m	V	FR, O	Mallee	4
<i>Exocarpos sparteus</i>	3.5 m	V	FR	Shrub	
<i>Glischrocaryon flavescens</i>	70 cm	I	ST	Shrub	
<i>Grevillea oligantha</i>	1.1 m	I	B	Shrub	
<i>Hakea verrucosa</i>	1.9 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	12 cm	I	FR	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	1.2 m	S	old FL	Shrub	
<i>Lepidosperma diurnum</i>	60 cm	L	H	Sedge	1
<i>Leucopogon cuneifolius</i>	60 cm	I	FR	Shrub	
<i>Melaleuca hamata</i>	1.5 m	V	FR	Shrub	
<i>Melaleuca pomphostoma</i>	1.4 m	V	old FL, FR	Shrub	
<i>Santalum acuminatum</i>	2.5 m	V	ST	Shrub	

## SWRV18

Date: 25 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus phenax* subsp. *phenax*, *E. flocktoniae* subsp. *flocktoniae*, *E. pluricaulis* subsp. *pluricaulis*, *Gastrolobium musaceum* and *Melaleuca hamata* over open shrubland of *Daviesia incrassata* subsp. *incrassata* and *Melaleuca glaberrima* over sparse shrubland of *Boronia inornata* subsp. *inornata* and *Gastrolobium tetragonophyllum* with sparse sedgeland of *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV18. Unallocated Crown Land. 485 m W of a track and 10.22 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 25.43 km SW of Ravensthorpe.

Site Description: West north-west facing gently inclined lower slope of weathered metamorphic rock, quartz, ironstone, mixed metasediments with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	50 cm	I	old FL	Shrub	
<i>Acacia gonophylla</i>	60 cm	I	B	Shrub	
<i>Acacia ingrata</i>	35 cm	I	ST	Shrub	
<i>Acacia pravifolia</i>	30 cm	I	FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	65 cm	I	ST	Shrub	
<i>Acacia tetanophylla</i>	1.2 m	V	FL	Shrub	
<i>Baeckea corynophylla</i>	60 cm	I	ST	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	40 cm	V	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1 m	I	FR	Shrub	
<i>Cassyltha melantha</i>	1 m	I	FR	Climber	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	80 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	ST	Shrub	
<i>Dodonaea pinifolia</i>	60 cm	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	V	FR	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.2 m	S	FR, O	Mallee	
<i>Eucalyptus proxima</i>	2 m	V	FR, O	Mallee	4
<i>Gahnia ancistrophylla</i>	25 cm	L	H	Sedge	
<i>Gastrolobium musaceum</i>	1.3 m	V	old FR	Shrub	
<i>Gastrolobium tetragonophyllum</i>	35 cm	V	ST	Shrub	
<i>Grevillea oligantha</i>	60 cm	I	ST	Shrub	
<i>Hakea lissocarpha</i>	1.2 m	I	old FL	Shrub	
<i>Hakea verrucosa</i>	1.3 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	20 cm	I	B	Shrub	
<i>Lasiopetalum rosmarinifolium</i>	15 cm	I	ST	Shrub	
<i>Lepidosperma diurnum</i>	30 cm	I	H	Sedge	1
<i>Lepidosperma</i> sp. <i>Saltbush Hill (K.R. Newbey 4118)</i>	25 cm	I	ST	Sedge	
<i>Leucopogon cuneifolius</i>	60 cm	I	FR	Shrub	
<i>Melaleuca glaberrima</i>	75 cm	V	FR	Shrub	
<i>Melaleuca hamata</i>	1.3 m	S	FR	Shrub	

<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	60 cm	V	old FL, FR	Shrub	
<i>Pimelea brachyphylla</i>	25 cm	I	B	Shrub	
<i>Rinzia communis</i>	30 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	1 m	I	ST	Shrub	
<i>Spyridium cordatum</i>	15 cm	I	old FL	Shrub	
<i>Stylidium albomontis</i>	18 cm	L	old H	Herb	

**SWRV19**

Date: 25 October 2009

Vegetation Description: Woodland of *Eucalyptus cernua*, *E. phenax* subsp. *phenax* and *E. calycogona* subsp. *calycogona* over open shrubland of *Grevillea oligantha*, *Exocarpos aphyllus*, *Dodonaea pinifolia*, *Acacia sulcata* var. *platyphylla* and *Hakea verrucosa* over sparse shrubland of *Acacia glaucoptera* and *Gastrolobium tetragonophyllum* with isolated clumps of sedges *Gahnia ancistrophylla* and *Lepidosperma* sp. Carracarrup Creek (S. Kern et al. LCH 16738).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV19. Unallocated Crown Land. 55 m E of a track and 10.55 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 25.06 km SW of Ravensthorpe.

Site Description: West facing gently inclined crest/upper slope of diorite, weathered mafics- greenstone, ironstone, amphibolite, granite, quartz. Slightly rocky diorite outcrop with light red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	55 cm	V	old FL, FR	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1.3 m	V	ST	Shrub	
<i>Allocasuarina campestris</i>	1 m	I	FL	Shrub	
<i>Austrostipa variabilis</i>	12 cm	I	H	Grass	
<i>Baeckea corynophylla</i>	60 cm	I	FL	Shrub	
<i>Billardiera coriacea</i>	1.5 m	I	FR	Climber	
<i>Cassytha melantha</i>	1 m	I	FR	Climber	
<i>Dodonaea pinifolia</i>	1.3 m	V	FR	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3 m	V	FL, FR	Mallee	
<i>Eucalyptus cernua</i>	4 m	S	FR	Mallet	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.5 m	V	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	1.4 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	25 cm	L	H	Sedge	
<i>Gastrolobium tetragonophyllum</i>	30 cm	V	ST	Shrub	
<i>Grevillea oligantha</i>	1.3 m	V	B	Shrub	
<i>Hakea verrucosa</i>	1.3 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	20 cm	I	B	Shrub	
<i>Lepidosperma</i> sp. Carracarrup Creek (S. Kern, R. Jasper, D. Brassington LCH 16738)	40 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Mt Chester (S. Kern et al. LCH 16596)	30 cm	I	H	Sedge	
<i>Maireana suaedifolia</i>	45 cm	I	ST	Shrub	
<i>Melaleuca glaberrima</i>	1 m	I	FR	Shrub	
<i>Melaleuca pomphostoma</i>	1 m	I	old FL, FR	Shrub	
<i>Melaleuca scalena</i>	1.5 m	V	FR	Shrub	
<i>Melaleuca torquata</i>	1.1 m	I	FR	Shrub	
<i>Pimelea brachyphylla</i>	50 cm	I	FL	Shrub	
<i>Pterostylis</i> aff. <i>spatulata</i>	15 cm	I	FL	Herb	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	70 cm	I	ST	Shrub	

## SWRV20

Date: 25 October 2009

Vegetation Description: Shrubland of *Acacia sulcata* var. *platyphylla*, *Melaleuca scalena* and *Hakea verrucosa* over sparse shrubland of *Dodonaea pinifolia* and *Melaleuca glaberrima* over sparse shrubland of *Gastrolobium tetragonophyllum* and *Leucopogon hamulosus* with isolated clumps of sedge *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV20. Unallocated Crown Land. 125 m E of a track and 10.64 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 25.02 km SW of Ravensthorpe.

Site Description: South south-east facing gently inclined mid/upper slope of weathered metamorphic, quartz, greenstone, mixed metasediments, gneiss/granite. Very slightly weathered mafics, some granite element- gneiss outcrop with light brown skeletal sandy clay loam.

Species	H	CC	FL	Form	CONS
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1.2 m	S	old FL	Shrub	
<i>Allocasuarina campestris</i>	1 m	I	FR	Shrub	
<i>Astus tetragonus</i>	1 m	I	FL	Shrub	
<i>Baeckea corynophylla</i>	1 m	I	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	30 cm	I	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.2 m	I	B, FR	Shrub	
<i>Dodonaea pinifolia</i>	90 cm	V	FR	Shrub	
<i>Gahnia ancistrophylla</i>	35 cm	V	H	Sedge	
<i>Gastrolobium tetragonophyllum</i>	35 cm	V	ST	Shrub	
<i>Grevillea dolichopoda</i>	60 cm	I	ST	Shrub	
<i>Guichenotia micrantha</i>	50 cm	I	old FL	Shrub	
<i>Hakea verrucosa</i>	1.4 m	S	FR	Shrub	
<i>Hibbertia exasperata</i>	10 cm	I	B	Shrub	
<i>Hibbertia gracilipes</i>	30 cm	I	B	Shrub	
<i>Kunzea cincinnata</i>	1.3 m	V	FL	Shrub	1
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	50 cm	L	H	Sedge	
<i>Leucopogon cuneifolius</i>	1.1 m	V	ST	Shrub	
<i>Leucopogon hamulosus</i>	50 cm	V	old FL	Shrub	
<i>Melaleuca glaberrima</i>	1 m	V	FR	Shrub	
<i>Melaleuca scalena</i>	1.4 m	S	FR	Shrub	
<i>Pimelea brachyphylla</i>	30 cm	I	B	Shrub	
<i>Spartochloa scirpoidea</i>	80 cm	I	ST	Grass	

## SWRV21

Date: 26 October 2009

Vegetation Description: Woodland of *Eucalyptus occidentalis* over open shrubland of *Dodonaea ptarmicaefolia*, *Templetonia retusa*, *Pomaderris paniculosa* subsp. *paniculosa*, *Phyllanthus calycinus* and *Melaleuca hamata* over open shrubland of *Thomasia foliosa* and *Daviesia anceps* with open sedgeland of *Gahnia ancistrophylla* over isolated herb *Goodenia concinna*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV21. Unallocated Crown Land. 300 m W of a track and 10.63 km SSE of the intersection of Ongerup Road and Koornong Road. Ca. 25.71 km SW of Ravensthorpe.

Site Description: South south-east facing moderately inclined lower slope of diorite, weathered greenstone/mafics. Slightly rocky diorite outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	1.6 m	V	FR	Shrub	
<i>Acacia glaucoptera</i>	55 cm	I	FR	Shrub	
<i>Acacia saligna</i> subsp. <i>lindleyi</i>	2.5 m	I	FL	Shrub	
<i>Allocasuarina campestris</i>	2.2 m	V	FR	Shrub	
<i>Astroloma epacridis</i>	40 cm	I	FR	Shrub	
<i>Austrodanthonia setacea</i>	15 cm	I	ST	Grass	
<i>Boronia scabra</i> subsp. <i>scabra</i>	30 cm	I	B, FL	Shrub	
<i>Callitris drummondii</i>	1.2 m	I	FR	Tree	
<i>Choretrum glomeratum</i> var. <i>glomeratum</i>	70 cm	I	ST	Shrub	
<i>Daucus glochidiatus</i>	7 cm	I	FR	Herb	
<i>Daviesia anceps</i>	50 cm	L	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	65 cm	I	FL	Shrub	
<i>Dodonaea pinifolia</i>	1.2 m	V	FR	Shrub	
<i>Dodonaea ptarmicaefolia</i>	2.5 m	V	FR	Shrub	
<i>Eucalyptus occidentalis</i>	15 m	S	FR	Tree	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.8 m	V	FR, O	Mallee	
<i>Eucalyptus pleurocarpa</i>	2.2 m	V	ST	Mallee	
<i>Exocarpos aphyllus</i>	1.4 m	I	B	Shrub	
<i>Exocarpos sparteus</i>	1.4 m	I	ST	Shrub	
<i>Gahnia ancistrophylla</i>	35 cm	V	H	Sedge	
<i>Gastrolobium musaceum</i>	1.3 m	I	old FL	Shrub	
<i>Goodenia concinna</i>	10 cm	I	B, FL	Herb	
<i>Hakea lissocarpha</i>	75 cm	I	B	Shrub	
<i>Hakea verrucosa</i>	1.3 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	25 cm	V	B	Shrub	
<i>Lepidosperma diurnum</i>	50 cm	L	H	Sedge	1
<i>Melaleuca hamata</i>	3 m	V	FR	Shrub	
<i>Muehlenbeckia adpressa</i>	1 m	I	ST	Climber	
<i>Phyllanthus calycinus</i>	1.2 m	V	old FL	Shrub	
<i>Pimelea brachyphylla</i>	25 cm	I	FL	Shrub	



<i>Pomaderris paniculosa</i> subsp. <i>paniculosa</i>	1.3 m	V	old FL	Shrub	
<i>Santalum acuminatum</i>	1 m	I	ST	Shrub	
<i>Senna</i> sp. <i>Pallinup River (J.W. Green 4847)</i>	1.3 m	I	FL	Shrub	
<i>Spartochloa scirpoidea</i>	70 cm	I	ST	Grass	
<i>Templetonia retusa</i>	1.6 m	V	FR	Shrub	
<i>Thomasia foliosa</i>	35 cm	V	FR	Shrub	

## SWRV22

Date: 26 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa* over open shrubland of *Melaleuca hamata*, *Allocasuarina campestris*, *Acacia sulcata* var. *platyphylla*, *Leptospermum erubescens* and *Acacia chrysell* over sparse shrubland of *Dodonaea pinifolia* and *Hibbertia exasperata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV22. Unallocated Crown Land. 420 m W of a track and 10.56 km SSE of the intersection of Ongerup Road and Koornong Road. Ca. 25.84 km SW of Ravensthorpe.

Site Description: South facing moderately inclined upper slope of weathered mafics, some diorite with red-brown shallow loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia chrysell</i>	2.5 m	V	FR	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	2 m	S	old FL	Shrub	
<i>Allocasuarina campestris</i>	2.4 m	V	FR	Shrub	
<i>Baeckea crispiflora</i>	1.5 m	V	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	65 cm	I	FL	Shrub	
<i>Calytrix leschenaultii</i>	40 cm	I	old FL	Shrub	
<i>Cassytha glabella</i>	40 cm	I	ST	Climber	
<i>Choretrum glomeratum</i> var. <i>glomeratum</i>	60 cm	I	ST	Shrub	
<i>Daviesia anceps</i>	50 cm	L	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	55 cm	I	ST	Herb	
<i>Dodonaea pinifolia</i>	1 m	V	FR	Shrub	
<i>Eucalyptus pleurocarpa</i>	3.5 m	V	FR	Mallee	
<i>Exocarpos aphyllus</i>	1.2 m	I	ST	Shrub	
<i>Gahnia ancistrophylla</i>	55 cm	L	H	Sedge	
<i>Guichenotia micrantha</i>	65 cm	I	FR	Shrub	
<i>Hakea verrucosa</i>	1.6 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	20 cm	V	B	Shrub	
<i>Kunzea affinis</i>	1.2 m	I	FL	Shrub	
<i>Lepidosperma diurnum</i>	55 cm	L	H	Sedge	1
<i>Leptospermum erubescens</i>	2 m	V	FL	Shrub	
<i>Melaleuca hamata</i>	2.5 m	V	FR, FL	Shrub	
<i>Phyllanthus calycinus</i>	35 cm	I	FL	Shrub	
<i>Santalum acuminatum</i>	1.4 m	I	ST	Shrub	
<i>Senna</i> sp. <i>Pallinup River</i> (J.W. Green 4847)	90 cm	I	ST	Shrub	
<i>Spartochloa scirpoidea</i>	90 cm	L	H	Grass	
<i>Templetonia retusa</i>	1.8 m	I	FR	Shrub	

## SWRV23

Date: 26 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus redunca*, *Melaleuca hamata* and *Melaleuca rigidifolia* over sparse shrubland of *Daviesia incrassata* subsp. *incrassata* over sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV23. Unallocated Crown Land. 50 m W of a track and 10.87 km SSE of the intersection of Ongerup Road and Koorngong Road. Ca. 25.55 km SW of Ravensthorpe.

Site Description: North-west facing very gently inclined crest of laterite, weathered ironstone/basalt (plate fracturing), weathered mafics, quartz. Slightly rocky weathered laterite, ironstone outcrop with yellow-red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	I	old FL	Shrub	
<i>Boronia inconspicua</i>	45 cm	I	ST	Shrub	
<i>Cassytha melantha</i>	2 m	V	FR	Climber	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	80 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	ST	Herb	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.6 m	V	FR, O	Mallee	
<i>Eucalyptus redunca</i>	1.8 m	S	FR, O	Mallee	
<i>Eucalyptus suggrandis</i> subsp. <i>suggrandis</i>	2 m	V	FR, O	Mallee	
<i>Gastrolobium musaceum</i>	1.3 m	V	old FL, FR	Shrub	
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>	75 cm	I	FL	Shrub	
<i>Grevillea pectinata</i>	25 cm	I	ST	Shrub	
<i>Hakea commutata</i>	90 cm	I	FL	Shrub	
<i>Lepidosperma diurnum</i>	50 cm	L	H	Sedge	1
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	60 cm	V	H	Sedge	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	30 cm	L	H	Sedge	
<i>Melaleuca hamata</i>	2.5 m	V	FR	Shrub	
<i>Melaleuca rigidifolia</i>	2 m	S	FL, FR	Shrub	
<i>Ozothamnus lepidophyllus</i>	45 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	1.8 m	V	ST	Shrub	
<i>Templetonia retusa</i>	1 m	I	FL	Shrub	

## SWRV24

Date: 26 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa* over open mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae* and *E. phenax* subsp. *phenax* over open shrubland of *Melaleuca undulata*, *M. scalena*, *Daviesia incrassata* subsp. *incrassata* and *Hakea verrucosa* over sparse shrubland of *Boronia inornata* subsp. *inornata* and *Grevillea huegelii* over sparse sedgeland of *Lepidosperma gahnioides*, *Lepidosperma diurnum* and *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV24. Unallocated Crown Land. 70 m W of a track and 10.75 km SSE of the intersection of Ongerup Road and Koornong Road. Ca. 25.58 km SW of Ravensthorpe.

Site Description: North-west facing moderately inclined mid/upper slope of basalt, metamorphosed greenstone, quartz, mixed metasediments. Very slightly rocky metamorphic greenstone outcrop with red-brown skeletal sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	55 cm	I	ST	Shrub	
<i>Acacia ingrata</i>	40 cm	V	old FL	Shrub	
<i>Austrostipa acrociliata</i>	50 cm	I	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	45 cm	V	FL	Shrub	
<i>Cassytha melantha</i>	1.5 m	V	FR	Climber	
<i>Daviesia anceps</i>	45 cm	I	ST	Shrub	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	1.2 m	V	old FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea concinna</i>	80 cm	I	FR	Shrub	
<i>Dodonaea pinifolia</i>	60 cm	I	FR	Shrub	
<i>Eucalyptus extensa</i>	10 m	S	FR	Tree	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	4.5 m	S	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	3.5 m	S	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.3 m	V	FR, O	Mallee	4
<i>Eucalyptus redunca</i>	1.3 m	V	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	1.2 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	35 cm	L	H	Sedge	
<i>Grevillea huegelii</i>	45 cm	V	FL	Shrub	
<i>Grevillea oligantha</i>	30 cm	I	ST	Shrub	
<i>Hakea commutata</i>	90 cm	V	FR	Shrub	
<i>Hakea verrucosa</i>	1.8 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	22 cm	I	B	Shrub	
<i>Lepidosperma</i> aff. <i>diurnum</i>	50 cm	L	H	Sedge	
<i>Lepidosperma diurnum</i>	45 cm	L	H	Sedge	1
<i>Lepidosperma gahnioides</i>	25 cm	L	H	Sedge	3
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	60 cm	I	H	Sedge	
<i>Lepidosperma</i> sp. Bandalup Scabrid (N. Eveleigh 10798)	45 cm	L	H	Sedge	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	50 cm	I	ST	Shrub	
<i>Melaleuca scalena</i>	2.2 m	V	FR	Shrub	

<i>Melaleuca undulata</i>	1.5 m	S	FL, FR	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	1.1 m	I	B	Shrub	
<i>Senna artemisioides</i> subsp. <i>x artemisioides x filifolia</i>	60 cm	I	ST	Shrub	
<i>Senna</i> sp. <i>Pallinup River (J.W. Green 4847)</i>	50 cm	I	ST	Shrub	
<i>Wilsonia humilis</i>	5 cm	I	ST	Shrub	

## SWRV25

Date: 27 October 2009

Vegetation Description: Open mallee forest of *Eucalyptus oleosa* subsp. *corvina* and *E. brachycalyx* over sparse shrubland of *Santalum acuminatum* and *Daviesia nematophylla* over sparse grassland of *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261) with shrub *Acacia erinacea*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV25. Crown Reserve 12324. Drive 925 m W along South Coast Highway from its intersection with Newdgate Ravensthorpe Road, then walk 245 m N from the highway. Ca. 4.89 km WNW of Ravensthorpe.

Site Description: West facing gently inclined mid-slope of metamorphosed mafic (AAV) with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia bifaria</i>	35 cm	I	FL	Shrub	3
<i>Acacia cyclops</i>	65 cm	I	ST	Shrub	
<i>Acacia erinacea</i>	35 cm	V	FL	Shrub	
<i>Asparagus asparagoides</i>	40 cm	I	B	Herb	
<i>Austrodanthonia setacea</i>	25 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	45 cm	L	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	1.2 m	I	FL	Shrub	
<i>Chenopodium desertorum</i> subsp. <i>microphyllum</i>	4 cm	I	FR	Shrub	
<i>Daviesia nematophylla</i>	2.5 m	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	40 cm	I	old stalk	Herb	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	25 cm	I	FR	Shrub	
<i>Eucalyptus brachycalyx</i>	18 m	S	FR, O	Mallee	
<i>Eucalyptus myriadena</i> subsp. <i>myriadena</i>	15 m	V	FR, O	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	20 m	S	FR, O	Tree	3
<i>Goodenia affinis</i>	5 cm	I	old FL	Shrub	
<i>Grevillea oligantha</i>	1.4 m	V	FR	Shrub	
<i>Maireana marginata</i>	3 cm	I	FR	Shrub	
<i>Podolepis rugata</i>	20 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	2 cm	I	ST	Shrub	
<i>Rhagodia preissii</i>	80 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	2.6 m	V	FR	Shrub	
<i>Sclerolaena diacantha</i>	6 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	1.5 m	I	FR	Shrub	

## SWRV26

Date: 27 October 2009

Vegetation Description: Woodland of *Eucalyptus cernua* and *E. myriadena* subsp. *myriadena* over open shrubland of *Melaleuca acuminata* subsp. *acuminata* over open shrubland of *M. torquata*, *Acacia sulcata* var. *platyphylla* and *Senna artemisioides* subsp. *x artemisioides* over isolated shrubs of *Hibbertia exasperata* with isolated grass *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV26. Unallocated Crown Land. 1.95 km ENE of the intersection of Floater Road and Old Newdgate Road. From the SE corner of Crown Reserve 21276 head 720 m W along the southern boundary track then walk 120 m S. Ca.

Site Description: South facing gently inclined mid-slope of weathered mafics with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia bifaria</i>	45 cm	I	old FL	Shrub	3
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1.8 m	V	Pods	Shrub	
<i>Austrodanthonia setacea</i>	15 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	45 cm	L	H	Grass	
<i>Comesperma integerrimum</i>	1.5 m	I	ST	Herb	
<i>Dodonaea pinifolia</i>	55 cm	V	FR	Shrub	
<i>Dodonaea ptarmicaefolia</i>	15 cm	I	ST	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	10 cm	I	ST	Shrub	
<i>Eucalyptus cernua</i>	20 m	S	FR, O	Mallet	
<i>Eucalyptus myriadena</i> subsp. <i>myriadena</i>	15 m	V	FR, O	Mallee	
<i>Goodenia affinis</i>	5 cm	I	old FL	Herb	
<i>Grevillea patentiloba</i> subsp. <i>patentiloba</i>	50 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.4 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	25 cm	I	B	Shrub	
<i>Linum marginale</i>	35 cm	I	B	Herb	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	4.5 m	S	old FL, FR	Shrub	
<i>Melaleuca torquata</i>	2.2 m	V	old FL	Shrub	
<i>Olearia muelleri</i>	50 cm	I	old FL	Shrub	
<i>Pittosporaceae</i> sp.	50 cm	I	ST	Climber	
<i>Ptilotus holosericeus</i>	3 cm	I	FL	Shrub	
<i>Pultenaea rotundifolia</i>	10 cm	I	FL	Shrub	
<i>Pultenaea rotundifolia</i>	18 cm	I	ST	Shrub	
<i>Senecio quadridentatus</i>	55 cm	I	old FL	Herb	
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i>	75 cm	I	FL, FR	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	60 cm	I	Pods	Shrub	

## SWRV27

Date: 28 October 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open shrubland/sparse mallee shrubland of *Acacia* sp. narrow phyllode (B.R. Maslin 7831), *Acacia brumalis* and *Eucalyptus brachycalyx* over sparse shrubland of *Senna artemisioides* subsp. *x artemisioides* *x filifolia* over sparse herb *Glischrocaryon flavescens* and isolated chenopod shrub *Sclerolaena diacantha*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV27. Crown Reserve 30795, proposed State Forest. 3.95 km SSW of the intersection of South Coast Highway and Thomas Road, and 2.04 km ENE of Cocanarup Homestead. Ca. 14.16 km WSW of Ravensthorpe.

Site Description: North-west facing gently inclined crest of dolerite, amphibolite. Very slightly rocky dolerite, amphibolite outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia brumalis</i>	3 m	V	Pods	Shrub	
<i>Acacia microbotrya</i>	1.5 m	I	Pods	Shrub	
<i>Acacia</i> sp. narrow phyllode (B.R. Maslin 7831)	5 m	S	B	Shrub	
<i>Asteridea athrixioides</i>	6 cm	I	old FL	Herb	
<i>Austrodanthonia setacea</i>	18 cm	I	old H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	40 cm	I	H	Grass	
<i>Calandrinia eremaea</i> complex	4 cm	I	B	Herb	
<i>Chenopodium desertorum</i> subsp. <i>microphyllum</i>	3 cm	I	ST	Shrub	
<i>Dodonaea ptarmicaefolia</i>	60 cm	I	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	20 cm	I	FL	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	30 cm	I	FL	Shrub	
<i>Eucalyptus brachycalyx</i>	11 m	V	FR, O	Mallee	
<i>Eucalyptus salmonophloia</i>	22 m	S	FR	Tree	
<i>Glischrocaryon flavescens</i>	75 cm	V	FL	Shrub	
<i>Glycocystis beckeri</i>	45 cm	I	ST	Shrub	
<i>Goodenia affinis</i>	4 cm	I	old FL	Herb	
<i>Goodenia concinna</i>	10 cm	I	FL	Herb	
<i>Maireana erioclada</i>	35 cm	I	FR	Shrub	
<i>Rhagodia crassifolia</i>	55 cm	V	ST	Shrub	
<i>Sclerolaena diacantha</i>	12 cm	I	FL, FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	75 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>x artemisioides x filifolia</i>	1.5 m	V	FL, FR	Shrub	



## SWRV28

Date: 28 October 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open shrubland of *Acacia acuminata* over open shrubland of *Templetonia retusa* over sparse chenopod shrubland of *Rhagodia crassifolia* and *Enchylaena tomentosa* var. *tomentosa* with isolated clumps of grass *Spartochloa scirpoidea*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV28. Crown Reserve 30795, proposed State Forest. 4.02 km SSW of the intersection of South Coast Highway and Thomas Road, and 2.01 km ENE of Cocanarup Homestead. Ca. 14.21 km WSW of Ravensthorpe.

Site Description: South-east facing moderately inclined upper slope of diorite, weathered amphibolite. Slightly rocky diorite, amphibolite, weathered metamorphic outcrop with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia acuminata</i>	6 m	S	B	Shrub	
<i>Acacia brumalis</i>	2.5 m	I	ST	Shrub	
<i>Atriplex semibaccata</i>	10 cm	I	ST	Shrub	
<i>Austrodanthonia setacea</i>	15 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	60 cm	I	ST	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range ( <i>A. Markey &amp; J. Allen 6261</i> )	45 cm	I	H	Grass	
<i>Chenopodium desertorum</i> subsp. <i>microphyllum</i>	5 cm	I	FL, FR	Shrub	
<i>Comesperma integerrimum</i>	3 m	V	ST	Herb	
<i>Dianella brevicaulis</i>	50 cm	L	FL	Herb	
<i>Dianella brevicaulis</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea ptarmicaefolia</i>	1.5 m	I	FR	Shrub	
<i>Ehrharta longiflora</i>	35 cm	I	H	Grass	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	40 cm	V	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	20 cm	I	ST	Shrub	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	7 m	V	FR, O	Tree	3
<i>Eucalyptus salmonophloia</i>	25 cm	S	old FR	Tree	
<i>Goodenia affinis</i>	4 cm	I	ST	Herb	
<i>Goodenia concinna</i>	10 cm	I	FL	Herb	
<i>Lagenophora huegelii</i>	4 cm	I	ST	Herb	
<i>Lepidosperma</i> sp.	45 cm	L	H	Sedge	
<i>Lomandra collina</i>	22 cm	I	ST	Herb	
<i>Oxalis</i> sp.	5 cm	I	ST	Herb	
<i>Rhagodia crassifolia</i>	80 cm	V	B	Shrub	
<i>Sclerolaena diacantha</i>	8 cm	I	FR, FL	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	65 cm	I	ST	Shrub	
<i>Spartochloa scirpoidea</i>	45 cm	I	ST	Grass	
<i>Templetonia retusa</i>	2.8 m	S	ST	Shrub	

## SWRV29

Date: 28 October 2009

Vegetation Description: Woodland of *Eucalyptus salmonophloia* over open shrubland of *Acacia acuminata* over open shrubland of *Dodonaea ptarmicaefolia* and *Santalum spicatum* over sparse chenopod shrubland of *Rhagodia crassifolia* and *Enchylaena tomentosa* var. *tomentosa*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV29. Crown Reserve 30795, proposed State Forest. 3.98 km SSW of the intersection of South Coast Highway and Thomas Road, and 2.16 km ENE of Cocanarup Homestead. Ca. 14.08 km WSW of Ravensthorpe.

Site Description: South-east facing moderately inclined mid/lower slope of diorite?, amphibolite with brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia acuminata</i>	5 m	S	B?	Shrub	
<i>Alyogyne wrayae</i>	1.6 m	V	FL	Shrub	
<i>Austrostipa elegantissima</i>	25 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	25 cm	I	H	Grass	
<i>Cassinia arcuata</i>	75 cm	I	ST	Shrub	2
<i>Chenopodium desertorum</i> subsp. <i>microphyllum</i>	4 cm	I	B	Shrub	
<i>Dodonaea ptarmicaefolia</i>	2.6 m	V	FR	Shrub	
<i>Ehrharta longiflora</i>	8 cm	I	H	Grass	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	1 m	V	FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	50 cm	I	FL	Shrub	
<i>Eucalyptus myriadena</i> subsp. <i>myriadena</i>	9 m	V	old FR	Mallee	
<i>Eucalyptus salmonophloia</i>	22 m	M	FR	Tree	
<i>Goodenia affinis</i>	4 cm	I	ST	Herb	
<i>Maireana suaedifolia</i>	70 cm	V	ST	Shrub	
<i>Oxalis</i> sp.	4 cm	I	ST	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	7 cm	I	old H	Grass	
<i>Plantago hispida</i>	8 cm	I	old FL	Herb	
<i>Rhagodia crassifolia</i>	1.1 m	V	B	Shrub	
<i>Santalum spicatum</i>	2.5 m	V	FR	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	30 cm	I	ST	Shrub	
<i>Senna artemisioides</i> subsp. <i>x artemisioides x filifolia</i>	55 cm	I	FL	Shrub	
<i>Thysanotus patersonii</i>	40 cm	I	B	Herb	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	8 cm	I	FL	Herb	
<i>Wilsonia humilis</i>	5 cm	I	ST	Shrub	

## SWRV30

Date: 28 October 2009

Vegetation Description: Open mallee forest of *Eucalyptus myriadena* and *E. oleosa* subsp. *corvina* over open shrubland of *Dodonaea ptarmicaefolia* and *Acacia binata* over sparse chenopod shrubland of *Rhagodia crassifolia* and isolated *Enchylaena tomentosa* var. *tomentosa*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV30. Crown Reserve 30795, proposed State Forest. 3.80 km SSW of the intersection of South Coast Highway and Thomas Road, and 2.55 km ENE of Cocanarup Homestead. Ca. 13.69 km WSW of Ravensthorpe.

Site Description: South facing moderately inclined mid-slope of amphibolite, metamorphosed greenstone, quartz with brown - light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	1.6 m	S	FL, FR	Shrub	
<i>Acacia erinacea</i>	40 cm	V	FL, FR	Shrub	
<i>Atriplex semibaccata</i>	3 cm	I	ST	Shrub	
<i>Austrodanthonia setacea</i>	30 cm	I	H	Grass	
<i>Austrostipa elegantissima</i>	75 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range ( <i>A. Markey &amp; J. Allen 6261</i> )	35 cm	I	H	Grass	
<i>Dodonaea ptarmicaefolia</i>	2.6 m	V	FR	Shrub	
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	50 cm	I	FL, FR	Shrub	
<i>Eremophila decipiens</i> subsp. <i>decipiens</i>	60 cm	V	FL	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	10 m	V	FL, FR, O	Mallee	
<i>Eucalyptus myriadena</i>	10 m	S	FR, O	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	10 m	V	FR, O	Mallee	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	5 m	V	FR, O	Mallee	
<i>Maireana suaedifolia</i>	45 cm	I	ST	Shrub	
<i>Olearia muelleri</i>	50 cm	I	old FL	Shrub	
<i>Oxalis</i> sp.	4 cm	I	ST	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	10 cm	I	old H	Grass	
<i>Plantago hispida</i>	10 cm	I	old FL	Herb	
<i>Pterostylis platypus</i> ms	12 cm	I	FL	Herb	
<i>Ptilotus holosericeus</i>	3 cm	I	FL	Shrub	
<i>Rhagodia crassifolia</i>	1.1 m	V	B?	Shrub	
<i>Sclerolaena diacantha</i>	10 cm	I	FR	Shrub	
<i>Senecio quadridentatus</i>	15 cm	I	old FL	Herb	
<i>Templetonia battii</i>	55 cm	V	FR	Shrub	
<i>Vittadinia gracilis</i>	20 cm	I	old FL	Herb	
<i>Wilsonia humilis</i>	8 cm	I	ST	Shrub	

## SWRV31

Date: 29 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa* over open shrubland of *Gastrolobium musaceum* and *Hakea verrucosa* over open shrubland of *Acacia mimica* var. *angusta*, *Melaleuca villosisepala* and *Daviesia pachyphylla* over sparse shrubland of *Petrophile seminuda* and *Allocasuarina microstachya* with isolated clumps of sedge *Mesomelaena stygia* subsp. *stygia*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV31. Unallocated Crown Land. 545 m S of a track and 8.43 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.63 km SW of Ravensthorpe.

Site Description: East north-east facing gently inclined mid-slope of amphibolite, weathered metamorphic mafics. Very slightly rocky weathered metamorphic mafics outcrop with yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	65 cm	S	FL	Shrub	
<i>Allocasuarina microstachya</i>	30 cm	V	ST	Shrub	
<i>Astroloma serratifolium</i>	55 cm	I	B	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	80 cm	I	FL, FR	Shrub	
<i>Conostylis argentea</i>	18 cm	L	old FL	Herb	
<i>Daviesia anceps</i>	45 cm	I	ST	Shrub	
<i>Daviesia pachyphylla</i>	75 cm	V	ST	Shrub	
<i>Eucalyptus pleurocarpa</i>	3 m	S	FR	Mallee	
<i>Gastrolobium musaceum</i>	1.6 m	V	FL, FR	Shrub	
<i>Grevillea teretifolia</i>	45 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.5 m	V	FR	Shrub	
<i>Hibbertia gracilipes</i>	25 cm	V	B	Shrub	
<i>Lepidosperma</i> sp. <i>Clathrate</i>	35 cm	I	FL	Sedge	
<i>Lepidosperma</i> sp. <i>Tibialate</i>	45 cm	L	H	Sedge	
<i>Leptospermum spinescens</i>	70 cm	I	FR	Shrub	
<i>Leucopogon lloydiorum</i>	75 cm	I	FL	Shrub	
<i>Lomandra mucronata</i>	10 cm	I	ST	Herb	
<i>Melaleuca pentagona</i> var. <i>pentagona</i>	45 cm	I	FL	Shrub	
<i>Melaleuca villosisepala</i>	35 cm	I	ST	Shrub	
<i>Melaleuca villosisepala</i>	70 cm	V	FL, FR	Shrub	
<i>Mesomelaena stygia</i> subsp. <i>stygia</i>	25 cm	L	H	Sedge	
<i>Olax benthamiana</i>	75 cm	I	FL	Shrub	
<i>Petrophile seminuda</i>	50 cm	V	B	Shrub	
<i>Restionaceae</i> sp.	15 cm	L	H	Sedge	
<i>Schoenus subflavus</i> subsp. <i>hispid culms</i> (K.R. Newbey 8278)	6 cm	I	ST	Herb	
<i>Stylidium</i> sp.	2 cm	I	ST	Shrub	
<i>Synaphea interioris</i>	12 cm	I	ST	Shrub	
<i>Thysanotus patersonii</i>	40 cm	I	B	Herb	

<i>Verticordia chrysantha</i>	60 cm	I	B, old FL	Shrub	
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## SWRV32

Date: 29 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa*, *E. phenax* subsp. *phenax* and *E. calycogona* subsp. *calycogona* over sparse shrubland of *Hakea verrucosa* and *Melaleuca scalena* over open shrubland of *Grevillea pectinata*, *Logania stenophylla*, *Lysinema pentapetalum* and *Acacia gonophylla* over sparse shrubland of *Spyridium cordatum*, *Hibbertia exasperata* and *Acacia ingrata* with sparse sedgeland of *Gahnia ancistrophylla* and *G. aristata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV32. Unallocated Crown Land. 650 m S of a track and 8.38 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.84 km SW of Ravensthorpe.

Site Description: East south-east facing gently inclined crest of schist, weathered quartz. Slightly rocky schist metamorphic rock outcrop with light brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	45 cm	I	ST	Shrub	
<i>Acacia gonophylla</i>	55 cm	V	FR	Shrub	
<i>Acacia ingrata</i>	30 cm	V	old FL	Shrub	
<i>Acacia pravifolia</i>	40 cm	I	ST	Shrub	
<i>Acrotriche cordata</i>	30 cm	I	B	Shrub	
<i>Allocasuarina campestris</i>	45 cm	I	ST	Shrub	
<i>Amphipogon turbinatus</i>	8 cm	I	ST	Herb	
<i>Astroloma epacridis</i>	35 cm	I	ST	Shrub	
<i>Astroloma serratifolium</i>	35 cm	I	ST	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	45 cm	V	FL	Shrub	
<i>Cassytha glabella</i>	30 cm	I	B	Climber	
<i>Cassytha melantha</i>	1.5 m	I	B	Climber	
<i>Cheiranthra filifolia</i>	8 cm	I	B, FL	Herb	
<i>Conostylis argentea</i>	12 cm	I	ST	Grass	
<i>Cooperookia strophilata</i>	30 cm	I	ST	Shrub	
<i>Cryptandra pungens</i>	12 cm	I	B	Shrub	
<i>Daviesia anceps</i>	40 cm	I	ST	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	55 cm	V	FL	Shrub	
<i>Daviesia pachyphylla</i>	65 cm	I	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	30 cm	I	ST	Herb	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	1.2 m	V	FR, O	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	1.5 m	S	FR, O	Mallee	
<i>Eucalyptus leptocalyx</i>	1.3 m	V	FL, FR	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.2 m	V	FR	Mallee	
<i>Eucalyptus pleurocarpa</i>	2 m	I	ST	Mallee	
<i>Eutaxia cuneata</i>	45 cm	I	ST	Shrub	
<i>Exocarpos sparteus</i>	1.5 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	35 cm	V	H	Sedge	
<i>Gahnia aristata</i>	40 cm	V	H	Sedge	
<i>Gastrolobium musaceum</i>	1.4 m	V	old FL	Shrub	

<i>Grevillea pectinata</i>	85 cm	V	FL	Shrub	
<i>Hakea lissocarpha</i>	80 cm	I	B	Shrub	
<i>Hakea verrucosa</i>	1.1 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	45 cm	V	B	Shrub	
<i>Hibbertia gracilipes</i>	20 cm	I	ST	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	40 cm	I	FL	Shrub	
<i>Lasiopetalum rosmarinifolium</i>	50 cm	I	old FL	Shrub	
<i>Lepidosperma</i> sp. <i>Clathrate</i>	50 cm	L	H	Sedge	
<i>Leucopogon lloydiorum</i>	50 cm	I	FL	Shrub	
<i>Leucopogon</i> sp. <i>Newdegate</i> (M. Hislop 3585)	40 cm	I	ST	Shrub	
<i>Logania stenophylla</i>	50 cm	V	B, old FL	Shrub	
<i>Lysinema pentapetalum</i>	70 cm	V	FL	Shrub	
<i>Marianthus microphyllus</i>	10 cm	I	FL	Shrub	
<i>Melaleuca scalena</i>	1.1 m	V	FR	Shrub	
<i>Melaleuca villosisepala</i>	60 cm		FR	Shrub	
<i>Mesomelaena stygia</i> subsp. <i>stygia</i>	35 cm	L	H	Sedge	
<i>Olax benthamiana</i>	45 cm	V	ST	Shrub	
<i>Petrophile seminuda</i>	40 cm	I	B	Shrub	
<i>Schoenus racemosus</i>	15 cm	I	H	Sedge	
<i>Siegfriedia darwinioides</i>	10 cm	I	old FL	Shrub	
<i>Spyridium cordatum</i>	35 cm	V	old FL	Shrub	
<i>Stylidium albomontis</i>	35 cm	I	old H	Herb	
<i>Stylidium piliferum</i>	10 cm	I	old stalk	Shrub	

### SWRV33

Date: 29 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus flocktoniae* subsp. *flocktoniae* and *E. phenax* subsp. *phenax* over open shrubland of *Hakea verrucosa* and *Melaleuca scalena* over open shrubland of *Melaleuca pomphostoma*, *Daviesia benthamii* subsp. *benthamii*, *Grevillea pectinata* and *Melaleuca glaberrima* over sparse shrubland of *Spyridium cordatum* and *Hibbertia exasperata* with sparse sedgeland of *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV33. Unallocated Crown Land. 335 m S of a track and 8.33 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.46 km SW of Ravensthorpe.

Site Description: East facing gently inclined lower slope of weathered metamorphic mafic rock, quartz. Very slightly rocky weathered metamorphic greenstone, mafics outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia ingrata</i>	45 cm	V	old FL	Shrub	
<i>Acacia mimica</i> var. <i>angusta</i>	55 cm	I	old FL	Shrub	
<i>Acrotriche cordata</i>	45 cm	I	ST	Shrub	
<i>Astroloma epacridis</i>	30 cm	I	ST	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	45 cm	V	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	70 cm	V	FR	Shrub	
<i>Cassytha glabella</i>	1 m	I	B	Climber	
<i>Cryptandra nutans</i>	15 cm	I	old FR	Shrub	
<i>Daviesia anceps</i>	50 cm	I	ST	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	65 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	30 cm	I	ST	Shrub	
<i>Dodonaea pinifolia</i>	45 cm	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	S	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.5 m	S	FR, O	Mallee	
<i>Eucalyptus uncinata</i>	1.3 m	V	FR, O	Mallee	
<i>Eutaxia cuneata</i>	45 cm	I	ST	Shrub	
<i>Exocarpos aphyllus</i>	1 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	45 cm	V	H	Sedge	
<i>Gastrolobium musaceum</i>	1.2 m	I	old FL	Shrub	
<i>Goodenia concinna</i>	12 cm	I	FL	Herb	
<i>Grevillea pectinata</i>	85 cm	V	FL	Shrub	
<i>Hakea verrucosa</i>	1.3m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	22 cm	V	B	Shrub	
<i>Lepidosperma</i> ?sp. <i>Clathrate</i>	30 cm	I	ST	Sedge	
<i>Lepidosperma diurnum</i>	60 cm	I	H	Sedge	1
<i>Lepidosperma</i> sp. <i>Saltbush Hill (K.R. Newbey 4118)</i>	55 cm	I	H	Sedge	
<i>Leucopogon lloydiorum</i>	1.1 m	I	FL	Shrub	
<i>Logania stenophylla</i>	55 cm	I	FL	Shrub	
<i>Marianthus microphyllus</i>	12 cm	I	FL	Shrub	



<i>Melaleuca glaberrima</i>	70 cm	V	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	65 cm	V	FR	Shrub	
<i>Melaleuca pomphostoma</i>	75 cm	S	old FL, FR	Shrub	
<i>Melaleuca scalena</i>	1.2 m	S	FR	Shrub	
<i>Microcorys glabra</i>	35 cm	I	ST	Shrub	
<i>Santalum acuminatum</i>	1.3 m	I	ST	Shrub	
<i>Siegfriedia darwinioides</i>	18 cm	I	old FL	Shrub	
<i>Spyridium cordatum</i>	30 cm	V	old FL	Shrub	
<i>Wilsonia humilis</i>	4 cm	I	ST	Shrub	

## SWRV34

Date: 29 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus phenax* subsp. *phenax* and *Exocarpos sparteus* over sparse shrubland of *Hakea verrucosa* and *Templetonia retusa* over shrubland of *Logania stenophylla*, *Melaleuca pomphostoma*, *M. cliffortioides*, *Styphelia pulchella* and *Acacia glaucoptera* with isolated clumps of sedge *Lepidosperma diurnum* over shrub *Daviesia anceps* and sparse sedgeland of *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV34. Unallocated Crown Land. 55 m S of a track and 8.14 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.34 km SW of Ravensthorpe.

Site Description: East facing gently inclined crest/upper slope of weathered metamorphic rock, mafic, quartz, calcrete. Slightly rocky weathered metamorphosed rock, mafics outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	80 cm	V	old FL	Shrub	
<i>Acacia ingrata</i>	35 cm	V	old FL	Shrub	
<i>Acrotriche cordata</i>	35 cm	I	old FL	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	35 cm	I	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	18 cm	I	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	45 cm	I	old FR	Shrub	
<i>Cryptandra nutans</i>	25 cm	I	B	Shrub	
<i>Daviesia anceps</i>	50 cm	V	ST	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	60 cm	I	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	55 cm	L	old FL	Herb	
<i>Dodonaea concinna</i>	1.1 m	V	FR	Shrub	
<i>Dodonaea pinifolia</i>	40 cm	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	V	FR, O	Mallee	
<i>Eucalyptus leptocalyx</i>	2 m	V	FL, FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.2 m	S	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.3 m	V	FR	Mallee	4
<i>Eutaxia cuneata</i>	25 cm	I	ST	Shrub	
<i>Exocarpos sparteus</i>	25 cm	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	55 cm	L	H	Sedge	
<i>Gahnia aristata</i>	30 cm	L	H	Sedge	
<i>Goodenia concinna</i>	8 cm	I	FL	Shrub	
<i>Hakea verrucosa</i>	1.1 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	25 cm	V	B	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	40 cm	I	FL	Shrub	
<i>Lepidosperma</i> aff. <i>diurnum</i>	50 cm	I	H	Sedge	
<i>Lepidosperma diurnum</i>	55 cm	L	H	Sedge	1
<i>Lepidosperma</i> sp. <i>Tibialate</i>	40 cm	L	H	Sedge	
<i>Logania stenophylla</i>	1.1 m	V	FL	Shrub	
<i>Marianthus microphyllus</i>	12 cm	I	FL	Shrub	

<i>Melaleuca cliffortioides</i>	65 cm	V	old FL, FR	Shrub	
<i>Melaleuca pomphostoma</i>	80 cm	S	old FL, FR	Shrub	
<i>Olax benthamiana</i>	75 cm	V	ST	Shrub	
<i>Santalum acuminatum</i>	50 cm	I	ST	Shrub	
<i>Siegfriedia darwinioides</i>	15 cm	I	old FL	Shrub	
<i>Spyridium cordatum</i>	20 cm	I	old FL	Shrub	
<i>Styphelia pulchella</i>	60 cm	S	B	Shrub	
<i>Templetonia neglecta</i>	75 cm	I	FL	Shrub	
<i>Templetonia retusa</i>	1 m	V	FR	Shrub	

## SWRV35

Date: 30 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa*, *E. flocktoniae* subsp. *flocktoniae* and *E. phenax* subsp. *phenax* over open shrubland of *Gastrolobium musaceum*, *Baeckea corynophylla* and *Leptospermum erubescens* over sparse shrubland of *Boronia inconspicua* and *Grevillea pectinata* over isolated herb *Stylidium albomontis* and isolated sedges *Lepidosperma* sp. Ravensthorpe (G.F. Craig 5188) and *Lepidosperma fimbriatum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV35. Unallocated Crown Land. 11.19 km SSE of the intersection of Ongerup Road and Koornong Road. 13.15 km S of Cocanarup Homestead. Ca. 26.10 km SW of Ravensthorpe.

Site Description: North facing gently inclined mid/lower slope of weathered metamorphic rock, weathered iron enriched rock, quartzite. Rocky weathered metamorphic mafic rock outcrop with red-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	V	FL	Shrub	
<i>Acacia ingrata</i>	30 cm	V	FL	Shrub	
<i>Austrostipa hemipogon</i>	25 cm	I	H	Grass	
<i>Baeckea corynophylla</i>	1.7 m	V	FL	Shrub	
<i>Boronia inconspicua</i>	45 cm	V	B	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	30 cm	I	FL	Shrub	
<i>Calytrix leschenaultii</i>	50 cm	V	old FL	Shrub	
<i>Cassytha melantha</i>	1.5 m	V	FR	Climber	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea concinna</i>	80 cm	V	FR	Shrub	
<i>Dodonaea pinifolia</i>	30 cm	I	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2.5 m	S	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	S	FR, O	Mallee	
<i>Eucalyptus pleurocarpa</i>	2.8 m	S	FR	Mallee	
<i>Exocarpos aphyllus</i>	1.3 m	I	B	Shrub	
<i>Exocarpos sparteus</i>	1.6 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	30 cm	L	H	Sedge	
<i>Gastrolobium musaceum</i>	1.2 m	S	old FL, FR	Shrub	
<i>Grevillea oligantha</i>	1.2 m	I	ST	Shrub	
<i>Grevillea pectinata</i>	55 cm	V	FL	Shrub	
<i>Lasiopetalum compactum</i>	1 m	I	old FL	Shrub	
<i>Lepidosperma fimbriatum</i>	25 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	65 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	25 cm	L	H	Sedge	
<i>Leptospermum erubescens</i>	2.2 m	V	FL	Shrub	
<i>Melaleuca scalena</i>	1.3 m	V	FR	Shrub	
<i>Microcybe albiflora</i>	25 cm	I	old FL	Shrub	
<i>Olearia muelleri</i>	45 cm	I	old FL	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	52 cm	I	ST	Shrub	

<i>Senna sp. Pallinup River (J.W. Green 4847)</i>	<b>50 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Stylidium albomontis</i>	<b>30 cm</b>	<b>L</b>	<b>old H</b>	<b>Herb</b>	
<i>Wilsonia humilis</i>	<b>10 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	

## SWRV36

Date: 30 October 2009

Vegetation Description: Mallee shrubland of *Eucalyptus oleosa* subsp. *corvina*, *E. phenax* subsp. *phenax* and *E. flocktoniae* subsp. *flocktoniae* over sparse shrubland of *Templetonia retusa*, *Glycocystis beckeri*, *Boronia inconspicua* and *Exocarpos sparteus* over sparse shrubland of *Acacia ingrata* and *Westringia dampieri*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV36. Unallocated Crown Land. 11.30 km SSE of the intersection of Ongerup Road and Koornong Road. 13.18 km S of Cocanarup Homestead. Ca. 26.14 km SW of Ravensthorpe.

Site Description: North north-west facing gently inclined mid/upper slope of weathered greenstone, mafics, plate fractures. Very slightly rocky weathered mafic rock outcrop with red-orange-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	I	FL	Shrub	
<i>Acacia ingrata</i>	40 cm	V	B	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	85 cm	I	ST	Shrub	
<i>Boronia inconspicua</i>	18 cm	I	ST	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	35 cm	I	FL	Shrub	
<i>Dodonaea concinna</i>	1.3 m	V	FR	Shrub	
<i>Dodonaea pinifolia</i>	75 cm	I	FR	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	3.5 m	V	FL, FR, O	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3.2 m	S	FR, O	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	4 m	S	FR	Mallee	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	3 m	S	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	70 cm	I	B	Shrub	
<i>Exocarpos sparteus</i>	2.2 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	45 cm	L	H	Sedge	
<i>Glycocystis beckeri</i>	1.6 m	V	FL	Shrub	
<i>Grevillea pectinata</i>	45 cm	V	FL	Shrub	
<i>Hakea verrucosa</i>	1.1 m	I	FR	Shrub	
<i>Lasiopetalum compactum</i>	45 cm	I	FL	Shrub	
<i>Lepidosperma</i> aff. <i>diurnum</i>	45 cm	L	H	Sedge	
<i>Melaleuca scalena</i>	1 m	V	FR	Shrub	
<i>Olearia muelleri</i>	50 cm	I	old FL	Shrub	
<i>Senna</i> sp. <i>Pallinup River</i> (J.W. Green 4847)	70 cm	I	FL	Shrub	
<i>Templetonia retusa</i>	1.8 m	V	FL, FR	Shrub	
<i>Westringia dampieri</i>	5 cm	V	FL	Shrub	

## SWRV37

Date: 30 October 2009

Vegetation Description: Shrubland of *Hakea verrucosa*, *Kunzea affinis*, *Melaleuca hamata* and *Calothamnus quadrifidus* subsp. *quadrifidus* ms over sparse grassland of *Spartochloa scirpoidea* over sparse shrubland of *Hibbertia gracilipes*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV37. Unallocated Crown Land. 11.35 km SSE of the intersection of Ongerup Road and Koornong Road. 13.20 km S of Cocanarup Homestead. Ca. 26.05 km SW of Ravensthorpe.

Site Description: West north-west facing moderately inclined mid-slope of quartz, diorite, weathered metamorphic rock, ironstone fragments, mixed metasediments. Very slightly rocky weathered metamorphic rock outcrop with yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	1 cm	I	old FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1.3 m	V	old FL	Shrub	
<i>Allocasuarina campestris</i>	1.2 m	S	FR	Shrub	
<i>Baeckea crispiflora</i>	1 m	V	B	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.5 m	V	old FR	Shrub	
<i>Daviesia pachyphylla</i>	1.3 m	V	ST	Shrub	
<i>Dodonaea pinifolia</i>	60 cm	I	FR	Shrub	
<i>Eutaxia cuneata</i>	32 cm	I	old FL	Shrub	
<i>Gahnia drummondii</i>	40 cm	I	H	Sedge	
<i>Grevillea dolichopoda</i>	35 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.4 m	S	FR	Shrub	
<i>Hibbertia gracilipes</i>	45 cm	V	B, FL	Shrub	
<i>Kunzea affinis</i>	1.4 m	V	FL	Shrub	
<i>Kunzea cincinnata</i>	1.3 m	V	old FL	Shrub	1
<i>Leucopogon hamulosus</i>	30 cm	I	ST	Shrub	
<i>Melaleuca hamata</i>	1.6 m	V	B, FR	Shrub	
<i>Spartochloa scirpoidea</i>	1 m	V	H	Grass	

## SWRV38

Date: 30 October 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa* over open mallee shrubland of *E. phenax* subsp. *phenax* over open shrubland of *Gastrolobium musaceum* and *Calothamnus quadrifidus* subsp. *quadrifidus* ms and over sparse shrubland of *Lasiopetalum compactum*, *Goodenia scapigera* subsp. *scapigera* and *Philotheca gardneri* subsp. *gardneri* over sparse sedgeland of *Gahnia ancistrophylla*, herb *Stylidium albomontis* and shrub *Acacia ingrata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV38. Unallocated Crown Land. 11.49 km SSE of the intersection of Ongerup Road and Koornong Road. 13.31 km S of Cocanarup Homestead. Ca. 26.27 km SW of Ravensthorpe.

Site Description: West north-west facing gently inclined crest of weathered metamorphosed iron enriched rock, some quartz. Rocky weathered metamorphosed mafic outcrop with red-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	60 cm	I	old FL	Shrub	
<i>Acacia ingrata</i>	30 cm	V	old FL	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1 m	V	old FL	Shrub	
<i>Austrodanthonia setacea</i>	55 cm	I	old H	Grass	
<i>Austrostipa hemipogon</i>	40 cm	I	H	Grass	
<i>Boronia inconspicua</i>	45 cm	I	B	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	35 cm	I	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	40 cm	I	FL	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.5 m	V	FL, FR	Shrub	
<i>Dodonaea concinna</i>	45 cm	I	FR	Shrub	
<i>Dodonaea pinifolia</i>	85 cm	V	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2.4 m	V	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	S	FR	Mallee	
<i>Eucalyptus pleurocarpa</i>	4 m	S	FR	Mallee	
<i>Eutaxia cuneata</i>	50 cm	I	old FL	Shrub	
<i>Gahnia ancistrophylla</i>	40 cm	L	H	Sedge	
<i>Gastrolobium musaceum</i>	1.5 m	S	FR	Shrub	
<i>Goodenia scapigera</i> subsp. <i>scapigera</i>	70 cm	I	FL	Shrub	
<i>Grevillea pectinata</i>	1.3 m	V	FL	Shrub	
<i>Hakea verrucosa</i>	1.5 m	I	FR	Shrub	
<i>Hibbertia</i> sp.	10 cm	I	B	Shrub	
<i>Lasiopetalum compactum</i>	75 cm	V	old FL	Shrub	
<i>Lepidosperma diurnum</i>	50 cm	L	H	Sedge	1
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	30 cm	L	H	Sedge	
<i>Leptospermum erubescens</i>	1.2 m	I	FL	Shrub	
<i>Melaleuca glaberrima</i>	25 cm	I	ST	Shrub	
<i>Melaleuca scalene</i>	1.2 m	I	FR	Shrub	
<i>Philotheca gardneri</i> subsp. <i>gardneri</i>	65 cm	V	old FL	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	50 cm	I	ST	Shrub	
<i>Stylidium albomontis</i>	30 cm	L	FL	Herb	



<i>Templetonia retusa</i>	1.3 m	I	ST	Shrub	
<i>Thysanotus patersonii</i>	45 cm	I	B	Herb	

## SWRV39

Date: 31 October 2009

Vegetation Description: Mallee shrubland of *Eucalyptus proxima*, *E. flocktoniae* subsp. *flocktoniae* and *E. phenax* subsp. *phenax* over sparse shrubland of *Melaleuca cucullata* and *M. scalena* over open shrubland of *Daviesia benthamii* subsp. *benthamii*, *Acacia glaucoptera*, *A. sulcata* var. *platyphylla* and *Melaleuca torquata* over sparse sedgeland of *Gahnia ancistrophylla*, herb *Lomandra micrantha* subsp. *teretifolia* and shrub *Boronia inornata* subsp. *inornata*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV39. Unallocated Crown Land. 85 m E of a track and 10.68 km S of Cocanarup Homestead. Ca. 23.86 km SW of Ravensthorpe.

Site Description: North north-east facing very gently inclined crest/upper slope of dolerite, weathered metamorphic mafics, weathered greenstone, calcrete, quartz. Very slightly rocky greenstone outcrop with brown, grey-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	75 cm	V	old FL, FR	Shrub	
<i>Acacia glaucoptera</i>	65 cm	V	old FL, FR	Shrub	
<i>Acacia ingrate</i>	35 cm	V	ST	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	85 cm	V	Pods	Shrub	
<i>Billardiera coriacea</i>	1 m	I	FL	Climber	
<i>Boronia inornata</i> subsp. <i>inornata</i>	35 cm	V	FL	Shrub	
<i>Cassytha melantha</i>	1.8 m	V	FR	Climber	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	65 cm	V	FL	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	40 cm	I	ST	Herb	
<i>Dodonaea concinna</i>	1 m	I	FR	Shrub	
<i>Dodonaea pinifolia</i>	60 cm	I	FR	Shrub	
<i>Eucalyptus calycogona</i> subsp. <i>calycogona</i>	2 m	V	FL, FR	Mallee	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	2 m	S	FL, FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.2 m	S	FR, O	Mallee	
<i>Eucalyptus proxima</i>	1.6 m	S	FR, O	Mallee	4
<i>Exocarpos aphyllus</i>	1.2 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	40 cm	L	H	Sedge	
<i>Gahnia aristata</i>	45 cm	I	H	Sedge	
<i>Gastrolobium tetragonophyllum</i>	55 cm	I	old FL, FR	Shrub	
<i>Goodenia concinna</i>	7 cm	I	FL	Herb	
<i>Grevillea pectinata</i>	65 cm	V	FL	Shrub	
<i>Halgania andromedifolia</i>	55 cm	I	FL	Shrub	
<i>Hibbertia exasperata</i>	8 cm	I	B	Shrub	
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	45 cm	I	H	Sedge	
<i>Lomandra micrantha</i> subsp. <i>teretifolia</i>	35 cm	L	H	Sedge	
<i>Marianthus microphyllus</i>	12 cm	I	FL	Shrub	
<i>Melaleuca cucullata</i>	1.7 m	V	FL, FR	Shrub	
<i>Melaleuca glaberrima</i>	60 cm	I	FR	Shrub	
<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	80 cm	V	FR	Shrub	
<i>Melaleuca scalena</i>	1.2 m	V	FR	Shrub	

<i>Melaleuca torquata</i>	<b>65 cm</b>	<b>V</b>	<b>FR</b>	<b>Shrub</b>	
<i>Microcorys glabra</i>	<b>30 cm</b>	<b>I</b>	<b>FL</b>	<b>Shrub</b>	
<i>Wilsonia humilis</i>	<b>8 cm</b>	<b>I</b>	<b>ST</b>	<b>Shrub</b>	

## SWRV40

Date: 31 October 2009

Vegetation Description: Woodland of *Eucalyptus extensa*, *E. oleosa* subsp. *corvina* and *Exocarpos sparteus* over sparse shrubland of *Melaleuca cucullata* over shrubland of *Dodonaea concinna*, *D. pinifolia* and *Acacia glaucoptera*.

Location: South-west Ravensthorpe Greenstone Belt survey site SWRV40. Unallocated Crown Land. 240 m W of a track and 10.52 km S of Cocanarup Homestead. Ca. 23.90 km SW of Ravensthorpe.



Site Description: North north-east facing gently inclined mid-slope of weathered greenstone, quartz, tonalite, Annabelle volcanics, schist. Slightly rocky weathered greenstone outcrop with grey, light brown skeletal/shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	90 cm	S	Pods	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	ST	Herb	
<i>Dodonaea concinna</i>	1.2 m	V	FR	Shrub	
<i>Dodonaea pinifolia</i>	1 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	3 m	S	FR	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	4 m	S	FR	Mallee	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2 m	V	FR	Mallee	
<i>Exocarpos sparteus</i>	3.5 m	V	B	Tree	
<i>Hakea verrucosa</i>	90 cm	I	ST	Shrub	
<i>Lepidosperma ?fimbriatum</i>	30 cm	I	ST	Sedge	
<i>Melaleuca cucullata</i>	1.8 m	V	FL, FR	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	1.2 m	I	B	Shrub	
<i>Senna</i> sp. <i>Pallinup River (J.W. Green 4847)</i>	75 cm	I	FL	Shrub	
<i>Wilsonia humilis</i>	12 cm	I	ST	Shrub	

## SWRV41

Date: 31 October 2009

Vegetation Description: Woodland of *Eucalyptus brachycalyx* over open mallee shrubland of *Eucalyptus extensa* and *E. oleosa* subsp. *corvina* over open shrubland of *Templetonia retusa*, *Melaleuca acuminata* subsp. *acuminata*, *M. scalena* and *Dodonaea ptaermicaefolia* over open shrubland of *Acacia glaucoptera*, *Grevillea pectinata*, *G. oligantha* and *Dodonaea pinifolia*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV41. Unallocated Crown Land. 11.08 km SSE of the intersection of Ongerup Road and Koornong Road. 13.18 km S of Cocanarup Homestead. Ca. 26.27 km SW of Ravensthorpe.

Site Description: West north-west facing gently inclined flat of weathered metamorphosed ironstone, quartz, mixed metasediments with red-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	2.5 m	V	Pods	Shrub	
<i>Acacia glaucoptera</i>	70 cm	V	Pods	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	1.2 m	I	ST	Shrub	
<i>Boronia inconspicua</i>	1 m	I	FL, FR	Shrub	
<i>Cassytha melantha</i>	3 m	V	FR	Climber	
<i>Choretrum glomeratum</i> var. <i>glomeratum</i>	55 cm	I	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	70 cm	I	FL	Herb	
<i>Dodonaea pinifolia</i>	55 cm	V	FR	Shrub	
<i>Dodonaea ptaermicaefolia</i>	1.4 m	V	FR	Shrub	
<i>Eucalyptus brachycalyx</i>	18 m	S	FR	Tree	
<i>Eucalyptus extensa</i>	4 m	S	FR	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	4 m	S	FR	Mallee	3
<i>Exocarpos aphyllus</i>	1.5 m	V	B	Shrub	
<i>Exocarpos sparteus</i>	2.5 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	40 cm	L	H	Sedge	
<i>Grevillea oligantha</i>	85 cm	V	B	Shrub	
<i>Grevillea pectinata</i>	50 cm	V	FL	Shrub	
<i>Hakea commutata</i>	55 cm	I	ST	Shrub	
<i>Lepidosperma fimbriatum</i>	25 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Carracarrup Creek (S. Kern, R. Jasper, D. Brassington LCH 16738)	40 cm	V	H	Sedge	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	22 cm	L	H	Sedge	
<i>Melaleuca acuminata</i> subsp. <i>acuminata</i>	2.5 m	V	FR	Shrub	
<i>Melaleuca scalena</i>	1.4 m	V	FR	Shrub	
<i>Pimelea erecta</i>	50 cm	I	FL	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	45 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	2.2 m	V	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	60 cm	I	FL	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	60 cm	I	FL	Shrub	
<i>Templetonia retusa</i>	1.6 m	V	FL, FR	Shrub	

## SWRV42

Date: 31 October 2009

Vegetation Description: Open woodland of *Eucalyptus oleosa* subsp. *corvina* over open forest of *Eucalyptus extensa* over open shrubland of *Melaleuca scalena*, *Hakea commutata*, *Templetonia retusa* and *Exocarpos aphyllus* over sparse shrubland of *Beyeria lechenaultii* and *Acacia glaucoptera* over sparse sedgeland of *Gahnia ancistrophylla* and *Lepidosperma* sp. *Bandalup Scabrid* (N. Eveleigh 10798).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV42. Unallocated Crown Land. 10.91 km SSE of the intersection of Ongerup Road and Koornong Road. 13.15 km S of Cocanarup Homestead. Ca. 26.35 km SW of Ravensthorpe.

Site Description: West north-west facing gently inclined lower slope/flat of weathered metamorphic rock, mixed metasediments, quartz with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia cyclops</i>	2.5 m	V	Pods	Shrub	
<i>Acacia glaucoptera</i>	75 cm	V	FL, FR	Shrub	
<i>Acacia harveyi</i>	3 m	I	ST	Tree	
<i>Astroloma epacridis</i>	5 m	I	ST	Shrub	
<i>Austrodanthonia setacea</i>	30 cm	I	H	Grass	
<i>Austrostipa variabilis</i>	30 cm	I	H	Grass	
<i>Beyeria lechenaultii</i>	1.4 m	V	B	Shrub	
<i>Calotis hispidula</i>	3 cm	I	FR	Herb	
<i>Carpobrotus</i> sp.	10 cm	I	B	Shrub	
<i>Crassula colorata</i> var. <i>colorata</i>	3 cm	I	ST	Herb	
<i>Daucus glochidiatus</i>	7 cm	I	old FR	Herb	
<i>Desmocladius asper</i>	6 cm	I	ST	Sedge	
<i>Dianella revoluta</i> var. <i>revoluta</i>	70 cm	I	stalk	Herb	
<i>Dodonaea ptarmicaefolia</i>	1.9 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	11 m	S	FR	Tree	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	20 m	V	FR	Tree	3
<i>Exocarpos aphyllus</i>	1.4 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	50 cm	V	H	Sedge	
<i>Glycocystis beckeri</i>	40 cm	I	FL	Shrub	
<i>Grevillea oligantha</i>	65 cm	I	B	Shrub	
<i>Grevillea pectinata</i>	65 cm	V	FL	Shrub	
<i>Hakea commutata</i>	1.7 m	V	FL, FR	Shrub	
<i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)	50 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. <i>Ravensthorpe</i> (G.F. Craig 5188)	20 cm	I	H	Sedge	
<i>Lomandra effusa</i>	35 cm	I	ST	Herb	
<i>Lysimachia arvensis</i>	12 cm	I	ST	Herb	
<i>Melaleuca scalena</i>	2 m	V	FR	Shrub	
<i>Neurachne alopecuroidea</i>	10 cm	I	H	Grass	
<i>Olearia muelleri</i>	45 cm	I	old FL	Shrub	
<i>Oxalis</i> sp.	4 cm	I	ST	Herb	
<i>Pentaschistis airoides</i> subsp. <i>airoides</i>	12 cm	I	old H	Grass	

<i>Pimelea erecta</i>	50 cm	I	FL	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	75 cm	I	B	Shrub	
<i>Santalum acuminatum</i>	2.5 m	I	FR	Shrub	
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	90 cm	I	FR	Shrub	
<i>Senna</i> sp. <i>Pallinup River (J.W. Green 4847)</i>	70 cm	I	FL, FR	Shrub	
<i>Templetonia retusa</i>	1.6 m	V	FR	Shrub	
<i>Thysanotus patersonii</i>	40 cm	I	B	Herb	
<i>Vittadinia cervicalis</i>	15 cm	I	old FL	Herb	

### SWRV43

Date: 1 November 2009

Vegetation Description: Woodland of *Eucalyptus extensa* and *E. oleosa* subsp. *corvina* over open mallee shrubland of *E. phenax* subsp. *phenax*, *E. flocktoniae* subsp. *flocktoniae* and *Melaleuca cucullata* over sparse shrubland of *Dodonaea concinna* and *Melaleuca torquata* over isolated grass *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV43. Unallocated Crown Land. 470 m N of a track and 7.84 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 23.90 km SW of Ravensthorpe.

Site Description: South-east facing gently inclined crest of weathered greenstone, tonalite, some granite, mixed metasediments with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	1 m	V	FR	Shrub	
<i>Acacia ingrata</i>	30 cm	I	ST	Shrub	
<i>Acacia sulcata</i> var. <i>platyphylla</i>	55 cm	I	Pods	Shrub	
<i>Alyxia buxifolia</i>	90 cm	I	ST	Shrub	
<i>Austrodanthonia setacea</i>	45 cm	I	H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	50 cm	I	H	Grass	
<i>Boronia inornata</i> subsp. <i>inornata</i>	30 cm	I	FL	Shrub	
<i>Callitris drummondii</i>	2.2 m	V	FR	Tree	
<i>Cassytha melantha</i>	3 m	V	FR	Climber	
<i>Dianella revoluta</i> var. <i>revoluta</i>	50 cm	I	old stalk	Herb	
<i>Dodonaea concinna</i>	1.4 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	15 m	S	FR, O	Mallet	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	4 m	V	FR, O	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	12 m	V	FR, O	Tree	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	3.5 m	V	FR	Mallee	
<i>Goodenia laevis</i> subsp. <i>humifusa</i>	12 cm	I	FL	Herb	
<i>Grevillea oligantha</i>	80 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.8 m	V	FR	Shrub	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	35 cm	I	H	Sedge	
<i>Melaleuca cucullata</i>	3.8 m	S	FL, FR	Shrub	
<i>Melaleuca torquata</i>	2.2 m	V	FR	Shrub	
<i>Rhagodia preissii</i> subsp. <i>preissii</i>	65 cm	I	FL	Shrub	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	35 cm	I	ST	Shrub	
<i>Wilsonia humilis</i>	8 cm	I	ST	Shrub	



## SWRV44

Date: 1 November 2009

Vegetation Description: Woodland of *Eucalyptus extensa* and *E. oleosa* subsp. *corvina* over open mallee shrubland/open shrubland of *Eucalyptus proxima* and *Melaleuca cucullata* over sparse shrubland of *Dodonaea concinna*, *Acacia glaucoptera* and *Senna* sp. Pallinup River (J.W. Green 4847) over isolated grass *Austrostipa* sp. Ravensthorpe Range (A. Markey & J. Allen 6261).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV44. Unallocated Crown Land. 415 m N of a track and 7.99 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 23.90 km SW of Ravensthorpe.

Site Description: South south-east facing gently inclined upper slope of tonalite, diorite, granite. Very slightly rocky diorite, granite outcrop with light brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	1.2 m	V	FR	Shrub	
<i>Austrodanthonia setacea</i>	22 cm	I	old H	Grass	
<i>Austrostipa</i> sp. Ravensthorpe Range (A. Markey & J. Allen 6261)	50 cm	I	H	Grass	
<i>Callitris drummondii</i>	2 m	V	FR	Tree	
<i>Cassytha melantha</i>	3 m	V	B, FR	Climber	
<i>Comesperma polygaloides</i>	15 cm	I	B	Shrub	
<i>Dodonaea concinna</i>	1.3 m	V	FR	Shrub	
<i>Eucalyptus extensa</i>	20 m	S	FR	Mallee	
<i>Eucalyptus oleosa</i> subsp. <i>corvina</i>	18 m	S	FR	Tree	3
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.5 m	V	FR, O	Shrub	
<i>Eucalyptus proxima</i>	3.2 m	S	FL, FR, O	Mallee	4
<i>Lepidosperma gahnioides</i>	45 cm	L	H	Sedge	3
<i>Melaleuca cucullata</i>	3.5 m	S	FL, FR	Shrub	
<i>Plantago hispida</i>	8 cm	I	FL	Herb	
<i>Senna</i> sp. Pallinup River (J.W. Green 4847)	1.2 m	V	FL, FR	Shrub	
<i>Thysanotus patersonii</i>	35 cm	I	B	Herb	
<i>Wilsonia humilis</i>	4 cm	I	ST	Shrub	

## SWRV45

Date: 1 November 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus leptocalyx*, *E. flocktoniae* subsp. *flocktoniae* and over open shrubland of *Hakea verrucosa* and *Melaleuca cliffortioides* over sparse shrubland of *Dodonaea pinifolia* and *Hibbertia exasperata*, *Daviesia anceps*, *Boronia inornata* subsp. *inornata*, *Acacia ingrata* and sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) and *Lepidosperma diurnum*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV45. Unallocated Crown Land. 80 m N of a track and 8.05 km SE of the intersection of Ongerup Road and Koornong Road. Ca. 24.14 km SW of Ravensthorpe.

Site Description: West north-west facing moderately inclined mid-slope of weathered metamorphosed mafic, greenstone (plate fracturing). Very slightly rocky weathered greenstone outcrop with red-brown shallow sandy clay loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia binata</i>	70 cm	I	old FL	Shrub	
<i>Acacia glaucoptera</i>	55 cm	I	ST	Shrub	
<i>Acacia ingrata</i>	40 cm	V	B	Shrub	
<i>Acrotriche cordata</i>	50 cm	I	B	Shrub	
<i>Allocasuarina campestris</i>	2.6 m	V	FR	Shrub	
<i>Astroloma epacridis</i>	45 cm	I	FR	Shrub	
<i>Boronia inornata</i> subsp. <i>inornata</i>	50 cm	V	FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	30 cm	I	FL	Shrub	
<i>Cassytha melantha</i>	2 m	I	FR	Climber	
<i>Daviesia anceps</i>	50 cm	I	old FL	Shrub	
<i>Daviesia benthamii</i> subsp. <i>benthamii</i>	45 cm	I	ST	Shrub	
<i>Dodonaea pinifolia</i>	1 m	V	FR	Shrub	
<i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>	3.2 m	S	FR, O	Mallee	
<i>Eucalyptus leptocalyx</i>	4 m	S	FL, FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	2.5 m	V	FR, O	Mallee	
<i>Exocarpos aphyllus</i>	1.2 m	I	B	Shrub	
<i>Gahnia ancistrophylla</i>	45 cm	I	H	Sedge	
<i>Goodenia laevis</i> subsp. <i>humifusa</i>	15 cm	L	FL	Herb	
<i>Hakea lissocarpha</i>	1.3 m	V	FR	Shrub	
<i>Hakea verrucosa</i>	2 m	V	FR	Shrub	
<i>Hibbertia exasperata</i>	55 cm	V	old FL	Shrub	
<i>Hybanthus floribundus</i> subsp. <i>adpressus</i>	55 cm	I	old FL	Shrub	
<i>Lepidosperma</i> aff. <i>diurnum</i>	22 cm	I	H	Sedge	
<i>Lepidosperma diurnum</i>	50 cm	L	H	Sedge	1
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	65 cm	V	H	Sedge	
<i>Lepidosperma</i> sp. Mt Chester (S. Kern et al. LCH 16596)	30 cm	I	H	Sedge	
<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	18 cm	I	H	Sedge	
<i>Logania stenophylla</i>	45 cm	I	B	Shrub	
<i>Melaleuca cliffortioides</i>	1.4 m	S	old FL, FR	Shrub	

<i>Melaleuca lateriflora</i> subsp. <i>lateriflora</i>	60 cm	I	old FL, FR	Shrub	
<i>Melaleuca scalena</i>	1.3 m	I	FR	Shrub	
<i>Santalum acuminatum</i>	3 m	I	ST	Shrub	
<i>Senna</i> sp. <i>Pallinup River (J.W. Green 4847)</i>	50 cm	I	ST	Shrub	
<i>Templetonia retusa</i>	2.2 m	I	FR	Shrub	
<i>Wilsonia humilis</i>	8 cm	I	ST	Shrub	

## SWRV46

Date: 2 November 2009

Vegetation Description: Open Shrubland of *Hakea verrucosa*, *Melaleuca uncinata* and *Gastrolobium musaceum* over open shrubland of *Astus tetragonus* and *Acacia mimica* var. *angusta* over sparse shrubland of *Hibbertia recurvifolia* with isolated clumps of sedge *Lepidosperma* ?sp. Mt Benson.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV46. Unallocated Crown Land. 175 m W of a track and 10.60 km S of Cocanarup Homestead. Ca. 23.94 km SW of Ravensthorpe.

Site Description: North-west facing gently inclined mid-slope of weathered mafic, platy-fracture, granites. Slightly rocky weathered mafic, slate-siltstone outcrop with red-yellow-brown shallow sandy loam soils.

Species	H	CC	FL	Form	CONS
<i>Acacia glaucoptera</i>	40 cm	I	ST	Shrub	
<i>Acacia mimica</i> var. <i>angusta</i>	55 cm	S	old FL	Shrub	
<i>Acacia tetanophylla</i>	70 cm	V	old FL	Shrub	
<i>Allocasuarina campestris</i>	30 cm	I	ST	Shrub	
<i>Astroloma serratifolium</i>	45 cm	I	B	Shrub	
<i>Astus tetragonus</i>	65 cm	V	B, FL	Shrub	
<i>Boronia scabra</i> subsp. <i>scabra</i>	18 cm	I	B	Shrub	
<i>Boronia subsessilis</i>	18 cm	I	B	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.2 m	I	old FR	Shrub	
<i>Dodonaea pinifolia</i>	50 cm	I	FR	Shrub	
<i>Eutaxia cuneata</i>	30 cm	I	old FL	Shrub	
<i>Gahnia ancistrophylla</i>	40 cm	L	H	Sedge	
<i>Gastrolobium musaceum</i>	1 m	V	old FL	Shrub	
<i>Grevillea dolichopoda</i>	40 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.2 m	V	FR	Shrub	
<i>Hibbertia recurvifolia</i>	35 cm	V	B, old FL	Shrub	
<i>Kunzea strigosa</i>	1.3 m	V	FL	Shrub	
<i>Lepidosperma</i> ?sp. Mt Benson	55 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. <i>K Boorabbin</i> (K.L. Wilson 2579)	40 cm	I	H	Sedge	
<i>Leucopogon cuneifolius</i>	60 cm	I	ST	Shrub	
<i>Melaleuca glaberrima</i>	40 cm	I	FR	Shrub	
<i>Melaleuca hamulosa</i>	50 cm	I	ST	Shrub	
<i>Melaleuca uncinata</i>	1 m	V	ST	Shrub	
<i>Neurachne alopecuroidea</i>	12 cm	I	H	Grass	
<i>Spartochloa scirpoidea</i>	75 cm	I	ST	Grass	
<i>Stylidium albomontis</i>	30 cm	I	old FL	Herb	
<i>Stylidium involucreatum</i>	8 cm	I	B?	Shrub	

## SWRV47

Date: 2 November 2009

Vegetation Description: Woodland of *Eucalyptus occidentalis* over sparse shrubland of *Hakea verrucosa* and *Calothamnus quadrifidus* subsp. *quadrifidus* ms over open shrubland of *Acacia mimica* var. *angusta* and *Baeckea crispiflora* with sparse sedgeland of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) over sparse shrub *Dodonaea pinifolia*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV47. Fitzgerald River National Park. Drive 8.15 km SW along Ongerup Road from its intersection with South Coast Highway. Then walk 1.03 km E. Ca. 29.37 km SW of Ravensthorpe.

Site Description: East south-east facing gently inclined lower slope of quartzite, mixed metasediments with yellow-brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	70 cm	S	old FL, FR	Shrub	
<i>Acacia saligna</i> subsp. <i>lindleyi</i>	1.2 m	V	old FL	Shrub	
<i>Allocasuarina huegeliana</i>	1 m	I	ST	Shrub	
<i>Baeckea crispiflora</i>	55 cm	V	ST	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.1 m	V	FL, FR	Shrub	
<i>Calytrix leschenaultii</i>	40 cm	I	old FL	Shrub	
<i>Comesperma scoparium</i>	35 cm	I	FR	Shrub	
<i>Dodonaea pinifolia</i>	45 cm	V	FR	Shrub	
<i>Eucalyptus occidentalis</i>	4 m	S	FR	Tree	
<i>Eucalyptus perangusta</i>	1.6 m	V	FR, O	Mallee	
<i>Goodenia tripartita</i>	2 cm	I	FL	Herb	
<i>Grevillea rigida</i> subsp. <i>distans</i>	55 cm	I	ST	Shrub	
<i>Hakea verrucosa</i>	1.3 m	V	FR	Shrub	
<i>Lepidobolus preissianus</i>	25 cm	I	ST	Sedge	
<i>Lepidosperma</i> aff. <i>pruinatum</i>	55 cm	I	H	Sedge	
<i>Lepidosperma carphoides</i>	40 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	80 cm	V	H	Sedge	
<i>Leptospermum erubescens</i>	65 cm	I	FR	Shrub	
<i>Leptospermum nitens</i>	35 cm	I	ST	Shrub	
<i>Leptospermum oligandrum</i>	50 cm	I	ST	Shrub	
<i>Leucopogon cuneifolius</i>	50 cm	I	ST	Shrub	
<i>Lomandra micrantha</i> subsp. <i>teretifolia</i>	35 cm	I	ST	Herb	
<i>Melaleuca hamata</i>	1.1 m	I	FR	Shrub	
<i>Melaleuca hamulosa</i>	1.2 m	I	ST	Shrub	
<i>Neurachne alopecuroidea</i>	4 cm	I	H	Grass	
<i>Petrophile seminuda</i>	50 cm	I	old FL	Shrub	
<i>Platysace deflexa</i>	55 cm	V	old stalk	Shrub	
<i>Schoenus breviculmis</i>	10 cm	I	H	Sedge	

## SWRV48

Date: 2 November 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa* and *Hakea laurina* over sparse shrubland of *Calothamnus quadrifidus* subsp. *quadrifidus* ms and *Exocarpos sparteus* over open shrubland and of *Acacia mimica* var. *angusta*, *Leptospermum spinescens* and *Allocasuarina humilis* over sparse clumps of *Lepidosperma* sp. A2 Inland Flat (G.J. Keighery 7000) and *Gahnia ancistrophylla* over *Leucopogon* sp. Newdegate (M. Hislop 3585).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV48. Fitzgerald River National Park. Drive 8.15 km SW along Ongerup Road from its intersection with South Coast Highway. Then walk 910 m E. Ca. 29.37 km SW of Ravensthorpe.

Site Description: East north-east facing gently inclined mid-slope of quartzite, mixed metasediments with yellow-brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	80 cm	S	old FL	Shrub	
<i>Acacia saligna</i> subsp. <i>lindleyi</i>	1 m	I	FL	Shrub	
<i>Allocasuarina humilis</i>	1 m	V	FL	Shrub	
<i>Banksia cirsioides</i>	1.2 m	I	old FL	Shrub	
<i>Banksia nivea</i> subsp. <i>nivea</i>	25 cm	I	ST	Shrub	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.1 m	V	FL, old FR	Shrub	
<i>Calytrix leschenaultii</i>	45 cm	I	old FL	Shrub	
<i>Chamelaucium ciliatum</i>	60 cm	I	B	Shrub	
<i>Conostylis argentea</i>	10 cm	I	ST	Herb	
<i>Daviesia pachyphylla</i>	1 m	I	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	80 cm	L	old stalk	Herb	
<i>Dodonaea pinifolia</i>	40 cm	I	FR	Shrub	
<i>Eucalyptus perangusta</i>	1.1 m	V	FR	Mallee	
<i>Eucalyptus pleurocarpa</i>	4 m	S	B, FR	Mallee	
<i>Exocarpos sparteus</i>	2.4 m	V	B	Shrub	
<i>Gahnia ancistrophylla</i>	60 cm	V	H	Sedge	
<i>Hakea incrassata</i>	45 cm	I	ST	Shrub	
<i>Hakea laurina</i>	4 m	S	B, FR	Tree	
<i>Hakea lissocarpha</i>	1.3 m	V	FR	Shrub	
<i>Hakea verrucosa</i>	1 m	V	FR	Shrub	
<i>Halgania anagalloides</i> var. <i>Southern</i> (A.E. Orchard 1609)	10 cm	I	ST	Shrub	
<i>Hibbertia</i> sp.	20 cm	I	ST	Shrub	
<i>Kunzea affinis</i>	70 cm	I	old FL	Shrub	
<i>Kunzea jucunda</i>	1.3 m	I	FL	Shrub	
<i>Lepidosperma carphoides</i>	30 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	1.2 m	V	H	Sedge	
<i>Lepidosperma</i> sp. <i>Clathrate</i>	40 cm	L	H	Sedge	
<i>Leptospermum oligandrum</i>	60 cm	V	ST	Shrub	
<i>Leptospermum spinescens</i>	1 m	V	FR	Shrub	

<i>Leucopogon cuneifolius</i>	60 cm	I	ST	Shrub	
<i>Leucopogon sp. Newdegate (M. Hislop 3585)</i>	35 cm	V	old FL	Shrub	
<i>Lomandra mucronata</i>	15 cm	L	ST	Herb	
<i>Melaleuca acuminata subsp. acuminata</i>	1.2 m	I	B, FR	Shrub	
<i>Melaleuca glaberrima</i>	60 cm	I	old FL, FR	Shrub	
<i>Melaleuca hamulosa</i>	1 m	I	FR	Shrub	
<i>Melaleuca pentagona var. pentagona</i>	35 cm	I	FL, FR	Shrub	
<i>Melaleuca villosisepala</i>	45 cm	I	FR	Shrub	
<i>Mesomelaena stygia subsp. stygia</i>	25 cm	L	H	Sedge	
<i>Olax benthamiana</i>	50 cm	I	ST	Shrub	
<i>Petrophile seminuda</i>	60 cm	I	B	Shrub	
<i>Platysace deflexa</i>	50 cm	I	ST	Shrub	
<i>Restionaceae sp.</i>	20 cm	I	H	Sedge	
<i>Templetonia aculeata</i>	30 cm	I	ST	Shrub	

## SWRV49

Date: 2 November 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus suggrandis* subsp. *suggrandis*, *E. phaenophylla* subsp. *phaenophylla* and *E. pluricaulis* subsp. *pluricaulis* over open shrubland of *Hakea lissocarpha*, *Melaleuca hamata*, *Daviesia incrassata* subsp. *incrassata*, *Baeckea corynophylla* and *Kunzea affinis* over open shrubland of *Hibbertia exasperata*, *Gastrolobium tetragonophyllum*, *Melaleuca glaberrima*, *Leucopogon tamminensis* var. *australis* and open sedgeland of *Lepidosperma* sp. Mt Benson and *Gahnia ancistrophylla*.



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV49. Fitzgerald River National Park. Drive 8.15 km SW along Ongerup Road from its intersection with South Coast Highway. Then walk 430 m E. Ca. 29.89 km SW of Ravensthorpe.

Site Description: East south-east facing gently inclined upper slope of quartz, weathered greenstone, gneiss, ironstone, mixed metasediments with yellow-red-brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	65 cm	I	old FL	Shrub	
<i>Acacia tetanophylla</i>	1.3 m	V	old FL	Shrub	
<i>Austrodanthonia setacea</i>	30 cm	I	H	Grass	
<i>Baeckea corynophylla</i>	1.1 m	V	old FL	Shrub	
<i>Callitris drummondii</i>	2 m	I	FR	Tree	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1 m	I	old FL	Shrub	
<i>Calytrix leschenaultii</i>	45 cm	I	old FL	Shrub	
<i>Cassytha glabella</i>	50 cm	I	ST	Climber	
<i>Cassytha melantha</i>	1 m	I	FR	Climber	
<i>Conostylis argentea</i>	12 cm	I	old FL	Herb	
<i>Daviesia incrassata</i> subsp. <i>incrassata</i>	1.3 m	V	old FR	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	45 cm	I	ST	Herb	
<i>Eucalyptus densa</i> subsp. <i>improcera</i>	1.3 m	V	FR	Mallee	
<i>Eucalyptus phaenophylla</i> subsp. <i>phaenophylla</i>	1.5 m	V	FR, O	Mallee	
<i>Eucalyptus phenax</i> subsp. <i>phenax</i>	1.6 m	I	FR, O	Mallee	
<i>Eucalyptus pluricaulis</i> subsp. <i>pluricaulis</i>	1.5 m	V	FL, FR, O	Mallee	
<i>Eucalyptus suggrandis</i> subsp. <i>suggrandis</i>	2 m	S	FR, O	Mallee	
<i>Eucalyptus uncinata</i>	2 m	V	FR	Mallee	
<i>Gahnia ancistrophylla</i>	55 cm	L	H	Sedge	
<i>Gastrolobium musaceum</i>	1 m	I	old FL	Shrub	
<i>Gastrolobium tetragonophyllum</i>	65 cm	V	old FL, FR	Shrub	
<i>Hakea laurina</i>	2.1 m	I	FR	Tree	
<i>Hakea lissocarpha</i>	1.6 m	V	FR	Shrub	
<i>Hakea marginata</i>	60 cm	I	B	Shrub	
<i>Hibbertia exasperata</i>	35 cm	V	B	Shrub	
<i>Kunzea affinis</i>	1.5 m	V	old FL	Shrub	
<i>Lepidosperma</i> sp. A2 Inland Flat (G.J. Keighery 7000)	90 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Clathrate	45 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Mt Benson	55 cm	V	H	Sedge	



<i>Lepidosperma</i> sp. Ravensthorpe (G.F. Craig 5188)	18 cm	I	H	Sedge	
<i>Leucopogon</i> sp. Newdegate (M. Hislop 3585)	60 cm	I	ST	Shrub	
<i>Leucopogon tamminensis</i> var. <i>australis</i>	45 cm	I	FL	Shrub	
<i>Lomandra effusa</i>	30 cm	L	H	Herb	
<i>Marianthus bicolor</i>	1 m	I	ST	Climber	
<i>Melaleuca glaberrima</i>	1.6 m	V	FR	Shrub	
<i>Melaleuca glaberrima</i>	1 m	V	old FL, FR	Shrub	
<i>Melaleuca hamata</i>	1 m	S	FR	Shrub	
<i>Melaleuca rigidifolia</i>	1.6 m	V	FR	Shrub	
<i>Melaleuca rigidifolia</i>	65 cm	V	old FL, FR	Shrub	
<i>Neurachne alopecuroidea</i>	5 cm	L	ST	Grass	
<i>Olearia imbricata</i>	50 cm	I	old FL	Shrub	
<i>Platysace deflexa</i>	35 cm	I	FR	Shrub	
<i>Restionaceae</i> sp.	15 cm	I	H	Sedge	
<i>Tetraria</i> sp. Mt Madden (C.D. Turley 40 BP/897)	25 cm	I	H	Sedge	

## SWRV50

Date: 2 November 2009

Vegetation Description: Open mallee shrubland of *Eucalyptus pleurocarpa* over open shrubland of *Calothamnus quadrifidus* subsp. *quadrifidus* ms, *Kunzea affinis*, *K. preissiana*, *Acacia mimica* var. *angusta* and *Hakea lissocarpha* over sparse shrubland of *Hakea incrassata*, *Baeckea preissiana* and *Leptospermum spinescens* over sparse shrubland of *Calytrix* aff. *leschenaultii* and *Hibbertia gracilipes* with sparse sedgeland of *Schoenus brevisetis* and *Lepidosperma* sp. Shoemaker Levy (L. Ang & O. Davies 10815).



Location: South-west Ravensthorpe Greenstone Belt survey site SWRV50. Fitzgerald River National Park. Drive 8.15 km SW along Ongerup Road from its intersection with South Coast Highway. Then walk 570 m E. Ca. 29.74 km SW of Ravensthorpe.

Site Description: East facing gently inclined mid-slope of quartz, ironstone, mixed metasediments, gneiss with yellow-brown shallow loamy sand soils.

Species	H	CC	FL	Form	CONS
<i>Acacia mimica</i> var. <i>angusta</i>	1.1 m	V	old FL	Shrub	
<i>Acacia sulcata</i> var. <i>planoconvexa</i>	80 cm	I	Pods	Shrub	
<i>Allocasuarina campestris</i>	1 m	V	FR	Shrub	
<i>Allocasuarina microstachya</i>	35 cm	V	FR	Shrub	
<i>Amphipogon turbinatus</i>	15 cm	L	ST	Herb	
<i>Argentipallium niveum</i>	30 cm	I	FL	Shrub	
<i>Baeckea preissiana</i>	50 cm	V	FL	Shrub	
<i>Banksia nivea</i> subsp. <i>nivea</i>	25 cm	L	old FL	Shrub	
<i>Billardiera coriacea</i>	70 cm	I	FR	Climber	
<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>	1.1 m	V	FL, old FR	Shrub	
<i>Calytrix</i> aff. <i>leschenaultii</i>	50 cm	V	old FL	Shrub	
<i>Chamaexeros serra</i>	30 cm	L	H	Herb	
<i>Chamelaucium ciliatum</i>	45 cm	I	FL	Shrub	
<i>Cheiranthra brevifolia</i>	25 cm	I	FL	Herb	
<i>Conostylis argentea</i>	12 cm	L	FL	Herb	
<i>Daviesia pachyphylla</i>	70 cm	V	ST	Shrub	
<i>Dianella revoluta</i> var. <i>revoluta</i>	40 cm	I	ST	Herb	
<i>Eucalyptus pleurocarpa</i>	4 m	S	FR	Mallee	
<i>Hakea incrassata</i>	50 cm	V	FR	Shrub	
<i>Hakea lissocarpha</i>	2 m	V	FR	Shrub	
<i>Hibbertia gracilipes</i>	30 cm	V	FL	Shrub	
<i>Kunzea affinis</i>	1.2 m	V	FL	Shrub	
<i>Kunzea micrantha</i>	40 cm	V	old FL	Shrub	
<i>Kunzea preissiana</i>	13 cm	V	FL	Shrub	
<i>Lepidosperma</i> sp. Mt Short (S. Kern et al. LCH 17510)	50 cm	L	H	Sedge	
<i>Lepidosperma</i> sp. Shoemaker Levy (L. Ang & O. Davies 10815)	50 cm	L	H	Sedge	
<i>Leptospermum spinescens</i>	70 cm	V	FR	Shrub	
<i>Leucopogon cuneifolius</i>	35 cm	I	ST	Shrub	

<i>Leucopogon obtusatus</i>	30 cm	I	FL	Shrub	
<i>Leucopogon sp. Newdegate (M. Hislop 3585)</i>	75 cm	I	ST	Shrub	
<i>Lysinema pentapetalum</i>	85 cm	I	FL	Shrub	
<i>Melaleuca rigidifolia</i>	55 cm	V	old FL	Shrub	
<i>Melaleuca villosisepala</i>	50 cm	V	old FL, FR	Shrub	
<i>Mesomelaena stygia subsp. stygia</i>	18 cm	L	H	Sedge	
<i>Persoonia striata</i>	30 cm	I	ST	Shrub	
<i>Petrophile seminuda</i>	70 cm	V	old FL	Shrub	
<i>Platysace deflexa</i>	40 cm	I	ST	Shrub	
<i>Schoenus brevisetis</i>	25 cm	V	H	Sedge	
<i>Schoenus subflavus subsp. subflavus</i>	10 cm	I	H	Sedge	
<i>Senna sp. Pallinup River (J.W. Green 4847)</i>	30 cm	I	ST	Shrub	
<i>Stachystemon virgatus</i>	30 cm	I	old FL	Shrub	
<i>Synaphea interioris</i>	18 cm	I	ST	Shrub	
<i>Verticordia chrysantha</i>	1.1 m	I	FL	Shrub	