



Targeted Fauna Survey at Wiluna West Gold Project
for GWR Group Limited

December 2019

Final Report



Limitations

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Executive Summary

GWR Group Limited's (GWR) is planning on developing its Eagle-Emu gold deposit which forms part of its Wiluna West Gold Project. The Eagle-Emu project area is located approximately 30 km southwest of Wiluna in Western Australia (WA).

It is understood that a number of conservation significant species listed under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* and WA Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority fauna lists have either been recorded in the area as a result of past surveys, or were present in the relevant databases in the vicinity of the Eagle-Emu gold deposit area. These species include:

- Malleefowl (*Leipoa ocellata*) – listed as Vulnerable under the EPBC Act and WA BC Act.
- Night Parrot (*Pezoporus occidentalis*) – listed as Endangered under the EPBC Act and CR under the WA BC Act.
- Brush-tailed Mulgara (*Dasycercus blythi*) – listed as Priority 4 by DBCA.
- Long-tailed Dunnart (*Sminthopsis longicaudata*) – listed as Priority 4 by DBCA.

Western Ecological was consequently commissioned to undertake a targeted fauna survey in the Eagle-Emu project area for the four species mentioned above. Given the relatively small size of the Eagle-Emu site (about 66 ha) the area was expanded with a 500 m buffer to account for potential changes in location to infrastructure (the survey area).

The field survey included a series of habitat assessments, systematic walked transects to look for Malleefowl mounds and tracks, the placement of acoustic units in the survey area in an attempt to record the calls of the Night Parrot and camera traps to survey for the Brush-tailed Mulgara and Long-tailed Dunnart. While walking transects, burrows, tracks and scats were also looked for.

During the field survey 17 fauna habitat assessments were undertaken across the survey area and two broad fauna habitats were described and these were Mulga Shrubland and Drainage Line. Mulga was the dominant flora species in the canopy across much of the survey area and these two broad habitat types were for the most part differentiated by where they were in the landscape i.e. the very minor channels where water does flow was called Drainage Line. The substrate across much of the survey area was stony and rocky with some outcropping on ridges and those were relatively small.

During the Malleefowl survey a total of 47.37 km of systematic transects were walked across the survey area. No Malleefowl were recorded while walking the transects and no Malleefowl were captured on the camera traps. During the survey we recorded five Malleefowl mounds in the survey all of which were deemed inactive and old and had not been recorded during any of the previous surveys. Malleefowl tracks were also recorded at three locations, very close to each other and at the northern end of the survey area, but outside of the project footprint.

No Night Parrot calls were recorded on the acoustic recording units during the survey and no suitable habitat is present in the survey area. This species is therefore considered unlikely to occur in the survey area.

No Brush-tailed Mulgara or Long-tailed Dunnarts were recorded on the 10 camera traps during the survey and no signs (burrows, tracks or scats) of them were observed. There is a record of the Long-tailed Dunnart from the survey area, consequently, this species is considered likely to occur. No suitable sandplain habitat is present in the survey area for the Brush-tailed Mulgara. Therefore, the Brush-tailed Mulgara is considered unlikely to occur in the survey area.



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1. Introduction

1.1 Background

GWR Group Limited (GWR) is planning on developing its Eagle-Emu gold deposit which forms part of its Wiluna West Gold Project. The Eagle-Emu project area is located approximately 30 km southwest of Wiluna in Western Australia (WA) (Figure 1).

It is understood that a number of conservation significant species listed under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* and WA Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority fauna lists have either been recorded in the area as a result of past surveys, or were present in the relevant databases in the vicinity of the Eagle-Emu gold deposit area. These species include:

- Malleefowl (*Leipoa ocellata*) – listed as Vulnerable under the EPBC Act and WA BC Act.
- Night Parrot (*Pezoporus occidentalis*) – listed as Endangered under the EPBC Act and CR under the WA BC Act.
- Brush-tailed Mulgara (*Dasyercus blythi*) – listed as Priority 4 by DBCA.
- Long-tailed Dunnart (*Sminthopsis longicaudata*) – listed as Priority 4 by DBCA.
- Boodie (inland subspecies) (*Bettongia lesueur graii*) – listed as Extinct under the EPBC Act and WA BC Act.

It is important to mention that the inland subspecies of the Boodie (*Bettongia lesueur graii*) which was present in the DBCA threatened fauna database search is extinct (Woinarski *et al.* 2014), therefore this species will not form part of this survey.

Please note that the four species being targeted during this survey was based on the many past survey results, previous database searches and known habitats present as a result of the previous surveys

Western Ecological was commissioned to undertake a targeted fauna survey in the Eagle-Emu project area (or site) for the four species mentioned above. Given the relatively small size of the Eagle-Emu site (about 66 ha) the area was expanded with a 500 m buffer to account for potential changes in location to infrastructure. This expanded area is referred to as the survey area and is approximately 593 ha (Figure 1).

1.2 Objectives and Scope

The scope of work (SoW) to be undertaken was as follows:

- Targeted searches and habitat assessments for the Malleefowl, Night Parrot, Brush-tailed Mulgara, and Long-tailed Dunnart
- Opportunistic observations of fauna, with a particular focus on conservation significant species other than the four above should they be detected (terrestrial vertebrates)
- Document the above in a report.

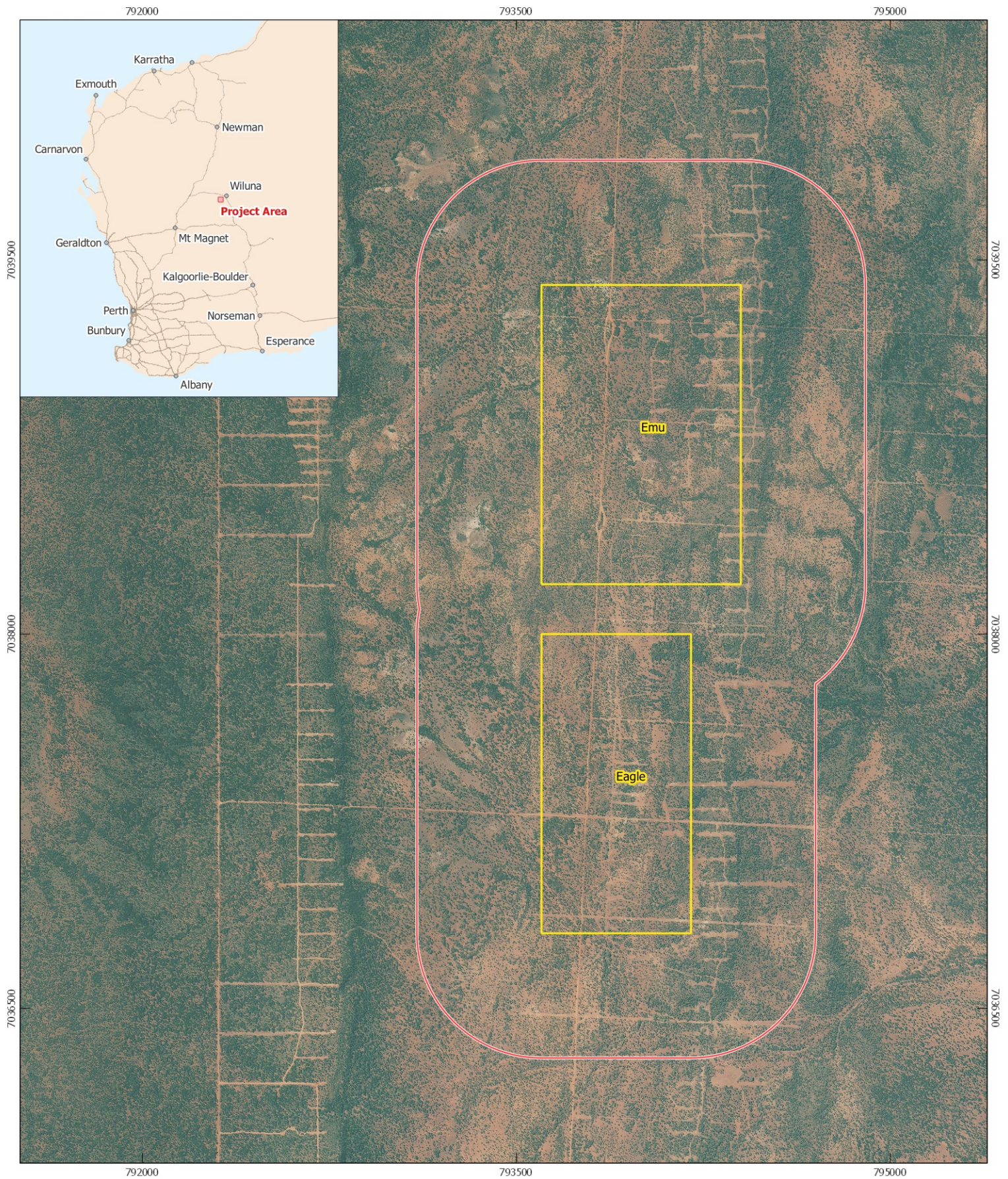
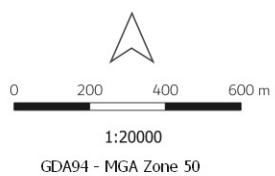


Figure 1: Project location



Legend

- Survey boundary
- Site boundary



1.3 **Legislative context**

Fauna in Western Australia is protected formally and informally by various legislative and non-legislative measures, which are as follows:

- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) – Australian Government
- Biodiversity Conservation Act 2016 (BC Act) – State.

Non-legislative measures:

- WA Department of Biodiversity, Conservation and Attractions (DBCA) Priority lists for flora, ecological communities and fauna
- Recognition of locally significant populations by DBCA.

A short description of each is given below. Other definitions, including species conservation categories, are provided in Appendix 1.

EPBC Act

The EPBC Act aims to protect matters of national environmental significance, which are detailed in Appendix 1. Under the EPBC Act, the Commonwealth Department of the Environment and Energy (DEE) lists protected species and Threatened Ecological Communities (TECs) by criteria set out in the Act. Species are conservation significant if they are listed as Threatened (i.e. Critically Endangered, Endangered and Vulnerable) or Migratory.

Bird species protected as Migratory under the EPBC Act include those listed under international migratory bird agreements relating to the protection of birds, which migrate between Australia and other countries, for which Australia has agreed. This includes the Japan-Australia Migratory Bird Agreement (JAMBA), the China-Australia Migratory Bird Agreement (CAMBA), the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA) and the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

Some marine fauna or terrestrial fauna that use marine habitats are listed as Marine under the EPBC Act. These species are only considered conservation significant when a proposed development occurs in a Commonwealth marine area (i.e. any Commonwealth Waters or Commonwealth Marine Protected Area). Outside of such areas, the EPBC Act does not consider these species to be matters of national environmental significance, so are not protected under the Act.

BC Act

The Biodiversity Conservation Act 2016 replaced both the Wildlife Conservation Act and the Sandalwood Act and came into effect on 1 January 2019. The aim of the new Act is to conserve and protect biodiversity and to promote the ecologically sustainable use of biodiversity components in the State, and will bring more activities within the scope of biodiversity laws.

Taxa listed as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1a, 1b, and 1c), or is a rediscovered species to be regarded as threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act). Other categories include extinct or extinct in the wild and they are listed under section 23 (1) of the BC Act (Appendix 1).

If species meet one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection, they are covered under section 13(1) of the BC Act and are called specially protected species. Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act can't also be listed as Specially Protected species (see Appendix 1 for a more detailed description of each threat category).

Threatened Ecological Communities (TECs) are also covered under the Biodiversity Conservation Act 2016 (BC Act) and are placed into three categories of critically endangered, endangered or vulnerable under section 27(1a, 1b, and 1c) of the BC Act depending on their threat status.

DBCA Priority Species and Communities

DBCA lists species that are possibly threatened but that do not meet criteria for listing under the BC Act, or are otherwise data deficient, and adds them to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring. Consideration of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations (see Appendix 1 for more detail of the priority codes).

The DBCA also has a list of Priority Ecological Communities (PECs) that have scant information available to be considered a TEC, or which are rare but not currently threatened. Ecological communities that do not meet survey criteria or that are not sufficiently defined are added to the PEC list under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as a TEC. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for near threatened, or that have been recently removed from the threatened list, are placed in priority 4. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in priority 5.

Informal Recognition of Threatened Fauna

Certain populations or communities of fauna may be of local significance or interest because of their patterns of distribution and abundance. For example, fauna may be locally significant because they are range extensions to the previously known distribution or are newly discovered species (and have the potential to be of conservation significance). In addition, many species are in decline as a result of threatening processes (land clearing, grazing, and changed fire regimes) and relict populations of such species assume local importance for DBCA. It is not uncommon for DBCA to make comment on these species of interest.

1.4 Bioregions and Climate

Bioregions

The Biogeographic Regionalisation of Australia (IBRA7) divides Australia into 89 bioregions based on major biological, geographical and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (DEE 2016). The survey area sits within the Murchison 1 (MUR1 – East Murchison subregion) which forms part of the Murchison Bioregion.

The climate of this subregion is arid. This subregion is characterised by its internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development. Salt Lake systems associated with the occluded Paleodrainage system. Broad plains of red-brown soils and breakaway complexes as well as red sandplains. Vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia* shrublands (Cowan 2001). Major land use in the subregion is pastoralism followed by mining.

Climate

The nearest and most relevant Bureau of Meteorology (BoM) weather station is Wiluna (Station No. 013012), approximately 30 km north-east of the survey area. The annual long-term average (1898 – 2019) rainfall is 261.7 mm (BoM 2019). In the year proceeding the survey (2018) there was 307.4 mm of rain recorded at Wiluna. However, up until the survey was conducted (late September 2019), from January through to August 2019, there had only been 89.3 mm of rainfall (BoM 2019) and no rainfall was recorded in September 2019.

The warmest month for Wiluna is January with a mean maximum temperature of 38°C and a mean minimum of 23°C. The coolest month is July with a mean maximum temperature of 19.5°C and a mean minimum of 5.4°C (BoM 2019). The mean

maximum and minimum temperatures for the month of September when the survey was undertaken are 26.4°C and 10°C respectively.

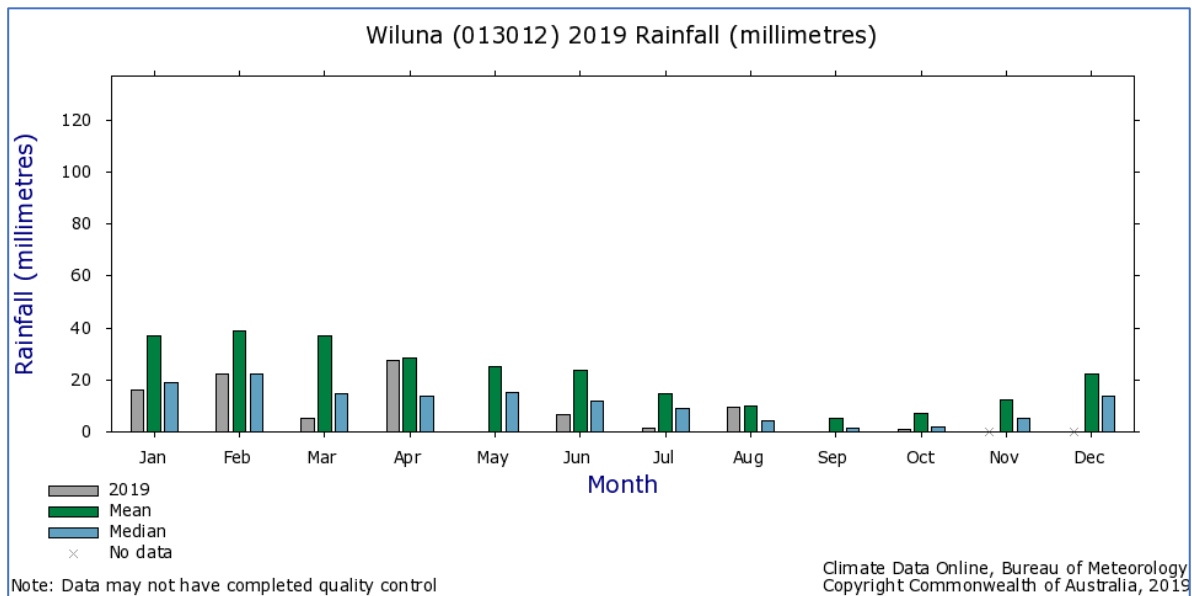


Figure 2. Rainfall data for 2019 at Wiluna (taken from BoM Climate Data Online).

1.5 Previous Surveys

There have been a number of previous fauna and flora surveys undertaken in part in the current survey area and nearby. These surveys include:

- Ninox (2005). A vertebrate fauna survey of the Wiluna West Project Area, Western Australia. Unpublished report, December 2005. Ninox Wildlife Consulting, WA.
- Ninox (2006). A vertebrate fauna survey of the Wiluna West Project Area #2 Western Australia. Unpublished report, November 2006. Ninox Wildlife Consulting, WA.
- Ninox (2008). A vertebrate fauna survey of the Wiluna West Project Area #3 Western Australia. Unpublished report, May 2008. Ninox Wildlife Consulting, WA.
- Ninox (2009). Mulgara survey for the Wiluna West Project Area. Unpublished report, May 2009. Ninox Wildlife Consulting, WA.
- Recon Environmental (2010). Herbert Lukin Ridge & Surrounds Vegetation Survey. Unpublished Report prepared for Golden West Resources Ltd, May 2010.
- KLA (2012). Level 2 fauna assessment spring 2011 for the Wiluna West Iron Ore Project. Unpublished Report prepared for Golden West Resources Ltd, August 2012. Keith Lindbeck and Associates.

Of these above surveys, Malleefowl and their mounds (determined as both inactive and active) were recorded by Ninox Wildlife Consulting in 2006 and 2007 and by Keith Lindbeck and Associates in 2011. The Brush-tailed Mulgara was recorded by Ninox Wildlife Consulting in 2007 and 2009. The Long-tailed Dunnart was recorded by Keith Lindbeck and Associates in 2011. Please note that the year these species were recorded does not necessarily match the report date as the fieldwork was carried out prior to the completion of the report.

An illustration of the previous surveys undertaken in the present survey area and nearby surrounds, and the conservation significant fauna (Malleefowl and Long-tailed Dunnart) that have been recorded in the current survey area and adjacent surrounds can be seen below in Figure 3. Please note that there are several inactive Malleefowl mounds that have previously been recorded in the current survey area, however, they will be discussed in the results section and presented on another figure below when discussing the Malleefowl results.

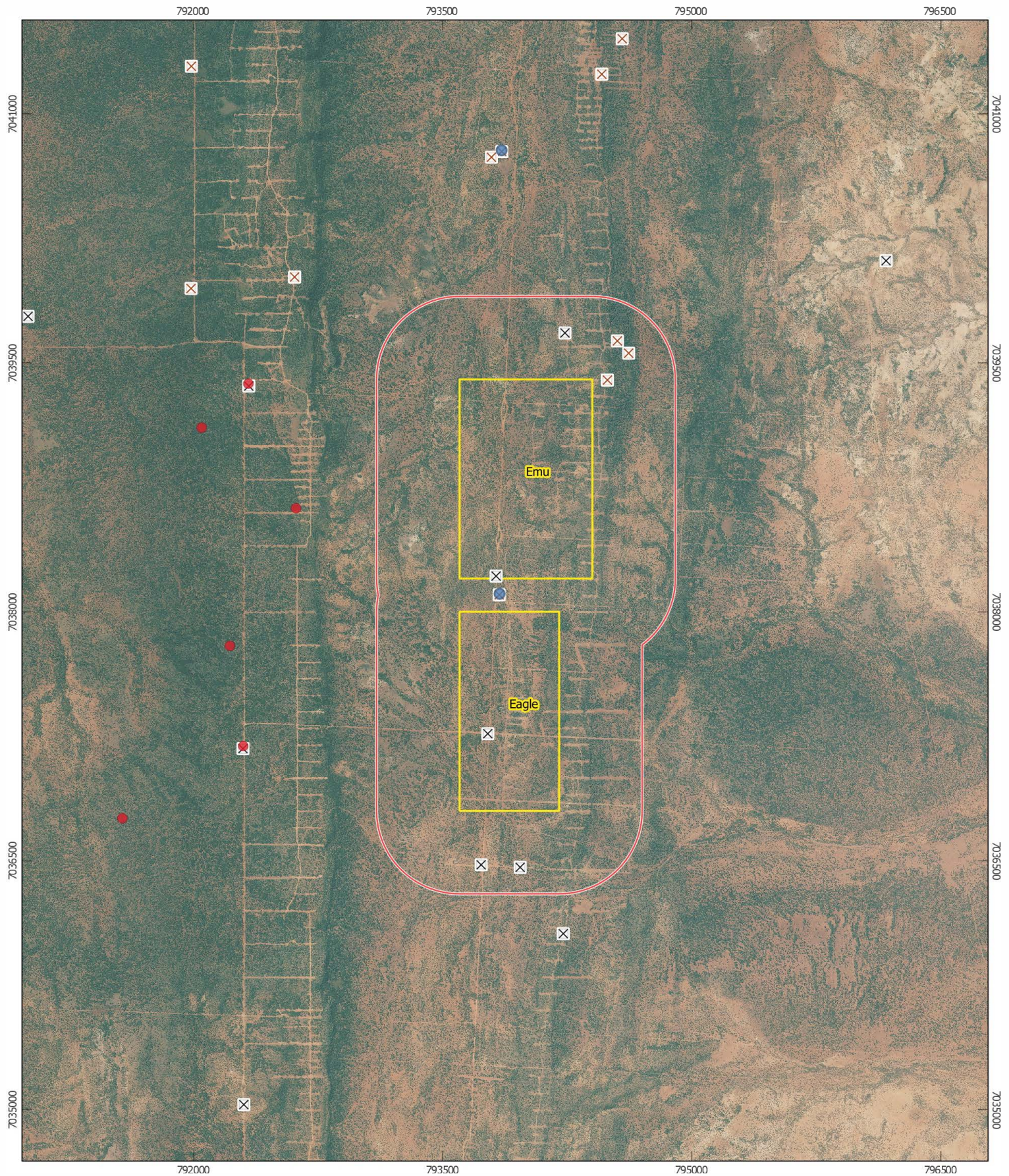


Figure 3: Previous Surveys



Legend

- Malleefowl mound
- Long-tailed Dunnart
- Site boundary
- Survey boundary
- X Historical survey site
- Fauna site (Ninox 2005-2007)
- Fauna site (KLA 2011)



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2. Methods

2.1 Survey Guidance

The targeted survey was completed in accordance with the following EPA and DEE requirements for the environmental surveying and reporting of fauna surveys in WA, where relevant and practical, and as documented in:

- EPA Statement of Environmental Principles, Factors and Objectives (EPA 2018)
- EPA Environmental Factor Guideline: Terrestrial Fauna (EPA 2016)
- EPA Technical Guidance: Sampling methods for Terrestrial vertebrate fauna (EPA 2016)
- EPA Technical Guidance: Terrestrial Fauna Surveys (EPA 2016)
- Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines 6.2 (2010) (DSEWPaC)
- Survey Guidelines for Australia's Threatened Mammals. EPBC Act survey guidelines 6.5 (2011) (DSEWPaC)
- National Recovery Plan for Malleefowl *Leipoa ocellata*. Department for Environment and Heritage (J. Benshemesh 2007)
- Interim Guideline for preliminary surveys of Night Parrot (*Pezoporus occidentalis*) in Western Australia (2017) Department of Parks and Wildlife (DPaW).

Please note that the two EPA Technical Guidance documents (Sampling methods for Terrestrial vertebrate fauna and Terrestrial Fauna Surveys) above from 2016 have not been updated and are respectively the same as the following documents:

- Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA-DEC 2010).
- Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No. 56 (EPA 2004).

2.2 Database Searches

Searches of DBCA threatened fauna database and NatureMap, and the EPBC Protected Matters Search Tool (EPBC PMST) were undertaken to identify fauna species of conservation significance potentially occurring in and near the survey area (DBCA 2018, DBCA 2019, DEE 2019) (Appendix 2). The DBCA search was centred on 26° 33' 35"S and 120°20' 31"E with a 100 km radial search area, while the NatureMap and EPBC PMST were centred on the following coordinates 26°44'50" S and 119°57' 23" E with a 40 km radial search.

Please note that the species being targeted during this survey had already been decided, with this decision being based on the many past survey results, previous database searches and known habitats present as a result of the previous surveys (see section 1.5 above). These current database searches were undertaken as an additional check to confirm that the species being targeted during this survey were appropriate and that no others were being overlooked should suitable habitat occur for them in the survey area.

2.3 Field Survey

The field survey was undertaken over five days from the 20 – 24 September 2019 by two qualified Zoologists (Dr Ron Firth and Laura Stevens). Further support was provided by Aboriginal Ladies (Rita Cutter, Caroline Long, Lina Long, Grandchild Long, Madeline Jeffries and Jennifer Sceghi) from Wiluna that are recognised experts at detecting and identifying Malleefowl tracks and mounds (see field survey team below – names above are from left to right). It is also worth noting that the Ladies are also recognised and have consequently been approved by the WA Department of Mines, Industry Regulation and Safety as experts.



Plate 1. Field Survey Team (note Mick Wilson from GWR took the image).

Fauna Habitat Assessment

A number of habitat assessments were undertaken throughout the survey area to define and delineate the main habitats present. A description and map of the broad main habitats was developed for the survey area.

The habitat assessment will include an evaluation (likelihood assessment) of the potential for habitats to support the four species of conservation significance (with this based on the database results, previous surveys, habitats present, known distributions and ecology of species from the literature and survey personnel's extensive experience).

Each habitat description included the following information where relevant:

- GPS co-ordinate will be recorded
- Habitat condition will be assessed as 'completely degraded through to pristine, based on the scale given in Keighery (1994)
- Landscape position
- Dominant vegetation and structure e.g. number of vegetation strata
- Hollow-bearing trees and dead stags (e.g. average size and abundance of hollows – should they be present)
- Description of any rock and rocky outcrops
- Logs (e.g. abundance and size)
- Substrate (e.g. leaf litter)
- Wetlands, creeks, rivers, dams and other water bodies
- Description of any observed nests and roosts
- Associated fauna species observed using the habitat
- Disturbance e.g. cattle grazing, fire
- Photo showing a typical example of the broad habitat type.

Malleefowl Survey

The targeted Malleefowl survey methods undertaken in the survey area were as follows:

- Multiple systematic transects were walked in the survey area in pairs with the distance between each pair of about 50 m in an easterly and then westerly direction across the survey area. The first Zoologist walked along each of

the transects from a start point to an end point using co-ordinates entered into a GPS, while the second Zoologist walked a parallel line but spaced about 50 m away. There was a 150 m gap between the transect walked by the second Zoologist heading in for example an easterly direction with the next line walked by the first Zoologist in a westerly direction.

- Record evidence of Malleefowl activity while walking the transects such as:
 - Malleefowl tracks
 - Malleefowl nesting mounds including status (inactive/ active) and activity according to the following criteria:
 - Nest in preparation – eggs not laid (evidence of litter trail)
 - Mound is in progress/ maintenance – eggs assumed to be laid
 - Evidence of chicks leaving nest – chicks fledging site / shell fragments
 - Decommissioned – spreading and returning of mound soil
- Malleefowl individual sightings and assessment of age (chick/ adult)
- Opportunistic observations of Malleefowl evidence (tracks, mounds and or individual sightings) in the survey area while not walking the systematic transects.
- In addition, Malleefowl evidence (tracks, mounds and or individual sightings) in the survey area was also looked for when driving tracks as this was mostly undertaken at about 30 km/hr.

Night Parrot Survey

DPaW recommends that Night Parrot surveys should be undertaken if there is suitable Night Parrot habitat present in an area proposed to be disturbed. The survey area falls into a location that DPaW considers a high priority area for the species.

The Night Parrot survey included the following:

- Placing out of four acoustic recording units (two Song Meter 2 [SM2] and two Song Meter 4 [SM4])
- Locations of the acoustic recording units was based on placing the units throughout the survey area and not based on habitat considered suitable (see results and discussion below)
- Each acoustic unit was placed out for four nights (maximum effort of 16 nights)
- Recordings on the acoustic units were analysed to determine the presence or absence of the Night Parrot by Bob Bullen (Bat Call WA).

Brush-tailed Mulgara and Long-tailed Dunnart Survey

In order to determine the presence or absence of the Brush-tailed Mulgara and Long-tailed Dunnart in the survey area a number of methods were used and included the following:

- Camera traps were set up at 10 locations (in suitable habitat deemed most likely to support these two species) in the survey area for three nights and then retrieved and images reviewed. Bait stations were positioned about 1.5 m away from the camera and had a mixture of oats, peanut butter and sardines (universal bait) placed in them. Both camera and bait station were cable tied to star pickets.
- Assessment of habitat and evidence of presence was undertaken in the survey area while walking the same systematic transects as those described above for the Malleefowl. While walking the transects we undertook searches for signs of activity, such as diggings, tracks or scats on the ground.

Opportunistic Searches

Any observation (visual or heard) of other species considered of conservation significance were recorded by means of a hand-held GPS (if they were observed). Amphibians, reptiles and mammals are mainly recorded through intensive trapping (Level 2 Surveys) and are infrequently recorded opportunistically. However, these animals will be noted when active, or by identifiable signs such as scats, tracks and diggings or if recorded on the camera traps.

3. Results

3.1 Fauna survey limitations

Survey limitations are sometimes difficult to predict prior to undertaking the assessment, as is the extent to which they influence survey effort. The limitations of the fauna survey are outlined below in Table 1.

Table 1: Limitations associated with the survey

Limitations	Impact on the assessment
Qualifications and survey experience	The Zoologists that undertook the survey are qualified and experienced. Dr Ron Firth has over 20 years of experience designing, managing and undertaking biodiversity and ecological surveys throughout Western Australia, the Northern Territory, Queensland, New South Wales and Victoria. He has written over 100 consultant reports and has authored or co-authored 15 papers that have been published in peer reviewed scientific journals and has made other contributions to Books. Laura Stevens has over 6 years of experience undertaking fauna surveys in Western Australia and has written more than 20 consultant reports.
Timing - weather, season	The field assessment was undertaken in late September 2019 when maximum temperatures were still in the mid to late 20s and minimum temperatures are still in the teens. Mean maximum temperature for the month of September is 26.4°C, while mean minimum temperatures for September is 10°C (BoM 2019). The nearest BoM weather station to the survey area with long-term temperature records is Wiluna (station number 013012), approximately 30 km north-east. In the nine months preceding the field assessment i.e. from January to September 2019 only 89.3 mm of rainfall had been recorded at Wiluna, which is considerably less than the long-term average of 219.7 mm for January to September (BoM 2019). In the year (2018) proceeding the survey there was 307.4 mm of rain recorded at Wiluna which is somewhat more than the long-term average of 261.7 mm (1898 – 2019). Please note that the primary aim of the field assessment was to undertake a targeted survey for the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart, therefore it is difficult to determine what the impacts of the low rainfall are on these species and their detectability. However, there is likely to be an impact on food resources either directly or indirectly and this is likely to impact on their abundance and consequently their detectability but this is not quantifiable from the work undertaken.
Scope - Life forms sampled	The primary objective of the survey was to undertake an assessment of habitat and targeted searches for the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart and this was achieved.
Sources of information	Several previous surveys have been undertaken in the current survey area and nearby (see section 1.5 above) and they were available for this report. Several database searches were undertaken and included the DBCA threatened fauna database (DBCA 2018), NatureMap (DBCA 2019) and the EPBC PMST (DEE 2019). Field guides and other scientific literature were also used where relevant.
Completeness	The main objective of the survey was to undertake an assessment of habitat and targeted searches for the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart and this was achieved. Then based on previous surveys, the current survey and database search results we assessed the likelihood of the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart occurring in the survey area. This was achieved.
Disturbance	The survey area has been disturbed as a result of historic and current pastoralism and historic mining. Recent exploration activity has also resulted in disturbance associated with the clearing of vegetation, primarily for drill lines and drill pads but also for some tracks. Rabbit scats were also recorded in the survey area and one Rabbit was also recorded on a camera trap.

3.2 Database Results

This section focuses on whether or not the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart were present in the three different database searches undertaken in and surrounding the survey area (See Table 2 below). For a full list of species recorded across the three database searches, please refer to Appendix 2.

Table 2: Presence or absence of the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart in the three database searches.

Species	DBCAs threatened fauna	NatureMap	EPBC PMST
Malleefowl	*P	P	P
Night Parrot	*A	A	P
Brush-tailed Mulgara	P	P	A
Long-tailed Dunnart	P	P	A

* P = Present and A = absent.

The Night Parrot was the only species absent from the DBCA threatened fauna database and NatureMap. Please note that the Brush-tailed Mulgara and Long-tailed Dunnart are not present in the EPBC PMST because they are not listed under the EPBC Act.

3.3 Fauna habitat

During the field survey 17 fauna habitat assessments were undertaken across the survey area (Appendix 3 and Figure 4). Two broad fauna habitats were described and these were Mulga Shrubland and Drainage Line (Figure 4). Mulga was the dominant flora species in the canopy across much of the survey area and these two broad habitat types were for the most part differentiated by where they were in the landscape i.e. the very minor channels where water does flow was called Drainage Line (Appendix 3). The substrate across much of the survey area was stony and rocky with some outcropping on ridges and those were relatively small (Appendix 3). The extent of the two Broad habitats in the survey area can be seen below in Table 3.

Table 3. Broad fauna habitat types and their extent in the survey area.

Habitat Type	Extent in Survey Area (ha)	Extent in Survey Area (%)
Mulga Shrubland	535.58	90.28
Drainage Line	57.65	9.72
Total	593.23	100

It is also important to note that there was very little grass in the survey area, but there were a few small patches of Mulga Shrubland where spinifex (*Triodia* sp.) was present (see habitat assessment sheets 9 and 12 in Appendix 3). An example of the two broad habitats identified in the survey area is illustrated below in plates 1 and 2.



Plate 2. An example of Mulga Shrubland in the survey area.



Plate 3. An example of Drainage Line habitat in the survey area.

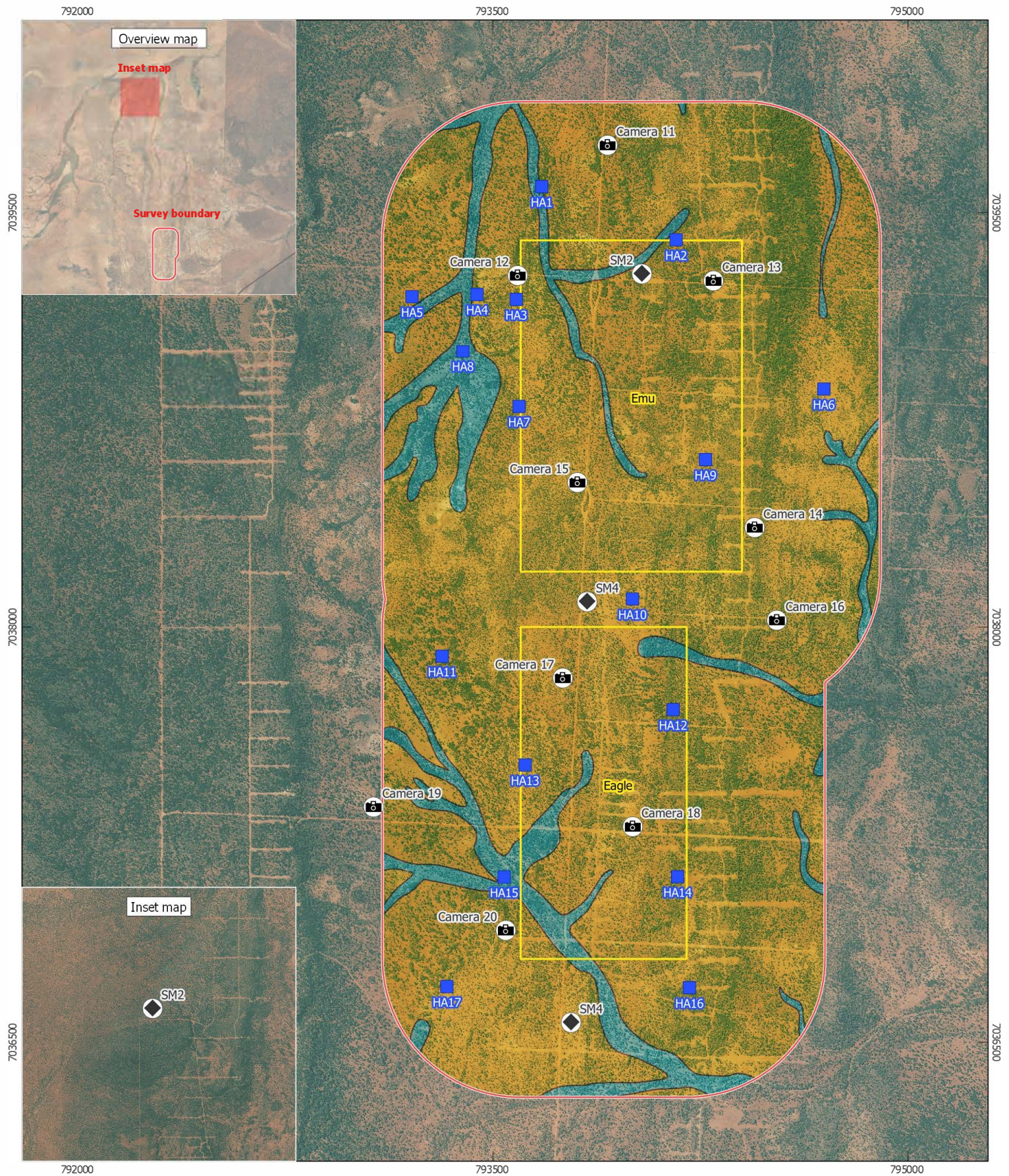
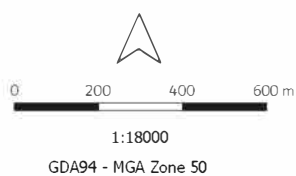









Figure 4: Fauna Habitats



Legend

-  Camera trap
-  Acoustic unit
-  Habitat assessment
-  Survey boundary
-  Site boundary
- Habitat type**
-  1 - Mulga Shrubland
-  2 - Drainage Line



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3.4 Targeted Surveys

The results of the Malleefowl, Night Parrot, Brush-tailed Mulgara and Long-tailed Dunnart surveys are outlined below.

Malleefowl Survey

During the Malleefowl survey a total of 47.37 km of systematic transects were walked across the survey area (Figure 5). Please note that many more kilometres were walked looking for Malleefowl mounds and tracks while traversing between the end and start of each transect and while driving tracks, however, we have not quantified how many additional kilometres this was. Further to this the transect lines displayed on Figure 5 symbolise what was walked on foot and does not represent our exact path, as one needs to walk around vegetation, over and across small rocky ridges and sometimes walk offline to look at potential signs.

No Malleefowl were recorded while walking the transects and no Malleefowl were captured on the camera traps. During the survey we recorded five Malleefowl mounds in the survey all of which were deemed inactive and had not been recorded during any of the previous surveys (Figure 5). These mounds were of various ages, with some having weathered to a stage that made them almost unrecognisable (see plates 3-7 below). Many had also been dug into by Goannas. The coordinates of these mounds are below in Table 4.

Table 4. Malleefowl mounds recorded in the survey area, their status and location.

Malleefowl Mound Status	Coordinates in GDA94 (easting and northing)
Mound 1 – Inactive and old	793964, 7038276
Mound 2 - Inactive and old	794078, 7038663
Mound 3 - Inactive and old	793967, 7039807
Mound 4 - Inactive	793568, 7039022
Mound 5 - Inactive and old	794110, 7037827

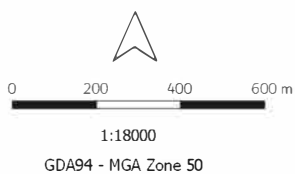
Of all the five mounds recorded during the survey, mound 4 was the most recently constructed mound in the survey area. It still had shape and had not weathered as much as the others (see plate 6).



Plate 4. Malleefowl mound 1 (very weathered and old).



Figure 5: Malleefowl Transects



Legend

- Malleefowl tracks
- Malleefowl mounds
- Transect
- Survey boundary
- Site boundary
- Habitat types
- 1 - Mulga Shrubland
- 2 - Drainage Line



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Plate 5. Malleefowl mound 2 (old but still some conical shape).



Plate 6. Malleefowl mound 3 (very old and barely recognisable as a mound).



Plate 7. Malleefowl mound 4 (the most recently constructed mound recorded during the survey).



Plate 8. Malleefowl mound 5 (a very old system of multipole mounds – well weathered).

Malleefowl tracks were also recorded at three locations, very close to each other and at the northern end of the survey area (Figure 5). These tracks were detected by the Aboriginal Ladies from Wiluna (see section 2.3 above). These tracks can be seen in plates 8 through to 10.

Table 5. Malleefowl tracks recorded in the survey area.

Malleefowl Tracks	Coordinates in GDA94 (easting and northing)
Track 1	793927, 7039781
Track 2	793964, 7039865
Track 3	793938, 7039920



Plate 9. Malleefowl track 1 (the track can be seen in the top half of the image).



Plate 10. Malleefowl track 2 (the track can be seen in approximately the middle of the image).



Plate 11. Malleefowl track 3 (two tracks can be seen in approximately the middle of the image).

A number of mounds (5) that were recorded in the survey area by GWR in 2012 were also revisited during this survey to determine their current status (see mounds 70, 71, 72, 73/74 and 75/76 on Figure 5). All of these mounds were inactive and very old. Their locations are presented below in Table 6 and images of them can be found in Appendix 4.

Table 6. Malleefowl mounds recorded in the survey area by GWR in 2012.

Malleefowl Mound	Coordinates in GDA94 (easting and northing)
70	793513, 7038160
71	793520, 7038085
72	793580, 7038266
73/74	793609, 7038213
75/76	793880, 7038250

Further to this a number of attempts by Malleefowl to construct mounds were recorded at four separate locations in the survey area. The locations of these and images of them can be seen in Table 7 and Appendix 4 respectively. These attempts were of various sizes, however, none of them resembled a mound in any way and were mostly holes in the ground.

Table 7. Malleefowl mound attempts recorded in the survey area.

Malleefowl Mound Attempts	Coordinates in GDA94 (easting and northing)
1	794098, 7038408
2	793993, 7038093
3	794013, 7038090
4	794005, 7038118

Night Parrot Survey

No Night Parrot calls were recorded on the acoustic recording units. Three of the units (one SM2 unit and two SM4 units) were placed in the survey area and one SM2 unit was placed about 9 km to the north of the survey area on sandplain that had spinifex present (Figure 4). The coordinates of each acoustic unit are presented in Table 8 and an image of one in situ can be seen in plate 11.

Table 8. Location of the four acoustic recording units in the survey area.

Acoustic recording Unit	Coordinates in GDA94 (easting and northing)
SM2 (placed north of the survey area)	794038, 7039281
SM2	792137, 7049293
SM4	793840, 7038093
SM4	793782, 7036572



Plate 12. SM4 in the survey area that is strapped to a Mulga shrub.

Brush-tailed Mulgara and Long-tailed Dunnart Survey

No Brush-tailed Mulgara or Long-tailed Dunnarts were recorded on camera traps during the survey and no signs (burrows, tracks or scats) of them were observed. The location of the 10 camera traps in the survey area can be seen in Figure 4 and their co-ordinates are below in Table 9.

Table 9. Location of the 10 camera traps in the survey area.

Camera Trap Number	Coordinates in GDA94 (easting and northing)
11	793914, 7039745
12	793589, 7039275
13	794297, 7039256
14	794446, 7038361
15	793805, 7038524
16	794526, 7038026
17	793752, 7037817
18	794005, 7037280
19	793068, 7037351
20	793546, 7036905

Most of the camera traps were placed close to rocky outcrops (see Appendix 4 for all the images of each camera trap setup and location). Plate 12 below illustrates the setup of the camera trap and bait station.



Plate 13. Camera 12 (camera trap in the foreground and bait station in the background).

The only species recorded on the camera traps was the Rabbit and Chestnut Quail-thrush (see Appendix 4).

4. Discussion

4.1 Malleefowl

Based on previous surveys and this current survey we know that Malleefowl have built mounds and likely nested in them in the survey area in the past, however, all of the new mounds recorded during this survey and those recorded previously in the survey area are inactive and very old (see plates 3 through to 7 and Appendix 4). The exception to this is mound 4 which is not as old and has still retained its shape, is not very weathered, but is inactive (see plate 6). This mound is just outside of the site boundary (proposed disturbance footprint) (Figure 4).

We have not attempted to assign broad categories of age to old mounds as the rate of mound weathering is not known for this area and would change, with this being dependent to some extent on the material from which the mound is constructed, its location in the landscape (surrounding vegetation) and weather (i.e. rainfall quantities and how much occurs during a particular rainfall event, wind and extreme storm events).

Malleefowl have also attempted to construct mounds in the survey area but have stopped for some reason (see Appendix 4). Further to this Malleefowl tracks (not sure how old they were at the time of the survey) were recorded at the northern end of the survey area. Therefore, Malleefowl do use the survey area, at least as part of their home range which can be up to 4 km² in low rainfall areas (Booth 1987), but currently not to nest.

Previous surveys have identified a significant number of old mounds, many inactive and a few active mounds just to the west and north west of this current survey area (Ninox 2006, 2008; KLA 2012, GWR 2012). During this survey we went to these areas and looked at several mounds that had previously been described as active, inactive and old. These mounds were located in areas where rock cover was less and smaller than in the survey area and there was more available soil and softer soil for the birds to scrape up to construct a mound. Further to this rainfall for the nine months up to the survey was well below average and consequently this could reduce the food resources available for the Malleefowl.

Studies have also shown that a wide range of food shrubs, rather than an abundance of any one species is probably important for birds during for example droughts (Harlen & Priddel 1996). This is supported by studies showing that Malleefowl are more abundant in areas where shrubs are more diverse (Woinarski 1989). As already discussed, there has been below average rainfall for the nine months prior to the survey and the survey area does appear to be relatively species poor with respect to shrub diversity.

These above factors could in part explain why there are relatively few mounds in the survey area and none that are currently active, because the habitat could be suboptimal, particularly during dry conditions.

4.2 Night Parrot

The Night Parrot is an enigmatic species thought possibly to be extinct until the recent recoveries of two dead specimens from Queensland (and new locations more recently). The type specimen and many early sightings, however, came from WA (Johnstone *et al.* 2013). Night Parrots are cryptic, nocturnal and endemic to Australia's arid interior. Until the late 19th century, they were widespread and relatively easily found at least at some locations. For instance, 14 of the 25 museum specimens in existence came from the Gawler Ranges in South Australia between 1871 and 1881 (Murphy *et al.* 2017). The last Night Parrot collected intentionally was in Western Australia in 1912 (Wilson 1937). Then followed 78 years of unconfirmed reports spanning all mainland states and the Northern Territory, until in 1990 a desiccated bird was found by a roadside in western Queensland (Boles *et al.* 1994, Murphy *et al.* 2017). In 2006, another dead bird was discovered by a Ranger 200 km to the south-east of the 1990 specimen (McDougall *et al.* 2009, Murphy *et al.* 2017). In 2013, the first photographs of a living night parrot were captured close to the site of the 2006 specimen (Dooley 2013, Murphy *et al.* 2017). Their cryptic nature, remote distribution and apparently rapid decline means that there is scant ecological information about night parrots.

A more recent sighting of the Night Parrot in WA comes from the Pilbara (12 April 2005) at a well near the Fortescue Marshes (Davis & Metcalf 2008). There was also a sighting near Matuwa (Lorna Glen), which is about 160 km north-east of Wiluna, in 2009 (Hamilton *et al.* 2017).

This species was present in the EPBC PMST database, however, none of their calls were recorded on the acoustic units. There is very limited ecological information available for this species such as its preferred habitat (only very broad information). However, with increasing conservation focus being given to this species, more information is likely to become available, e.g. the discovery of Night Parrot nests in large Spinifex hummocks in Queensland (Murphy *et al.* 2017) which is a common and widespread habitat type throughout much of south-east Queensland and WA.

There is no suitable habitat in the form of large spinifex hummocks in the survey area, therefore this species is unlikely to occur.

4.2 Brush-tailed Mulgara and Long-tailed Dunnart

Brush-tailed Mulgara

The Brush-tailed Mulgara is distributed across inland Australia with a population that fluctuates somewhat in response to seasonal conditions, but is probably substantially >10,000 individuals even at its lowest point. The population size has declined historically but may now be stable. If still declining, this is at a rate of <10% over ten years (Woinarski *et al.* 2014).

The Brush-tailed Mulgara is associated mostly with hummock (spinifex) grasslands but also uses other vegetation types (often sandplains, grasslands and woodlands) when mixed with or adjacent to hummock grasslands. It is mainly nocturnal and shelters during the day in excavated burrow systems. Brush-tailed Mulgara burrows typically contain between two and nine entrances with tunnels mostly found on a single level at a below ground depth of about 300 mm. The shape for a burrow entrance is typically an arch over a flat bottom with a height of 70-80 mm and a width of 80-100 mm at the base (Thompson & Thompson 2007). The diet of the Brush-tailed Mulgara comprises a broad range of invertebrates and small vertebrates (Woinarski *et al.* 2014).

The Brush-tailed Mulgara has been recorded nearby, about 10 km north of the survey area but in sandplain habitat (Ninox 2008 and 2009). During the survey, no Brush-tailed Mulgara were recorded on camera traps and no signs such as scats were observed. The survey area contains no suitable habitat in terms of sandy areas in which Brush-tailed Mulgara can construct burrows. Given this, the species is highly unlikely to occur in the survey area.

Long-tailed Dunnart

Records of the Long-tailed Dunnart come from widely scattered localities in the arid zone where it inhabits rugged, rocky areas. Little is known of the life history of long-tailed dunnarts, but available evidence suggests that this widely scattered species is restricted to rugged, rocky areas (Burbidge *et al.* 2008). Habitat includes plateaus composed of boulders and stones, with fine red sand sparsely vegetated with Mulga and miniritchie (*Acacia sp.*) shrubs over spinifex and areas of open woodland of Mulga (Van Dyck & Strahan 2008). The striated foot-pad and long strongly muscular tail of the Long-tailed Dunnart suggest it is an active and capable climber.

This species has been recorded in the survey area (see Figure 3) (KLA 2012), and in a relatively flat location and not an area described as rugged and rocky where they are typically thought to occur. However, the survey area does contain small areas of rock outcropping associated with small ridges that would possibly be considered suitable habitat (see Appendix 3).

As already discussed, there has been below average rainfall for the nine months prior to the survey which could be impacting on food resources for the Long-tailed Dunnart. The species may also be in very low densities in the survey area making detectability low.

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APPENDICES



Appendix 1: Conservation Categories

Categories of Threatened Fauna Species under the EPBC Act

Conservation Code	Description
Ex	Extinct Taxa which at a particular time if, at the time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild Taxa which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered Taxa which at a particular time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
En	Endangered Taxa which is not critically endangered and it is facing a very high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Vu	Vulnerable Taxa which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

Source: Environment Protection and Biodiversity Conservation Act 1999.

DBCA Fauna Priority Codes

Category	Code	Description
Poorly-known species	Priority 1 (P1)	Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
Poorly-known species	Priority 2 (P2)	Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
Poorly-known species	Priority 3 (P3)	Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

Category	Code	Description
Poorly-known species	Priority 4 (P4)	<p>(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.</p> <p>(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.</p> <p>(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.</p>



Appendix 2: Database Searches

X_attrib	Y_attrib	NAME_SCI	SOURCE	SOURCE_ID	NAME ID	FAMILY
869052.1204	6968619.398	Amytornis striatus striatus	TFAUNA	7789	24539	Maluridae
869052.1204	6968619.398	Amytornis striatus striatus	TFAUNA	7793	24539	Maluridae
871966.7974	6970285.607	Amytornis striatus striatus	TFAUNA	85125	24539	Maluridae
744732.7476	7043078.015	Amytornis striatus striatus	WAM_BIRDS	AVIF:18201	24539	Maluridae
744732.7476	7043078.015	Amytornis striatus striatus	WAM_BIRDS	AVIF:18202	24539	Maluridae
762859.2061	7005261.054	Amytornis striatus striatus	WAM_BIRDS	AVIF:18406	24539	Maluridae
905726.2771	7070167.501	Amytornis textilis textilis	TFAUNA	10750	24541	Maluridae
849050.8575	7064323.805	Apus pacificus	BIRDATLAS1	21330 335	25554	Apodidae
823877.3728	7055745.667	Apus pacificus	BIRDATLAS1	21334 335	25554	Apodidae
805214.5964	6978363.876	Apus pacificus	FAUNASURVEY	1221318	25554	Apodidae
793878.7603	7033737.952	Bettongia lesueur graii	TFAUNA	12789	24161	Potoroidae
791999.1016	7045891.956	Bettongia lesueur graii	TFAUNA	16103	24161	Potoroidae
790948.4062	7039616.992	Bettongia lesueur graii	TFAUNA	16104	24161	Potoroidae
849050.8575	7064323.805	Calidris acuminata	BIRDATLAS1	21330 163	24779	Scolopacidae
823877.3728	7055745.667	Calidris acuminata	BIRDATLAS1	21334 163	24779	Scolopacidae
849050.8575	7064323.805	Calidris alba	BIRDATLAS1	15544 166	24780	Scolopacidae
823877.3728	7055745.667	Calidris alba	BIRDATLAS1	21334 166	24780	Scolopacidae
788953.2622	6982647.548	Calidris ferruginea	BIRDATLAS1	141542 161	24784	Scolopacidae
788953.2622	6982647.548	Calidris ferruginea	BIRDATLAS1	83145 161	24784	Scolopacidae
849050.8575	7064323.805	Calidris melanotos	BIRDATLAS1	21330 978	24786	Scolopacidae
823877.3728	7055745.667	Calidris melanotos	BIRDATLAS1	21334 978	24786	Scolopacidae
849050.8575	7064323.805	Calidris ruficollis	BIRDATLAS1	107280 162	24788	Scolopacidae
849050.8575	7064323.805	Calidris ruficollis	BIRDATLAS1	15543 162	24788	Scolopacidae
849050.8575	7064323.805	Calidris ruficollis	BIRDATLAS1	15544 162	24788	Scolopacidae
849050.8575	7064323.805	Calidris ruficollis	BIRDATLAS1	15545 162	24788	Scolopacidae
823877.3728	7055745.667	Calidris ruficollis	BIRDATLAS1	21334 162	24788	Scolopacidae
849050.8575	7064323.805	Calidris subminuta	BIRDATLAS1	21330 965	24789	Scolopacidae
823877.3728	7055745.667	Calidris subminuta	BIRDATLAS1	21334 965	24789	Scolopacidae
849050.8575	7064323.805	Charadrius veredus	BIRDATLAS1	21330 142	24378	Charadriidae
823877.3728	7055745.667	Charadrius veredus	BIRDATLAS1	21334 142	24378	Charadriidae
911431.3138	7089472.711	Dasycercus blythi	COWANSURVEYS	18241	30903	Dasyuridae
911431.3138	7089472.711	Dasycercus blythi	COWANSURVEYS	18242	30903	Dasyuridae
911431.3138	7089472.711	Dasycercus blythi	COWANSURVEYS	18243	30903	Dasyuridae
903808.813	7088070.058	Dasycercus blythi	COWANSURVEYS	18244	30903	Dasyuridae
910163.3993	7088324.969	Dasycercus blythi	COWANSURVEYS	18245	30903	Dasyuridae

792715.613	7064074.036	Dasyercus blythi	FAUNASURVEY	1015776	30903	Dasyuridae
857799.6688	7007029.736	Dasyercus blythi	FAUNASURVEY	1030755	30903	Dasyuridae
879179.9379	7006566.071	Dasyercus blythi	FAUNASURVEY	1030756	30903	Dasyuridae
870002.3387	6984808.096	Dasyercus blythi	TFAUNA	1413	30903	Dasyuridae
874316.8011	6987020.763	Dasyercus blythi	TFAUNA	1414	30903	Dasyuridae
848079.6821	6974467.789	Dasyercus blythi	TFAUNA	1415	30903	Dasyuridae
850633.7227	6989754.543	Dasyercus blythi	TFAUNA	1416	30903	Dasyuridae
847877.2981	6974673.246	Dasyercus blythi	TFAUNA	1488	30903	Dasyuridae
863488.563	7080179.396	Dasyercus blythi	TFAUNA	1535	30903	Dasyuridae
860802.2395	7079933.189	Dasyercus blythi	TFAUNA	5140	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12688	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12689	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12690	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12691	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12692	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12693	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12694	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12695	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12696	30903	Dasyuridae
837797.1568	7021954.774	Dasyercus blythi	TFAUNA	12697	30903	Dasyuridae
789063.2005	7052158.302	Dasyercus blythi	TFAUNA	16107	30903	Dasyuridae
789063.2005	7052158.302	Dasyercus blythi	TFAUNA	16108	30903	Dasyuridae
789063.2005	7052158.302	Dasyercus blythi	TFAUNA	16109	30903	Dasyuridae
862676.258	7080446.459	Dasyercus blythi	TFAUNA	16381	30903	Dasyuridae
862676.258	7080446.459	Dasyercus blythi	WAM_MAMMALS	3	30903	Dasyuridae
867774.4568	6969312.503	Dasyercus blythi	WAM_MAMMALS	1	30903	Dasyuridae
911422.0185	7089495.214	Dasyercus blythi	WAM_MAMMALS	6	30903	Dasyuridae
911422.0185	7089495.214	Dasyercus blythi	WAM_MAMMALS	7	30903	Dasyuridae
911422.0185	7089495.214	Dasyercus blythi	WAM_MAMMALS	8	30903	Dasyuridae
911422.0185	7089495.214	Dasyercus blythi	WAM_MAMMALS	9	30903	Dasyuridae
903868.8129	7088068.181	Dasyercus blythi	WAM_MAMMALS	0	30903	Dasyuridae
822069.5997	7055647.285	Dasyercus blythi	WAM_MAMMALS	3	30903	Dasyuridae
787529.7295	6990510.616	Dasyercus cristicauda	FAUNASURVEY	82670	24089	Dasyuridae
783072.4952	6999496.083	Dasyercus cristicauda	FAUNASURVEY	82776	24089	Dasyuridae
783043.2383	6999518.927	Dasyercus cristicauda	FAUNASURVEY	82777	24089	Dasyuridae
782983.969	6999531.363	Dasyercus cristicauda	FAUNASURVEY	82778	24089	Dasyuridae

782896.7004	6999622.064	Dasycercus cristicauda	FAUNASURVEY	82779	24089	Dasyuridae
782896.7004	6999622.064	Dasycercus cristicauda	FAUNASURVEY	82780	24089	Dasyuridae
782896.7004	6999622.064	Dasycercus cristicauda	FAUNASURVEY	82781	24089	Dasyuridae
782896.7004	6999622.064	Dasycercus cristicauda	FAUNASURVEY	82782	24089	Dasyuridae
783175.4749	6999660.092	Dasycercus cristicauda	FAUNASURVEY	82783	24089	Dasyuridae
789179.084	6994043.497	Dasycercus cristicauda	FAUNASURVEY	82784	24089	Dasyuridae
789632.0672	6995175.289	Dasycercus cristicauda	FAUNASURVEY	82785	24089	Dasyuridae
789868.0133	6995081.068	Dasycercus cristicauda	FAUNASURVEY	82786	24089	Dasyuridae
789907.4234	6995069.059	Dasycercus cristicauda	FAUNASURVEY	82787	24089	Dasyuridae
790065.0634	6995021.022	Dasycercus cristicauda	FAUNASURVEY	82788	24089	Dasyuridae
789688.8796	6995484.503	Dasycercus cristicauda	FAUNASURVEY	82789	24089	Dasyuridae
866422.4371	6966844.234	Dasycercus sp.	TFAUNA	20632	48395	Dasyuridae
856289.448	7060384.497	Dasycercus sp.	TFAUNA	22846	48395	Dasyuridae
842368.2663	7144728.595	Falco hypoleucos	BIRDATLAS2	104394 236	24473	Falconidae
856629.1027	7084832.152	Falco hypoleucos	FAUNASURVEY	485562	24473	Falconidae
767320.5008	7068510.98	Falco hypoleucos	FAUNASURVEY	753333	24473	Falconidae
749315.8595	7066657.14	Falco peregrinus	BIRDATLAS1	3485 237	25624	Falconidae
807764.5791	6978478.134	Falco peregrinus	BIRDATLAS2	142119 237	25624	Falconidae
824667.6219	7092554.242	Falco peregrinus	BIRDATLAS2	455833 237	25624	Falconidae
856893.0062	6963184.168	Falco peregrinus	BIRDATLAS2	6301 237	25624	Falconidae
792715.613	7064074.036	Falco peregrinus	FAUNASURVEY	1015672	25624	Falconidae
805214.5964	6978363.876	Gelochelidon nilotica	FAUNASURVEY	1221314	47954	Laridae
849050.8575	7064323.805	Glareola maldivarum	BIRDATLAS1	21330 172	24481	Glareolidae
823877.3728	7055745.667	Glareola maldivarum	BIRDATLAS1	21334 172	24481	Glareolidae
873538.4047	6976687.522	Leipoa ocellata	TFAUNA	1331	24557	Megapodiidae
875811.9869	6973177.326	Leipoa ocellata	TFAUNA	1332	24557	Megapodiidae
875320.9419	6980518.764	Leipoa ocellata	TFAUNA	1487	24557	Megapodiidae
806099.4013	6978874.441	Leipoa ocellata	TFAUNA	10725	24557	Megapodiidae
793878.7603	7033737.952	Leipoa ocellata	TFAUNA	12788	24557	Megapodiidae
792326.9413	7039374.518	Leipoa ocellata	TFAUNA	16105	24557	Megapodiidae
792296.3929	7037190.461	Leipoa ocellata	TFAUNA	16106	24557	Megapodiidae
799609.451	6965900.479	Leipoa ocellata	TFAUNA	72673	24557	Megapodiidae
797734.5516	7002459.6	Leipoa ocellata	TFAUNA	72681	24557	Megapodiidae
797665.8886	7001662.664	Leipoa ocellata	TFAUNA	72682	24557	Megapodiidae
796960.9401	7002078.753	Leipoa ocellata	TFAUNA	72683	24557	Megapodiidae
797031.4382	7004206.59	Leipoa ocellata	TFAUNA	72684	24557	Megapodiidae
796786.2144	7004334.425	Leipoa ocellata	TFAUNA	72685	24557	Megapodiidae

805271.5694	6980270.376	Leipoa ocellata	TFAUNA	89810	24557	Megapodiidae
811495.8759	7003587.848	Leipoa ocellata	TFAUNA	89811	24557	Megapodiidae
805225.8699	6978419.06	Leipoa ocellata	TFAUNA	90078	24557	Megapodiidae
779029.2126	6988275.885	Leipoa ocellata	TFAUNA	90224	24557	Megapodiidae
789069.356	6993591.334	Leipoa ocellata	TFAUNA	91098	24557	Megapodiidae
860987.0324	6963963.654	Leipoa ocellata	TFAUNA	91820	24557	Megapodiidae
860987.0324	6963963.654	Leipoa ocellata	TFAUNA	91821	24557	Megapodiidae
805225.8699	6978419.06	Leipoa ocellata	TFAUNA	91901	24557	Megapodiidae
797549.9694	7002630.373	Leipoa ocellata	TFAUNA	91902	24557	Megapodiidae
797734.2871	7002448.515	Leipoa ocellata	WAM_BIRD_OBS	47285	24557	Megapodiidae
797665.6241	7001651.579	Leipoa ocellata	WAM_BIRD_OBS	47286	24557	Megapodiidae
796960.6763	7002067.668	Leipoa ocellata	WAM_BIRD_OBS	47287	24557	Megapodiidae
797031.1745	7004195.506	Leipoa ocellata	WAM_BIRD_OBS	47288	24557	Megapodiidae
796785.9509	7004323.34	Leipoa ocellata	WAM_BIRD_OBS	47289	24557	Megapodiidae
799609.181	6965889.393	Leipoa ocellata	WAM_BIRD_OBS	47294	24557	Megapodiidae
861129.8358	6964103.75	Liopholis kintorei	TFAUNA	4899	41412	Scincidae
919921.5843	7080237.901	Macrotis lagotis	TFAUNA	19754	24168	Peramelidae
920207.4713	7080106.417	Macrotis lagotis	TFAUNA	19755	24168	Peramelidae
781076.879	7080635.419	Macrotis lagotis	WAM_MAMMALS	MAMM:M1010 MAMM:M3403	24168	Peramelidae
822069.5997	7055647.285	Macrotis lagotis	WAM_MAMMALS	0	24168	Peramelidae
781076.879	7080635.419	Macrotis lagotis	WAM_MAMMALS	MAMM:M898	24168	Peramelidae
841710.2021	6982158.105	Petrogale lateralis	FAUNASURVEY	82774	24142	Macropodidae
805214.5964	6978363.876	Petrogale lateralis	FAUNASURVEY	1221367	24142	Macropodidae
849050.8575	7064323.805	Plegadis falcinellus	BIRDATLAS1	21330 178	24843	Threskiornithid ae
823877.3728	7055745.667	Plegadis falcinellus	BIRDATLAS1	21334 178	24843	Threskiornithid ae
849050.8575	7064323.805	Pluvialis fulva	BIRDATLAS1	21330 137	24382	Charadriidae
823877.3728	7055745.667	Pluvialis fulva	BIRDATLAS1	21334 137	24382	Charadriidae
860987.0324	6963963.654	Polytelis alexandrae	WAM_BIRDS	AVIF:9515	24752	Psittacidae
793853.2478	7040780.913	Sminthopsis longicaudata	FAUNASURVEY	289324	24115	Dasyuridae
793840.9948	7038108.434	Sminthopsis longicaudata	FAUNASURVEY	289346	24115	Dasyuridae
792715.613	7064074.036	Sminthopsis longicaudata	FAUNASURVEY	1015818	24115	Dasyuridae
818921.7092	7062581.702	Sminthopsis longicaudata	FAUNASURVEY	1234948	24115	Dasyuridae
849050.8575	7064323.805	Tringa glareola	BIRDATLAS1	21330 154	24806	Scolopacidae

823877.3728	7055745.667	Tringa glareola	BIRDATLAS1	21334 154	24806	Scolopacidae
849050.8575	7064323.805	Tringa nebularia	BIRDATLAS1	15544 158	24808	Scolopacidae
849050.8575	7064323.805	Tringa nebularia	BIRDATLAS1	21330 158	24808	Scolopacidae
823877.3728	7055745.667	Tringa nebularia	BIRDATLAS1	21334 158	24808	Scolopacidae
		Tyto novaehollandiae				
781096.3623	7080612.817	novaehollandiae	WAM_BIRDS	AVIF:2699	24855	Tytonidae

GENUS	SPECIES	SUBSPECIES	NAME COM	CONS CODE	CERTAINTY	METHOD
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	Certain	Survey
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	Certain	Survey
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	Moderately Certain	Opportunistic sighting
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	WAM Vouchered	Collection
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	WAM Vouchered	Collection
Amytornis	striatus	striatus	striated grasswren (sandplain)	P4	WAM Vouchered	Collection
Amytornis	textilis	textilis	western grasswren	P4	Certain	Opportunistic sighting
Apus	pacificus		fork-tailed swift	IA	Moderately Certain	Observational
Apus	pacificus		fork-tailed swift	IA	Moderately Certain	Observational
Apus	pacificus		fork-tailed swift	IA	Certain	Survey
Bettongia	lesueur	graii	burrowing bettong (inland)	EX	Certain	Opportunistic sighting
Bettongia	lesueur	graii	burrowing bettong (inland)	EX	Certain	Survey
Bettongia	lesueur	graii	burrowing bettong (inland)	EX	Certain	Survey
Calidris	acuminata		sharp-tailed sandpiper	IA	Moderately Certain	Observational
Calidris	acuminata		sharp-tailed sandpiper	IA	Moderately Certain	Observational
Calidris	alba		sanderling	IA	Moderately Certain	Observational
Calidris	alba		sanderling	IA	Moderately Certain	Observational
Calidris	ferruginea		curlew sandpiper	VU/IA	Moderately Certain	Observational
Calidris	ferruginea		curlew sandpiper	VU/IA	Moderately Certain	Observational
Calidris	melanotos		pectoral sandpiper	IA	Moderately Certain	Observational
Calidris	melanotos		pectoral sandpiper	IA	Moderately Certain	Observational
Calidris	ruficollis		red-necked stint	IA	Moderately Certain	Observational
Calidris	ruficollis		red-necked stint	IA	Moderately Certain	Observational
Calidris	ruficollis		red-necked stint	IA	Moderately Certain	Observational
Calidris	ruficollis		red-necked stint	IA	Moderately Certain	Observational
Calidris	ruficollis		red-necked stint	IA	Moderately Certain	Observational
Calidris	subminuta		long-toed stint	IA	Moderately Certain	Observational
Calidris	subminuta		long-toed stint	IA	Moderately Certain	Observational
Charadrius	veredus		oriental plover	IA	Moderately Certain	Observational
Charadrius	veredus		oriental plover	IA	Moderately Certain	Observational
Dasyercus	blythi		Brush-tailed Mulgara	P4	Very Certain	Survey
Dasyercus	blythi		Brush-tailed Mulgara	P4	Very Certain	Survey
Dasyercus	blythi		Brush-tailed Mulgara	P4	Very Certain	Survey
Dasyercus	blythi		Brush-tailed Mulgara	P4	Very Certain	Survey
Dasyercus	blythi		Brush-tailed Mulgara	P4	Very Certain	Survey

Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic sighting
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic sighting
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic sighting
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic sighting
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic sighting
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Historical
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic
Leipoa	ocellata		malleefowl	VU	Moderately Certain	Opportunistic
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Leipoa	ocellata		Malleefowl	VU	Very Certain	Survey
Liopholis	kintorei		great desert skink	VU	Certain	Survey
Macrotis	lagotis		bilby	VU	Moderately Certain	Monitoring
Macrotis	lagotis		bilby	VU	Moderately Certain	Monitoring
Macrotis	lagotis		bilby	VU	WAM Vouchered	Collection
Macrotis	lagotis		bilby	VU	WAM Vouchered	Collection
Macrotis	lagotis		bilby	VU	WAM Vouchered	Collection
Petrogale	lateralis	lateralis	black-flanked rock-wallaby	EN	Certain	Survey
Petrogale	lateralis	lateralis	black-flanked rock-wallaby	EN	Certain	Survey
Plegadis	falcinellus		glossy ibis	IA	Moderately Certain	Observational
Plegadis	falcinellus		glossy ibis	IA	Moderately Certain	Observational
Pluvialis	fulva		Pacific golden plover	IA	Moderately Certain	Observational
Pluvialis	fulva		Pacific golden plover	IA	Moderately Certain	Observational
Polytelis	alexandrae		princess parrot	P4	WAM Vouchered	Collection
Sminthopsis	longicaudata		long-tailed dunnart	P4	Certain	Survey
Sminthopsis	longicaudata		long-tailed dunnart	P4	Certain	Survey
Sminthopsis	longicaudata		long-tailed dunnart	P4	Certain	Survey
Sminthopsis	longicaudata		long-tailed dunnart	P4	Certain	Survey
Tringa	glareola		wood sandpiper	IA	Moderately Certain	Observational

Tringa	glareola		wood sandpiper	IA	Moderately Certain	Observational
Tringa	nebularia		common greenshank	IA	Moderately Certain	Observational
Tringa	nebularia		common greenshank	IA	Moderately Certain	Observational
Tringa	nebularia		common greenshank	IA	Moderately Certain	Observational
	novaehollandi	novaehollan				
Tyto	ae	diae	masked owl (southwest)	P3	WAM Vouchered	Collection

TYPE	COUNT	LOCALITY	SITE	ACC.					
				M	GDA LONG	GDA LAT	DAY	MON	YEAR
Day sighting	1	SIR SAMUEL	Wanjarri Nature Reserve, S of rubbish dump in spinifex	50000	120.73	-27.3559	1	6	1987
Caught or trapped	1	SIR SAMUEL	Wanjarri Nature Reserve	50000	120.73	-27.3559	1	2	1979
Sighting	2	SIR SAMUEL	Wanjarri Nature Reserve	1000	120.7589	-27.3401	24	8	2016
Specimen	1	MEEKATHARRA	Paroo Railway Stn, 15 km SW of	10000	119.46	-26.7122	21	9	1983
Specimen	1	MEEKATHARRA	Paroo Railway Stn, 15 km SW of	10000	119.46	-26.7122	21	9	1983
Specimen	1	WILUNA	Bluff Point, 8 km N of; Sandstone - Wiluna Road	10000	119.65	-27.05	3	5	1984
Day sighting	5	WILUNA	Bwteen Wiluna and Wongawol Stn	50000	121.067	-26.431	1	9	1974
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Unknown	1	WILUNA	Yeelirrie, Yeelirrie	25000	120.0832	-27.2838	16	3	2015
Secondary sign	0	WILUNA	Wiluna West Project Area	1000	119.9557	-26.787	0	0	0
Secondary sign	0	WILUNA	Golden West Resources near Wiluna	1000	119.934	-26.6778	0	0	0
Secondary sign	0	WILUNA	Golden West Resources near Wiluna	1000	119.9249	-26.7346	0	0	0
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	12	1977
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	18000	119.9181	-27.2487	1	2	1980
Sighting	1	WILUNA	WILUNA	18000	119.9181	-27.2487	2	10	1979
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	3	10	1980
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	24	10	1977
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	12	1977
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	12	1977
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Caught or	1	WILUNA	Lorna Glen Station	30	121.1179	-26.2555	1	10	2006
Caught or	1	WILUNA	Lorna Glen Station	30	121.1179	-26.2555	1	10	2006
Caught or	1	WILUNA	Lorna Glen Station	30	121.1179	-26.2555	1	10	2006
Caught or	1	WILUNA	Lorna Glen Station	30	121.0422	-26.2703	1	10	2006
Caught or	1	WILUNA	Lorna Glen Station	30	121.1056	-26.2662	1	10	2006

Paroo Station Pastoral Lease, Rosslyn									
Unknown	1	WILUNA	Hill	3000	119.937	-26.5137	15	5	2014
Unknown	1	WILUNA	Wiluna, Lake Way	100	120.6053	-27.0128	8	6	2014
Unknown	1	WILUNA	Wiluna, Lake Way	100	120.8205	-27.0113	9	6	2014
Caught or	1	WILUNA	Mt Keith (WMC)	500	120.7347	-27.2098	7	6	1997
Caught or	7	WILUNA	Mt Keith (WMC)	50	120.7775	-27.1887	1	6	1997
Sighting	6	SIR SAMUEL	Mt Keith (WMC)	50	120.5167	-27.3087	4	6	1997
Caught or	1	WILUNA	Mt Keith (WMC)	1000	120.5381	-27.1703	7	6	1997
Caught or	1	SIR SAMUEL	Mount Keith Mine Site	1000	120.5146	-27.3069	9	5	1998
Caught or	2	WILUNA	Jundee Mine Site, 55km N of Wiluna	1000	120.6415	-26.3522	1	4	1995
Caught or			Plover Bore, Jundee gold mining						
trapped	1	WILUNA	lease. Shire of Wiluna.	1000	120.6147	-26.3551	28	7	1996
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	22	10	2006
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	20	10	2006
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	21	10	2006
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	19	10	2006
Night	2	WILUNA	Honeymoon Well	10000	120.4	-26.8833	19	10	2006
Night	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	21	10	2006
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	17	1	2007
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	12	1	2007
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	16	1	2007
Caught or	1	WILUNA	Honeymoon Well	10000	120.4	-26.8833	19	1	2007
Caught or			Golden West Resources near Wiluna,						
trapped	1	WILUNA	WW14	1000	119.9031	-26.6219	26	10	2007
Caught or			Golden West Resources near Wiluna,						
trapped	1	WILUNA	WW14	1000	119.9031	-26.6219	29	10	2007
Caught or			Golden West Resources near Wiluna,						
trapped	2	WILUNA	WW14	1000	119.9031	-26.6219	30	10	2007
Caught or	1	WILUNA	Jundee Hmsd	1000	120.6333	-26.35	8	6	1984
Specimen	1	WILUNA	WILUNA	10000	120.6333	-26.35	8	6	1984
Specimen	1	SIR SAMUEL	SIR SAMUEL	0	120.7169	-27.35	3	12	1899
Specimen	1	WILUNA	LORNA GLEN STATION	5	121.1178	-26.2553	4	12	1899
Specimen	1	WILUNA	LORNA GLEN STATION	5	121.1178	-26.2553	4	12	1899
Specimen	1	WILUNA	LORNA GLEN STATION	5	121.1178	-26.2553	4	12	1899
Specimen	1	WILUNA	LORNA GLEN STATION	5	121.1178	-26.2553	4	12	1899
Specimen	1	WILUNA	WILUNA	0	121.0428	-26.2703	4	12	1899
Specimen	1	WILUNA	40KM NE WILUNA	10000	120.2333	-26.5833	0	0	0
Unknown	8	WILUNA	Eastern Murchison, Yeelirrie	10000	119.9019	-27.1781	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8549	-27.098	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8546	-27.0978	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.854	-27.0977	25	3	2009

Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8531	-27.0969	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8531	-27.0969	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8531	-27.0969	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8531	-27.0969	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.8559	-27.0965	25	3	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.9177	-27.1459	18	7	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.922	-27.1356	18	7	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.9244	-27.1364	18	7	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.9248	-27.1365	18	7	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.9264	-27.1369	18	7	2009
Unknown	1	WILUNA	Eastern Murchison, Yeelirrie	100	119.9225	-27.1328	18	7	2009
			Translocated to Wanjarri Nature						
Released	2	SIR SAMUEL	reserve from Plover Bore site.	10000	120.704	-27.3726	1	8	1997
Caught or	2	WILUNA	Within the Plover Bore Site	1000	120.575	-26.5324	1	6	1995
Sighting	1	WILUNA	Well 3, Canning Stock Route	500	120.4133	-25.7756	13	9	2000
Unknown	1	WILUNA	Bogada Bore, BG S1	100	120.5716	-26.312	30	3	2012
Unknown	1	MEEKATHARRA	Goldfields,	100	119.6815	-26.4787	10	11	2013
Sighting	1	MEEKATHARRA	MEEKATHARRA	1E+05	119.5014	-26.4987	31	7	1977
Sighting	1	WILUNA	Sandstone - Paynes Find Road	100	120.1089	-27.2822	21	4	2001
Sighting	1	WILUNA	19	100	120.25	-26.25	15	8	2005
Sighting	1	SIR SAMUEL	Wanjarri Nature Reserve	100	120.6089	-27.4081	14	1	1999
			Paroo Station Pastoral Lease, Rosslyn						
Unknown	1	WILUNA	Hill	3000	119.937	-26.5137	15	5	2014
Unknown	10	WILUNA	Yeelirrie, Yeelirrie	25000	120.0832	-27.2838	16	3	2015
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Secondary	1	WILUNA	Wanjarri Nature Reserve	500	120.7728	-27.282	7	7	1997
Secondary	1	SIR SAMUEL	Wanjarri Nature Reserve	500	120.7968	-27.313	22	1	1997
Secondary	1	WILUNA	Mount Keith	1000	120.7896	-27.247	9	10	1998
Sighting	0	WILUNA	Yeelirrie Stn	10000	120.092	-27.279	1	4	1984
Secondary	0	WILUNA	Wiluna West Project Area	1000	119.9557	-26.787	22	9	2006
Secondary			Golden West Resources near Wiluna,						
sign	0	WILUNA	WW22	1000	119.9388	-26.7365	28	10	2007
			Golden West Resources near Wiluna,						
Day sighting	1	WILUNA	WW23	1000	119.939	-26.7562	28	10	2007
Day sighting	0	SANDSTONE	Yeelirrie	1000	120.0297	-27.3974	12	8	2000
Day sighting	0	WILUNA	Yeelirrie	1000	120.0019	-27.0682	10	8	2000
Day sighting	0	WILUNA	Yeelirrie	1000	120.0014	-27.0754	10	8	2000
Day sighting	0	WILUNA	Yeelirrie	1000	119.9942	-27.0718	10	8	2000
Day sighting	0	WILUNA	Yeelirrie	1000	119.9944	-27.0526	10	8	2000
Day sighting	0	WILUNA	Yeelirrie	1000	119.9919	-27.0515	10	8	2000

Sighting	1	WILUNA	1 mile North of Yeelirrie RH (near townsite)	10000	120.0833	-27.2666	11	10	1982
Sighting	1	WILUNA	1 mile South of Community Bore	1000	120.1402	-27.055	11	10	1982
Secondary sign	0	WILUNA	3 miles East of Middle Well, Yeelirrie Station	10000	120.0833	-27.2833	1	1	1976
Secondary	0	WILUNA	6 miles West of Twelve Mile Bore	10000	119.8167	-27.2	1	1	1976
Sighting	1	WILUNA	Mallee Hen Bore - 18 km West North West of Yeelirrie HS	1000	119.9167	-27.15	1	1	1976
Secondary	0	SIR SAMUEL	Wanjarri	50000	120.65	-27.4	1	1	1972
Secondary	0	SIR SAMUEL	Wanjarri	50000	120.65	-27.4	1	1	1969
Sighting	1	WILUNA	Yeelirrie	10000	120.0833	-27.2833	11	10	1982
Sighting	1	WILUNA	Yeellirrie Station SW 2 inch bore	50000	120	-27.0667	5	8	2003
Sighting	1	WILUNA	Yeelirrie	1000	120.0019	-27.0683	10	8	2000
Sighting	1	WILUNA	Yeelirrie	1000	120.0014	-27.0755	10	8	2000
Sighting	1	WILUNA	Yeelirrie	1000	119.9942	-27.0719	10	8	2000
Sighting	1	WILUNA	Yeelirrie	1000	119.9944	-27.0527	10	8	2000
Sighting	1	WILUNA	Yeelirrie	1000	119.9919	-27.0516	10	8	2000
Sighting	1	SANDSTONE	Yeelirrie	1000	120.0297	-27.3975	12	8	2000
Caught or trapped	1	SIR SAMUEL	Kathleen Valley, now Wanjarri Nature Reserve	1000	120.6514	-27.3987	9	11	1964
Secondary sign	0	WILUNA	Desert Cell, Lorna Glen	1000	121.2057	-26.3362	1	6	2012
Secondary sign	0	WILUNA	Desert Cell, Lorna Glen	1000	121.2086	-26.3373	1	6	2012
Specimen	1	WILUNA	WILUNA	50000	119.8167	-26.3667	0	0	0
Specimen	1	WILUNA	WILUNA	10000	120.2333	-26.5833	20	11	1984
Specimen	1	WILUNA	WILUNA	50000	119.8167	-26.3667	0	0	0
Secondary sign	1	WILUNA	Eastern Murchison, Yeelirrie	100	120.4503	-27.241	25	3	2009
Secondary sign	1	WILUNA	Yeelirrie, Yeelirrie	25000	120.0832	-27.2838	16	3	2015
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Specimen	1	SIR SAMUEL	Wanjarri; Kathleen Valley Station	10000	120.65	-27.4	23	3	1964
Unknown	1	WILUNA	Goldfields, 25km west of Wiluna	100	119.9538	-26.7235	15	11	2011
Unknown	1	WILUNA	Goldfields, 25km west of Wiluna	100	119.9543	-26.7476	15	11	2011
Unknown	1	WILUNA	Paroo Station Pastoral Lease, Rosslyn Hill	3000	119.937	-26.5137	20	10	2014
Unknown	1	WILUNA	Wiluna, EASTMURCHISON, Galaxy	3000	120.2	-26.5215	8	8	2015
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978

Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	12	1977
Sighting	1	WILUNA	WILUNA	1E+05	120.5014	-26.4987	31	3	1978
Sighting	1	WILUNA	WILUNA	18000	120.2514	-26.582	1	6	1978
Specimen	1	WILUNA	Yandil Station Wiluna	10000	119.8169	-26.3669	0	0	0

NatureMap Species Report

Created By Guest user on 03/11/2019

Kingdom Animalia
Origin Native
Current Names Only Yes
Core Datasets Only Yes
Species Group All Animals
Method 'By Circle'
Centre 119° 57' 23" E, 26° 44' 50" S
Buffer 40km
Group By Kingdom

Kingdom	Species	Records
Animalia	229	1455
TOTAL	229	1455

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Animalia				
1.	24559 <i>Acanthagenys rufogularis</i> (Spiny-cheeked Honeyeater)			
2.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
3.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
4.	24264 <i>Acanthiza robustirostris</i> (Slaty-backed Thornbill)			
5.	24265 <i>Acanthiza uropygialis</i> (Chestnut-rumped Thornbill)			
6.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
7.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			
8.	30833 <i>Amphibolurus longirostris</i> (Long-nosed Dragon)			
9.	24312 <i>Anas gracilis</i> (Grey Teal)			
10.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
11.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
12.	<i>Anidiops villosus</i>			
13.	44637 <i>Anilios hamatus</i>			
14.	44650 <i>Anilios waitii</i>			
15.	25318 <i>Antaresia perthensis</i> (Pygmy Python)			
16.	24087 <i>Antechinomys laniger</i> (Kultarr)			
17.	25528 <i>Aphelocephala leucopsis</i> (Southern Whiteface)			
18.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
19.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
20.	24610 <i>Ardeotis australis</i> (Australian Bustard)			
21.	<i>Argiope protensa</i>			
22.	<i>Arrenurus separatus</i>			
23.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
24.	24356 <i>Artamus personatus</i> (Masked Woodswallow)			
25.	<i>Barnardius zonarius</i>			
26.	24161 <i>Bettongia lesueur</i> subsp. <i>graii</i> (Boodie (inland), Burrowing Bettong (inland))		X	
27.	25331 <i>Brachyurophis approximans</i> (North-western Shovel-nosed Snake)			
28.	42380 <i>Brachyurophis fasciolatus</i> subsp. <i>fasciolatus</i> (Narrow-banded Shovel-nosed Snake)			
29.	24359 <i>Burhinus grallarius</i> (Bush Stone-curlew)			
30.	25715 <i>Cacatua roseicapilla</i> (Galah)			
31.	24725 <i>Cacatua roseicapilla</i> subsp. <i>assimilis</i> (Galah)			
32.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
33.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
34.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
35.	25339 <i>Chelodina steindachneri</i> (Flat-shelled Turtle)			
36.	47909 <i>Cheramoeca leucosterna</i> (White-backed Swallow)			
37.	24434 <i>Chrysococcyx osculans</i> (Black-eared Cuckoo)			
38.	25580 <i>Cinclosoma castaneothorax</i> (Chestnut-breasted Quail-thrush)			
39.	42311 <i>Cinclosoma marginatum</i> (Western Quail-thrush)			
40.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
41.	24361 <i>Coracina maxima</i> (Ground Cuckoo-shrike)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
42.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
43.	<i>Cormocephalus aurantiipes</i>			
44.	<i>Cormocephalus turneri</i>			
45.	24416 <i>Corvus bennetti</i> (Little Crow)			
46.	25593 <i>Corvus orru</i> (Torresian Crow)			
47.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
48.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
49.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
50.	30893 <i>Cryptoblepharus buchananii</i>			
51.	25458 <i>Ctenophorus caudicinctus</i> (Ring-tailed Dragon)			
52.	24869 <i>Ctenophorus caudicinctus</i> subsp. <i>mensarum</i> (Ring-tailed Dragon)			
53.	24875 <i>Ctenophorus isolepis</i> subsp. <i>gularis</i> (Central Military Dragon)			
54.	24876 <i>Ctenophorus isolepis</i> subsp. <i>isolepis</i> (Crested Dragon, Military Dragon)			
55.	24882 <i>Ctenophorus nuchalis</i> (Central Netted Dragon)			
56.	24886 <i>Ctenophorus reticulatus</i> (Western Netted Dragon)			
57.	24889 <i>Ctenophorus scutulatus</i> (Lozenge-marked Dragon)			
58.	25025 <i>Ctenotus ariadnae</i>			
59.	25052 <i>Ctenotus leonhardii</i>			
60.	25054 <i>Ctenotus mimetes</i>			
61.	25463 <i>Ctenotus pantherinus</i> (Leopard Ctenotus)			
62.	25064 <i>Ctenotus pantherinus</i> subsp. <i>ocellifer</i> (Leopard Ctenotus)			
63.	25066 <i>Ctenotus quattuordecimlineatus</i>			
64.	25074 <i>Ctenotus schomburgkii</i>			
65.	25075 <i>Ctenotus severus</i>			
66.	25465 <i>Ctenotus uber</i> (Spotted Ctenotus)			
67.	25375 <i>Cyclorana maini</i> (Sheep Frog)			
68.	25376 <i>Cyclorana platycephala</i> (Water-holding Frog)			
69.	24322 <i>Cygnus atratus</i> (Black Swan)			
70.	<i>Cyrtophora parnasia</i>			
71.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
72.	30903 <i>Dasyercus blythi</i> (Brush-tailed Mulgara, Ampurta)		P4	
73.	24089 <i>Dasyercus cristicauda</i> (Crest-tailed Mulgara, minyiminnyi)		P4	
74.	24997 <i>Delma butleri</i>			
75.	25001 <i>Delma nasuta</i>			
76.	25468 <i>Demansia psammophis</i> (Yellow-faced Whipsnake)			
77.	25295 <i>Demansia psammophis</i> subsp. <i>cupreiceps</i> (Yellow-faced Whipsnake)			
78.	<i>Desognanops humphreysi</i>			Y
79.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
80.	24926 <i>Diplodactylus conspicillatus</i> (Fat-tailed Gecko)			
81.	25469 <i>Diplodactylus granariensis</i>			
82.	24930 <i>Diplodactylus granariensis</i> subsp. <i>rex</i>			
83.	24940 <i>Diplodactylus pulcher</i>			
84.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
85.	25092 <i>Egernia depressa</i> (Southern Pygmy Spiny-tailed Skink)			
86.	<i>Elanus axillaris</i>			
87.	47937 <i>Eiseyornis melanops</i> (Black-fronted Dotterel)			
88.	<i>Eolophus roseicapillus</i>			
89.	24568 <i>Epthianura aurifrons</i> (Orange Chat)			
90.	24570 <i>Epthianura tricolor</i> (Crimson Chat)			
91.	25109 <i>Eremiascincus richardsonii</i> (Broad-banded Sand Swimmer)			
92.	<i>Ethmostigmus pachysoma</i>			
93.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
94.	25621 <i>Falco berigora</i> (Brown Falcon)			
95.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
96.	25623 <i>Falco longipennis</i> (Australian Hobby)			
97.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
98.	24958 <i>Gehyra punctata</i>			
99.	24959 <i>Gehyra variegata</i>			
100.	24401 <i>Geopelia cuneata</i> (Diamond Dove)			
101.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
102.	47959 <i>Gerygone fusca</i> subsp. <i>mungi</i> (Desert Gerygone)			
103.	<i>Gerygone mungi</i>			
104.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
105.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
106.	24297 <i>Hamirostra melanosternon</i> (Black-breasted Buzzard)			
107.	24961 <i>Heteronotia binoei</i> (Bynoe's Gecko)			
108.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
109.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
110.	<i>Hoggicosa castanea</i>			
111.	33917 <i>Idiosoma nigrum</i> (Shield-backed Trapdoor Spider)			T

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
112.	24367 <i>Lalage tricolor</i> (White-winged Triller)			
113.	24557 <i>Leipoa ocellata</i> (Malleefowl)		T	
114.	25125 <i>Lerista bipes</i>			
115.	25130 <i>Lerista desertorum</i>			
116.	25155 <i>Lerista muelleri</i>			
117.	42411 <i>Lerista timida</i>			
118.	25005 <i>Lialis burtonis</i>			
119.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
120.	25392 <i>Litoria rubella</i> (Little Red Tree Frog)			
121.	30938 <i>Lucasium damaeum</i>			
122.	30933 <i>Lucasium stenodactylum</i>			
123.	30934 <i>Lucasium wombeyi</i>			
124.	<i>Lycosa australicola</i>			
125.	25489 <i>Macropus robustus</i> (Euro, Biggada)			
126.	24135 <i>Macropus robustus</i> subsp. <i>erubescens</i> (Euro, Biggada)			
127.	24136 <i>Macropus rufus</i> (Red Kangaroo, Marlu)			
128.	24168 <i>Macrotis lagotis</i> (Bilby, Dalgyte, Ninu)		T	
129.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
130.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
131.	24549 <i>Malurus leucopterus</i> subsp. <i>leuconotus</i> (White-winged Fairy-wren)			
132.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
133.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
134.	47997 <i>Melanodryas cucullata</i> (Hooded Robin)			
135.	24736 <i>Melopsittacus undulatus</i> (Budgerigar)			
136.	25184 <i>Menetia greyii</i>			
137.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
138.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
139.	<i>Missulena insignis</i>			
140.	<i>Missulena occatoria</i>			
141.	24904 <i>Moloch horridus</i> (Thorny Devil)			
142.	25190 <i>Morethia butleri</i>			
143.	25425 <i>Neobatrachus kunapalari</i> (Kunapalari Frog)			
144.	42303 <i>Neobatrachus sudellae</i> (Desert Trilling Frog)			
145.	25428 <i>Neobatrachus wilsmorei</i> (Plonking Frog)			
146.	24737 <i>Neophema bourkii</i> (Bourke's Parrot)			
147.	<i>Neopsephotus bourkii</i>			
148.	24966 <i>Nephurus laevis</i>			
149.	24971 <i>Nephurus vertebralis</i>			
150.	25498 <i>Nephurus wheeleri</i>			
151.	24973 <i>Nephurus wheeleri</i> subsp. <i>wheeleri</i>			
152.	24094 <i>Ningui ridei</i> (Wongai Ningui)			
153.	24229 <i>Notomys mitchellii</i> (Mitchell's Hopping-mouse)			
154.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
155.	24742 <i>Nymphicus hollandicus</i> (Cockatiel)			
156.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
157.	<i>Oratennus distinctus</i>			
158.	24618 <i>Oreoica gutturalis</i> (Crested Bellbird)			
159.	34012 <i>Oreoica gutturalis</i> subsp. <i>pallescens</i> (Crested Bellbird, central)			
160.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
161.	<i>Parartemia laticaudata</i>			
162.	25254 <i>Parasuta monachus</i>			
163.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
164.	24628 <i>Pardalotus striatus</i> subsp. <i>murchisoni</i> (Striated Pardalote)			
165.	<i>Pardalotus striatus</i> subsp. <i>westraliensis</i> <i>Xmurchisoni</i>			
166.	48060 <i>Petrochelidon ariel</i> (Fairy Martin)			
167.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
168.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
169.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
170.	24748 <i>Platycercus varius</i> (Mulga Parrot)			
171.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
172.	24751 <i>Platycercus zonarius</i> subsp. <i>zonarius</i> (Port Lincoln Parrot)			
173.	42306 <i>Platyplectrum spenceri</i> (Centralian Burrowing Frog)			
174.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
175.	25510 <i>Pogona minor</i> (Dwarf Bearded Dragon)			
176.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
177.	24681 <i>Poliocephalus poliocephalus</i> (Hoary-headed Grebe)			
178.	24683 <i>Pomatostomus superciliosus</i> (White-browed Babbler)			
179.	25706 <i>Pomatostomus temporalis</i> (Grey-crowned Babbler)			
180.	24106 <i>Pseudantechinus woolleyae</i> (Woolley's Pseudantechinus)			
181.	24237 <i>Pseudomys hermannsburgensis</i> (Sandy Inland Mouse)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
182.	42416 <i>Pseudonaja mengdeni</i> (Western Brown Snake)			
183.	25263 <i>Pseudonaja modesta</i> (Ringed Brown Snake)			
184.	<i>Ptilonorhynchus guttatus</i>			
185.	24757 <i>Ptilonorhynchus maculatus</i> subsp. <i>guttatus</i> (Western Bowerbird)			
186.	42344 <i>Pumella albifrons</i> (White-fronted Honeyeater)			
187.	25009 <i>Pygopus nigriceps</i>			
188.	24278 <i>Pyrrholaemus brunneus</i> (Redthroat)			
189.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
190.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
191.	24982 <i>Rhynchoedura ornata</i> (Western Beaked Gecko)			
192.	24174 <i>Saccolaimus flaviventris</i> (Yellow-bellied Sheath-tailed Bat)			
193.	<i>Scolopendra laeta</i>			
194.	<i>Scolopendra morsitans</i>			
195.	24199 <i>Scotorepens balstoni</i> (Inland Broad-nosed Bat)			
196.	<i>Selenotholus foelschei</i>			
197.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
198.	30948 <i>Smicromis brevirostris</i> (Weebill)			
199.	24108 <i>Sminthopsis crassicaudata</i> (Fat-tailed Dunnart)			
200.	24109 <i>Sminthopsis dolichura</i> (Little long-tailed Dunnart)			
201.	24115 <i>Sminthopsis longicaudata</i> (Long-tailed Dunnart)		P4	
202.	24116 <i>Sminthopsis macroura</i> (Stripe-faced Dunnart)			
203.	24117 <i>Sminthopsis ooldea</i> (Ooldea Dunnart)			
204.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
205.	24927 <i>Strophurus elderi</i>			
206.	24946 <i>Strophurus strophurus</i>			
207.	24949 <i>Strophurus wellingtonae</i>			
208.	25269 <i>Suta fasciata</i> (Rosen's Snake)			
209.	24207 <i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
210.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
211.	30870 <i>Taeniopygia guttata</i> (Zebra Finch)			
212.	30871 <i>Taeniopygia guttata</i> subsp. <i>castanotis</i> (Zebra Finch)			
213.	24176 <i>Taphozous hilli</i> (Hill's Sheath-tail-bat)			
214.	25202 <i>Tiliqua multifasciata</i> (Central Blue-tongue)			
215.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
216.	42351 <i>Todiramphus pyrrhopygius</i> (Red-backed Kingfisher)			
217.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
218.	24851 <i>Turnix velox</i> (Little Button-quail)			
219.	30814 <i>Tympanocryptis cephalus</i> (Pebble Dragon)			
220.	<i>Urodacus hoplurus</i>			
221.	<i>Urodacus similis</i>			
222.	25210 <i>Varanus brevicauda</i> (Short-tailed Pygmy Monitor)			
223.	25211 <i>Varanus caudolineatus</i>			
224.	25216 <i>Varanus giganteus</i> (Perentie)			
225.	25218 <i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
226.	25524 <i>Varanus panoptes</i> (Yellow-spotted Monitor)			
227.	25223 <i>Varanus panoptes</i> subsp. <i>rubidus</i>			
228.	25526 <i>Varanus tristis</i> (Racehorse Monitor)			
229.	24205 <i>Vespadelus finlaysoni</i> (Finlayson's Cave Bat)			

Conservation Codes

- T - Rare or likely to become extinct
- X - Presumed extinct
- IA - Protected under international agreement
- S - Other specially protected fauna
- 1 - Priority 1
- 2 - Priority 2
- 3 - Priority 3
- 4 - Priority 4
- 5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 07/06/19 19:24:43

[Summary](#)

[Details](#)

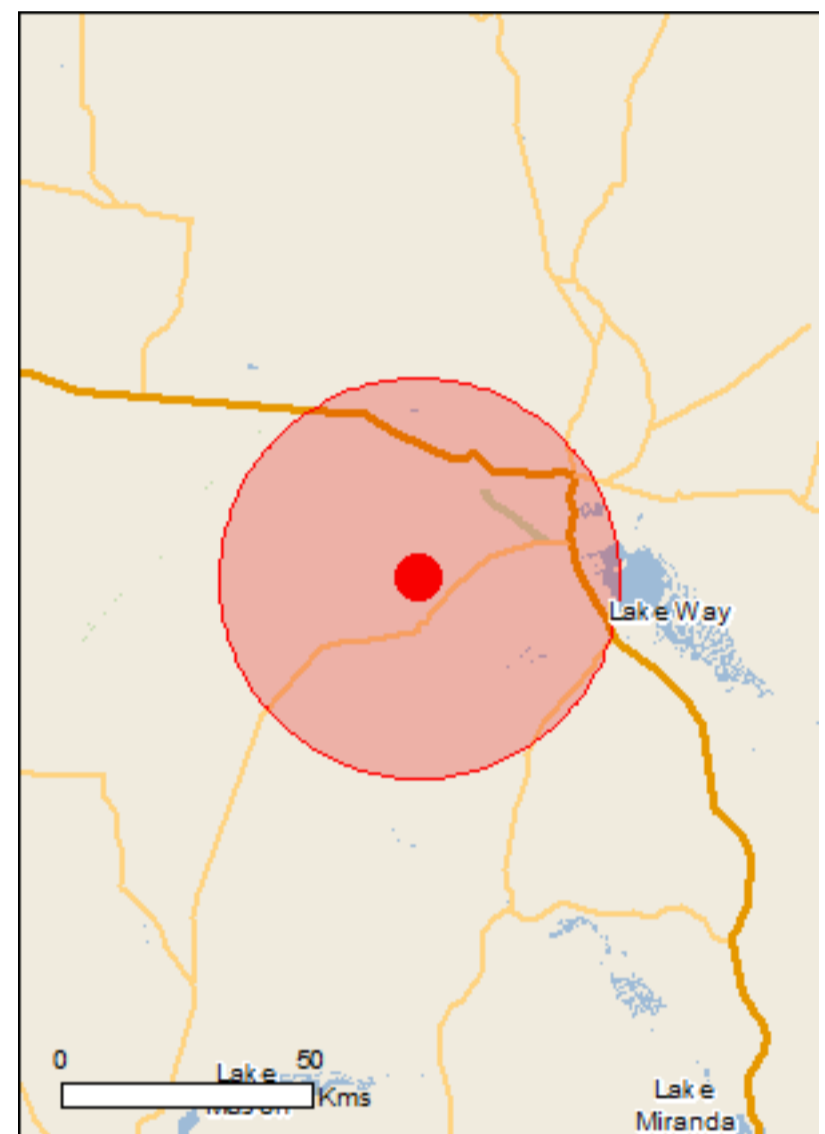
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

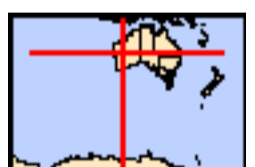
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

Buffer: 40.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	4
Listed Migratory Species:	6

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	9
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	11
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Species [\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat likely to occur within area
Polytelis alexandrae Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat known to occur within area

Plants

Atriplex yeelirrie [88538]	Endangered	Species or species habitat likely to occur within area
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Listed Migratory Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area

Migratory Wetlands Species

Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land

[[Resource Information](#)]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name

Commonwealth Land -

Listed Marine Species

[[Resource Information](#)]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area

Extra Information

Invasive Species

[[Resource Information](#)]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area

Mammals

Name	Status	Type of Presence
Camelus dromedarius Dromedary, Camel [7]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Equus asinus Donkey, Ass [4]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area

Plants	Status	Type of Presence
Carrichtera annua Ward's Weed [9511]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-26.76056 119.94528

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.



Appendix 3: Habitat Assessments

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA1

Project Number: CL001

Date: 22/09/19

Easting: 793676

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7039594

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i> , <i>A. pruinocarpa</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey	<i>A. tetragonophylla</i> , <i>Eremophila</i> sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover				0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 5 Yr	4-3 >5 Yr
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LAST FIRE

(general)					DISTURBANCE					(cattle)				
0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	

GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common	
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common	
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common	
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	
Suitability for Bats	YES			NO		Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common	

SPECIES				
Malleefowl	YES	NO	DETAILS	Known from survey area
Night Parrot	YES	NO		No suitable habitat present in survey area
Long-tailed Dunnart	YES	NO		Known from survey area
Mulgara	YES	NO		No suitable habitat present in survey area
Birds			Mammals	Reptiles
			Old Kangaroo Scats (likely Euro)	

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA2

Project Number: CL001

Date: 22/09/19

Easting: 794162

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7039402

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
--------------	------	------------	------	---------------	------

VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i> , <i>A. pruinocarpa</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey				0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	<i>Eremophila</i> sp.		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

Scale:	CONDITION					LAST FIRE				
	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 Yr	4-5 Yr

DISTURBANCE

(general)					(cattle)				
0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	

GROUND COVER

Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA3

Project Number: CL001

Date: 22/09/19

Easting: 793584

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7039187

E

SE

W

N/A



Soil Texture

sand

sandy-loam

loam

cracking clay

clay

VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i>		3.5	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey				0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	<i>Ptilotus sp.</i>		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 Yr	4-5	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA4

Project Number: CL001

Date: 22/09/19

Easting: 793412

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7039205

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneura</i>	4	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey	<i>Sida sp.</i>	1.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover			0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION **LAST FIRE**

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr
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(general) DISTURBANCE (cattle)

0 heavy	1 medium*	2 mild	3 none	0 heavy	1 medium	2 mild	3 none
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA6

Project Number: CL001

Date: 22/09/19

Easting: 793207

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7039197

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneur.</i> , <i>A. pruinocarpa</i>	4	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	<i>Eremophila sp.</i>	0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION						LAST FIRE					
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 Yr	4-5 Yr	3 >5 Yr

(general) DISTURBANCE					(cattle)				
0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	

GROUND COVER

Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA6

Project Number: CL001

Date: 22/09/19	Easting: 794696	Aspect	N	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7038860		E	SE	W	N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland		Overstorey	Acacia aneura, A. pruinocarpa	3	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland		Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%
Euc Woodland		Ground Cover			0 <5%	1 <20%	2 20-60%	3 60-100%

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

0 heavy	1 medium*	2 mild	3 none	0 heavy	1 medium	2 mild	3 none
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GROUND COVER

Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA7

Project Number: CL001

Date: 22/09/19

Easting: 793594

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7038797

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Cover				
	Acacia Shrubland	Stratum	Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	Acacia aneura	3.5	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%
Euc Woodland	Ground Cover			0 <5%	1 <20%	2 20-60%	3 60-100%

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%		0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA8

Project Number: CL001

Date: 22/09/19

Easting: 793391

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 77038998

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey	<i>Sida sp.</i>		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover				0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 5 Yr	4- >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common	
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common	
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common	
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	
Suitability for Bats	YES			NO		Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common	

SPECIES

Malleefowl	YES	NO	DETAILS	Known from survey area
Night Parrot	YES	NO		No suitable habitat present in survey area
Long-Tailed Dunnart	YES	NO		Known from survey area
Mulgara	YES	NO		No suitable habitat present in survey area
Birds			Mammals	Reptiles
Chestnut-rumped Thornbill			Old Kangaroo Scats (likely Euro)	

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA9

Project Number: CL001

Date: 22/09/19

Easting: 794268

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7038605

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>A. aneura, Eucalyptus kingsmillii</i>	4.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	<i>Triodia sp.</i>	0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION						LAST FIRE				
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr

(general) DISTURBANCE					(cattle)				
	0 heavy	1 medium*	2 mild	3 none	0 heavy	1 medium	2 mild	3 none	

GROUND COVER									
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS									
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals				Reptiles	
Chestnut-rumped Thornbill			Old Kangaroo Scats (likely Euro)					
Chestnut Quail-thrush								

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA10

Project Number: CL001

Date: 23/09/19

Easting: 794004

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7038101

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneura</i> , <i>A. pruinocarpa</i>	4	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover			0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION						LAST FIRE				
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr

(general) DISTURBANCE					(cattle)				
	0 heavy	1 medium*	2 mild	3 none	0 heavy	1 medium	2 mild	3 none	

GROUND COVER									
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS									
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		
Malleefowl diggings - looks like a mound attempt								

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA11

Project Number: CL001

Date: 23/09/19

Easting: 793316

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7037894

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
		Riverine Woodland	Overstorey		Acacia aneura	4	0 <5%	1 <20%	2 20-60%
	Other Grassland	Midstorey			0 <5%	1 <20%	2 20-60%	3 60-100%	
	Euc Woodland	Ground Cover	Ptilotus sp.	0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION						LAST FIRE				
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr

(general) DISTURBANCE					(cattle)				
	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none

GROUND COVER										
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%	

MICROHABITATS										
Burrowing Suitability	0 none	1 Rock	2 Stony	3 Sandy Loam	4 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 none	2 0-30%	3 30-70%	4 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%		Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%		Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%		Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA12

Project Number: CL001

Date: 23/09/19

Easting: 794151

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7037701

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneura</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey	<i>Eremophila sp.</i>		1.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	<i>Triodia sp.</i>		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION						LAST FIRE				
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr

(general) DISTURBANCE					(cattle)				
	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none

GROUND COVER									
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS									
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		
Chestnut-rumped Thornbill								

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA13

Project Number: CL001

Date: 23/09/19	Easting: 793616	Aspect	N	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7037501		E	SE	W	N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i>		3	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey	<i>Eremophila sp.</i>		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover				0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%		0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

	0	1	2	3		0	1	2	3
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA14

Project Number: CL001

Date: 23/09/19

Easting: 794167

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7037097

E

SE

W

N/A



Soil Texture

sand

sandy-loam

loam

cracking clay

clay

VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneura</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey	<i>Eremophila sp.</i>		1.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover				0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none
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GROUND COVER

Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals				Reptiles	
			Old Kangaroo Scats (likely Euro)					

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA15

Date: 23/09/19

Easting: 793540

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7037096

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>Acacia aneura</i>		4	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey	<i>Sida sp.</i>	1.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
Euc Woodland	Ground Cover	Grass (no reproductive parts but not Triodia)	0.5	0 <5%	1 <20%	2 20-60%	3 60-100%		

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 5 Yr	4- 3 >5 Yr
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(general)

DISTURBANCE

(cattle)

Cattle dung	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
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GROUND COVER

Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common	
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common	
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common	
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	
Suitability for Bats	YES			NO		Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common	

SPECIES				
Malleefowl	YES	NO	DETAILS	Known from survey area
Night Parrot	YES	NO		No suitable habitat present in survey area
Long-tailed Dunnart	YES	NO		Known from survey area
Mulgara	YES	NO		No suitable habitat present in survey area
Birds			Mammals	Reptiles
Chestnut-rumped Thornbill			Cattle Dung	
Grey Shrike-thrush				

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA16

Project Number: CL001

Date: 23/09/19

Easting: 794210

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7036696

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:		Average Height in metres	Cover				
	Acacia Shrubland	Stratum			Scattered Plants	Sparse	Moderate	Thick	
	Riverine Woodland	Overstorey	<i>A. aneura, Eucalyptus kingsmillii</i>		5	0 <5%	1 <20%	2 20-60%	3 60-100%
Other Grassland	Midstorey	<i>Eremophila sp.</i>		1.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover				0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION					LAST FIRE					
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 4-5 Yr	3 >5 Yr

	(general)				DISTURBANCE				(cattle)		
	Tracks, rubbish	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	

GROUND COVER										
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%	

MICROHABITATS										
Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common	
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common	
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common	
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		
Chestnut-rumped Thornbill								

FAUNA HABITAT ASSESSMENT SHEET

North-west

Location: GWR about 30 km south west of Wiluna

Site Number: HA17

Project Number: CL001

Date: 23/09/19

Easting: 793333

Aspect

N

NE

SW

NW

Quadrat Size: 50 x 50

Northing: 7036700

E

SE

W

N/A



Soil Texture	sand	sandy-loam	loam	cracking clay	clay
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VEGETATION

Vegetation Description	Hummock Grassland	Other:	Average Height in metres	Cover				
	Acacia Shrubland	Stratum		Scattered Plants	Sparse	Moderate	Thick	
Riverine Woodland	Overstorey	<i>Acacia aneura</i> , <i>A. pruinocarpa</i>	5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Other Grassland	Midstorey	<i>Acacia aneura</i>	1.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Euc Woodland	Ground Cover	Grass (no reproductive parts but not <i>Triodia</i>)	0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	

CONDITION

LAST FIRE

Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1-3 Yr	2 Yr	4-5	3 >5 Yr
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(general)

DISTURBANCE

(cattle)

	0 heavy	1 medium*	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
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GROUND COVER

	0 <5%	1 <20%	2 20-60%	3 60-100%		0 <5%	1 <20%	2 20-60%	3 60-100%
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100% *
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other	0 <5%	1 <20%	2 20-60%	3 60-100%

MICROHABITATS

Burrowing Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbles Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Hollows	0 none	1 rare	2 moderate	3 common
Exfoliating Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Hollows	0 none	1 rare	2 moderate	3 common
Rock Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Presence	0 none	1 rare	2 moderate	3 common
Boulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m

Suitability for Bats	YES		NO	Termite Mounds	0 none	1 rare	2 moderate	3 common
Caves	Absent	Present		Woody Debris	0 none	1 rare	2 moderate	3 common
SPECIES								
Malleefowl	YES	NO	DETAILS	Known from survey area				
Night Parrot	YES	NO		No suitable habitat present in survey area				
Long-tailed Dunnart	YES	NO		Known from survey area				
Mulgara	YES	NO		No suitable habitat present in survey area				
Birds			Mammals			Reptiles		



Appendix 4: Photos



Malleefowl mound 70 (very old and inactive).



Malleefowl mound 71 (very old and inactive).



Malleefowl mound 72 (very old and inactive).



Malleefowl mound 73/74 (very old and inactive).



Malleefowl mound 75/76 (very old and inactive).



Malleefowl mound attempt 1.



Malleefowl mound attempt 2.



Malleefowl mound attempt 3.



Malleefowl mound attempt 4.



Camera 11.



Camera 13.



Camera 14.



Camera 15.



Camera 16.



Camera 17.



Camera 18.



Camera 19.



Camera 20.



Rabbit recorded on camera trap 19 (see bright image at the bottom centre of image).



Chestnut Quail-thrush recorded on camera trap 19 (see bottom left of image).