



Vertebrate Desktop Assessment for the Dalgaranga Gold Project
Gascoyne Resources Ltd



Limitations

Scope of services

This report ("the report") has been prepared by Western Ecological Pty Ltd (WE) in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and WE. In some circumstances, a range of factors such as time, budget, access and/or site disturbance constraints may have limited the scope of services. This report is strictly limited to the matters stated in it and is not to be read as extending, by implication, to any other matter in connection with the matters addressed in it.

Reliance on data

In preparing the report, WE have relied upon data and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise expressly stated in the report, WE have not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. WE have also not attempted to determine whether any material matter has been omitted from the data. WE will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WE. The making of any assumption does not imply that WE have made any enquiry to verify the correctness of that assumption.

The report is based on conditions encountered and information received at the time of preparation of this report or the time that site investigations were carried out. WE disclaim responsibility for any changes that may have occurred after this time. This report and any legal issues arising from it are governed by and construed in accordance with the law of Western Australia as at the date of this report.

Report Version	Revision No.	Purpose	Author/reviewer	Submitted to Client	
				Form	Date
Draft Report	1	For client review	Western Ecological / Gascoyne Resources	Electronic	28/02/2020
Final Report	2	Client submission	Western Ecological	Electronic	27/03/2020



Executive Summary

Gascoyne Resources Limited (Gascoyne) is preparing to further develop the Dalgara Gold project which is approximately 65 km north west of Mount Magnet in the Murchison region of Western Australia (WA). Gascoyne commenced mining activities at the Project in March 2018 and is currently active.

Gascoyne was recently granted a new miscellaneous lease (L59/168 – approximately 73 ha) and plans to incorporate it into its borefield that is soon to be recommissioned as part of an expansion to the Dalgara Gold project. Previous flora and fauna surveys were undertaken in 2016 for the project, however, a section of L59/168 has not been assessed given that this lease has just recently been granted.

Western Ecological was commissioned by Gascoyne in February 2020 to undertake a desktop review for terrestrial vertebrates, particularly those of conservation interest that may occur in and adjacent to, L59/168. The desktop study included a review of databases and past relevant reports and a likelihood assessment of conservation significant fauna (terrestrial vertebrate) potentially occurring in the survey area (L59/168).

Searches of DBCA threatened fauna database, 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. The search area was centred on 27° 51' 24" S and 117° 12' 53" E for all three databases and consisted of a 40 km radial search area for NatureMap (maximum search area) and a 50 km radial search area for the EPBC PMST. Originally a radial search area of 60 km was submitted to DBCA for the threatened fauna database, however, a larger buffer of 100 km was applied by DBCA in order to select a greater number of records that adequately demonstrate the potential species composition in the search area.

Collectively, these databases were used in conjunction with the previous survey reports and literature to develop a likelihood list of conservation significant species that have the potential to occur in the vicinity of the survey area. These databases include some species that do not occur in the survey area, as some fauna have a limited or patchy distribution or a high level of habitat specificity for habitats which are not located in the survey area e.g. sea birds, wading birds and shorebirds that require coastal shores for habitat. Some fauna may also have become locally extinct or were erroneously identified in previous surveys. This fauna was examined and then excluded from the likelihood assessment (noting that there were some exceptions).

A total of 19 conservation significant species are considered in this likelihood assessment. Of these 19 conservation significant species, two species (or their signs) have been recorded nearby during previous surveys (these species are considered as Possibly occurring in the survey area), a further three species are also considered as Possibly occurring in the survey area and a further 14 species are considered Unlikely to occur in the survey area because there is no suitable habitat.



Table of Contents

Executive Summary	3
1. Introduction.....	5
1.1 Background	5
1.2 Objectives and Scope.....	5
Figure 1. Project location.	6
Figure 2. Survey area location.....	7
1.3 Legislative context.....	8
2. Summary of Previous Surveys	10
3. Likelihood Assessment – Conservation Significant Species	12
5. References.....	21
APPENDICES	23
Appendix 1: Conservation Categories	24
Appendix 2: Database Searches	26



1. Introduction

1.1 Background

Gascoyne Resources Limited (Gascoyne) is preparing to further develop the Dalgarranga Gold project which is approximately 65 km north west of Mount Magnet in the Murchison region of Western Australia (WA) (Figure 1). Gascoyne commenced mining activities at the Project in March 2018 and is currently active.

Gascoyne was recently granted a new miscellaneous lease (L59/168 – approximately 73 ha [Figure 2 – survey area]) and plans to incorporate it into its borefield that is soon to be recommissioned as part of an expansion to the Dalgarranga Gold project. Previous flora and fauna surveys were undertaken in 2016 for the project, however, a section of L59/168 has not been assessed given that this lease has just recently been granted. Flora and fauna surveys are required in L59/168 to support a mining proposal and native vegetation clearing permit application.

Western Ecological was commissioned by Gascoyne in February 2020 to undertake a desktop review for terrestrial vertebrates, particularly those of conservation interest that may occur in and adjacent to L59/168.

1.2 Objectives and Scope

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

- Undertake a review of databases and past relevant reports
- Carry out a likelihood assessment of conservation significant fauna (terrestrial vertebrate) potentially occurring in the survey area (L59/168)
- Document the above in a report suitable for attachment to a WA Department of Mines, Industry Regulation and Safety (DMIRS) Mining Proposal and Native Vegetation Clearing Permit amendment application.

Figure 1: Dalgaranga Gold Mine location figure

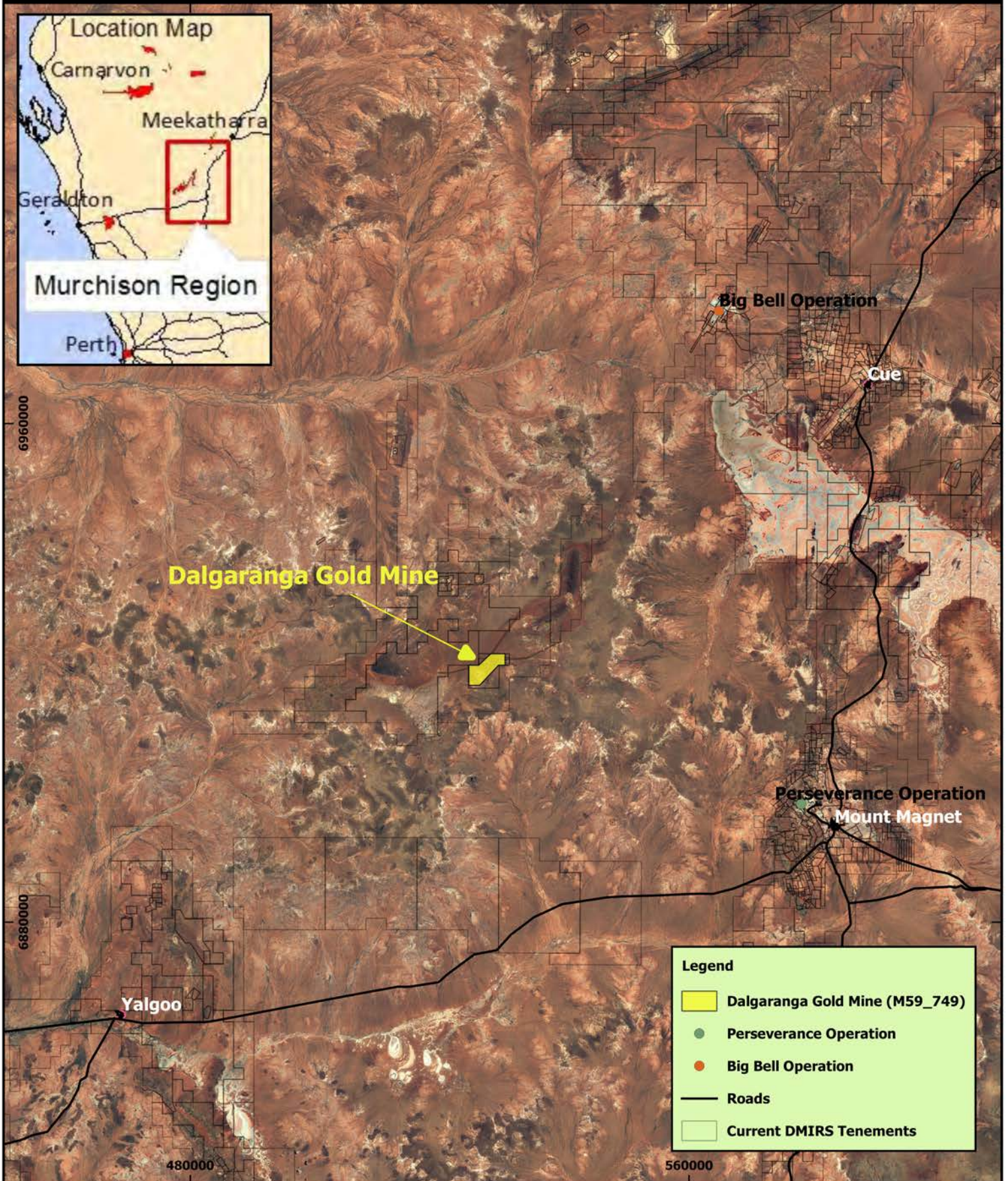
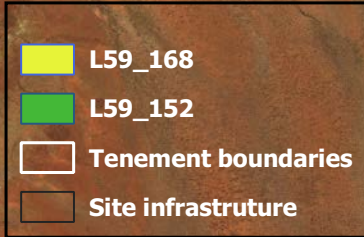


Figure 2: Dalgaranga Gold Project - location of L59/168



L59/168 = 73.3 ha

Area of L59/168 outside of L59/152 = 26.0 ha

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) – WA State Government.

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 Agriculture, Water and the Environment (DAWE) 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 BC Act 2016 replaced both the *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (S 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.



2. Summary of Previous Surveys

There have been two relatively recent fauna surveys undertaken for Gascoyne in the Dalgara tenements (M59/749, L59/141, L59/142, L59/151, L59/152 and L59/153). The two fauna reports (MBCContracting 2016 and 2017) are summarised below (see Table 1). These previous fauna surveys provide context and on ground observations of habitat that assisted with the likelihood assessment.

Table 1. Previous fauna surveys undertaken for the Dalgaranga project.

*Conservation significance is based on listing as of submission date on report and includes species listed as Priority species by DBCA, and threatened under the BC Act and EPBC Act. Noting that the surveys undertaken in 2016 and 2017 still referred to fauna listed as scheduled under the WA WC Act and BC Act because the term specially protected fauna i.e. those listed as schedules 1 through to 3 had not transitioned (this occurred as of January 2019) to threatened categories i.e. CR (critically endangered), EN (endangered) and Vu (vulnerable) under the BC Act.

Reference	Survey Type	Survey Date	Proximity to Survey Area (L59/168)	Methods	Broad Habitats Described	*Conservation Significant Species Recorded
MBCContracting (2016). Level 1 Fauna Assessment and Level 2 Targeted Malleefowl Survey Dalgaranga. Unpublished report prepared for Gascoyne Resources, June 2016.	Level 1 fauna assessment and targeted Malleefowl survey	31 May to 1 June 2016	Approximately 4 km to the east	<ul style="list-style-type: none"> Habitat assessments Opportunistic observations Searches for signs i.e. burrows, scats and tracks Systematic walked transects searching for Malleefowl mounds 	<ul style="list-style-type: none"> Mulga – five different types were described with this based primarily on midstorey vegetation (type and cover) and substrate type Disturbed areas Regenerating areas Mining pit with water 	<ul style="list-style-type: none"> One extinct Malleefowl mound
MBCContracting (2017). Level 1 Fauna Assessment and Targeted Malleefowl Survey Extension of Dalgaranga Gold Project - Part Two. Unpublished report prepared for Gascoyne Resources, June 2017.	Level 1 fauna assessment and targeted Malleefowl survey	10 -14 May 2017	Approximately 3.5 km to the east	<ul style="list-style-type: none"> Habitat assessments Opportunistic observations Searches for signs i.e. burrows, scats and tracks Searches for Malleefowl mounds Camera traps 	<ul style="list-style-type: none"> Mulga – five different types were described with this based primarily on midstorey vegetation (type and cover) cover and substrate type Open flat rocky areas Open flat areas (not rocky) Rocky ridge Rocky outcrops 	<ul style="list-style-type: none"> Peregrine Falcon

3. Likelihood Assessment – Conservation Significant Species

The likelihood assessment is informed by the previous surveys (habitat present and fauna records) undertaken in close proximity to miscellaneous lease L59/168, database search results and other information in the scientific literature on the ecology of each conservation significant species being considered.

Searches of DBCA threatened fauna database, 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 2020, DBCA 2020, DAWE 2020) (Appendix 2). The search area was centred on 27° 51' 24" S and 117° 12' 53" E for all three databases and consisted of a 40 km radial search area for NatureMap (maximum search area) and a 50 km radial search area for the EPBC PMST. Originally a radial search area of 60 km was submitted to DBCA for the threatened fauna database, however, a larger buffer of 100 km was applied by DBCA in order to select a greater number of records that adequately demonstrate the potential species composition in the search area.

Collectively, these databases were used in conjunction with the previous survey reports and literature to develop a likelihood list of species that have the potential to occur in the vicinity of the survey area. These databases include some species that do not occur in the survey area, as some fauna have a limited or patchy distribution or a high level of habitat specificity for habitats which are not located in the survey area e.g. sea birds, wading birds and shorebirds that require coastal shores for habitat (Appendix 2). Some fauna may also have become locally extinct or were erroneously identified in previous surveys. This fauna was examined (see below for a further explanation) and then excluded from the likelihood assessment.

Waterbirds

A number wetland bird species was returned in the database searches, many were from Lake Austin, which is about 55 km north west of the survey area. These were a combination of waders, waterbirds and migratory marine birds. These wetland avifauna such as wading birds, including Plovers and Sandpipers inhabit estuaries, lakes, mudflats, saltmarshes, sandflats and beaches, with shallow water edges, where they feed on invertebrates such as worms, molluscs, insects and crustaceans (Garnett *et al.* 2011). Suitable habitat for these species is not present in the survey area, however, they are still mentioned in Table 2 below if they are listed as migratory or threatened under the EPBC Act because there were a number of them in the database searches (Appendix 2).

Now regionally extinct

A number of species in the database searches were also known to be historical records of species now locally or regionally extinct, for example the Greater Bilby (*Macrotis lagotis*) and Greater Stick-nest rat (*Leporillus conditor*). These species have therefore been omitted from any further discussion. In addition, those species with records older than 1970 have also been omitted from further discussion with a few exceptions (Appendix 2).

Database errors and anomalies

Occasionally there are errors and/or anomalies in the database searches that are sourced from the various government departments, for example, the Grey Wagtail (*Motacilla cinerea*), which is a rare visitor (Johnstone & Storr 1998). These species have been omitted from any further discussion (Appendix 2).

It is important to note, that the EPBC PMST is not entirely based on point records, but also on broader information, including bioclimatic distribution models, whereas the DBCA threatened fauna database and NatureMap is. Consequently, the results of the EPBC PMST are in some cases less accurate, particularly at a local scale. As a result, the EPBC PMST can include species that do not occur in the survey area because, for example, there is no habitat available or they are now known to be locally extinct. These species have therefore been omitted from any further discussion.

In addition, many fauna are not distributed evenly across the landscape, are more abundant in some places than others, and consequently more detectable (Currie 2007). Furthermore, some small, common ground-dwelling reptile and mammal species tend to be habitat specific, and many bird species can occur as regular migrants, occasional visitors or vagrants. Therefore, all these species have been excluded from any further discussion.

Conservation Significant Fauna

With the aforementioned waterbirds and locally/regionally extinct and database errors species removed, a total of 19 conservation significant species are considered in this likelihood assessment. Of these 19 conservation significant species, two species (or their signs) have been recorded nearby during previous surveys (see Table 1 above).

Not all of the species being assessed here have been recorded nearby the survey area, as a result we have provided a likelihood of occurrence for each species based on the following criteria:

- **Recorded:** Recorded during the field survey or site reconnaissance
- **Likely:** Suitable habitat is present in the survey area and the survey area is in the species' known distribution
- **Possible:** Limited or no suitable habitat is present in survey area, but is nearby. The species has good dispersal abilities and is known from the general area
- **Unlikely:** No suitable habitat is present in survey area but is nearby, the species has poor dispersal abilities, but is known from the general area; or suitable habitat is present, however, the survey area is outside of the species' known distribution.

Accompanying the likelihood of occurrence determination is information on the ecology (sometimes relatively limited because the species has not been studied in detail) and other information where relevant to help further explain the decision.

Table 2. Likelihood assessment of potential conservation significant species occurring in the survey area (L59/168).

*See Appendix 1 for a description of the conservation categories.

Species and conservation status*	Summary of ecology and other relevant information	Likelihood of occurrence
Meekatharra Slider/West Coast Mulga Slider (<i>Lerista eupoda</i>) – P1	The Meekatharra Slider inhabits open Mulga areas on loamy soils in arid habitats (Chapple <i>et al.</i> 2019). This species is thought to be very common in the hills on the western part of its range and reasonably common in the flat areas (Chapple <i>et al.</i> 2019). However, there are relatively few records of this species and its ecology is poorly understood.	Unlikely – There are 3 records of the Meekatharra Slider in the DBCA threatened fauna database, two from 1984 and one with no date. All three records come from Coodardy Homestead which is about 75 km north east of the survey area. This species has not been recorded nearby (MBContracting 2016 and 2017). There may be some very limited habitat in the survey area, however, given the few records and the limited understanding of this species ecology, the Meekatharra Slider is considered Unlikely to occur in the survey area (noting that habitats in the survey area would need to be assessed on ground in order to make a more-informed assessment).
Common Sandpiper (<i>Actitis hypoleucos</i>) – Mi (BC Act and EPBC Act)	The species utilises a wide range of coastal wetlands and some inland wetlands, with changing levels of salinity, and is mostly found around muddy edges or rocky shores and rarely on mudflats (Geering <i>et al.</i> 2007).	Unlikely – No suitable habitat in the survey area.
Sharp-tailed Sandpiper (<i>Calidris acuminata</i>) - Mi (BC Act and EPBC Act)	The Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This also includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, salt pans and hypersaline salt lakes inland (Higgins & Davies 1996).	Unlikely – No suitable habitat in the survey area.
Curllew Sandpiper (<i>Calidris ferruginea</i>) – CR (BC Act), Mi (EPBC Act)	Curllew Sandpipers mostly occur on intertidal mudflats in sheltered coastal areas e.g. estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes,	Unlikely – No suitable habitat in the survey area.

	dams, waterholes and bore drains, usually with bare edges of mud or sand (Higgins & Davies 1996).	
Pectoral Sandpiper (<i>Calidris melanotos</i>) - Mi (BC Act and EPBC Act)	The species is usually found in coastal or near coastal habitat (prefers shallow fresh to saline wetlands) but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996).	Unlikely – No suitable habitat in the survey area.
Red-necked Stint (<i>Calidris ruficollis</i>) - Mi (BC Act and EPBC Act)	The Red-necked Stint is mainly found in coastal areas, including in sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks. Occasionally they have been recorded on exposed or ocean beaches, and sometimes on stony or rocky shores, reefs or shoals. They also occur in saltworks, sewage farms, saltmarsh and ephemeral or permanent shallow wetlands near the coast or inland, including lagoons, lakes, swamps, riverbanks, waterholes, bore drains, dams, soaks and pools in salt flats (Higgins & Davies 1996).	Unlikely – No suitable habitat in the survey area.
White-winged Black Tern (<i>Chlidonias leucopterus</i>) - Mi (BC Act and EPBC Act)	In their non-breeding range, this species mostly inhabits fresh, brackish or saline, and coastal or subcoastal wetlands. White-winged Black Terns visit tidal wetlands, such as harbours, bays, estuaries and lagoons, and their associated tidal sandflats and mudflats. They also occur in terrestrial wetlands, including swamps, lakes, billabongs, rivers, floodplains, reservoirs, saltworks, sewage ponds and outfalls. Wetlands may be open, or with floating emergent or marginal vegetation. They seldom occur on inland wetlands in Australia (Higgins & Davies 1996).	Unlikely – No suitable habitat in the survey area.
Gull-billed Tern (<i>Gelochelidon nilotica</i>) - Mi (BC Act and EPBC Act)	Gull-billed Terns are found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands. They are only rarely found over the ocean.	Unlikely – No suitable habitat in the survey area.

<p>Bar-tailed Godwit (<i>Limosa lapponica</i>) – Mi (BC Act and EPBC Act)</p>	<p>The Bar-tailed Godwit is found mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It is found often around beds of seagrass and sometimes in nearby saltmarshes. It has been observed in coastal sewage farms and saltworks, salt lakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats. It is seldom found on inland wetlands or in areas of short grass, such as farmland, paddocks and airstrips (Marchant & Higgins 1993).</p>	<p>Unlikely – No suitable habitat in the survey area.</p>
<p>Wood Sandpiper (<i>Tringa glareola</i>) - Mi (BC Act and EPBC Act)</p>	<p>The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. They are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs and trees (dead or alive), especially <i>Melaleuca</i> (Paperbark) and River Red Gums (<i>Eucalyptus camaldulensis</i>) and often with fallen timber (Higgins & Davies 1996).</p>	<p>Unlikely – No suitable habitat in the survey area.</p>
<p>Common Greenshank (<i>Tringa nebularia</i>) – Mi (BC Act and EPBC Act)</p>	<p>The Common Greenshank is found in different types of inland wetlands and sheltered coastal habitats of varying salinity. It occurs in sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass. Habitats include embayments, harbours, river estuaries, deltas and lagoons and less often in round tidal pools, rock-flats and rock platforms. The species uses both permanent and ephemeral wetlands, including swamps, lakes, dams, rivers, creeks, billabongs, waterholes and inundated floodplains, claypans and salt flats (Higgins & Davies 1996).</p>	<p>Unlikely – No suitable habitat in the survey area.</p>
<p>Australian Painted Snipe (<i>Rostratula australis</i>) - En (BC Act and EPBC Act)</p>	<p>The Australian Painted Snipe inhabits shallow, vegetated, temporary or infrequently filled inland wetlands (occasionally brackish), including temporary and permanent lakes, swamps and claypans (Marchant & Higgins 1993, Garnett et al. 2011). Numbers of the Australian Painted Snipe are thought to have declined substantially since European settlement, particularly over the last 50 years due to the loss and alteration of wetlands (Garnett et al. 2011, Rogers et al. 2005).</p>	<p>Unlikely – No suitable habitat in the survey area.</p>

<p>Night Parrot (<i>Pezoporus occidentalis</i>) – CR (BC Act), En (EPBC Act)</p>	<p>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 <i>et al.</i> 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 <i>et al.</i> 2017). The last Night Parrot collected intentionally was in Western Australia in 1912 (Wilson 1937).</p> <p>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 <i>et al.</i> 1994, Murphy <i>et al.</i> 2017). In 2006, another dead bird was discovered by a Ranger 200 km to the south-east of the 1990 specimen (McDougall <i>et al.</i> 2009, Murphy <i>et al.</i> 2017). In 2013, the first photographs of a living night parrot were captured close to the site of the 2006 specimen (Dooley 2013, Murphy <i>et al.</i> 2017). Their cryptic nature, remote distribution and apparently rapid decline means that there is scant ecological information about night parrots.</p> <p>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 (Loma Glen), which is about 450 km north-east of Wiluna, in 2009 (Hamilton <i>et al.</i> 2017).</p> <p>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</p>	<p>Unlikely – There is only one record of the Night Parrot in the DBCA threatened fauna database and it is labelled historic (no year provided). The location given is Daggar Hills which is approximately 55 km south east of the survey area. The survey area is in the medium priority area for survey in the Interim guideline for preliminary surveys of night parrot (DBCA 2017).</p> <p>There is no suitable habitat nearby in the form of large spinifex hummocks (MBCContracting 2016 and 2017) and we assume that this is the case in the survey area (from preliminary examinations of aerial imagery [Google Earth], therefore this species is considered unlikely to occur (noting that habitats in the survey area would need to be assessed on ground in order to make a more well informed assessment)).</p>
--	---	---

	<p>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 <i>et al.</i> 2017) which is a common and widespread habitat type throughout much of south-east Queensland and WA.</p>	
<p>Black-flanked Rock-wallaby (<i>Petrogale lateralis lateralis</i>) - En (BC Act and EPBC Act)</p>	<p>The Black-flanked Rock-wallaby was formerly widespread, but patchily distributed throughout most of WA south of the Kimberley, but has greatly declined and is restricted to the best habitat in a number of locations (Pearson & Kinnear 1997, Woinarski <i>et al.</i> 2014).</p> <p>This species requires daytime shelter in heavily shaded locations in rocky areas, caves, cliffs, screes and rockpiles. The feed on grasses, forbs, shrubs and sometimes seeds and fruits (Woinarski <i>et al.</i> 2014).</p>	<p>Unlikely – There is only one record of the Black-flanked Rock-wallaby in the DBCA threatened fauna database and it is labelled historic (no year provided). The location given is Mt Farmer which is approximately 30 km east of the survey area. However, records on the distribution map in the Action Plan for Australian Mammals indicate that it is from before 1993 (Woinarski <i>et al.</i> 2014).</p> <p>There is very limited to no suitable habitat nearby in the form of rocky areas (MBCContracting 2017) and we assume that this is the case in the survey area (from preliminary examinations of aerial imagery [Google Earth], therefore this species is considered unlikely to occur (noting that habitats in the survey area would need to be assessed on ground in order to make a better informed assessment).</p>
<p>Gilled Slender Blue-tongue (<i>Cyclodomorphus branchialis</i>) – Vu (BC Act)</p>	<p>The Gilled Slender Blue-tongue is a ground dwelling crepuscular and nocturnal species that shelters in hummock grass, leaf litter, including Acacia and under fallen logs and stumps (Chapple <i>et al.</i> 2019). This species appears to prefer deep leaf litter on sandy beaches vegetated primarily with coastal spinifex (Maryan & Reinhold 1996, Cogger 2014). However, recent records are mostly from rocky outcrops and its population is thought to be severely fragmented (Chapple <i>et al.</i> 2019).</p>	<p>Possible – There are five records of the Gilled Slender Blue-tongue in the DBCA threatened fauna database, all from 2005 and all from Mount Magnet, which is approximately 65 km south east of the survey area.</p> <p>There is some potential suitable habitat nearby in the form of rocky areas (MBCContracting 2017).</p> <p>Given the number of relatively recent records in the region and some potential suitable habitat nearby we consider this species as Possibly occurring in the survey area (noting that habitats in the survey area would need to be assessed on ground in order to make a more well-informed assessment).</p>

<p>Western Spiny-tailed Skink (<i>Egernia stokesii badia</i>) - Vu (BC Act), En (EPBC Act)</p>	<p>The Western Spiny-tailed Skink population has declined significantly as a result of land-clearing and currently occurs in small isolated subpopulations (Chapple <i>et al.</i> 2019). This species is found on rocky outcrops, hills and woodlands (Cogger 2014, Chapple <i>et al.</i> 2019).</p>	<p>Possible – There are 30 records of the Western Spiny-tailed Skink in the DBCA threatened fauna database, with the earliest record coming from 1986 and the location given as Austin Downs. The latest record comes from 2018, but no location name is provided.</p> <p>There is some potential suitable habitat nearby in the form of rocky areas (MBContracting 2017), and a similar species the Southern Pygmy Spiny-tailed Skink (<i>Egernia depressa</i>) was recorded in these rocky areas during the 2017 survey (MBContracting 2017).</p> <p>Given the number of records in the region and some potential suitable habitat nearby we consider this species as Possibly occurring in the survey area (noting that habitats in the survey area would need to be assessed on ground in order to make a more well-informed assessment).</p>
<p>Malleefowl (<i>Leipoa ocellata</i>) – Vu (BC Act), En (EPBC Act)</p>	<p>These birds have a relatively large home range that can be up to 4 km² in low rainfall areas (Booth 1987). Malleefowl prefer habitat with a dense canopy and an open ground layer in which they can construct their mounds (Benshemesh 2007). Benshemesh (1992) also found that dense canopy cover was the most important feature associated with high breeding densities at sites in Victoria. Fire history is also important with Malleefowl birds preferring old growth (i.e. long unburnt) mallee. Fire has a major influence on the structure and floristic composition of habitats that Malleefowl occupy.</p> <p>Predation by the introduced fox is also thought to be limiting the abundance of Malleefowl and in many areas may be a major cause of decline (Benshemesh 2007).</p>	<p>Possible – There are 32 records of the Malleefowl in the DBCA threatened fauna database, with the earliest record coming from 1962. The location is given as Yalgoo, which is approximately 75 km south west of the survey area. The latest record comes from 2016, and the location provided is Daggard Hills which is approximately 55 km south east of the survey area.</p> <p>One old extinct mound was found nearby while a flora survey was being undertaken in 2012 (MBContracting 2016). No sightings of Malleefowl or their mounds have been recorded by the two previous fauna assessments.</p> <p>Given the number of records in the region, the old extinct mound and some potential suitable habitat nearby (MBContracting 2016 and 2017), this species is considered as Possibly occurring in the survey area (noting that habitats in the survey area would need to be assessed on ground in order to make a better informed assessment).</p>

<p>Peregrine Falcon (<i>Falco peregrinus</i>) – OS (BC Act)</p>	<p>The Peregrine Falcon is an uncommon but wide-ranging bird across Australia (Barrett <i>et al.</i> 2003). It occurs mainly along rivers and ranges as well as wooded watercourses and lakes and nests primarily on cliffs, granite outcrops and quarries. The diet of the Peregrine Falcon has been well studied and primarily includes flocking species such as Parrots, Pigeons and on the east coast European Starlings (<i>Sturnus vulgaris</i>) (Olsen & Fuentes 2008).</p>	<p>Possible – There are 12 records of the Peregrine Falcon in the DBCA threatened fauna database, ranging from 1980 to 2017. The 2017 record is from Nalbarra Station.</p> <p>The Peregrine Falcon was recorded nearby in 2017 using Mulga trees and Gilbey’s Pit (MBCContracting 2017).</p> <p>Given that the Peregrine Falcon was recorded nearby in 2017 we consider this species as Possibly occurring in the survey area (noting that habitats in the survey area would need to be assessed on ground in order to make a better-informed assessment).</p>
<p>Fork-tailed Swift (<i>Apus pacificus</i>) - Mi (BC Act and EPBC Act)</p>	<p>The Fork-tailed Swift is a non-breeding visitor to all states and territories of Australia (Higgins 1999). The Fork-tailed Swift is a summer migrant to Australia usually during the months of October-April. The Fork-tailed Swift is an aerial species which forages high above the tree canopy and is independent of terrestrial habitats. It occurs in flocks of up to 2,000 birds and is often seen accompanying Tree Martins (<i>Petrochelidon nigricans</i>) and Masked Wood swallows (<i>Artamus personatus</i>) (Johnstone & Storr 1998).</p>	<p>Possible - There were two records in the DBCA threatened fauna database from 2001 (Walga Rock – about 55 km north east of the survey area) and 2008 (Yalgoo). While the species will not be reliant on the habitats of the survey area, it is likely to visit them as part of its larger foraging home range.</p>

5. References

- Benshemesh, J. (1992). The conservation ecology of Malleefowl, with particular regard to fire. Pages 1-224. Monash University, Clayton.
- Benshemesh, J. (2007). National Recovery Plan for Malleefowl. Department for Environment and Heritage, South Australia.
- Boles W. E., Longmore N. W. & Thompson M. C. (1994). A recent specimen of the Night Parrot *Geopsittacus occidentalis*. Emu 94, 37–40.
- Booth, D. T. (1987). Home range and hatching success of Malleefowl, *Leipoa ocellata* Gould (Megapodiidae), in Murray mallee near Renmark, S.A. Australian Wildlife Research 14, 95-104.
- Chapple, D. G., Tingley, R., Mitchell, N. J., Macdonald, S. L., Keogh, J. S., Shea, G. M., Bowles, P., Cox, N. A., & Woinarski, J. C. Z. (2019). The action plan for Australian lizards and snakes 2017. CSIRO Publishing.
- Cogger, H. (2014). Reptiles and Amphibians of Australia. CSIRO Publishing.
- Currie, D. J. (2007). Disentangling the roles of environment and space in ecology. Journal of Biogeography 34, 2009-2011.
- Davis, R., & Metcalf, B. (2008). The night parrot (*Pezoporus occidentalis*) in northern Western Australia: a recent sighting from the Pilbara region. Emu 108, 233-236.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2017). Interim guideline for preliminary surveys of night parrot (*Pezoporus occidentalis*) in Western Australia. Version 1 – May 2017.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2020). Threatened and Priority Fauna Information (custom search).
- Department of Biodiversity, Conservation and Attractions (DBCA) (2020). NatureMap: Mapping Western Australia's Biodiversity. Retrieved from <https://naturemap.dbca.wa.gov.au>
- Department of the Environment and Energy (DAWE) (2020). Protected Matters Search Tool, Accessed from <http://www.environment.gov.au/epbc/pmst/index.html> Commonwealth of Australia.
- Dooley S. (2013) Out of the shadows. Australian Birdlife 2, 26–30.
- Garnett, S. T., Szabo, J.K., & Dutton, G. (2011). The Action Plan for Australian Birds 2010. Collingwood, Victoria: CSIRO Publishing and Birds Australia.
- Geering, A., Agnew, L., & Harding, S. (eds). (2007). Shorebirds of Australia. Melbourne: CSIRO Publishing.
- Hamilton, N., A., Onus, M., Withnell, B. & Withnell K. (2017). Recent sightings of the Night Parrot *Pezoporus occidentalis* from Matuwa (Lorna Glen) and Millrose Station in Western Australia. Australian Field Ornithology 34, 71-75.
- Higgins, P. J. (ed.) (1999). Handbook of Australian, New Zealand and Antarctic Birds. Volume Four - Parrots to Dollarbird. Melbourne: Oxford University Press.
- Higgins, P. J. & Davies, S. J. J. F. (eds). (1996). Handbook of Australian, New Zealand and Antarctic Birds. Volume Three - Snipe to Pigeons. Melbourne, Victoria: Oxford University Press.
- Johnstone, R. E., Burbidge, A. H., & Darnell, J. C. (2013). Birds of the Pilbara region, including seas and offshore islands, Western Australia: distribution, status and historical changes. Records of the Western Australian Museum Supplement 78, 343–441.
- Johnstone, R. E. & Storr, G. M. (1998). Handbook of Western Australian Birds. Volume 1 - Non-Passerines (Emu to Dollarbird). Oxford University Press.
- Marchant, S., & Higgins, P. J. (eds). (1993). Handbook of Australian, New Zealand and Antarctic Birds. Volume 2 - Raptors to Lapwings. Melbourne, Victoria: Oxford University Press.

- Maryan, B., & Rheinhold, L. (1996). Herpetofauna of Dirk Hartog Island Shark Bay area, Western Australia. *Herpetofauna* 26, 8-11.
- Mathew, H. (1996). An investigation into the effect of management strategies on the home range of Chuditch (*Dasyurus geoffroii*). Honours Thesis. University of Western Australia.
- MBContracting (2016). Level 1 Fauna Assessment and Level 2 Targeted Malleefowl Survey Dalgaranga. Unpublished report prepared for Gascoyne Resources, June 2016.
- MBContracting (2017). Level 1 Fauna Assessment and Targeted Malleefowl Survey Extension of Dalgaranga Gold Project - Part Two. Unpublished report prepared for Gascoyne Resources, June 2017.
- McDougall, A., Porter G., Mostert M. et al. (2009). Another piece in an Australian ornithological puzzle – a second Night Parrot is found dead in Queensland. *Emu* 109, 198–203.
- Murphy, S.A., Silcock, J., Murphy, R., Reid, J., and Austin, J.J. (2017). Movements and habitat use of the night parrot *Pezoporus occidentalis* in south-western Queensland. *Austral Ecology* 42, 858-868.
- Native Vegetation Solutions (2016). Level 1 Flora and Vegetation Survey Gascoyne Resources Dalgaranga Tenements. Unpublished report prepared for Clark Lindbeck & Associates, June 2016.
- Olsen, J. & Fuentes, E. (2008). Dietary shifts based upon prey availability in Peregrine Falcons and Australian Hobbies breeding near Canberra, Australia. *Journal of Raptor Research* 42, 125–137.
- Pearson, D. J., & Kinnear, J. E. (1997). A review of the distribution, status and conservation of rock-wallabies in Western Australia. *Australian Mammalogy* 19, 137-152.
- Rogers, D., Hance, I., Paton, S., Tzaros, C., Griffioen, P., Herring, M., Jaensch, R., Oring, L., Silcocks, A. & Weston, M. (2005). The breeding bottleneck: Breeding habitat and population decline in the Australian Painted Snipe. In: P. Straw (ed). *Status and conservation of shorebirds in the East Asian–Australasian Flyway: Proceedings of the Australasian Shorebirds Conference, 13–15 December 2003* (pp. 15–23). Canberra.
- Van Dyck, S. & Strahan, R. (2008). *The Mammals of Australia*. New South Wales: New Holland Publishers.
- Wilson, H. (1937) Notes on the Night Parrot, with references to recent occurrences. *Emu* 37, 79–87.
- Woinarski, J. C.Z. Burbidge, A. A., & Harrison, P. L. (2014). *The action plan for Australian mammals 2012*. CSIRO Publishing.



APPENDICES

Appendix 1: Conservation Categories

Categories of Threatened Fauna Species under the EPBC Act

Conservation Code	Description
Ex	<p>Extinct</p> <p>Taxa which at a particular time if, at the time, there is no reasonable doubt that the last member of the species has died.</p>
ExW	<p>Extinct in the Wild</p> <p>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.</p>
CE	<p>Critically Endangered</p> <p>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.</p>
En	<p>Endangered</p> <p>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.</p>
Vu	<p>Vulnerable</p> <p>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.</p>
Mi	<p>Migratory</p> <p>Taxa that are listed under international agreements to which Australia is a party are protected under the EPBC Act.</p>



CONSERVATION CODES

For Western Australian Flora and Fauna

Threatened, Extinct and Specially Protected fauna or flora¹ are species² which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such.

The *Wildlife Conservation (Specially Protected Fauna) Notice 2018* and the *Wildlife Conservation (Rare Flora) Notice 2018* have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018* to be the lists of Threatened, Extinct and Specially Protected species under Part 2 of the *Biodiversity Conservation Act 2016*.

Categories of Threatened, Extinct and Specially Protected fauna and flora are:

T **Threatened species**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR **Critically endangered species**

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN **Endangered species**

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU **Vulnerable species**

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting 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.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P **Priority species**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added 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.

Assessment 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.

1 **Priority 1: Poorly-known species**

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.

2 **Priority 2: Poorly-known species**

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.

3 **Priority 3: Poorly-known species**

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.

4 **Priority 4: Rare, Near Threatened and other species in need of monitoring**

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

¹ The definition of flora includes algae, fungi and lichens

² Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

Appendix 2: Database Searches

NAME SCI	NAME COM	CLASS	CONS CODE	YEAR	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY M	GDA_LONG	GDA_LAT	NAME ID	FAMILY	GENUS	SPECIES	SUBSPECIES
<i>Actitis hypoleucos</i>	Common Sandpiper	BIRD	IA	1979	BIRDATLAS1				0			108000	117.501400000000	-28.498700000000	41323	Scolopacidae	<i>Actitis</i>	<i>hypoleucos</i>	
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	Austin, Lake	10000	117.716700000000	-27.550000000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Austin, Lake	10000	117.716700000000	-27.550000000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Day Dawn	0	117.866700000000	-27.466700000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Day Dawn	0	117.866700000000	-27.466700000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Day Dawn	0	117.866700000000	-27.466700000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Day Dawn	0	117.866700000000	-27.466700000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1908	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.666900000000	-28.332800000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1908	WAM_BIRDS				0		Yalgoo	10000	116.666900000000	-28.332800000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1899	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Cue, Murchison	0	117.900000000000	-27.432800000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Amytornis textilis textilis</i>	Western grasswren	BIRD	P4	1899	WAM_BIRDS				0		Cue, Murchison	0	117.900000000000	-27.432800000000	24541	Maluridae	<i>Amytornis</i>	<i>textilis</i>	<i>textilis</i>
<i>Apus pacificus</i>	fork-tailed swift	BIRD	IA	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Walga Rock	100	117.464700000000	-27.400900000000	25554	Apodidae	<i>Apus</i>	<i>pacificus</i>	
<i>Apus pacificus</i>	fork-tailed swift	BIRD	IA	2008	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Yalgoo Caravan Park	100	116.684700000000	-28.348700000000	25554	Apodidae	<i>Apus</i>	<i>pacificus</i>	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATA				0		Lake Austin	0	117.896900000000	-27.600800000000	24779	Scolopacidae	<i>Calidris</i>	<i>acuminata</i>	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATA				0		Lake Austin	0	117.886900000000	-27.608900000000	24779	Scolopacidae	<i>Calidris</i>	<i>acuminata</i>	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	BIRD	IA	2004	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Wetland Great Northern Hwy	100	117.901100000000	-27.581100000000	24779	Scolopacidae	<i>Calidris</i>	<i>acuminata</i>	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.900800000000	-27.580900000000	24779	Scolopacidae	<i>Calidris</i>	<i>acuminata</i>	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Lake Austin	100	117.888300000000	-27.607600000000	24779	Scolopacidae	<i>Calidris</i>	<i>acuminata</i>	
<i>Calidris ferruginea</i>	curlew sandpiper	BIRD	CR	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.900800000000	-27.580900000000	24784	Scolopacidae	<i>Calidris</i>	<i>ferruginea</i>	
<i>Calidris ruficollis</i>	red-necked stint	BIRD	IA	2012	FAUNASURVEY	Certain	Survey	Unknown	2	WELD RANGE	Cue, Lake Austin	3000	117.472500000000	-27.201100000000	24788	Scolopacidae	<i>Calidris</i>	<i>ruficollis</i>	
<i>Chlidonias leucopterus</i>	white-winged black tern	BIRD	IA	2015	BIRDATA				0		Lake Austin, Lakeside Rd causeway	0	117.817200000000	-27.526400000000	41332	Laridae	<i>Chlidonias</i>	<i>leucopterus</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	TFAUNA	Certain	Survey	Caught or trapped	2	Mount Magnet		1000	117.866700000000	-28.066700000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	TFAUNA	Certain	Survey	Caught or trapped	2	Mount Magnet		1000	117.828200000000	-28.061300000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	MOUNT MAGNET	MOUNT MAGNET	10000	117.866700000000	-28.066700000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	MOUNT MAGNET	MOUNT MAGNET	10000	117.866700000000	-28.066700000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES				0		MOUNT MAGNET	10000	117.866700000000	-28.066700000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Cyclodomorphus branchialis</i>	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES				0		MOUNT MAGNET	10000	117.866700000000	-28.066700000000	25086	Scincidae	<i>Cyclodomorphus</i>	<i>branchialis</i>	
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Yalgoo		10000	116.684700000000	-28.348700000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs/Weld Range		10000	117.384700000000	-27.398700000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Walga Rock		10000	117.468100000000	-27.398700000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2003	TFAUNA	Certain	Survey	Caught or trapped	3	Austin Downs		1000	117.470800000000	-27.398600000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Not Sure	Survey	Caught or trapped	1	Austin Downs/Weld Range		1000	117.350000000000	-27.383300000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	Weld Range/South Murchinson		1000	117.335100000000	-27.139800000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	South Murchinson		1000	117.076500000000	-27.071800000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	Weld Range/South Murchinson		1000	117.315700000000	-27.141700000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1986	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs		1000	117.383300000000	-27.400000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2003	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs		1000	117.470800000000	-27.398600000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2004	TFAUNA	Certain	Survey	Caught or trapped	1	Yalgoo		1000	116.725600000000	-28.348300000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Targeted survey	Day sighting	2	Lake Austin		1000	117.387000000000	-27.394000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Targeted survey	Day sighting	2	Lake Austin		1000	117.360000000000	-27.382000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2018	WL_REG17		Survey	Unknown	0		Egernia stokesii subsp. badia 13/10/2018.2	30	116.866400000000	-28.241400000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>subsp.</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	1	LAKE AUSTIN	SA3, SA3 29-5	100	117.491100000000	-27.407300000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	5	YALGOO	SA2, SA2 29 2	100	117.343800000000	-27.765100000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	YALGOO	SA2, SA2 29 4	100	116.739000000000	-28.110700000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	1	YALGOO	SA2, SA2 29 5	100	117.160200000000	-28.271900000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	SOUTH MURCHISON	SA1, SA1S05	100	117.289100000000	-26.972500000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	12	DAGGAR HILLS	SA2, SA2-02	100	117.678800000000	-28.443000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	YALGOO	SA2, SA2 1 4	100	117.012500000000	-28.289400000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	12	DAGGAR HILLS	SA2, SA2 3 1	100	117.657100000000	-28.413200000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	PAYNES FIND	SA2, SA2 3 2	100	117.552200000000	-28.567500000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	3	YALGOO	SA2, SA2 4 1	100	117.174500000000	-28.257600000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1986	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WOOLGERONG ROCK	10000	117.383300000000	-27.400000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WOOLGERONG ROCK	10000	117.382800000000	-27.400000000000	25107	Scincidae	<i>Egernia</i>	<i>stokesii</i>	<i>badia</i>
<i>Egernia stokesii badia</i>	western spiny-tailed skink	REPTILE	VU	1998	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	WELD RANGE	WURRAH ROCK	10000	117.350000000000	-27.383300000000	25107	Scincidae	<i>Egernia</</i>		

<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2011	BIRDATA				0		Walga Rock	0	117.0342000000	-27.3958000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2014	BIRDATA				0		Nalbarra Station	0	117.6075000000	-28.6492000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2017	BIRDATA				0		Nalbarra Station Grid Soak	0	117.6347000000	-28.6399000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	1980	BIRDATLAS1	Moderately certain	Observational	Sighting	1	WELD RANGE	WELD RANGE	18000	117.5847000000	-27.2487000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Noongal Station	100	117.1464000000	-27.8701000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Walga Rock	500	117.4625000000	-27.4029000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Muralgarra Homestead	100	117.0334000000	-28.5251000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	WELD RANGE	Claypan, The Glen Station	500	117.4119000000	-26.9973000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2008	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Yalgoo Caravan Park	100	116.6847000000	-28.3487000000	25624	Falconidae	Falco	peregrinus
<i>Falco peregrinus</i>	peregrine falcon	BIRD	OS	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Walga Rock	100	117.0342000000	-27.3958000000	25624	Falconidae	Falco	peregrinus
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1978	BIRDATLAS1				0			108000	116.5014000000	-27.4987000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.9181000000	-27.5820000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.9181000000	-27.5820000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	117.5014000000	-27.4987000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.9181000000	-27.5820000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.9181000000	-27.5820000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	117.5014000000	-27.4987000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	116.5014000000	-27.4987000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Gelochelidon nilotica</i>	gull-billed tern	BIRD	IA	2006	BIRDATLAS2				0		Lake Austin	100	117.8897000000	-27.6106000000	47954	Sturnidae	Gelochelidon	nilotica
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1980	BIRDATLAS1	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	LAKE AUSTIN	108000	117.5014000000	-27.4987000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	DAGGAR HILLS	20km NW of Mount Magnet	100	117.6408000000	-27.9487000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.8667000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.8667000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.8667000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.6828000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.6828000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.6833000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Gnows Nest via Yalgoo	10000	116.8667000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Gnows Nest via Yalgoo	10000	116.8667000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.6828000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.6828000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.6833000000	-28.3500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	2016	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Daggar Hills		1000	117.7822000000	-27.9303000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	2001	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	YALGOO		1000	116.7500000000	-28.5000000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	2001	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	DAGGAR HILLS		500	117.6394000000	-27.9500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1972	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		1000	116.8667000000	-28.6833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1966	TFAUNA	Moderately certain	Historical (written)	Secondary sign	1	YALGOO		1000	116.9500000000	-28.6833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1996	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	DAGGAR HILLS		1000	117.3460000000	-28.2053000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	1	LAKE AUSTIN		50000	117.9000000000	-27.4166000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1966	TFAUNA	Moderately certain	Historical (written)	Secondary sign	1	YALGOO		50000	116.9167000000	-28.6666000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		1000	116.9167000000	-28.6666000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1964	TFAUNA	Moderately certain	Historical (written)	Secondary sign	0	YALGOO		1000	116.8520000000	-28.5794000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1980	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		10000	116.9167000000	-28.6666000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1972	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.9167000000	-28.6666000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1974	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.8500000000	-28.5833000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1975	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.9167000000	-28.6666000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.7333000000	-27.7500000000	24557	Megapodiidae	Leipoa	ocellata
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	SOUTH MURCHISON		50000	117.1833000000	-27.1333000000	24557	Megapodiidae	Leipoa	ocellata

<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	1980	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	LAKE AUSTIN		50000	117.500000000000	-27.500000000000	24557	Megapodiidae	<i>Leipoa</i>	<i>ocellata</i>
<i>Leipoa ocellata</i>	malleefowl	BIRD	VU	0	TFAUNA	Certain	Historical (written)	Secondary sign	0	Cue		1000	117.852600000000	-27.447100000000	24557	Megapodiidae	<i>Leipoa</i>	<i>ocellata</i>
<i>Leporillus conditor</i>	greater stick-nest rat, wopikara	MAMMAL	CD	2012	TFAUNA	Not Sure	Opportunistic sighting	Secondary sign	0	East Murchison		1000	117.254000000000	-27.192400000000	24219	Muridae	<i>Leporillus</i>	<i>conditor</i>
<i>Lerista eupoda</i>	West Coast mulga slider	REPTILE	P1	0	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Coodardy		10000	117.566700000000	-27.266700000000	25134	Scincidae	<i>Lerista</i>	<i>eupoda</i>
<i>Lerista eupoda</i>	West Coast mulga slider	REPTILE	P1	1984	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	WELD RANGE	COODARDY HS	10000	117.583300000000	-27.266700000000	25134	Scincidae	<i>Lerista</i>	<i>eupoda</i>
<i>Lerista eupoda</i>	West Coast mulga slider	REPTILE	P1	1984	WAM_REPTILES				0		COODARDY HS	10000	117.583300000000	-27.266700000000	25134	Scincidae	<i>Lerista</i>	<i>eupoda</i>
<i>Limosa lapponica</i>	bar-tailed godwit	BIRD	IA	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Claypan, Austin Downs Station	100	117.653600000000	-27.422000000000	30932	Scolopacidae	<i>Limosa</i>	<i>lapponica</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	CUE	10000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	EMILY GOLD MINE	50000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	EMILY GOLD MINE	50000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0			10000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0		EMILY GOLD MINE	50000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Macrotis lagotis</i>	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0		EMILY GOLD MINE	50000	117.900000000000	-27.433300000000	24168	Thylacomyidae	<i>Macrotis</i>	<i>lagotis</i>
<i>Oxyura australis</i>	blue-billed duck	BIRD	P4	2016	BIRDATA				0		Meeline Swamp	0	117.844200000000	-28.340600000000	24328	Anatidae	<i>Oxyura</i>	<i>australis</i>
<i>Petrogale lateralis lateralis</i>	black-flanked rock-wallaby	MAMMAL	EN	0	TFAUNA	Moderately certain	Historical (written)	Dead	0	Mt Farmer		10000	117.416700000000	-27.700000000000	24142	Macropodidae	<i>Petrogale</i>	<i>lateralis</i> <i>lateralis</i>
<i>Pezoporus occidentalis</i>	night parrot	BIRD	CR	0	TFAUNA	Certain	Historical (written)	Dead	1	Daggar Hills		10000	117.492000000000	-27.798000000000	24743	Psittacidae	<i>Pezoporus</i>	<i>occidentalis</i>
<i>Thinornis rubricollis</i>	hooded plover	BIRD	P4	2000	TFAUNA	Certain	Community survey	Day sighting	2	Lake Austin		50000	117.900000000000	-27.616700000000	48135	Charadriidae	<i>Thinornis</i>	<i>rubricollis</i>
<i>Thinornis rubricollis</i>	hooded plover	BIRD	P4	2000	TFAUNA	Certain	Community survey	Day sighting	2	Lake Austin		1000	117.901100000000	-27.581400000000	48135	Charadriidae	<i>Thinornis</i>	<i>rubricollis</i>
<i>Thinornis rubricollis</i>	hooded plover	BIRD	P4	2000	BIRDATLAS2				0		Cue South	500	117.902500000000	-27.580100000000	48135	Charadriidae	<i>Thinornis</i>	<i>rubricollis</i>
<i>Thinornis rubricollis</i>	hooded plover	BIRD	P4	2012	FAUNASURVEY	Certain	Survey	Unknown	500	WELD RANGE	Cue, Lake Austin	3000	117.472500000000	-27.201100000000	48135	Charadriidae	<i>Thinornis</i>	<i>rubricollis</i>
<i>Tringa glareola</i>	wood sandpiper	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.900800000000	-27.580800000000	24806	Scolopacidae	<i>Tringa</i>	<i>glareola</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	2011	BIRDATA				0		Lake Austin - Lakeside Rd	0	117.816700000000	-27.525000000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	2015	BIRDATA				0		Lake Austin	0	117.253100000000	-27.604400000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	1978	BIRDATLAS1	Moderately certain	Observational	Sighting	1	YALGOO	YALGOO	18000	117.251400000000	-28.415400000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Claypan, Austin Downs Station	100	117.653600000000	-27.422000000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.900800000000	-27.580800000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Lake Austin - Lakeside Rd	0	117.816700000000	-27.525000000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>
<i>Tringa nebularia</i>	common greenshank	BIRD	IA	2012	FAUNASURVEY	Certain	Survey	Unknown	45	WELD RANGE	Cue, Lake Austin	3000	117.472500000000	-27.201100000000	24808	Scolopacidae	<i>Tringa</i>	<i>nebularia</i>

NatureMap Species Report

Created By Guest user on 09/02/2020

Kingdom Animalia
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 117° 12' 54" E, 27° 51' 22" S
Buffer 40km
Group By Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	119	1319
Other specially protected fauna	1	1
Priority 3	1	1
Protected under international agreement	1	1
Rare or likely to become extinct	4	5
TOTAL	126	1327

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Rare or likely to become extinct				
1.	25107 <i>Egernia stokesii</i> subsp. <i>badia</i> (Western Spiny-tailed Skink, Gidgee Skink)		T	
2.	33917 <i>Idiosoma nigrum</i> (Shield-backed Trapdoor Spider)		T	
3.	24142 <i>Petrogale lateralis</i> subsp. <i>lateralis</i> (Black-flanked Rock-wallaby, Black-footed Rock-wallaby)		T	
4.	24743 <i>Pezoporus occidentalis</i> (Night Parrot)		T	
Protected under international agreement				
5.	24808 <i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
Other specially protected fauna				
6.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
Priority 3				
7.	33936 <i>Branchinella wellardi</i> (fairy shrimp (Carnavon and Murchison))		P3	
Non-conservation taxon				
8.	24559 <i>Acanthagenys rufogularis</i> (Spiny-cheeked Honeyeater)			
9.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
10.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
11.	25527 <i>Acanthiza iredalei</i> (Samphire Thornbill, Slender-billed Thornbill)			
12.	24264 <i>Acanthiza robustirostris</i> (Slaty-backed Thornbill)			
13.	24265 <i>Acanthiza uropygialis</i> (Chestnut-rumped Thornbill)			
14.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
15.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
16.	25544 <i>Aegotheles cristatus</i> (Australian Owllet-nightjar)			
17.	24312 <i>Anas gracilis</i> (Grey Teal)			
18.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
19.	25528 <i>Aphelocephala leucopsis</i> (Southern Whiteface)			
20.	24268 <i>Aphelocephala nigricincta</i> (Banded Whiteface)			
21.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
22.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
23.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
24.	24610 <i>Ardeotis australis</i> (Australian Bustard)			
25.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
26.	24355 <i>Artamus minor</i> (Little Woodswallow)			
27.	24356 <i>Artamus personatus</i> (Masked Woodswallow)			
28.	<i>Barnardius zonarius</i>			
29.	24359 <i>Burhinus grallarius</i> (Bush Stone-curlew)			
30.	24564 <i>Certhionyx variegatus</i> (Pied Honeyeater)			
31.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
32.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
33.	47909 <i>Cheramoeca leucosterna</i> (White-backed Swallow)			
34.	25580 <i>Cincoloma castaneothorax</i> (Chestnut-breasted Quail-thrush)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
35.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
36.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
37.	24361 <i>Coracina maxima</i> (Ground Cuckoo-shrike)			
38.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
39.	24416 <i>Corvus bennetti</i> (Little Crow)			
40.	25592 <i>Corvus coronoides</i> (Australian Raven)			
41.	25593 <i>Corvus orru</i> (Torresian Crow)			
42.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
43.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
44.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
45.	24869 <i>Ctenophorus caudicinctus</i> subsp. <i>mensarum</i> (Ring-tailed Dragon)			
46.	24886 <i>Ctenophorus reticulatus</i> (Western Netted Dragon)			
47.	24889 <i>Ctenophorus scutulatus</i> (Lozenge-marked Dragon)			
48.	25052 <i>Ctenotus leonhardii</i>			
49.	25075 <i>Ctenotus severus</i>			
50.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
51.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
52.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
53.	25092 <i>Egernia depressa</i> (Southern Pygmy Spiny-tailed Skink)			
54.	47937 <i>Eelseyornis melanops</i> (Black-fronted Dotterel)			
55.	<i>Eolophus roseicapillus</i>			
56.	24567 <i>Epthianura albifrons</i> (White-fronted Chat)			
57.	24570 <i>Epthianura tricolor</i> (Crimson Chat)			
58.	25621 <i>Falco berigora</i> (Brown Falcon)			
59.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
60.	25623 <i>Falco longipennis</i> (Australian Hobby)			
61.	25727 <i>Fulica atra</i> (Eurasian Coot)			
62.	24958 <i>Gehyra punctata</i>			
63.	24959 <i>Gehyra variegata</i>			
64.	24401 <i>Geopelia cuneata</i> (Diamond Dove)			
65.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
66.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
67.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
68.	24961 <i>Heteronotia binoei</i> (Bynoe's Gecko)			
69.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
70.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
71.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
72.	24572 <i>Lacustroica whitei</i> (Grey Honeyeater)			
73.	25137 <i>Lerista gerrardii</i>			
74.	25157 <i>Lerista nichollsi</i>			
75.	42411 <i>Lerista timida</i>			
76.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
77.	41417 <i>Liopholis striata</i> (Night Skink)			
78.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
79.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
80.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
81.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
82.	47997 <i>Melanodryas cucullata</i> (Hooded Robin)			
83.	24736 <i>Melopsittacus undulatus</i> (Budgerigar)			
84.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
85.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
86.	25425 <i>Neobatrachus kunapalari</i> (Kunapalari Frog)			
87.	25427 <i>Neobatrachus sutor</i> (Shoemaker Frog)			
88.	24737 <i>Neophema bourkii</i> (Bourke's Parrot)			
89.	<i>Neopsephotus bourkii</i>			
90.	24742 <i>Nymphicus hollandicus</i> (Cockatiel)			
91.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
92.	24976 <i>Oedura marmorata</i> (Marbled Velvet Gecko)			
93.	24618 <i>Oreoica gutturalis</i> (Crested Bellbird)			
94.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
95.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
96.	48060 <i>Petrochelidon ariel</i> (Fairy Martin)			
97.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
98.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
99.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
100.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
101.	24681 <i>Poliocephalus poliocephalus</i> (Hoary-headed Grebe)			
102.	24683 <i>Pomatostomus superciliosus</i> (White-browed Babbler)			
103.	25706 <i>Pomatostomus temporalis</i> (Grey-crowned Babbler)			
104.	25262 <i>Pseudechis butleri</i> (Spotted Mulga Snake)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
105.	25434 <i>Pseudophryne occidentalis</i> (Western Toadlet)			
106.	24390 <i>Psophodes occidentalis</i> (Western Wedgebill, Chiming Wedgebill)			
107.	<i>Ptilonorhynchus guttatus</i>			
108.	42344 <i>Purnella albifrons</i> (White-fronted Honeyeater)			
109.	24278 <i>Pyrrholaemus brunneus</i> (Redthroat)			
110.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
111.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
112.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
113.	24982 <i>Rhynchoedura ornata</i> (Western Beaked Gecko)			
114.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
115.	30948 <i>Smicromis brevirostris</i> (Weebill)			
116.	24108 <i>Sminthopsis crassicaudata</i> (Fat-tailed Dunnart)			
117.	<i>Storena sinuosa</i>			
118.	24946 <i>Strophurus strophurus</i>			
119.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
120.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
121.	30870 <i>Taeniopygia guttata</i> (Zebra Finch)			
122.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
123.	42351 <i>Todiramphus pyrrhopygius</i> (Red-backed Kingfisher)			
124.	24851 <i>Turnix velox</i> (Little Button-quail)			
125.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
126.	25211 <i>Varanus caudolineatus</i>			

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: 09/02/20 13:58:43

[Summary](#)

[Details](#)

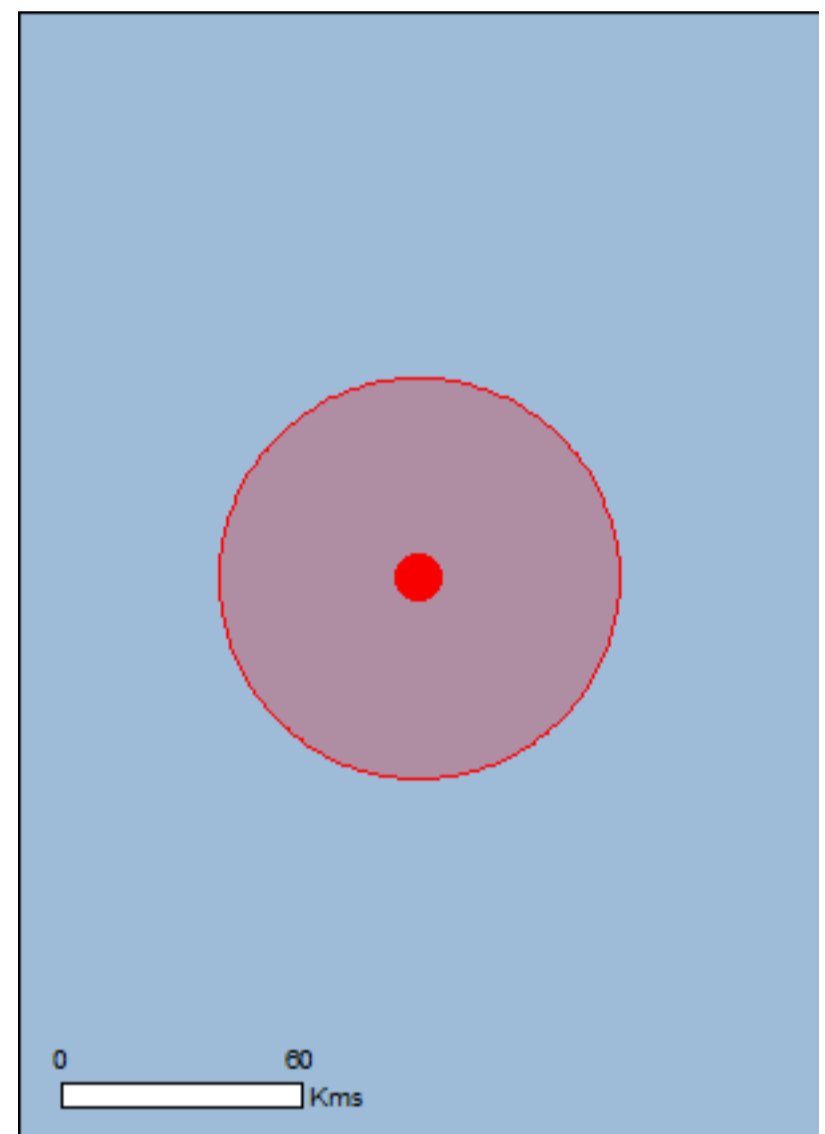
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

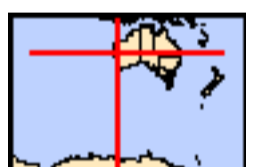
[Acknowledgements](#)



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

[Coordinates](#)

Buffer: 50.0Km



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:	7
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:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	12
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:	2
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

Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
---	-----------------------	--

Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
---	------------	---

Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area
--	------------	--

Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
--	------------	--

Other

Idiosoma nigrum Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat known to occur within area
--	------------	---

Plants

Ricinocarpos brevis [82879]	Endangered	Species or species habitat may occur within area
--	------------	--

Reptiles

Egernia stokesii badia Western Spiny-tailed Skink, Baudin Island Spiny-tailed Skink [64483]	Endangered	Species or species habitat known to occur within area
--	------------	---

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 Marine Birds

Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
---	--	--

Migratory Terrestrial Species

Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
---	--	--

Migratory Wetlands Species

Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within
--	--	---

Name	Threatened	Type of Presence area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

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
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		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

Name	Threatened	Type of Presence
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Dalgaranga and Noongal Pastoral Leases	WA
Lakeside Pastoral Lease	WA

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
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area

Mammals

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

Name	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 likely to 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

-27.85611 117.215

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.