

www.subsea7.com

# AUSTRALIA BUNDLE SITE

# SUPPLIERS FRONT SHEET (FOR A4/A3 DOCUMENTS ONLY)

SUPPLIERS NAME	360 Environmental Pty Ltd
PURCHASE ORDER NO:	4300233403-01
DOCUMENT TITLE	Learmonth Pipeline Fabrication Facility Level 1 Fauna Survey
TOTAL NO OF PAGES	79
SUPPLIERS ORDER NO:	

SUPPLIERS OWN DOCUMENT NUMBER	SUPPLIERS REVISION	DATE	SUPPLIERS APPROVAL SIGNATURE
APFAC017-233403-HSE-00007	2198AL	25/10/2018	Who

	SUPPLIER DOCUMENT REVIEW		
	Reviewed and no comment. Submit final version of document as required.		
	Revise and resubmit. Work may proceed subject to incorporation of changes indicated.		
	3. Revise and resubmit. Work may not proceed.		
	4. For information.		
Permission to proceed does not constitute acceptance of design details, calculations, test methods or materials developed or selected by Supplier and does not relieve Supplier from full compliance with full contractual and other obligations nor detract from any of the purchaser's rights.			
Engineer's			

Date:

PACKAGE DESCRIPTION	Environmental Approvals and Project Management			
SAP NO	1 31(3) 11 (3)			REV NO
APFAC017	4300233403- 01			

Signature:



Learmonth Pipeline Fabrication Facility

# Level 1 Fauna Survey

Prepared for:

Subsea 7

October 2018

• people • planet • professional

Document Reference	Revision	Prepared	Reviewed by	Submitted to Client	
Document Reference	Revision	by		Copies	Date
2198AL	A - INTERNAL DRAFT	LS	RF, SS	1 Electronic (email)	18/08/17
2198AL	B - CLIENT DRAFT	LS	SH	1 Electronic (email)	22/08/17
2198AL	C - CLIENT FINAL	LS	Subsea 7	1 Electronic (email)	23/10/17
2198AL	D - FINAL	EW	SW/TS	1 Electronic (email)	14/09/18
2198AL	E – FINAL	АН	SW/TS/HT	1 Electronic (email)	25/10/18

#### Disclaimer

This report is issued in accordance with, and is subject to, the terms of the contract between the Client and 360 Environmental Pty Ltd, including, without limitation, the agreed scope of the report. To the extent permitted by law, 360 Environmental Pty Ltd shall not be liable in contract, tort (including, without limitation, negligence) or otherwise for any use of, or reliance on, parts of this report without taking into account the report in its entirety and all previous and subsequent reports. 360 Environmental Pty Ltd considers the contents of this report to be current as at the date it was produced. This report, including each opinion, conclusion and recommendation it contains, should be considered in the context of the report as a whole. The opinions, conclusions and recommendations in this report are limited by its agreed scope. More extensive, or different, investigation, sampling and testing may have produced different results and therefore different opinions, conclusions and recommendations. Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this cover page, without the prior written consent of 360 Environmental Pty Ltd.

© Copyright 2018 360 Environmental Pty Ltd ACN 109 499 041



# Executive Summary

360 Environmental Pty Ltd (360 Environmental) was commissioned by Subsea 7 to undertake a Level 1 Fauna Survey of the proposed Learmonth Pipeline Fabrication Facility. The purpose of the survey was to help determine the environmental values within and in proximity to the proposed development envelope.

The Survey Area was 547.2 ha in size, located approximately 35 km south of the Exmouth town site, in the Carnarvon biogeographic region of Western Australia.

A Department of Parks and Wildlife (DPaW, now the Department of Biodiversity Conservation and Attractions) threatened fauna database radial search (30 km), a *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search Tool (10km) and a NatureMap search (10 km) were undertaken to identify fauna species of conservation significance potentially occurring in the Survey Area.

Database searches returned 128 vertebrate fauna species from 50 families as potentially occurring in the vicinity of the Survey Area. Of these there were 22 reptile species from six families, 84 bird species from 32 families and 22 mammal species from 12 families.

A total of 58 conservation significant species (including Priority species) were returned from database searches, comprising three reptile, 44 bird and 11 mammal species.

During the field assessment 40 species from 29 families were recorded. This consisted of five reptile species from five families, 29 bird species from 20 families and six mammal species from four families. Six conservation significant species were recorded; the Osprey, Lesser Sand Plover, Caspian Tern, Lesser Crested Tern, Crested Tern and Rainbow Beeeater. No 'critical habitat' for any of these species was recorded within the Survey Area.

Fifteen fauna habitat assessments were undertaken during the survey and four broad fauna habitats were identified and mapped (Beach, Hummock Grassland, Tecticornia Shrubland and Minor Drainage Line).



# Table of Contents

1	Introduction	1
1.1	Background	. 1
1.2	Objectives and Scope	. 1
2	Biophysical Environment	3
2.1	Climate	3
2.2	Biogeographic Regionalisation for Australia	4
2.3	Broad Vegetation	4
2.4	Previous Biological Studies	4
3	Methods	6
3.1	Desktop Assessment	6
3.2	Level 1 Fauna Survey	7
4	Results	12
4.1	Limitations and Constraints	12
4.2	Desktop Assessment	13
4.3	Field Survey	15
5	Discussion	18
5.1	Fauna of Conservation Significance	18
6	Conclusion	25
7	References	26
8	Limitations	28



# List of Tables

Table 1: Summary of Previous Fauna Surveys Undertaken in the Region	5
Table 2: Motion Sensitive Camera Locations (co-ordinates are in UTMs [GDA94])	9
Table 3: Limitations and Constraints Associated with the Survey Area	12
Table 4: Conservation Significant Fauna Potentially Occurring in the Survey Area	15
Table 5: Fauna Habitat in the Survey Area	16
List of Figures	
Figure 1: Location of the Survey Area	2
Figure 2: Monthly rainfall, long-term average rainfall and maximum and minimum temperature for Learmonth Airport (5007) (Bureau of Meteorology, 2018)	3
Figure 3a: Fauna Habitat	30
Figure 3b: Fauna Habitat	31
List of Plates	
Plate 1: An example of an SM2 Unit	9
Plate 2: An example of a Motion Sensitive Camera	10

# List of Appendices

Appendix A Definition of Threatened Fauna Species Categories

Appendix B Database Search Results

Appendix C Fauna Species List

Appendix D Habitat Assessments



# 1 Introduction

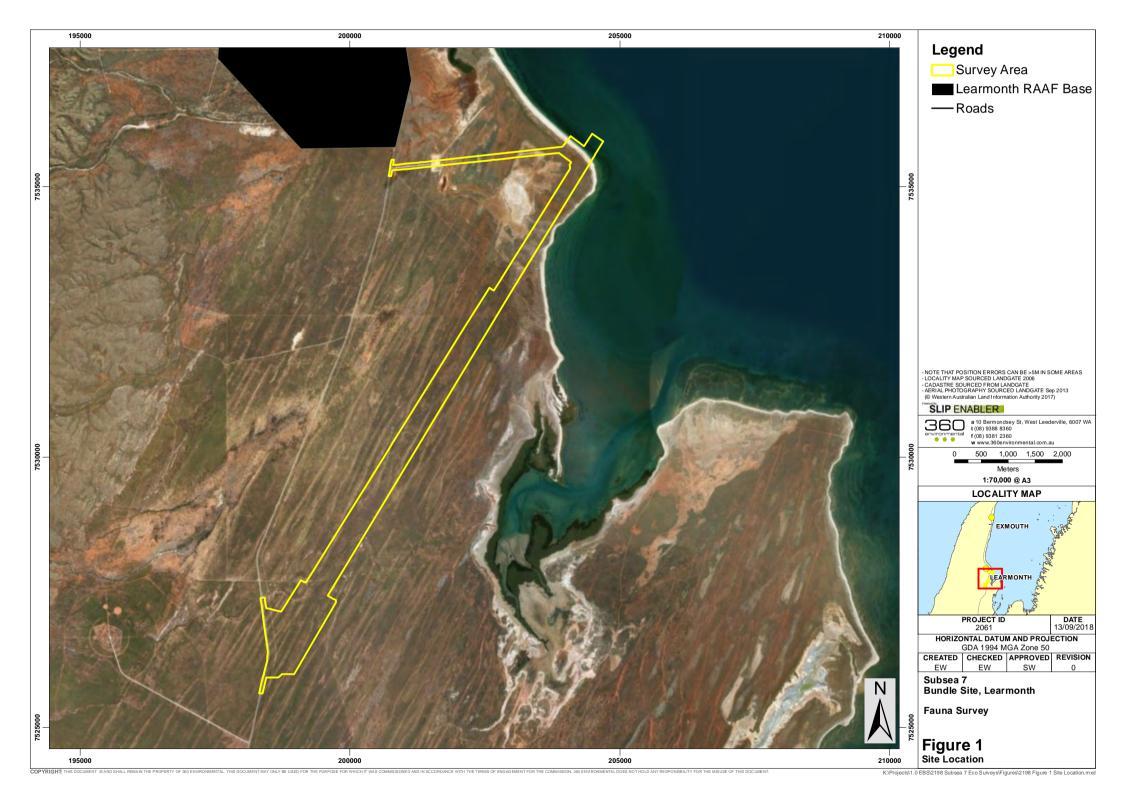
# 1.1 Background

360 Environmental Pty Ltd (360 Environmental) was commissioned by Subsea 7 to undertake a Level 1 Fauna Survey and a Habitat Assessment for their proposed development envelope near Learmonth, Western Australia (Figure 1). The Survey Area is 547.2 ha in size, located approximately 35 km south of the Exmouth town site, in the Carnarvon biogeographic region of Western Australia.

# 1.2 Objectives and Scope

The objectives of the fauna survey were to determine the environmental values within and adjacent to the proposed development envelope. This report has been written in accordance with the requirements of the Environmental Protection Authorities (EPA) Technical Guidance- Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia (2004). The scope of work for the fauna survey included:

- A desktop assessment of relevant literature, databases and spatial datasets to determine the likelihood of occurrence of fauna of conservation significance;
- A Level 1 fauna survey that included nocturnal spotlighting, motion cameras and bat monitoring;
- A fauna habitat assessment and mapping of habitat types within the Survey Area;
   and
- Provision of a report documenting the results of the desktop review and field assessment(s).





# 2 Biophysical Environment

# 2.1 Climate

The closest long term official Bureau of Meteorology (BoM) weather station currently operating near to the Survey Area is at Learmonth Airport (Station number 5007), approximately 2.5 km to the north of the Survey Area.

### Level 1 Fauna Field Survey (June 2017)

Learmonth Airport recorded 269.30 mm of rain in the 12 months prior to the Level 1 survey. This is 43.7 mm above the long-term average rainfall of 260.7 mm for the same period (BoM 2018). For the four months prior to the survey, Exmouth recorded 62 mm of rainfall or 38.2% (38.3 mm) below the long-term average of 100.3 mm (Figure 2) (BoM 2018).

# Additional Fauna Habitat Assessment (August 2018)

Learmonth Airport recorded 154.6 mm rainfall in the 12 months prior to the additional fauna habitat assessment. This included a major rainfall event in June with a total of 91.2 mm of rainfall, which is 48 mm above the long-term average for the month (Figure 2) (BoM 2018).

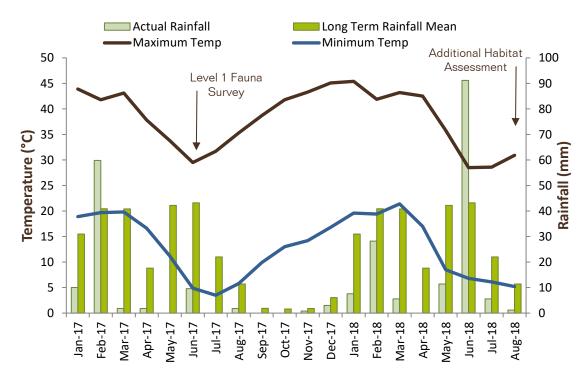


Figure 2: Monthly rainfall, long-term average rainfall and maximum and minimum temperature for Learmonth Airport (5007) (Bureau of Meteorology, 2018)



# 2.2 Biogeographic Regionalisation for Australia

The Biogeographic Regionalisation of Australia (IBRA7) divides Australia into 89 bioregions based on major biological and geographical/geological attributes. These bioregions are subdivided into 419 subregions, as part of a refinement of the IBRA framework. The Survey Area lies within the Carnarvon Bioregion and Cape Range subregion.

The Carnarvon bioregion is composed of quaternary alluvial, aeolian and marine sediments overlying Cretaceous strata. A mosaic of saline alluvial plains with samphire and saltbush low shrublands, Bowgada low woodland on sandy ridges and plains, Snakewood scrub on clay flats and tree to shrub steppe over hummock grasslands on and between red sand dune fields. Limestone strata with *Acacia stuartii* or *A. bivenosa* shrubland outcrop in the north, where extensive tidal flats in sheltered embayments support Mangal (Kendrick & Mau 2002).

# 2.3 Broad Vegetation

Mapping of Pre-European vegetation within Western Australia was completed on a broad scale (1:1,000,000) by Beard (1975) and later re-assessed by Shepherd et al. (2001) with some larger vegetation units divided into smaller units. The combined Pre-European database contains a total of 819 vegetation types within Western Australia where two broad vegetation types were identified and mapped over the Survey Area. The Shepherd et al. (2001) vegetation type in the Survey Area (along with the corresponding Beard [1975] type, in brackets) is described below:

- Cape Range (117) Grass-steppe Hummock grassland Triodia spp.; and
- Coastal Dunes (662) Hummock grassland; shrub steppe; mixed Acacia scrub and dwarf scrub with soft spinifex and Triodia basedowii.

# 2.4 Previous Biological Studies

There have been a limited number of on ground and desktop assessments surrounding the Survey Area in the recent past. 360 Environmental was commissioned in 2015 to undertake a Level 1 Flora, Vegetation and Fauna Assessment for Lots 1403 and 1404 Truscott Crescent, Exmouth (about 35 km north of this current Survey Area). The Survey Area was one of five proposed caravan park sites. Given this is a fauna assessment we will only summarise the results of the fauna components of this previous work (Table 1). Please note, the Star Finch (Neochmia ruficauda sclarescens) is no longer a conservation significant species.



# Table 1: Summary of Previous Fauna Surveys Undertaken in the Region

\*Conservation significance is based on listing as of submission date on report and includes species listed as Priority species by DPaW, Scheduled under the WC act and threatened under the EPBC Act.

REFERENCE	SURVEY TYPE	SURVEY DATE	PROXIMITY TO SURVEY AREA	METHODS	HABITATS PRESENT	*CONSERVATION SIGNIFICANT SPECIES
Tourism WA Level 1 Flora, Vegetation and Fauna Assessment for Lots 1403 and 1404 Truscott Crescent, Exmouth (360 Environmental, 2015)	Level 1 Survey	6-7 May 2015	The area assessed is approximately 35 km to the north of the Survey Area	Desktop assessment - database searches and field survey	Sand Dune Acacia shrublands Buffel grassland	Three conservation significant species were recorded during the survey:      Osprey (Pandion cristatus), which was observed perching in the Survey Area      Rainbow Bee-eater (Merops ornatus) a number of which were observed foraging in the Survey Area.      Star Finch (Neochmia ruficauda clarescens) was observed perched in the Survey Area.



# 3 Methods

The fauna survey was undertaken in accordance with the EPA requirements for the environmental surveying and reporting of fauna in Western Australia and EPBC Act survey and referral guidelines, where practical and relevant, and follows:

- Terrestrial Biological Surveys as an Element of Biodiversity Protection. Position Statement No. 3 (EPA 2002);
- Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No. 56 (EPA 2004);
- Technical Guide Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA-DEC 2010);
- Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines
   6.2 (2010) (DSEWPaC);
- Survey Guidelines for Australia's Threatened Frogs. EPBC Act survey guidelines
   6.3 (2010) (DSEWPaC);
- Survey Guidelines for Australia's Threatened Mammals. EPBC Act survey guidelines 6.5 (2011) (DSEWPaC); and
- Survey Guidelines for Australia's Threatened Reptiles. EPBC Act survey guidelines 6.6 (2011) (DSEWPaC).

# 3.1 Desktop Assessment

A 30 km Department of Biodiversity, Conservation and Attractions (DBCA) threatened fauna database search, and a 10 km NatureMap and EPBC Protected Matters Search Tool (PMST) radial search were each undertaken (Appendix B). The searches were undertaken to identify fauna species of conservation significance potentially occurring in the Survey Area (DPaW 2017a; DPaW 2017b and DEE 2017).

Collectively, these sources were used to compile a list of species that have been previously recorded in the vicinity of the Survey Area (Appendix C). This list invariably includes 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. waders/shorebirds that require coastal shores for habitat. Some fauna may also have become locally extinct or were erroneously identified in previous surveys. These fauna were examined and then excluded from the list where relevant.



# 3.1.1 Likelihood of Occurrence Criteria

The Likelihood of Occurrence for each species is based on the following criteria:

- Recorded: Recorded during the field survey;
- 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; and
- 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.

# 3.2 Level 1 Fauna Survey

The field assessment was undertaken from 13 - 16 June 2017. The survey was consistent with standard protocols for the region and relevant EPA Guidance Statements and EPBC Act Survey Guidelines as outlined above in section 3.1 (where relevant and practical).

To verify the accuracy of the background research, the field component of the Level 1 fauna survey incorporated the following tasks:

- Utilising passive sampling which included:
  - o Hand foraging for inactive and/or cryptic species (raking leaf litter, searching under rocks and logs and under loose litter);
  - o Looking for scats, pellets, skeletal material, tracks, diggings; and
  - o Opportunistic observations (visual or heard) of active species, in particular birds.
- Assessment of the habitat (within the Survey Area) to support species protected under State and/or Federal legislation or by the DBCA as a Priority species was undertaken

Amphibians, reptiles and mammals are mainly recorded through intensive trapping (level 2 type surveys) and are infrequently recorded opportunistically. However, these animals were noted when active, or by identifiable signs such as scats, tracks and diggings.

#### 3.2.1 Habitat Assessments

Habitat assessments were undertaken throughout the Survey Area to define and delineate (map habitats) the main habitats present (Figures 3a & 3b).

Each habitat description includes the following information:

GPS co-ordinate recorded:



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

### 3.2.2 Nocturnal Spotlighting

Spotlighting and head torching at night from vehicles and on foot is an important survey tool as much of the region's fauna is nocturnal and/or crepuscular, particularly conservation significant species. Nocturnal searches were conducted (two Zoologists searching for 60 minutes each, over two nights), totalling 240 minutes. In addition, spotlighting was also conducted from the vehicle while driving to the Survey Area and between spotlighting areas.

#### 3.2.3 Bat Monitoring

Song Meter 2 (SM2) acoustic recording units were set up in suitable habitat at night to target micro-bat species. SM2 units were set up at two different locations (Figures 3a & 3b; Plate 1).





Plate 1: An example of an SM2 Unit

# 3.2.4 Camera Traps

Camera traps were setup during the field survey at eight separate locations for two nights per location (Table 2; Figures 3a & 3b; Plate 2). Camera traps were baited with sardines and universal bait (peanut butter, oats and water) and placed in their field of view. Cameras were used to target species of conservation significance that may occur in the Survey Area.

Table 2: Motion Sensitive Camera Locations (co-ordinates are in UTMs [GDA94])

CAMERA NUMBER	EASTING	Northing	DATES PLACED OUT
1	201998	7535474	13 – 15/06/17
2	202895	7535572	13 – 15/06/17
3	204181	204181 7535618 13 – 15/06/1	
6	202958 7533162 13 – 15		13 – 15/06/17
8	199375	375	
9	199300	00 7527300 14 – 16/06/17	
10	198634 7526316 14 – 16/06/17		14 – 16/06/17
12	199650	7527725	14 – 16/06/17





Plate 2: An example of a Motion Sensitive Camera

#### 3.2.5 Taxonomy

For species identified in the desktop assessment, where there is doubt as to their true taxonomy (through subsequent name changes or taxonomic reviews), an effort was made to determine the current scientific name for each species. In some cases, old scientific names may be presented where correct nomenclature could not be determined due to name changes. Some taxon names may be followed by 'sp.', meaning that the species name was not given in the data source or the identification is in doubt. Where there are previously recorded species such as this that have the potential to be a conservation significant species, they are discussed specifically in the results and discussion section.

Taxonomy and nomenclature in this report follows the accepted listing of published terrestrial vertebrate species. The listing for amphibians and reptiles follows Cogger (2014), birds follows Christidis & Boles (2008) and mammals Van Dyck & Strahan (2008).

#### 3.2.6 Additional Habitat Assessment

An additional habitat assessment was undertaken from 31 July - 6 August 2018 throughout the Survey Area to define and delineate (map habitats) the main habitats present (Figures 3a & 3b). The additional habitat assessment was undertaken to confirm the extent of the fauna habitats within the Survey Area (which had increased from the 2017 field survey). The additional habitat assessments allowed for the accurate extrapolation of the previously



identified habitats to extend to the boundary of the Survey Area. This was completed by botanists undertaking flora and vegetation fieldwork within the Survey Area.



# 4 Results

# 4.1 Limitations and Constraints

Table 3 discusses the survey limitations and constraints of the fauna assessment completed for the Survey Area.

Table 3: Limitations and Constraints Associated with the Survey Area

VARIABLE	IMPACT ON SURVEY OUTCOMES
Access	The Survey Area is 547.2 ha. The overall area was surveyed in a broad and general capacity, with all major habitats sampled and mapped.
Experience	The personnel who executed the survey were practitioners suitably qualified in their respective fields:
	Field Zoologists: Dr Ron Firth (18 years' experience) and Laura Stevens (5 years' experience);
	Field Botanists (completed a follow up fauna habitat assessment in August 2018): Catherine Krens (15 years' experience) and Sophie Fox (8 years' experience);
	Data interpretation and reporting by: Andrew Hide, Zoologist (10 years' experience), Evan Webb, Ecologist (2 years' experience) and Laura Stevens; and
	Report review: Heidi Taylor (5 years' experience, Environmental Scientist); Dr Ron Firth; Scott Walker (20 years' experience) (Principal Ecologist).
Timing, weather, season	The Level 1 fauna survey was conducted from 13 to 16 June 2017 and a follow up fauna habitat assessment conducted from 31 July to 5 August 2018.
	Rainfall prior to the survey in 2017 was below the long-term average. Rainfall prior to the survey in 2018 was the same as the long-term average. During the survey weather conditions such as maximum and minimum temperatures were close to the long-term average. Given this, weather is unlikely to have impacted on the results of the survey to any significant extent, particularly as the assessment was a Level 1 (a reconnaissance survey with no trapping).
Scope: Life forms sampled	The scope of this project was to undertake a Level 1 fauna survey (reconnaissance survey and an assessment of
	habitats in the Survey Area). Given the level of survey, many species that occur in the Survey Area would not have been observed, particularly small ground-dwelling fauna



VARIABLE	IMPACT ON SURVEY OUTCOMES			
	that are normally captured by methods such as trapping. All conservation significant species previously recorded in the area have been considered. Based on the habitat			
	present, those species deemed to potentially occur in the Survey Area have been addressed in this study.			
Sources of information	The fauna desktop analysis used several sources to produce a list of fauna species previously recorded in the vicinity of the Survey Area. This included threatened fauna database (DPaW 2017a), NatureMap (DPaW 2017b) and the EPBC PMST (DEE 2017), as well as past reports, field guides and other scientific literature.			
Completeness	A total 128 fauna species were recovered from database searches and a total of 40 species were recorded during the survey. SM2 units were placed out at two locations and camera traps at eight locations for two nights each. A total of 240 minutes of spotlighting were undertaken. A total of 15 fauna habitat assessments were carried out.			
Disturbances	Much of the Survey Area is considered to be in Very Good condition, although sheep are present throughout the Survey Area.			

# 4.2 Desktop Assessment

Database searches returned 128 vertebrate fauna species from 50 families as potentially occurring in the vicinity of the Survey Area. Of these, there were 22 reptile species from six families, 84 bird species from 32 families and 22 mammal species from 12 families.

A total of 58 conservation significant vertebrate fauna species (including Priority species) from 23 families were identified during the desktop review of the database searches (Appendix B). These were comprised of three reptile species from three families, 44 bird species from 14 families and 11 mammals from six families.

#### 4.2.1 Conservation Significant Fauna

All three database searches returned a number of wetland species, in particular marine reptiles and mammals. These species require specific habitats (i.e. oceans) that are not present in the Survey Area and have been omitted from any further discussion.

A number of species returned from the database searches were also known to be historical records of species now extinct e.g. Burrowing Bettong (*Bettongia Lesueur*), Broad-faced Potoroo (*Potorous platyops*) and Lesser Stick-nest Rat (*Leporillus apicalis*) or extinct in the local area and or more broadly in the region e.g. Northern Quoll (*Dasyurus hallucatus*) and Shark Bay Mouse (*Pseudomys fieldi*). Also, some records were only returned from the



DBCA threatened fauna database, some of which were single records or undated records, these species have been omitted from any further discussion.

Occasionally there are inconsistencies in the database searches, for example, the Grey Wagtail has only two confirmed sightings in north-west WA (Johnstone & Storr 2004) yet it was present in the EPBC PMST and the Yellow Wagtail (*Motacilla flava*) requires edges of swamps, sewage ponds and salt-marshes (Pizzey 1997). These habitats are not present in the Study Area. As such these species have been omitted from any further discussion. The Barrow Island Golden Bandicoot (*Isoodon auratus barrowensis*), is found exclusively on Barrow Island, which is approximately 200 km north-east of the Survey Area, this species has therefore been omitted from any further discussion.

It is important to note, that the EPBC PMST is not entirely based on point records, but also on broader information, for example bioclimatic distribution models. The DBCA threatened fauna database and NatureMap are based on point records. Consequently, the results of the EPBC PMST are in some cases less accurate, particularly at a local scale. Consequently, the EPBC PMST will include species that do not occur in the search area because for example there is no habitat or they are now known to be locally extinct.

In addition, many fauna are not distributed evenly across the landscape, are more abundant in some places than others are, 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 omitted from any further discussion regarding fauna results.

With the aforementioned species removed, a total of 47 conservation significant species (including Priority species) from the database searches were potentially considered to either be Likely, Possibly or Unlikely to occur in the Survey Area. These 47 species comprise two reptile, 43 bird and two mammal species.

Of these 47 conservation significant species, six species were recorded during the field survey, one species is considered 'Likely', 26 species are considered 'Possible' and 16 species are considered 'Unlikely' to occur within the Survey Area (Table 4).



Table 4: Conservation Significant Fauna Potentially Occurring in the Survey Area

En = Listed as Endangered under the EBPC Act, Vu = Listed as Vulnerable under the EBPC Act, Mi = Listed as Migratory under the EBPC Act, Ma = Listed as Marine under the EBPC Act, S = Scheduled under the WC Act, and P = Listed as Priority by the DBCA.

SPECIES	CONSERVATION STATUS	LIKELIHOOD
Reptiles		
Cape Range Stone Gecko (Diplodactylus capensis)	P2	Unlikely
Cape Range Slider (Lerista allochira)	P3	Unlikely
Birds		
Seabirds (various)	MiMa, S5	Possible
Coastal Waders (various)	MiMa, S5	Recorded
Fork-tailed Swift (Apus pacificus)	MiMa, S5	Unlikely
Eastern Great Egret (Ardea modesta)	Ma, S5	Unlikely
Cattle Egret (Ardea ibis)	Ma, S5	Unlikely
Little Egret (Egretta garzetta)	Ma, S5	Unlikely
Night Parrot (Pezoporus occidentalis)	En	Unlikely
Rainbow Bee-eater (Merops ornatus)	Ма	Recorded
Barn Swallow (Hirundo rustica)	MiMa, S4	Unlikely
Mammals		
Pilbara Leaf-nosed Bat (Rhinonicteris aurantia)	Vu	Unlikely
Black-flanked Rock-wallaby (Petrogale lateralis lateralis)	Vu	Unlikely

# 4.3 Field Survey

The field survey recorded a total of 40 species from 29 families, which consisted of five reptile species from five families, 29 bird species from 20 families and six mammal species from four families (Appendix C). The key findings from the survey is further explained for each fauna group.

# **Amphibians**

From the database searches, no amphibian species have been previously recorded in the Survey Area (Appendix B). During the survey, no amphibians were recorded.

# Reptiles

From the database searches, a total of 22 reptile species have been previously recorded from the following six families in the surrounding area; Diplodactylidae, Pygopodidae, Gekkonidae, Scincidae, Agamidae and Elapidae. During the field assessment two reptile species were directly recorded; the Tree Dtella (*Gehyra variegata*) and Stimson's Python



(Antaresia stimsoni). Three reptile families were directly or indirectly (signs such as burrows) recorded during the survey but could not be attributed to species level because they were seen scurrying; a number of Skink (Ctenotus sp.), Dragon (Ctenophorus sp.) and Varanid (likely Gould's Sand Monitor [Varanus gouldii]) burrows were also observed in the Survey Area (Appendix C).

#### Birds

From the database searches, a total of 84 bird species from 32 families have been previously recorded in the surrounding area. During the field assessment 29 bird species were recorded from the following 20 families: Casuariidae, Columbidae, Accipitridae, Falconidae, Haematopodidae, Charadriidae, Laridae, Cacatuidae, Psittacidae, Maluridae, Meliphagidae, Campephagidae, Artamidae, Cracticidae, Rhipiduridae, Monarchidae, Corvidae, Meglauridae, Estrildidae, and Motacillidae (Appendix C).

#### Mammals

From the database searches, a total of 22 mammal species from 12 families have been previously recorded in the surrounding area. During the field assessment six mammal species were recorded; the Western Grey Kangaroo (*Macropus fuliginosus*), Common Sheath-tailed Bat (*Taphozous georgianus*), Gould's Wattled Bat (*Chalinolobus gouldii*), Little Broad-nosed Bat (*Scotorepens greyii*), Finlayson's Cave Bat (*Vespadelus finlaysoni*) and the introduced European Rabbit (*Oryctolagus cuniculus*) (Appendix C).

# 4.3.1 Fauna Habitat

In total 15 fauna habitat assessments were undertaken during the field survey and four broad fauna habitats were identified and mapped (Table 5; Appendix D; Figures 3a & 3b).

Table 5: Fauna Habitat in the Survey Area

Fauna Habitat	AREA (HA)	AREA (%)
Beach	7.1	1.3
Hummock Grassland	513.5	93.8
Tecticornia Shrubland	13.6	2.5
Minor Drainage Line	4.4	0.8
Cleared / track	8.5	1.6
Total	547.2	100

Four fauna habitat types that were identified in the survey area are widespread and common in the Exmouth region and are further explained.

#### Beach

Beach habitat comprised 1.3% of the Survey Area. This fauna habitat consists of a small area of sandy/shelly shoreline. This habitat provides potential foraging habitat in the form



of shallow saline water for coastal birds, such as the migratory birds returned from the database searches (for example Plovers, Sandpipers and Godwits) as well as those species recorded during the survey (Terns, Oystercatchers and Plover).

#### **Hummock Grassland**

Hummock Grassland comprised 93.8% of the Survey Area. This fauna habitat consisted primarily of Triodia hummocks. In places there were various scattered Acacia species (including A. gregorii, A. bivenosa, A. coriacea and A. tetragonophylla). In places, this habitat is a mix of grasses which have dense lower strata, providing habitat with considerable cover for small reptile species, bird and mammal species, and areas with a less dense midstorey, but with an increased cover of grasses. This habitat has little woody debris and leaf litter which would provide important microhabitat for some common reptile, bird and mammal species. Overall this habitat provides limited vegetation structure and hence limited fauna habitat for birds and mammals.

### Tecticornia Shrubland

Tecticornia Shrubland comprised 2.5% of the Survey Area. The habitat lacks an overstorey or midstorey. The groundstorey is a mix or *Tecticornia* and *Frankenia* low shrubland on saline flats. This habitat provides limited foraging opportunities for a variety of small bird species, such as the Brown Song lark (*Cincloramphus cruralis*), which was recorded foraging in this habitat.

### Minor Drainage Line

The Minor Drainage Line comprised 0.8% of the Survey Area. This fauna habitat consisted of scattered *Corymbia hamersleyana* over shrubland of *Acacia coriaecea* and *Cullen* sp. over *Triodia* hummocks. The habitat contains moderate amounts of rocky outcropping, woody debris and leaf litter which act as important microhabitats for reptile, bird and mammal species. The presence of trees may provide roosting and nesting opportunities for birds, however, as this habitat type occupies less than 1% of the Survey Area and continues beyond the Survey Area extent, it is therefore unlikely to represent critical habitat to fauna species.



# 5 Discussion

# 5.1 Fauna of Conservation Significance

During the field assessment, six conservation significant species were recorded; the Osprey, Lesser Sand Plover, Caspian Tern, Lesser Crested Tern, Crested Tern and Rainbow Bee-eater, and are further discussed below.

### Osprey (Pandion cristatus)

The Osprey is listed as marine and migratory under the EPBC Act. Coastal birds such as the Osprey require coasts and near-coastal wetland habitat, including estuaries, bays, inlets, islands and surrounding waters; coral atolls, reefs, lagoons, rock cliffs and stacks. The Osprey is moderately common to very common in sheltered seas around northern Australia and the West coast (and islands) south to 31°S (Garnett *et al.* 2011).

The Osprey feeds mainly on fish, including banded sweep, buff-bream, pike, garfish, smelt, groper, herring and mullet, as well as sea snakes from Shark Bay northwards, nesting seabirds (including White-faced Storm-petrels and Bridled Terns) and large lizards (Johnstone & Storr 1998).

There are no records of the Osprey in the DBCA threatened fauna database for the Exmouth area. However, it was present in the EPBC protected matters report and NatureMap results. The Osprey was observed flying over the Survey Area on a number of occasions. No nesting site was noted within the Survey Area.

The Osprey forages in marine/aquatic environments, therefore any loss of vegetation associated with the proposed works will not impact the foraging of this species.

### Coastal Waders

The group of Coastal Waders consist of:

- Lesser Sand Plover (Charadrius mongolus);
- Caspian Tern (Hydroprogne caspia);
- Lesser Crested Tern (Thalasseus bengalensis); and
- Crested Tern (Thalasseus bergii).

The Survey Area contains a small portion of beach habitat which may be utilised by all four species of wader recorded during the survey. While these species were all Recorded in the Survey Area, it is important to note that the Survey Area comprises only 6 ha (or an approximately 600 m long section) of beach habitat. This habitat occurs extensively outside of the Survey Area and as such the impact of the proposed project on these species is therefore very limited, particularly at the regional scale.



### Rainbow Bee-eater (Merops ornatus)

The Rainbow Bee-eater is listed as Marine under the EPBC Act and Schedule 5 under the WC Act. This species is one of the most common and widespread birds in Australia with a distribution that covers the majority of Australia (Barrett *et al.* 2003). It occurs in lightly wooded, often sandy country, preferring areas near water. It feeds on airborne insects, and nests throughout its range in WA, in burrows excavated in sandy ground or banks, often at the margins of roads and tracks. In WA this species can occur as a 'resident, breeding visitor, postnuptial nomad, passage migrant and winter visitor' (Johnstone & Storr 2004).

The DBCA threatened fauna database returned 5 records of the Rainbow Bee-eater. The species was observed on the wing and heard calling on numerous occasions throughout the Survey Area. The Survey Area does not contain any habitat that is of specific preference to the species, and the wider region surrounding the Survey Area, also contains habitat that will be utilised by the species.

# 5.1.1 Species Considered as Possibly Occurring

A total of 26 species are considered as Possibly occurring in the Survey Area based on the available desktop information and habitat present. The following species are discussed further.

#### Coastal Birds

All three database searches returned a number of wetland avifauna species, in particular coastal birds (i.e. waders) that require specific habitats (i.e. shorelines). There is a small area of beach habitat in the Survey Area. Habitat is therefore present for all of these species, a number of which were recorded during the survey (Appendix C). While these species are all considered Possible in the Survey Area, it is important to note that database searches returned limited records of these species. In addition only 6 ha (or an approximately 600 m long section of beach) of the entire Survey Area contains suitable habitat, and as such the impact of the proposed project on this habitat is limited, particularly at the regional scale given the extensive areas of shoreline in the local area and more broadly in the region. These species include:

- Greater Sand Plover (Charadrius leschenaultii):
- Lesser Sand Plover (Charadrius mongolus);
- Oriental Plover (Charadrius veredus);
- Grey Plover (Pluvialis squatarola);
- Oriental Pratincole (Glareola maldivarum);
- Common Noddy (Anous stolidus);
- Sooty Tern (Sterna fuscata);



- Australian Fairy Tern (Sternula nereis);
- Common Sandpiper (Actitis hypoleucos);
- Ruddy Turnstone (Arenaria interpres);
- Sharp-tailed Sandpiper (Calidris acuminata);
- Red Knot (Calidris canutus);
- Curlew Sandpiper (Calidris ferruginea);
- Pectoral Sandpiper (Calidris melanotos);
- Red-necked Stint (Caliris ruficollis):
- Great Knot (Calidris tenuirostris);
- Bar-tailed Godwit (Limosa lapponica);
- Bar-tailed Godwit (Western Alaskan) (Limosa lapponica bauera);
- Bar-tailed Godwit (Northern Siberian) (Limosa lapponica menzbieri);
- Eastern Curlew (Numenius madagascariensis);
- Whimbrel (Numenius phaeopus);
- Grey-tailed tattler (Tringa brevipes);
- Wood Sandpiper (Tringa glareola); and
- Common Greenshank (Tringa nebularia).

### Barn Swallow (Hirundo rustica)

The Barn Swallow is listed as Migratory and Marine under the EPBC Act and as Schedule 4 under the WC Act. It is an uncommon to locally common summer visitor, mainly to coastal areas of north WA and south to Learmonth, inhabiting towns and wetlands (Johnstone & Storr 1998).

There are no records of the Barn Swallow in the DBCA threatened fauna database for the Exmouth area, but it was present in the EPBC protected matters report, which as noted in Section 4.2.2 is not entirely based on point records, but also on broader information, for example bioclimatic distribution models. Whereas the Department of Biodiversity Conservation and Attractions NatureMap and threatened fauna databases are based on point records.

Although there are a lack of DBCA records for this species in Exmouth; there is suitable habitat, and the Survey Area is within the known distribution of the species. The Barn Swallow is therefore considered as Possibly occurring in the Survey Area.



### 5.1.2 Species Considered as Unlikely to Occur

A total of 16 species of conservation significance are considered Unlikely to occur in the Survey Area and are further discussed below.

# Cape Range Stone Gecko (Diplodactylus capensis)

This species is listed as P2 under the DBCA Priority List.

The Cape Range Stone Gecko is a small to moderate size terrestrial gecko found in the northern end of North West Cape. Here it is found under debris, logs and rocks on limestone hills with spinifex and low shrubs and trees (Cogger 2014).

The Survey Area lacks limestone hills, has limited logs and rocks that provide shelter and foraging habitat. There were 29 records of the Cape Range Stone Gecko in the DBCA threatened fauna database for the Exmouth area. It is therefore considered Unlikely that the Cape Range Stone Gecko will occur in the Survey Area.

# Cape Range Slider (Lerista allochira)

This species is listed as P3 under the DBCA Priority List.

The Cape Range Slider is a burrowing species, which is usually found in loose soil or sand beneath stones, logs, termite mounds, etc., where they feed on ants, termites, and other small insects. At night they emerge to feed at the surface, immediately 'diving' into the loose sandy substrate when disturbed. This behaviour results in the distinctive disrupted wavy tracks which often criss-cross sand dunes (Cogger 2014).

The Cape Range Slider inhabits slopes and crests of heavily dissected limestone plateau sparsely vegetated with *Triodia and shrubs*. The Survey Area does not contain any suitable habitat.

There were 11 records of the Cape Range Slider in the DBCA threatened fauna database for the Exmouth area. However, given the absence of limestone slopes and dissected plateau the Cape Range Slider is considered Unlikely to occur in the Survey Area.

# Night Parrot (Pezoporus occidentalis)

The Night Parrot is listed as Endangered under the EPBC Act and Schedule 1 under the WC Act. It is an enigmatic species thought possibly to be extinct until the recent recoveries of two dead specimens from Queensland (and new locations more recently). The type specimen and many early sightings, however, came from WA (Johnstone *et al.* 2013). A more recent sighting of the Night Parrot in the Pilbara comes from 12 April 2005 at a well near the Fortescue Marshes (Davis & Metcalf 2008), followed by breeding observations at Pullen Pullen Reserve in Western Queensland (Murphy *et al.* 2017). This was followed more recently by a sighting near Matuwa (Lorna Glen), north-east of Wiluna, in 2009 (Hamilton *et al.* 2017).

The DBCA threatened fauna database has no records of the Night Parrot in the search area and there is very limited ecological information available for this species such as its



preferred habitat (only very broad information). However, with increasing conservation focus being given to this species, more information is likely to become available, e.g. the discovery of Night Parrot nests in large Spinifex hummocks in Queensland (Murphy et al. 2017) which is a common and widespread habitat type throughout much of south-east Queensland and WA, including the Survey Area. In March 2017, a population was observed and photographed at an interior salt lake in central Western Australia (at this stage no more details are available). The Interim Night Parrot Survey Guidelines (May 2017) identifies the broad habitat requirements of the Night Parrot (roosting and nesting together with foraging) include areas of old-growth dense spinifex clumps (Triodia) (often >50 years unburnt, and especially hummocks that are ring forming) (DPaW 2017c). This is likely to include various native grasses and herbs, and may or may not contain shrubs or low trees (DPaW 2017c). Night parrots have been known to fly up to 40 km or more in a night during foraging expeditions, so foraging habitat is not necessarily within or adjacent to roosting areas. The Survey Area does not contain dense old growth spinifex clumps and there is an absence of nearby records and a very limited number of records in WA, consequently the Night Parrot is considered Unlikely in the Survey Area.

### Seabirds

The following seabirds are considered as Unlikely to occur in the Survey Area. They all require marine habitat and spend the majority of their lives at sea. The small amount of beach habitat in the Survey Area may be utilised by these species occasionally as part of a larger home range. They may fly overhead, however, they are unlikely to depend on this habitat and as such the proposed project is unlikely to have an impact on them, particularly at a regional scale. These species include:

- Southern Giant-Petrel (Macronectes giganteus);
- Flesh-footed Shearwater (Ardenna carneipes);
- Streaked Shearwater (Calonectris leucomelas);
- Wedge-tailed Shearwater (Puffinus pacificus);
- Campbell Albatross (Thalassarche impavida);
- Lesser Frigatebird (Fregata ariel); and
- White-bellied Sea-Eagle (Haliaeetus leucogaster).

# Fork-tailed Swift (Apus pacificus)

The Fork-tailed Swift is listed as Marine Migratory under the EPBC Act and as Schedule 5 under the WC Act. It 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 mostly independent of terrestrial habitats. It occurs in flocks



of up to 2,000 birds and is often seen accompanying Tree Martins and Masked Wood swallows (Johnstone & Storr 1998).

There are no records of the Fork-tailed Swift in the DBCA threatened fauna database for the Exmouth area, but it was present in the EPBC protected matters report, which as noted in Section 4.2.2 is not entirely based on point records.

The Fork-tailed Swift is considered as Unlikely to occur in the survey area.

### Eastern Great Egret (Ardea modesta)

The Eastern Great Egret is listed as marine under the EPBC Act and as Schedule 5 under the WC Act. There are seven records (two of which are historical) of the Eastern Great Egret in the DBCA threatened fauna database for the Exmouth area.

The Eastern Great Egret occurs through the greater part of WA, but not the arid eastern interior south of Lake Gregory and east of Lake Nabberu. It is common in well-watered Kimberley flatlands, but scarce to moderately common everywhere else in WA.

The Eastern Great Egret is usually found in ones, twos or small flocks, occasionally in very large aggregations. The Eastern Great Egret inhabits mainly shallow freshwaters (river pools, lakes and lagoons), as well as shallow salt water including mangrove creeks and tidal pools.

Limited DBCA database returns and a lack of suitable freshwater habitat, result in the Eastern Great Egret being considered as Unlikely to occur in the Survey Area.

### Cattle Egret (Ardea ibis)

The Cattle Egret is listed as Marine under the EPBC Act and as Schedule 5 under the WC Act. It occurs casually in the wetter parts of WA. The species inhabits short grass, especially damp pastures and wetlands, usually in the company of cattle and occasionally other livestock. In WA it is an irregular visitor, occurring mostly in autumn, and is not thought to breed regularly (Johnstone & Storr 1998).

There are no records of the Cattle Egret in the DBCA threatened fauna database for the Exmouth area, but was present in the EPBC protected matters report.

Given the lack of records for this species in Exmouth and the lack of suitable habitat, the Cattle Egret is considered as Unlikely to occur in the survey area.

### Little Egret (Egretta garzetta)

The Little Egret is listed as Marine under the EPBC Act and as Schedule 5 under the WC Act. The species inhabits tidal mudflats, saltmarshes, mangroves, freshwater wetlands and sewage ponds (Pizzey 1997).

There are no records of the Little Egret in the DBCA threatened fauna database for the Exmouth area, but was present in the EPBC protected matters report.



Given the lack of records for this species in Exmouth and the lack of suitable habitat, the Little Egret is considered as Unlikely to occur in the survey area.

### Pilbara Leaf-nosed Bat (Rhinonicteris aurantia)

The Pilbara Leaf-nosed Bat is listed as Vulnerable under the EPBC Act and S3 under the WC Act.

The PLNB is dependent on caves and mines with very hot and humid roost sites (28-32°C and 96-100% humidity) during the dry season (Armstrong 2000; Churchill 2008). Caves and mines, which have these specific characteristics, are relatively uncommon in the Pilbara. Without these conditions, PLNB are susceptible to dehydration and hypothermia and can die within a few hours.

The PLNB is now known to be more widespread than previously supposed; however, most of its maternity roost sites are confined either to banded ironstone strata that may be mined or to underground mine adits that are now collapsing or being open cut (Woinarski et al. 2014).

There are no records of the Pilbara Leaf-nosed Bat in the DBCA threatened fauna database for the Exmouth area, but was present in the EPBC protected matters report.

Given the lack of records for this species in the area (and region) and the lack of suitable habitat, the Pilbara Leaf-nosed Bat is considered as Unlikely to occur in the survey area.

# Black-flanked Rock-wallaby (Petrogale lateralis lateralis)

The Black-flanked Rock-wallaby is listed as Endangered under the EPBC Act.

Once patchily distributed but widespread throughout most of WA, the Black-flanked Rock-wallaby is now confined to small patches of suitable habitat. It has a very small area of occupancy and is severely fragmented with mostly small, isolated subpopulations. The Black-flanked Rock-wallaby inhabits rocky areas, caves, cliffs, screes and rock piles, where they shelter during the daytime. At dusk they emerge to feed on grasses, shrubs and occasionally seeds and fruits (Woinarski et al. 2012).

The DBCA threatened fauna database returned 18 records of the Black-flanked Rock-wallaby in the Exmouth area, however, they were all from nearby gorges. This habitat is not present in the Survey Area. This lack of suitable rocky habitat results in the Black-flanked Rock-wallaby being considered as Unlikely to occur in the Survey Area.



# 6 Conclusion

Fifteen fauna habitat assessments were undertaken during the survey and four broad fauna habitats were identified and mapped (Beach, Hummock Grassland, Tecticornia Shrubland and Minor Drainage Line).

A total of 47 conservation significant species (including Priority species) were considered to potentially occur in the Survey Area. These 47 species comprised two reptile, 43 bird and two mammal species.

During the field assessment 40 species from 29 families were recorded. This consisted of five reptile species from five families, 29 bird species from 20 families and six mammal species from four families. Six conservation significant species were recorded; the Osprey, Lesser Sand Plover, Caspian Tern, Lesser Crested Tern, Crested Tern and Rainbow Beeeater. No 'critical habitat' for any of these species was recorded within the Survey Area.



# 7 References

360 Environmental (2015). Flora, Vegetation and Fauna Assessment, Learmonth. Report prepared for Tourism WA.

Armstrong, K.A., & Anstey, S.D. (2000) The Ghost Bat in the Pilbara – 100 years on. *Australian Mammalogy* **22**, 93-101.

Barrett, G., Silcocks, A., Barry, S., Cunningham, R., & Poulter, R. (2003). The New Atlas of Australian Birds. Hawthorn East, Victoria: Royal Australasian Ornithologists Union.

Beard, J. S. (1972-81). Vegetation Survey of Western Australia, 1:250 000 Series. 21 titles published by Vegmap Publications.

Bureau of Meteorology [BOM]. (2018). Daily Weather Observations, Commonwealth of Australia. Retrieved August 2018, from <a href="http://www.bom.gov.au/climate">http://www.bom.gov.au/climate</a>

Christidis, L., & Boles, W. E. (2008). Systematics and Taxonomy of Australian Birds. Victoria: CSIRO Publishing.

Churchill, S. (2008). *Australian Bats 2nd Edition*. Sydney, New South Wales: Reed New Holland.

Currie, D. J. (2007). Disentangling the roles of environment and space in ecology. *Journal of Biogeography* **34**, 2009-2011.

Cogger, H. (2014). Reptiles and Amphibians of Australia. CSIRO Publishing.

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 Parks and Wildlife (DPaW) (2017a). Threatened and Priority Fauna Information (custom search).

Department of Parks and Wildlife (DPaW) (2017b). NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife and Western Australian Museum. <a href="http://naturemap.dec.wa.gov.au/">http://naturemap.dec.wa.gov.au/</a>

Department of Parks and Wildlife (DPaW) (2017c). Interim guideline for preliminary surveys of night parrot (*Pezoporus occidentalis*) in Western Australia. <a href="https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/interim guideline">https://www.dpaw.wa.gov.au/images/documents/plants-animals/animals/interim guideline for night parrot survey.pdf</a>

Department of the Environment and Energy (DEE) (2017). *Protected Matters Search Tool.* Accessed from <a href="http://www.environment.gov.au/epbc/pmst/index.html">http://www.environment.gov.au/epbc/pmst/index.html</a>.

Department of the Environment and Energy (DEE) (2017). The Biogeographic Regionalisation of Australia (IBRA).

Environmental Protection Authority (EPA) (2002). Terrestrial Biological Surveys as an Element of Biodiversity Protection. Position Statement No. 3.



Environmental Protection Authority (EPA) and Department of Environment and Conservation (DEC). (2010). Technical Guide – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment.

Garnett, S. T., Szabo, J.K., & Dutson, G. (2011). The Action Plan for Australian Birds 2010. Collingwood, Victoria: CSIRO Publishing and Birds Australia.

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. (1999). Handbook of Australian, New Zealand and Antarctic Birds. Volume Four - Parrots to Dollarbird. Oxford University Press. Melbourne.

Johnstone, R. E. & Storr, G. M. (1998). *Handbook of Western Australian Birds*. Volume 1 - Non-Passerines (Emu to Dollarbird). Oxford University Press.

Johnstone, R. E. & Storr, G. M. (2004). *Handbook of Western Australian Birds*. Volume 2 - Passerines (Blue-winged Pitta to Goldfinch). Oxford University Press.

Keighery B. J. (1994). Bushland Plant Survey. A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc.) Nedlands, WA.

Murphy, S.A., Austin, J.J., Murphy, R.K., Silcock, J., Joseph, L., Garnett, S.T., Leseberg, N.P., Watson, J.E.M. & Burbidge, A.H. (2017). Observations on breeding Night Parrots (*Pezoporus occidentalis*) in western Queensland. *Emu* 117, 107–113.

Pizzey, G. & Knight, F. (2001). The Field Guide to the Birds of Australia. Harper Collins Publishers.

Shepherd, D. P., Beeston, G. R., & Hopkins, A. J. M. (2001). Native Vegetation in Western Australia (Technical Report 249). Perth: Department of Agriculture.

Van Dyck, S., & Strahan, R. (2008). The Mammals of Australia. New South Wales: New Holland Publishers.

Woinarski, J. C. Z., Burbidge, A. A., & Harrison, P. L. (2014). The action plan for Australian Mammals 2012. CSIRO Publishing.



# 8 Limitations

This report is produced strictly in accordance with the scope of services set out in the contract or otherwise agreed in accordance with the contract. 360 Environmental makes no representations or warranties in relation to the nature and quality of soil and water other than the visual observation and analytical data in this report.

In the preparation of this report, 360 Environmental has relied upon documents, information, data and analyses ("client's information") provided by the client and other individuals and entities. In most cases where client's information has been relied upon, such reliance has been indicated in this report. Unless expressly set out in this report, 360 Environmental has not verified that the client's information is accurate, exhaustive or current and the validity and accuracy of any aspect of the report including, or based upon, any part of the client's information is contingent upon the accuracy, exhaustiveness and currency of the client's information. 360 Environmental shall not be liable to the client or any other person in connection with any invalid or inaccurate aspect of this report where that invalidity or inaccuracy arose because the client's information was not accurate, exhaustive and current or arose because of any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to 360 Environmental.

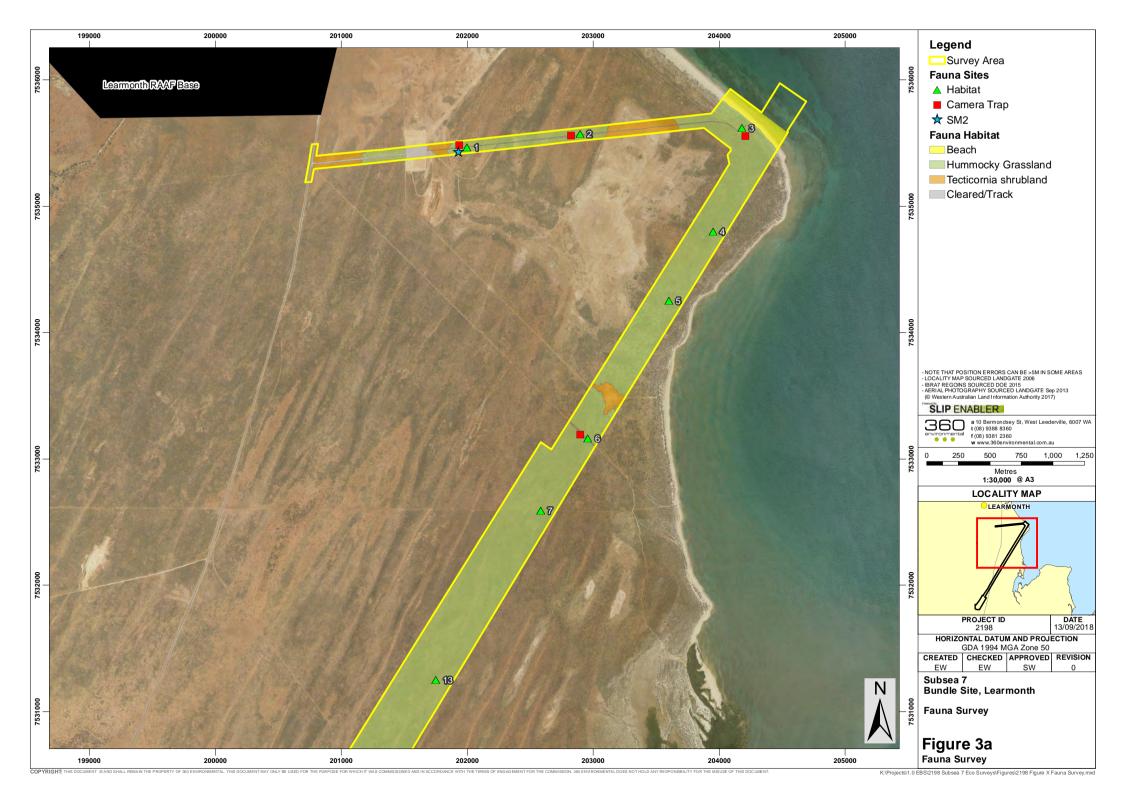
Aspects of this report, including the opinions, conclusions and recommendations it contains, are based on the results of the investigation, sampling and testing set out in the contract and otherwise in accordance with normal practices and standards. The investigation, sampling and testing are designed to produce results that represent a reasonable interpretation of the general conditions of the site that is the subject of this report. However, due to the characteristics of the site, including natural variations in site conditions, the results of the investigation, sampling and testing may not accurately represent the actual state of the whole site at all points.

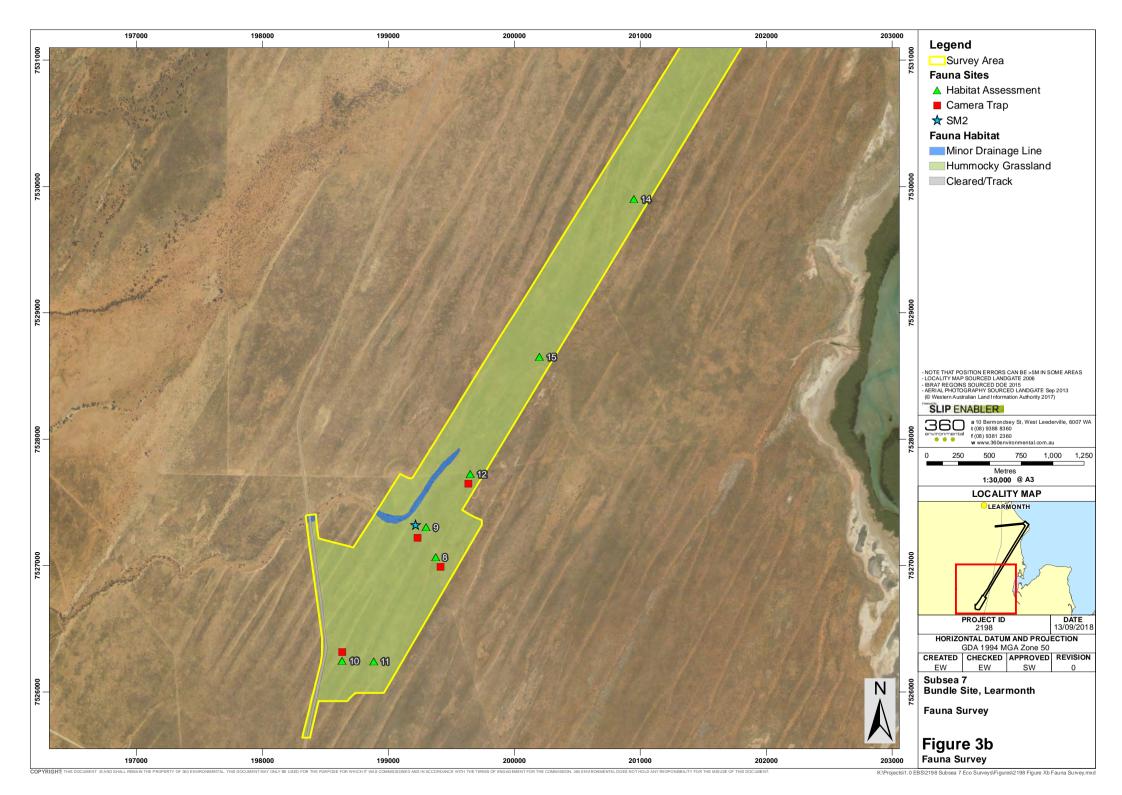
It is important to recognise that site conditions, including the extent and concentration of contaminants, can change with time. This is particularly relevant if this report, including the data, opinions, conclusions and recommendations it contains, are to be used a considerable time after it was prepared. In these circumstances, further investigation of the site may be necessary.

Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this page, without the prior written consent of 360 Environmental Pty Ltd.



# **FIGURES**







## **APPENDIX A**

Definition of Threatened Fauna Species Categories



#### Western Australian Threatened Fauna Categories Wildlife Conservation Act 1950 (WA)

CATEGORY	CODE	DESCRIPTION
Schedule 1	S1	Rare or likely to become extinct as critically endangered fauna.
Schedule 2	S2	Fauna that is rare or is likely to become extinct as endangered fauna.
Schedule 3	S3	Fauna that is rare or is likely to become extinct as vulnerable fauna.
Schedule 4	S4	Fauna presumed to be extinct.
Schedule 5	S5	Migratory birds protected under an international agreement.
Schedule 6	S6	Fauna that is of special conservation need as conservation dependent fauna.
Schedule 7	S7	Other specially protected fauna

#### Department of Parks and Wildlife Fauna Priority Codes

CATEGORY	CODE	DESCRIPTION
Priority 1	P1	Taxa with few, poorly known populations on threatened lands.
Priority 2	P2	Taxa with few, poorly known populations on conservation lands.
Priority 3	P3	Taxa with several, poorly known populations, some on conservation lands.
Priority 4	P4	Taxa in need of monitoring: not currently threatened or in need of special protection, but could become so.  Usually represented on conservation lands.
Priority 5	P5	Taxa in need of monitoring: not considered threatened, but the subject of a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

#### Categories of Threatened Fauna Species under the EPBC Act

CONSERVATION CODE	DESCRIPTION
Ex	Extinct
	Taxa which at a particular time if, at the time, there is no reasonable doubt
	that the last member of the species has died.
ExW	Extinct in the Wild
	Taxa which is known only to survive in cultivation, in captivity or as a
	naturalised population well outside its past range; or it has not been
	recorded in its known and/or expected habitat, at appropriate seasons,



CONSERVATION CODE	DESCRIPTION
	anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered
	Taxa which at a particular time, it is facing an extremely high risk of
	extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
Е	Endangered
_	Taxa which is not critically endangered and it is facing a very high risk of
	extinction in the wild in the medium-term future, as determined in
	accordance with the prescribed criteria.
V	Vulnerable
	Taxa which is not critically endangered or endangered and is facing a high
	risk of extinction in the wild in the medium-term future, as determined in
	accordance with the prescribed criteria.
CD	Conservation Dependent
	Taxa which at a particular time if, at that time, the species is the focus of
	a specific conservation program, the cessation of which would result in
	the species becoming vulnerable, endangered or critically endangered
	within a period of 5 years.

Source: Environment Protection and Biodiversity Conservation Act 1999



## **APPENDIX B**

**Database Search Results** 

NAME	NAME_ID FAMILY	GENUS	SPECIES	SUBSPECIES	S COMMON_NAM	KINGDOM	CONVS_CO		CERTAINTY	METHOD	COUNT		SITE_NAME SHOTHOLE CANYON	ACCURACY_M	YEAR
Diplodactylus capensis Diplodactylus capensis	34146 Diplodactylidae 34146 Diplodactylidae	Diplodactylus Diplodactylus	capensis		Cape Range stone gecko Cape Range stone gecko	Animalia Animalia	P2 P2	REPTILE REPTILE	WAM Vouchered WAM Vouchered	Specimen		1 NORTH WEST CAPE 1 NORTH WEST CAPE	SHOTHOLE CANYON SHOTHOLE CANYON	50000 50000	1976 1976
Diplodactylus capensis  Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis capensis		Cape Range stone gecko	Animalia	P2 P2	REPTILE	WAM Vouchered	Specimen Specimen		1 NORTH WEST CAPE	SHOTHOLE CANYON	50000	1976
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 NORTH WEST CAPE	SHOTHOLE CANYON	50000	1976
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 NORTH WEST CAPE	SHOTHOLE CANYON	50000	1978
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 NORTH WEST CAPE	SHOTHOLE CANYON	50000	1978
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 NORTH WEST CAPE	SHOTHOLE CANYON	50000	1978
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	SHOTHOLE CANYON	10000	1998
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	SHOTHOLE CANYON	10000	1998
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	SHOTHOLE CANYON	10000	1998
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	SHOTHOLE CANYON	10000	1998
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	SHOTHOLE CANYON	200000	2004
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	CAPE RANGE NATIONAL PARK	50000	1997
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	SHOTHOLE CANYON	50000	1981
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	Cape Range National Park	50000	1997
Diplodactylus capensis Lerista allochira	34146 Diplodactylidae 25120 Scincidae	Diplodactylus Lerista	capensis allochira		Cape Range stone gecko a skink	Animalia Animalia	P2 P3	REPTILE	WAM Vouchered WAM Vouchered	Specimen Specimen		1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	CAPE RANGE NATIONAL PARK CAPE RANGE NATIONAL PARK	50000 200000	1997 2008
Aipysurus apraefrontalis	25350 Elapidae	Aipysurus	apraefrontalis		short-nosed seasnake	Animalia	CR	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	EXMOUTH	10000	2008
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MANDU MANDU GORGE	10000	1986
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MANDU MANDU GORGE	10000	1986
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	Р3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MANDU MANDU GORGE	10000	1986
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	Р3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MANDU MANDU GORGE	10000	1986
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MANDU MANDU GORGE	10000	1986
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	Cape Range National Park	50000	1997
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	CAPE RANGE NATIONAL PARK	50000	1998
Diplodactylus capensis	34146 Diplodactylidae	Diplodactylus	capensis		Cape Range stone gecko	Animalia	P2	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	LEARMONTH	50000	2000
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	LEARMONTH AIRSTRIP	50000	2001
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 LEARMONTH	LEARMONTH AIRSTRIP	50000	2001
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	Р3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MOUTH OF YARDIE CREEK	10000	1984
Lerista allochira	25120 Scincidae	Lerista	allochira		a skink	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	MOUTH OF YARDIE CREEK	10000	1984
Aprasia rostrata	24992 Pygopodidae	Aprasia	rostrata		Hermite Island worm-lizard	Animalia	P3	REPTILE	WAM Vouchered	Specimen		1 EXMOUTH GULF	BULLARA HS	10000	1993
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	WAM Vouchered	Specimen		1 NORTH WEST CAPE		0	1995
Milyeringa veritas Milyeringa veritas	34025 Eleotridae 34025 Eleotridae	Milyeringa Milyeringa	veritas veritas		blind gudgeon blind gudgeon	Animalia Animalia	VU VU	FISH FISH	WAM Vouchered WAM Vouchered	Specimen Specimen		1 NORTH WEST CAPE 1 NORTH WEST CAPE		100000 100000	1983 1958
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 NORTH WEST CAPE		100000	1958
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 NORTH WEST CAPE		100000	1957
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		100000	1979
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		100000	1958
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		100000	1958
Milyeringa veritas	34025 Eleotridae	Milyeringa	veritas		blind gudgeon	Animalia	VU	FISH	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	rockhole 6 km N, 100m E, Yardi Creel	100000	1899
Charadrius mongolus mongolu	s 25576 Charadriidae	Charadrius	mongolus	mongolus	lesser sand plover	Animalia	EN & IA	BIRD	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK	Yardie Creek River	0	1959
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei 		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae	Draculoides	vinei vinei		Cape Range Draculoides	Animalia Animalia	P4 P4	INVERTEBRATE INVERTEBRATE	WAM Vouchered	Specimen Specimen		1 NORTH WEST CAPE 1 NORTH WEST CAPE		50 50	1989 1989
Draculoides vinei	33915 Hubbardiidae	Draculoides Draculoides	vinei		Cape Range Draculoides Cape Range Draculoides	Animalia	P4 P4	INVERTEBRATE	WAM Vouchered WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides  Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 NORTH WEST CAPE		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		10000	1992
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei 		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei 		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK		50 50	1983
Draculoides vinei Draculoides vinei	33915 Hubbardiidae	Draculoides Draculoides	vinei vinei		Cape Range Draculoides Cape Range Draculoides	Animalia Animalia	P4 P4	INVERTEBRATE	WAM Vouchered	Specimen Specimen		1 CAPE RANGE NATIONAL PARK  1 CAPE RANGE NATIONAL PARK		50	1983 1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4 P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen		1 CAPE RANGE NATIONAL PARK		50	1987

Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
				Cape Range Draculoides		P4		WAM Vouchered			50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Animalia		INVERTEBRATE		Specimen	1 CAPE RANGE NATIONAL PARK		
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1991
						P4				1 CAPE RANGE NATIONAL PARK		
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia		INVERTEBRATE	WAM Vouchered	Specimen		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1996
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1996
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1999
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	2001
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1992
									•			
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1991
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1991
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1996
									-1			
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	2002
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1990
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	10000	1990
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
	33915 Hubbardiidae		vinei		Animalia	P4	INVERTEBRATE				50	1989
Draculoides vinei		Draculoides		Cape Range Draculoides				WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK		
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Animalia	P4	INVERTEBRATE	WAM Vouchered		1 CAPE RANGE NATIONAL PARK	50	1989
				Cape Range Draculoides					Specimen			
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered		1 LEARMONTH	50	1988
									Specimen			
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	10000	1995
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	10000	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	10000	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH	10000	1988
	33915 Hubbardiidae	Draculoides	vinei		Animalia	P4	INVERTEBRATE			1 LEARMONTH		
Draculoides vinei				Cape Range Draculoides				WAM Vouchered	Specimen		10000	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
			*******									
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1995
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1995
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	2004
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
	madbaranaac	2.000.01003	********	pe nonge pracaiolaes	,ana			· Jucincied	-pecimen			1000

Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
				Cape Range Draculoides							50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK		
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1991
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1993
Draculoides vinei							INVERTEBRATE			1 CAPE RANGE NATIONAL PARK	50	
	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4		WAM Vouchered	Specimen			1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered		1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1987
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1988
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
	33915 Hubbardiidae					P4					50	1989
Draculoides vinei		Draculoides	vinei	Cape Range Draculoides	Animalia		INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK		
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
						P4	INVERTEBRATE			1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia			WAM Vouchered	Specimen			
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei												
	2201E Hubbardiidaa			Cana Danga Dragulaidas	Animalia		INIV/EDTEDDATE			1 CARE DANCE NATIONAL DARK	FO	
	33915 Hubbardiidae	Draculoides	vinei	Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK	50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides Draculoides	vinei vinei	Cape Range Draculoides Cape Range Draculoides	Animalia	P4	INVERTEBRATE INVERTEBRATE			1 CAPE RANGE NATIONAL PARK	10000	1989
Draculoides vinei Draculoides vinei		Draculoides	vinei					WAM Vouchered	Specimen			
	33915 Hubbardiidae	Draculoides Draculoides	vinei vinei	Cape Range Draculoides	Animalia Animalia	P4	INVERTEBRATE	WAM Vouchered WAM Vouchered	Specimen Specimen	1 CAPE RANGE NATIONAL PARK	10000 50	1989
Draculoides vinei Bamazomus subsolanus	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus	vinei vinei vinei subsolanus	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus	Animalia Animalia Animalia	P4 P4 EN	INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH	10000 50 10000	1989 1987 2008
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus	vinei vinei vinei subsolanus subsolanus	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus	Animalia Animalia Animalia Animalia	P4 P4 EN EN	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH	10000 50 10000 10000	1989 1987 2008 2008
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus	vinei vinei vinei subsolanus subsolanus subsolanus	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus	Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH	10000 50 10000 10000 10000	1989 1987 2008 2008 2008
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH	10000 50 10000 10000 10000 10000	1989 1987 2008 2008 2008 1991
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus	vinei vinei vinei subsolanus subsolanus subsolanus	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus	Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000	1989 1987 2008 2008 2008
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH	10000 50 10000 10000 10000 10000	1989 1987 2008 2008 2008 1991
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides Draculoides	vinei vinei vinei subsolanus subsolanus subsolanus vinei vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides Cape Range Draculoides Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4	INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen Specimen Specimen Specimen Specimen Specimen Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50	1989 1987 2008 2008 2008 1991 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei Draculoides vinei Draculoides vinei Draculoides vinei Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides Draculoides Draculoides Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei vinei vinei vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides Cape Range Draculoides Cape Range Draculoides Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50 50	1989 1987 2008 2008 2008 1991 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei Draculoides vinei Draculoides vinei Draculoides vinei Draculoides vinei Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Braculoides Draculoides Draculoides Draculoides Draculoides Draculoides	vinei vinei vinei subsolanus subsolanus subsolanus vinei vinei vinei vinei vinei	Cape Range Draculoides Cape Range Draculoides castern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides	vinei vinei vinei subsolanus subsolanus vinei vinei vinei vinei vinei vinei vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides Draculoides	vinei vinei vinei subsolanus subsolanus vinei vinei vinei vinei vinei vinei vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides castern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4 P4 P4 P4 P4 P4 P4 P4 P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1989 1
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1989 1
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1989 1
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 10000 50 50 50 50 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1991 1992 1992
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1991 1992 1992
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1991 1992 1992
Draculoides vinei Bamazomus subsolanus Bamazomus subsolanus Bamazomus subsolanus Draculoides vinei	33915 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33905 Hubbardiidae 33915 Hubbardiidae	Draculoides Draculoides Draculoides Bamazomus Bamazomus Draculoides	vinei vinei subsolanus subsolanus subsolanus vinei	Cape Range Draculoides Cape Range Draculoides eastern Cape Range bamazomus eastern Cape Range bamazomus eastern Cape Range bamazomus Cape Range Draculoides	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P4 P4 EN EN EN P4	INVERTEBRATE	WAM Vouchered	Specimen	1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	10000 50 10000 10000 10000 50 50 50 50 50 50 50 50 50 50 50 50	1989 1987 2008 2008 2008 1991 1989 1989 1989 1989 1989 1991 1992 1992

B 111 1 1	22245 11 11 111							1411/507500475			4 15404404711		=0	2002
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	2002
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	2008
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	2008
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	2008
Bamazomus subsolanus	33905 Hubbardiidae	Bamazomus	subsolanus		eastern Cape Range bamazomus	Animalia	EN	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		10000	2008
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		10000	1999
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	1989
Draculoides vinei														
	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 LEARMONTH		50	1989
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range Draculoides	Animalia	P4	INVERTEBRATE	WAM Vouchered	Specimen	1 EXMOUTH GULF		50	1989
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	MAMMAL	Very certain	Translocation	27 DOOLE ISLAND	Release Bay, Doole Island - failed trans	10000	1993
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	MAMMAL	Very certain	Translocation	27 DOOLE ISLAND	Release Bay, Doole Island - failed trans		1993
	24236 Muridae		fieldi			Animalia	VU	MAMMAL			27 DOOLE ISLAND			1995
Pseudomys fieldi		Pseudomys			Shark Bay mouse, djoongari				Very certain	Translocation		Release Bay, Doole Island - failed trans		
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	MAMMAL	Very certain	Translocation	27 DOOLE ISLAND	Release Bay, Doole Island - failed trans		1995
Isoodon auratus barrowensis	24151 Peramelidae	Isoodon	auratus	barrowensis	Barrow Island golden bandicoot	Animalia	VU	MAMMAL	Very certain	Translocation	92 DOOLE ISLAND	Doole Is - successful translocation	10000	2011
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	1 NORTH WEST CAPE	9km South of Exmouth townsite	1000	0
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Opportunistic sig	2 CAPE RANGE NATIONAL PARK	Shothole Canyon, Cape Range Nationa	1000	2005
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	7 NORTH WEST CAPE	ShotHole Canyon	1000	0
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	4 CAPE RANGE NATIONAL PARK	Shothole Canyon	1000	0
												•		-
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	1 CAPE RANGE NATIONAL PARK		1000	2004
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	1 LEARMONTH	Shothole Canyon, ~12 miles NNW of L		1961
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	1 CAPE RANGE NATIONAL PARK	Cape Range National Park	1000	0
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range draculoides	Animalia	P4	Arachnids	Certain	Unknown	2 LEARMONTH	Shot Pot Cave (Cave C106)	Not defined	1983
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range draculoides	Animalia	P4	Arachnids	Certain	Unknown	3 LEARMONTH	Dry Swallet Cave (Cave C 18)	Not defined	1983
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	1 LEARMONTH	Shothole Canyon	1000	0
	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain		1 CAPE RANGE NATIONAL PARK		1000	0
Diplodactylus capensis										Survey		Cape Range National Park		0
Phascogale calura	24098 Dasyuridae	Phascogale	calura		red-tailed phascogale, kenngoor	Animalia	CD	Mammals	Certain	Survey	0 CAPE RANGE NATIONAL PARK	Cave 0.7 km and bearing 38.5 degrees		
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Not sure	Survey	0 CAPE RANGE NATIONAL PARK	Cave 0.7 km and bearing 38.5 degrees		0
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia	P2	Insects	Certain	Survey	1 CAPE RANGE NATIONAL PARK	Cave C-169, Cape Range	1000	1987
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia	P2	Insects	Certain	Survey	1 CAPE RANGE NATIONAL PARK	Cave C-169, Cape Range	1000	1988
Pristis zijsron	34037 Pristidae	Pristis	zijsron		green sawfish	Animalia	VU	Fish	Certain	Survey	1 NORTH WEST CAPE	West Coast - Exmouth Bay area	10000	2008
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, warru		EN	Mammals	Moderately Certain	Secondary sign	0 LEARMONTH	Middle Gully (Site 12)	1000	2001
Nocticola flabella	33985 Nocticolidae		flabella	idicians		Animalia	P2	Insects	Certain		1 CAPE RANGE NATIONAL PARK		1000	1988
		Nocticola			Cape Range Blind Cockroach					Survey				
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia	P2	Insects	Certain	Survey	1 CAPE RANGE NATIONAL PARK	Cave C-103 (Trionomo - Area D), Cape		1988
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, warru	Animalia	EN	Mammals	Moderately Certain	Secondary sign	0 LEARMONTH	Charles Knife Canyon site (Site 10)	1000	2000
Chelonia mydas	25336 Cheloniidae	Chelonia	mydas		green turtle	Animalia	VU	Reptiles	Certain	Opportunistic sig	1 LEARMONTH	Approx 500m north of Learmonth Jett	1000	2002
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, warru	Animalia	EN	Mammals	Certain	Opportunistic sig	3 CAPE RANGE NATIONAL PARK	Small steep gorge N of Oyster Stacks t	1000	2002
Lerista allochira	25120 Scincidae	Lerista	allochira			Animalia	P3	Reptiles	Certain	Unknown	1 CAPE RANGE NATIONAL PARK	Bed of Mandu Mandu Gorge, North W	1000	0
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia	P2	Insects	Certain	Survey	1 LEARMONTH	Cave C126, Cape Range	10000	1988
				lateralis			EN						1000	2002
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, warru			Mammals	Certain	Opportunistic sig	5 CAPE RANGE NATIONAL PARK	Mandu Mandu Gorge		
Diplodactylus capensis	34146 Gekkonidae	Diplodactylus	capensis		Cape Range Stone Gecko	Animalia	P2	Reptiles	Certain	Survey	2 LEARMONTH	Cape Range National Park	1000	0
Sminthopsis longicaudata	24115 Dasyuridae	Sminthopsis	longicaudata		Long-tailed Dunnart	Animalia	P4	Mammals	Certain	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 1). Appr	1000	0
Mesembriomys macrurus	24222 Muridae	Mesembriomys	macrurus		golden-backed tree-rat	Animalia	P4	Mammals	Certain	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 1). Appr	10000	0
Mesembriomys macrurus	24222 Muridae	Mesembriomys	macrurus		golden-backed tree-rat	Animalia	P4	Mammals	Certain	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 18). App	10000	0
Leporillus apicalis	24218 Muridae	Leporillus	apicalis		lesser stick-nest rat	Animalia	EX	Mammals	Certain	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 1). Appr		0
Zyzomys pedunculatus	24249 Muridae	Zyzomys	pedunculatus		central rock-rat, antina	Animalia	CR	Mammals	Not sure	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 1). Appr		0
														0
Zyzomys pedunculatus	24249 Muridae	Zyzomys	pedunculatus		central rock-rat, antina	Animalia	CR	Mammals	Certain	Survey	0 LEARMONTH	Owl Roost Cave (CR4, Sample 1). Appr		-
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia	P2	Insects	Certain			Cave 167 (Spiral), Cape Range	1000	1988
Nocticola flabella	33985 Nocticolidae	Nocticola	flabella		Cape Range Blind Cockroach	Animalia				Survey	2 CAPE RANGE NATIONAL PARK			1988
Nocticola flabella	33985 Nocticolidae	Nocticola				Ailiilialia	P2	Insects	Certain	Survey	1 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range	1000	
Petrogale lateralis lateralis			flabella		Cape Range Blind Cockroach	Animalia	P2 P2	Insects Insects				Cave C-118, Cape Range Cave C-118, Cape Range	1000	1988
	24142 Macropodidae		flabella lateralis	lateralis		Animalia			Certain	Survey	1 CAPE RANGE NATIONAL PARK		1000	1988 2002
Ophisternon candidum		Petrogale	lateralis	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru	Animalia Animalia	P2 EN	Insects Mammals	Certain Certain Not sure	Survey Survey Secondary sign	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge	1000 1000	
Ophisternon candidum Milyeringa veritas	34038 Synbranchidae	Petrogale Ophisternon	lateralis candidum	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru blind cave eel	Animalia Animalia Animalia	P2 EN VU	Insects Mammals Fish	Certain Certain Not sure Not defined	Survey Survey Secondary sign Historical (writte	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa	1000 1000 1000	2002 0
Milyeringa veritas	34038 Synbranchidae 34025 Eleotridae	Petrogale Ophisternon Milyeringa	lateralis candidum veritas	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru blind cave eel cave gudgeon, blind gudgeon	Animalia Animalia Animalia Animalia	P2 EN VU VU	Insects Mammals Fish Fish	Certain Certain Not sure Not defined Certain	Survey Survey Secondary sign Historical (writte Targeted survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.)	1000 1000 1000 1000	2002 0 1989
Milyeringa veritas Milyeringa veritas	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae	Petrogale Ophisternon Milyeringa Milyeringa	lateralis candidum veritas veritas	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon	Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU	Insects Mammals Fish Fish Fish	Certain Certain Not sure Not defined Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R	1000 1000 1000 1000 1000	2002 0 1989 1991
Milyeringa veritas Milyeringa veritas Ophisternon candidum	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon	lateralis candidum veritas veritas candidum	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel	Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU	Insects Mammals Fish Fish Fish	Certain Certain Not sure Not defined Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R	1000 1000 1000 1000 1000 1500	2002 0 1989 1991 1991
Milyeringa veritas Milyeringa veritas	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae	Petrogale Ophisternon Milyeringa Milyeringa	lateralis candidum veritas veritas candidum apicalis	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU VU EX	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 Km	1000 1000 1000 1000 1000 1500 10000	2002 0 1989 1991 1991 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon	lateralis candidum veritas veritas candidum	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel	Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU	Insects Mammals Fish Fish Fish	Certain Certain Not sure Not defined Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R	1000 1000 1000 1000 1000 1500 10000	2002 0 1989 1991 1991
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus	lateralis candidum veritas veritas candidum apicalis	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU VU EX	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 Km	1000 1000 1000 1000 1000 1500 1500 10000	2002 0 1989 1991 1991 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24222 Muridae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warn blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU VU EX CR	Insects Mammals Fish Fish Fish Mammals Mammals	Certain Certain Not sure Not defined Certain Certain Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km	1000 1000 1000 1000 1000 1500 10000 10000	2002 0 1989 1991 1991 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24242 Wuridae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru-	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	P2 EN VU VU VU EX CR P4 EN	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals	Certain Certain Not sure Not defined Certain Certain Certain Certain Certain Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go	1000 1000 1000 1000 1500 1500 10000 10000 10000	2002 0 1989 1991 1991 0 0 0 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24222 Muridae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale	lateralis candidum veritas veritas candidum apicalis pedunculatus macruus lateralis lateralis	lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru-	Animalia	P2 EN VU VU VU VU CR CR P4 EN EN	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals Mammals	Certain Certain Not sure Not defined Certain Certain Certain Certain Certain Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Survey Survey Survey Survey Survey Opportunistic sig Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 61.2 km Unregistered Cave (Sample 3) 61.7 km Unregistered Cave (Sample 3) 61.7 km Pilgramunna Gorge (= Pilgnonman Go	1000 1000 1000 1000 1500 500 10000 10000 10000	2002 0 1989 1991 1991 0 0 0 2002 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 2422 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis	lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru-	Animalia	P2 EN VU VU VU EX CR P4 EN EN	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals Mammals Mammals Mammals Mammals	Certain Certain Not sure Not defined Certain Moderately Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 18 CAPE RANGE NATIONAL PARK 19 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 10 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17	1000 1000 1000 1000 1500 1500 10000 10000 10000 10000	2002 0 1989 1991 1991 0 0 0 2002 2002 2001
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24122 Muridae 24142 Macropodidae 24142 Macropodidae 24145 Macropodidae 33915 Hubbardiidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Draculoides	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis vinei	lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- Cape Range draculoides	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN EN P4	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals Mammals Mammals Mammals Arachnids	Certain Certain Not sure Not defined Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 1 LEARMONTH 2 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park	1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24222 Muridae 24122 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Progale Petrogale Petrogale Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis lateralis lateralis	lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- Cape Range draculoides black-flanked rock-wallaby, warru-	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN P4 EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 12 CAPE RANGE NATIONAL PARK 13 CAPE RANGE NATIONAL PARK 14 CAPE RANGE NATIONAL PARK 15 LEARMONTH 16 LEARMONTH 17 CAPE RANGE NATIONAL PARK 18 LEARMONTH 18 LEARMONTH 18 CAPE RANGE NATIONAL PARK 19 LEARMONTH 18 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (- Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay	1000 1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24122 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Draculoides	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis vinei	lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- Cape Range draculoides	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN EN EN EN EN	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals Mammals Mammals Mammals Arachnids	Certain Certain Not sure Not defined Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 18 CAPE RANGE NATIONAL PARK 19 CAPE RANGE NATIONAL PARK 10 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park	1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24222 Muridae 24122 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Progale Petrogale Petrogale Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis lateralis lateralis	lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- Cape Range draculoides black-flanked rock-wallaby, warru-	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN P4 EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Certain	Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 12 CAPE RANGE NATIONAL PARK 13 CAPE RANGE NATIONAL PARK 14 CAPE RANGE NATIONAL PARK 15 LEARMONTH 16 LEARMONTH 17 CAPE RANGE NATIONAL PARK 18 LEARMONTH 18 LEARMONTH 18 CAPE RANGE NATIONAL PARK 19 LEARMONTH 18 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (- Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay	1000 1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24122 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale	lateralis candidum veritas veritas veritas candidum alceralis pedunculatus macrurus lateralis lateralis lateralis lateralis lateralis	lateralis lateralis lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked r	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN EN EN EN EN	Insects Mammals Fish Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Certain Not sure	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Secondary sign Secondary sign	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 18 CAPE RANGE NATIONAL PARK 19 CAPE RANGE NATIONAL PARK 10 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgnomana Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay	1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 0 0 0 2002 2002 2001 1999 2002 2002
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24145 Dasyuridae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis lateralis lateralis lateralis lateralis lateralis lateralis	lateralis lateralis lateralis lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warru- blind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- Cape Range draculoides black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- lack-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru- black-flanked rock-wallaby, warru-	Animalia	P2 EN VU VU VU VU EX CR P4 EN EN EN EN EN EN EN EN EN EN EN EN EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Not sure Certain Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 2 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14). 3.6	1000 1000 1000 1000 1000 1500 1500 110000 10000 10000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 0 0 2002 2002 2001 1999 2002 2002 2002 1999
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24229 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24145 Dasyuridae 2415 Dasyuridae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Setrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis lateralis lateralis lateralis lateralis lateralis lateralis lateralis lateralis	lateralis lateralis lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublack gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked junnart boodie (inland), burrowing bettor	Animalia	P2 EN VU VU VU EX CR P4 EN	Insects Mammals Fish Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Not sure Certain Certain Certain Certain Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 0 ALEARMONTH 18 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramuna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Fample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14), 3.6 Monajee Cave (CR21, Sample 14), 3.6	1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002 2009 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesueur graii Mesembriomys macrurus	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24141 Macropodidae 24142 Macropodidae 24141 Pacropodidae 24141 Pacropodidae 24142 Macropodidae 24143 Dasyuridae 24161 Potoroldae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Sminthopsis Bettongia Mesembriomys	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked rock-wallaby, warruCape Range draculoides black-flanked rock-wallaby, warrublack-flanked rock-wallab	Animalia	P2 EN VU VU VU VU VU EX CR P4 EN EN P4 EN P4 EN P4 EN P4 EX P4	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 10 LEARMONTH 1 CAPE RANGE NATIONAL PARK 10 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 10 LEARMONTH 10 LEARMONTH 10 LEARMONTH 10 LEARMONTH 10 LEARMONTH 10 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, Cave C-274, Cape R Pilgramunna Well, Cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14), 3.6 Monajee Cave (CR21, Sample 14), 3.6	1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 0 0 0 2002 2002 2002 2002 2002 2002 1999 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Metongia lesueur graii Mesembriomys macrurus Pseudomys fieldi	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 2415 Macropodidae 24161 Fotoroidae 24161 Potoroidae 24161 Potoroidae 24222 Muridae 24236 Muridae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Sminthopsis Bettongia Mesembriomys Pseudomys	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis fongicaudata lesueur macrurus fieldi	lateralis lateralis lateralis lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked rock-wallaby	Animalia	P2 EN VU VU VU VU VU EX CR P4 EN P4 EX VU	Insects Mammals Fish Fish Fish Mammals Mammals Mammals Mammals Mammals Mammals Arachnids Mammals	Certain Certain Not sure Not defined Certain Not sure Certain Certain Certain Certain Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 2 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 2 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 0 LEARMONTH 1 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14). 3.6	1000 1000 1000 1000 1000 1500 1500 110000 11000 11000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002 2002 2002 2000 200
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesueur graii Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 24141 Dascropodidae 24142 Macropodidae 24142 Macropodidae 24141 Dasyuridae 24161 Potoroidae 24222 Muridae 24236 Muridae 24124 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Sminthopsis Bettongia Mesembriomys Pseudomys Pseudomys Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked r	Animalia	P2 EN VU VU VU EX CR P4 EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 0 ACPE RANGE NATIONAL PARK 18 CAPE RANGE NATIONAL PARK 19 CAPE RANGE NATIONAL PARK 10 LEARMONTH 10 LEARMONTH 11 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 11 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, Cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14). 3.6 Wost of Learmonth. 1.2 km NW of pro	1000 1000 1000 1000 1500 1500 10000 10000 10000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000	2002 0 1989 1991 0 0 0 2002 2002 2001 1999 2002 2002 1999 0 0 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesuerur graii Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34025 Selotridae 34038 Synbranchidae 24121 Muridae 24124 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24141 Macropodidae 24141 Macropodidae 24141 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24143 Muridae 24236 Muridae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophistermon Milyeringa Milyeringa Ophistermon Leporillus Zyzomys Mesembriomys Petrogale	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii	Cape Range Blind Cockroach black-flanked rock-wallaby, warrubind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked ro	Animalia	P2 EN VU VU VU VU VU EX CR P4 EN EN P4 EN EN EN EN EN EN EN EN VU EX EN EN EN EN EN EN EN EN P4 EX P4 VU EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey Survey Survey Opportunistic sig Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 12 CAPE RANGE NATIONAL PARK 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 0 CAPE RANGE NATIONAL PARK 1 LEARMONTH 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramuna Well, Cave C-274, Cape R Pilgramuna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 4) 11.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14), 3.6 Most of Learmonth. 1.2 km NW of proc West of Learmonth. 1 km NW of proc	1000 1000 1000 1500 1500 10000 10000 10000 100	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002 1999 0 0 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesueur graii Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 24141 Dascropodidae 24142 Macropodidae 24142 Macropodidae 24141 Dasyuridae 24161 Potoroidae 24222 Muridae 24236 Muridae 24124 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Sminthopsis Bettongia Mesembriomys Pseudomys Pseudomys Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii	Cape Range Blind Cockroach black-flanked rock-wallaby, warrublind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked r	Animalia	P2 EN VU VU VU EX CR P4 EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 0 ACPE RANGE NATIONAL PARK 18 CAPE RANGE NATIONAL PARK 19 CAPE RANGE NATIONAL PARK 10 LEARMONTH 10 LEARMONTH 11 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 10 CAPE RANGE NATIONAL PARK 11 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, Cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14). 3.6 Wost of Learmonth. 1.2 km NW of pro	1000 1000 1000 1500 1500 10000 10000 10000 100	2002 0 1989 1991 0 0 0 2002 2002 2001 1999 2002 2002 1999 0 0 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesuerur graii Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34025 Selotridae 34038 Synbranchidae 24121 Muridae 24124 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24141 Macropodidae 24141 Macropodidae 24141 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24143 Muridae 24236 Muridae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophistermon Milyeringa Milyeringa Ophistermon Leporillus Zyzomys Mesembriomys Petrogale	lateralis candidum veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii	Cape Range Blind Cockroach black-flanked rock-wallaby, warrubind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked ro	Animalia	P2 EN VU VU VU VU VU EX CR P4 EN EN P4 EN EN EN EN EN EN EN EN VU EX EN EN EN EN EN EN EN EN P4 EX P4 VU EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey Survey Survey Opportunistic sig Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 0 LEARMONTH 12 CAPE RANGE NATIONAL PARK 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 0 CAPE RANGE NATIONAL PARK 1 LEARMONTH 0 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramuna Well, Cave C-274, Cape R Pilgramuna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered cave (Sample 4) 11.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14), 3.6 Most of Learmonth. 1.2 km NW of proc West of Learmonth. 1 km NW of proc	1000 1000 1000 1000 1500 1500 10000 10000 10000 100	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002 1999 0 0 0 0
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesueur graii Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24218 Muridae 24249 Muridae 24142 Macropodidae 241415 Dasyuridae 24161 Potoroidae 24222 Muridae 24236 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae	Petrogale Ophistermon Milyeringa Milyeringa Ophistermon Leporillus Zyzomys Mesembriomys Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrubiack-flanked rock-wallaby, warrubiack-	Animalia	P2 EN VU VU VU EX CR P4 EN	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Moderately Certain Certain Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Seco	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 17 CAPE RANGE NATIONAL PARK 0 LEARMONTH 18 CAPE RANGE NATIONAL PARK 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 10 LEARMONTH 10 LEARMONTH 11 CAPE RANGE NATIONAL PARK 11 LEARMONTH 11 LEARMONTH 11 LEARMONTH 11 LEARMONTH 12 LEARMONTH 13 LEARMONTH 14 LEARMONTH 15 LEARMONTH 15 LEARMONTH 16 LEARMONTH 17 LEARMONTH 17 LEARMONTH 18 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, Cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Pilgramunna Well, cave C-274, Cape R Unregistered Cave (Sample 4) 11.8 km Unregistered Cave (Sample 3) 12.7 km Unregistered cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14), 3.6 Monajee Cave (CR21, Sample 14), 3.6 Monajee Cave (CR21, Sample 14), 3.6 West of Learmonth. 1.2 km NW of prop West of Learmonth. 1.2 km NW of propo West of Learmonth. 1 km NW of propo West of Learmonth. 1.7 km NW of propo West of Learmonth. 1.7 km NW of propo West of Learmonth. 1.7 km NW of propo	1000 1000 1000 1000 1500 1500 10000 10000 10000 100	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 1999 0 0 0 0 2001 1999
Milyeringa veritas Milyeringa veritas Ophisternon candidum Leporillus apicalis Zyzomys pedunculatus Mesembriomys macrurus Petrogale lateralis lateralis Petrogale lateralis lateralis Draculoides vinei Petrogale lateralis lateralis Sminthopsis longicaudata Bettongia lesueur grail Mesembriomys macrurus Pseudomys fieldi Petrogale lateralis lateralis Petrogale lateralis lateralis	34038 Synbranchidae 34025 Eleotridae 34025 Eleotridae 34025 Eleotridae 34038 Synbranchidae 24121 Muridae 24249 Muridae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24142 Macropodidae 24141 Macropodidae 24141 Macropodidae 24142 Macropodidae 24141 Potoroidae 24141 Potoroidae 24222 Muridae 24236 Muridae 24142 Macropodidae	Petrogale Ophisternon Milyeringa Milyeringa Ophisternon Leporillus Zyzomys Mesembriomys Petrogale Petrogale Petrogale Petrogale Petrogale Petrogale Sminthopsis Bettongia Mesembriomys Pseudomys Pseudomys Petrogale Petrogale	lateralis candidum veritas veritas veritas candidum apicalis pedunculatus macrurus lateralis	lateralis lateralis lateralis lateralis lateralis graii lateralis lateralis lateralis	Cape Range Blind Cockroach black-flanked rock-wallaby, warrubind cave eel cave gudgeon, blind gudgeon cave gudgeon, blind gudgeon blind cave eel lesser stick-nest rat central rock-rat, antina golden-backed tree-rat black-flanked rock-wallaby, warrublack-flanked ro	Animalia	P2 EN VU VU VU EX CR P4 EN EN EN EN EN EN P4 EV EN EN EN EN P4 EV	Insects Mammals Fish Fish Fish Mammals	Certain Certain Not sure Not defined Certain Not sure Certain	Survey Survey Survey Secondary sign Historical (writte Targeted survey Unknown Unknown Survey Survey Survey Opportunistic sig Opportunistic sig Secondary sign Unknown Opportunistic sig Secondary sign Opportunistic sig Survey Survey Survey Survey Survey Survey Survey Opportunistic sig Opportunistic sig	1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 0 CAPE RANGE NATIONAL PARK 5 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 0 LEARMONTH 0 LEARMONTH 10 LEARMONTH 17 CAPE RANGE NATIONAL PARK 2 CAPE RANGE NATIONAL PARK 3 CAPE RANGE NATIONAL PARK 10 LEARMONTH 12 LEARMONTH 14 LEARMONTH 16 LEARMONTH 17 CAPE RANGE NATIONAL PARK 18 LEARMONTH 19 LEARMONTH 10 LEARMONTH 11 LEARMONTH 11 LEARMONTH 11 LEARMONTH 12 LEARMONTH 13 LEARMONTH 14 LEARMONTH 15 LEARMONTH 16 LEARMONTH 17 LEARMONTH 17 LEARMONTH 18 LEARMONTH	Cave C-118, Cape Range Gorge between Mandu Mandu Gorge Pilgramuna Well, Cape Range Nationa Pilgramuna Well (Cape Range N.P.) Pilgramunna Well, Cave C-274, Cape R Pilgramunna Well, Cave C-274, Cape R Unregistered Cave (Sample 3) 12.7 km Pilgramunna Gorge (= Pilgonoman Go Pilgrimunna, at entrance to gorge Site 17 Cave 15, Cape Range National Park 2 small gorges N of Sandy Bay Gorge near Sandy Bay VCL W of Learmonth RAAF Base Monajee Cave (CR21, Sample 14). 3.6 West of Learmonth. 1.2 km NW of prop West of Learmonth. 1.1 km NW of propo West of Learmonth. 1 km NW of propo	1000 1000 1000 1000 1500 1500 10000 10000 10000 10000 10	2002 0 1989 1991 1991 0 0 2002 2002 2001 1999 2002 2002 1999 0 0 0 0 2001 1999 1999 1999 1990 190

Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, war	ru Animalia	EN	Mammals	Certain	Opportunistic sig	1 LEARMONTH	Proposed limestone quarry near Lea	arr 1000	2000
Lerista allochira	25120 Scincidae	Lerista	allochira	idecidiis	black named rock wandby, nam	Animalia	P3	Reptiles	Certain	Survey	0 LEARMONTH	Drainage line Site 4	1000	2000
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, war		EN	Mammals	Certain	Opportunistic sig	1 LEARMONTH	West of Learmonth. 1.25 km SW of		2001
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range draculoides	Animalia	P4	Arachnids	Certain	Unknown	1 LEARMONTH	Cave 96, Cape Range National Park	1000	1999
Mesembriomys macrurus	24222 Muridae	Mesembriomys	macrurus		golden-backed tree-rat	Animalia	P4	Mammals	Certain	Survey	0 LEARMONTH	Cave CR6 (= WAM Cave 4) (Sample 1		0
Potorous platyops	24164 Potoroidae	Potorous	platyops		broad-faced potoroo	Animalia	EX	Mammals	Not sure	Survey	0 LEARMONTH	Cave CR6 (= WAM Cave 4) (Sample 1		0
Petrogale lateralis lateralis	24142 Macropodidae	Petrogale	lateralis	lateralis	black-flanked rock-wallaby, war		EN	Mammals	Certain	Opportunistic sig	2 CAPE RANGE NATIONAL PARK	Three small gorges	1000	2002
Dermochelys coriacea	25346 Dermochelyidae	Dermochelys	coriacea		leatherback turtle	Animalia	VU	Reptiles	Certain	Opportunistic sig	1 EXMOUTH GULF	Gales Bay near Roberts Island	500	1991
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	Mammals	Certain	Opportunistic sig	20 EXMOUTH GULF	around Doole Island and bottom of		0
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Targeted survey	7 EXMOUTH GULF	Release Bay, Doole Island	500	1993
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Survey	3 EXMOUTH GULF	Release Bay, Doole Island	500	1996
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Targeted survey	8 EXMOUTH GULF	Narrow Neck, Doole Island	500	1995
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Survey	2 EXMOUTH GULF		500	1996
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Survey	5 EXMOUTH GULF	Reasonable Beach, Doole Island	500	1996
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Targeted survey	25 EXMOUTH GULF	Doole Island	10000	1995
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Targeted survey	27 EXMOUTH GULF	Release Bay, Doole Island, Whitmore		1993
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	Mammals	Certain	Survey	1 EXMOUTH GULF	Safe Mun Bay, Doole Island	500	1996
Sterna caspia (Hydroprogne caspia	24523 Laridae	Sterna	caspia		Caspian tern	Animalia	IA	BIRD	Moderately certain	Survey	1 EXMOUTH GULF	Roberts	0	1989
Sterna caspia (Hydroprogne caspia	24523 Laridae	Sterna	caspia		Caspian tern	Animalia	IA	BIRD	Moderately certain	Survey	1 EXMOUTH GULF	Roberts	0	1989
Sterna nereis nereis	24530 Laridae	Sterna	nereis	nereis	fairy tern	Animalia	VU	BIRD	Moderately certain	Survey	1 EXMOUTH GULF	Roberts	0	1989
Sterna caspia (Hydroprogne caspia	24523 Laridae	Sterna	caspia	nereis	Caspian tern	Animalia	IA	BIRD	Moderately certain	Survey	1 EXMOUTH GULF	Doole (island to West)	0	1989
Pseudomys fieldi	24236 Muridae	Pseudomys	fieldi		Shark Bay mouse, djoongari	Animalia	VU	MAMMAL	Not defined	Survey	1 EXMOUTH GULF	Doole	0	0
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain		2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	2 NORTH WEST CAPE 2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
	24051 Balaenopteridae		novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain		2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
= :			-		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae	Megaptera	novaeangliae		'	Animalia	CD	MAMMAL	Certain	survey				2012
Megaptera novaeangliae		Megaptera	novaeangliae		humpback whale		CD			survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia		MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 NORTH WEST CAPE	North West Cape, Exmouth Gulf	3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	North West Cape, Exmouth Gulf	3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2013
Sousa sahulensis	0 Delphinidae	Sousa	sahulensis		Australian humpback dolphin	Animalia	P4	MAMMAL	Certain	Survey	3 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	Survey	3 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Sousa sahulensis	0 Delphinidae	Sousa	sahulensis		Australian humpback dolphin	Animalia	P4	MAMMAL	Certain	Survey	3 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 NORTH WEST CAPE	Exmouth Gulf to Barrow Island, Exm		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2012
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exm		2012
Draculoides vinei	33915 Hubbardiidae	Draculoides	vinei		Cape Range draculoides	Animalia	P4	INVERTEBRATE	Moderately certain	survey	1 CAPE RANGE NATIONAL PARK	Cape Range, cave C-79	10000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	North West Cape, Ningaloo	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	North West Cape, Ningaloo	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin,	100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Fremantle-Darwin,	100	2013
-			-											

Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 LEARMONTH	Fremantle-Darwin, 100	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
			-	humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae			CD	MAMMAL		survey			2012
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera	novaeangliae	humpback whale humpback whale	Animalia Animalia	CD	MAMMAL	Certain Certain	survey	3 LEARMONTH 2 TALANDJI	Exmouth Gulf to Barrow Island, Exmol 3000 Exmouth Gulf to Barrow Island, Exmol 3000	2012
= :			novaeangliae		Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale					survey		•	
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia		MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia Animalia	CD P4	MAMMAL MAMMAL	Certain Certain	survey	1 LEARMONTH 1 N/A	Exmouth Gulf to Barrow Island, Exmou 3000	2012 2014
Sousa sahulensis	0 Delphinidae	Sousa	sahulensis	Australian humpback dolphin	Animalia	CD CD	MAMMAL	Certain	Survey	2 TALANDJI	ExmouthGulf_to_BarrowIsland, Exmol 3000 Exmouth Gulf to Barrow Island, Exmol 3000	2014
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera	novaeangliae novaeangliae	humpback whale humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
	24051 Balaenopteridae		novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
= :	24051 Balaenopteridae		-	humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Megaptera	novaeangliae novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	2 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL		survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	2013
	24051 Balaenopteridae				Animalia	CD	MAMMAL	Certain Certain			Exmouth Gulf to Barrow Island, Exmot 3000	
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale					survey	3 LEARMONTH 3 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000	2013
		Megaptera Megaptera		humpback whale humpback whale	Animalia	CD	MAMMAL	Certain	survey survey	3 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000	
Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae	humpback whale	Animalia Animalia	CD CD	MAMMAL MAMMAL	Certain Certain	survey survey survey	3 LEARMONTH 3 TALANDJI	Exmouth Gulf to Barrow Island, Exmot 3000 North West Cape, Exmouth Gulf 3000	2013 2014
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia Animalia Animalia	CD CD VU	MAMMAL MAMMAL FISH	Certain Certain Certain	survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK	Exmouth Gulf to Barrow Island, Exmol 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmol 3000	2013 2014 2009 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia Animalia Animalia Animalia	CD CD VU CD	MAMMAL MAMMAL FISH MAMMAL	Certain Certain Certain Certain	survey survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmot 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000	2013 2014 2009
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia Animalia Animalia Animalia Animalia	CD CD VU CD CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL	Certain Certain Certain Certain Certain	survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera Megaptera	novaeangliae novaeangliae veritae novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD CD CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain	survey survey survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD CD CD CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain Certain Certain	survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDIJ 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera Megaptera Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD CD CD CD CD CD CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain Certain Certain Certain	survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDIJ 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 2 LEARMONTH 1 TALANDIJ	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD CD CD CD CD CD CD CD CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain	survey survey survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 2 LEARMONTH 1 TALANDJI 1 TALANDJI	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD	MAMMAL MAMMAL FISH MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain	survey survey survey survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDIJ 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 2 LEARMONTH 1 TALANDIJ 1 TALANDIJ 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD	MAMMAL FISH MAMMAL	Certain	survey survey survey survey survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDIJ 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDIJ 1 TALANDIJ 1 EXMOUTH GULF 1 TALANDIJ 1 TALANDIJ 1 TALANDIJ 1 TALANDIJ 1 TALANDIJ 1 TALANDIJ	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD CD VU CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey survey survey survey survey survey survey survey survey survey survey survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDJI 1 TALANDJI 1 TALANDJI 1 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 LEARMONTH 1 TALANDII 1 TALANDII 1 EXMOUTH GULF 1 TALANDII 2 TALANDII 1 TALANDII	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDJI 1 TALANDJI 1 TALANDJI 1 TALANDJI 1 TALANDJI 2 TALANDJI 1 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI 3 TALANDJI 4 TALANDJI 5 TALANDJI 6 TALANDJI 6 TALANDJI 7 TALANDJI 6 TALANDJI 7 TALANDJI 7 TALANDJI 7 TALANDJI 8 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2012
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 LEARMONTH 2 LEARMONTH 2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 5 TALANDII 6 TALANDII 6 TALANDII 7 TALANDII 7 TALANDII 8 TALANDII 9 TALANDII 1 TALANDII	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD C	MAMMAL MAMMAL FISH MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves, Exmouth Gulf 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 LEARMONTH C LEARMONTH C EXMOUTH GULF 1 LEARMONTH L LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 6 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24051 Balaenopteridae 34025 Eleotridae 24051 Balaenopteridae 24054 Dugongidae	Megaptera Megaptera Milyeringa Megaptera Dugong Dugong	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale humpback whale dugong	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Cavee, Exmouth Gulf 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Cavee, Exmouth Gulf 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Degaptera Megaptera Dugong Dugong Megaptera Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 4 LEARMONTH 2 LEARMONTH 4 LEARMONTH 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Megaptera Milyeringa Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXAMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 3 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF 6 EXMOUTH GULF 6 EXMOUTH GULF 7 EXMOUTH GULF 8 EXMOUTH GULF 9 EXMOUTH GULF 9 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape, 3000 Exmouth Gulf to Barrow Island, Exmou	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 4 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 3 EXMOUTH GULF 3 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 LEARMONTH 2 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 7 LEARMONTH 8 LEARMONTH 9 LEARMONTH 1 PAMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 3 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDJI 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDJI 1 TALANDJI 1 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI 2 TALANDJI 4 TALANDJI 2 LEARMONTH 6 LEARMONTH 2 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF 6 EXMOUTH GULF 6 EXMOUTH GULF 7 EXMOUTH GULF 8 EXMOUTH GULF 9 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape, 3000 Exmouth Gulf to Barrow Island, Exmou	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae dugon novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH C EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24051 Balaenopteridae	Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale dugong humpback whale dugong humpback whale dugong dugong dugong humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 TALANDII 4 TALANDII 5 TALANDII 6 TALANDII 7 TALANDII 7 TALANDII 8 LEARMONTH 9 EXMOUTH GULF 1 LEARMONTH 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 6 LEARMONTH 7 LEARMONTH 8 LEARMONTH 9 LEARMONTH 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Dugong Megaptera Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 LEARMONTH 2 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF 6 EXMOUTH GULF 6 EXMOUTH GULF 7 EXMOUTH GULF 8 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 3 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF 5 EXMOUTH GULF 6 EXMOUTH GULF 6 EXMOUTH GULF 7 EXMOUTH GULF 8 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2012 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 2 TALANDII 2 TALANDII 1 TALANDII 2 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 TALANDII 4 TALANDII 5 TALANDII 6 TALANDII 7 TALANDII 7 TALANDII 8 LEARMONTH 9 EXMOUTH GULF 1 LEARMONTH 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 6 LEARMONTH 7 LEARMONTH 8 LEARMONTH 9 LEARMONTH 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Gulf to Barrow Island, Exmou	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 3 LEARMONTH 4 LEARMONTH 5 LEARMONTH 6 LEARMONTH 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Caves of the Northwest Cape 3000 Exmouth Gulf to Barrow Island, Exmou 3	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013
Megaptera novaeangliae Megaptera novaeangliae Milyeringa veritas Megaptera novaeangliae	24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera	novaeangliae novaeangliae veritas novaeangliae	humpback whale humpback whale blind gudgeon humpback whale	Animalia	CD C	MAMMAL	Certain	survey	3 LEARMONTH 3 TALANDII 1 CAPE RANGE NATIONAL PARK 2 LEARMONTH 2 EXMOUTH GULF 2 LEARMONTH 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 1 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 2 TALANDII 4 TALANDII 2 TALANDII 2 LEARMONTH 2 EXMOUTH GULF 1 EXMOUTH GULF 1 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 2 LEARMONTH 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 1 N/A 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 North West Cape, Exmouth Gulf 3000 Exmouth Gulf to Barrow Island, Exmou	2013 2014 2009 2012 2012 2012 2012 2012 2013 2013 2013

Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Stenella longirostris	24067 Delphinidae	Stenella	longirostris	spinner dolphin	Animalia	P4	MAMMAL	Certain	survey	4 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 LEARMONTH	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	os	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf to BarrowIsland, Exmou 3000	2014
	24051 Balaenopteridae		-	humpback whale	Animalia	CD	MAMMAL	Certain		2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2014
Megaptera novaeangliae		Megaptera	novaeangliae						survey			
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmor 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
= :					Animalia	OS	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong					survey			
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Orcaella heinsohni	24060 Delphinidae	Orcaella	heinsohni	Australian snubfin dolphin	Animalia	P4	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf to Barrowisland, Exmol 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
	24051 Balaenopteridae		novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae		Megaptera	-						survey			
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exmoi 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	2 N/A	ExmouthGulf_to_BarrowIsland, Exmor 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	14 EXMOUTH GULF	ExmouthGulf, ExmouthGulf 100	2013
Pseudomys chapmani	24233 Muridae	Pseudomys	chapmani		nı Animalia	P4	MAMMAL	Certain	survey	1 EXMOUTH GULF	Roy Hill, Opportunistic Site 03 100	2011
Dugong dugon	24084 Dugongidae	,	dugon	dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
		Dugong										
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae 	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Orcaella heinsohni	24060 Delphinidae	Orcaella	heinsohni	Australian snubfin dolphin	Animalia	P4	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2012
Orcaella heinsohni	24060 Delphinidae	Orcaella	heinsohni	Australian snubfin dolphin	Animalia	P4	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
						OS	MAMMAL			2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia			Certain	survey		·	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exmoi 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2013
						CD			survey			
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia		MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 EXMOUTH GULF	ExmouthGulf_to_BarrowIsland, Exmor 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exmor 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exmor 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon	dugong	Animalia	os	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exmor 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000	2012
			-		Animalia	CD	MAMMAL	Certain		2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale					survey		·	
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae			humpback whale	Animalia	CD	MAMMAL	Certain			Exmouth Gulf to Barrow Island, Exmol 3000	2012
Megaptera novaeangliae		Megaptera	novaeangliae						survey	2 EXMOUTH GULF		
iviegaptera novacangnac	24051 Balaenopteridae	Megaptera	novaeangliae	humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000	2012
Dugong dugon			-			CD OS						2012 2013
Dugong dugon	24051 Balaenopteridae 24084 Dugongidae	Megaptera Dugong	novaeangliae dugon	humpback whale dugong	Animalia Animalia		MAMMAL	Certain Certain	survey survey	2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013
Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong	novaeangliae dugon dugon	humpback whale dugong dugong	Animalia Animalia Animalia	OS OS	MAMMAL MAMMAL MAMMAL	Certain Certain Certain	survey survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A	Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000 ExmouthGulf_to_BarrowIsland, Exmou 3000	2013 2014
Dugong dugon Dugong dugon Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera	novaeangliae dugon dugon novaeangliae	humpback whale dugong dugong humpback whale	Animalia Animalia Animalia Animalia	OS OS CD	MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain	survey survey Survey survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000 ExmouthGulf_to_BarrowIsland, Exmou 3000 Exmouth Gulf to Barrow Island, Exmou 3000	2013 2014 2012
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong	novaeangliae dugon dugon novaeangliae dugon	humpback whale dugong dugong humpback whale dugong	Animalia Animalia Animalia Animalia Animalia	OS OS CD OS	MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain	survey survey Survey survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon	humpback whale dugong dugong humpback whale dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS	MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain	survey survey Survey survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 2 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Dugong dugon Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon	humpback whale dugong dugong humpback whale dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS	MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain Certain	survey survey Survey survey Survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 2 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to, BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to, BarrowIsland, Exmot 3000 ExmouthGulf_to, BarrowIsland, Exmot 3000 ExmouthGulf_to, BarrowIsland, Exmot 3000 ExmouthGulf_to, BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon	humpback whale dugong dugong humpback whale dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS	MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain Certain Certain	survey survey Survey survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 2 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Dugong dugon Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon	humpback whale dugong dugong humpback whale dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS	MAMMAL	Certain Certain Certain Certain Certain Certain Certain	survey survey Survey survey Survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Dugong dugon Dugong dugon Dugong dugon Dugong dugon Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS	MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL MAMMAL	Certain Certain Certain Certain Certain Certain Certain Certain	survey survey Survey survey Survey Survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 2 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon dugon dugon	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS	MAMMAL	Certain	survey survey Survey survey Survey Survey Survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS OS OS OS OS	MAMMAL	Certain	survey survey Survey survey Survey Survey Survey Survey Survey Survey Survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong	novaeangliae dugon dugon novaeangliae dugon	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong dugong dugong dugong dugong dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS OS OS OS OS OS	MAMMAL	Certain	survey survey survey survey Survey Survey Survey Survey Survey Survey survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Megaptera	novaeangliae dugon dugon novaeangliae dugon novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS OS OS CD OS CD OS	MAMMAL	Certain	survey survey Survey Survey Survey Survey Survey Survey Survey Survey survey survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to, BarrowIsland, Exmot 3000 ExmouthGulf to BarrowIsland, Exmot 3000 ExmouthGulf to BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong	novaeangliae dugon dugon novaeangliae dugon	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong dugong dugong dugong humpback whale dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS OS OS CD OS OS	MAMMAL	Certain	survey survey Survey Survey Survey Survey Survey Survey Survey survey survey survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to, BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to, BarrowIsland, Exmot 3000 ExmouthGulf to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae	Megaptera Dugong Dugong Megaptera Dugong Megaptera	novaeangliae dugon dugon novaeangliae dugon	humpback whale dugong dugong humpback whale dugong humpback whale dugong	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS OS OS OS OS CD OS CD OS CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Megaptera Megaptera	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon dugon dugon dugon dugon dugon novaeangliae dugon novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS OS CS CD CD CD CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouthoutf, to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouthoutf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Dugong Megaptera Megaptera Megaptera	novaeangliae dugon dugon novaeangliae dugon novaeangliae novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS CD CD CD CD CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Megaptera Megaptera	novaeangliae dugon dugon novaeangliae dugon dugon dugon dugon dugon dugon dugon dugon dugon novaeangliae dugon novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS OS OS OS OS OS CS CD CD CD CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF 3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouthoutf, to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouthoutf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Dugong Megaptera Megaptera Megaptera	novaeangliae dugon dugon novaeangliae dugon novaeangliae novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale humpback whale humpback whale	Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	OS OS CD OS CD CD CD CD CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to_BarrowIsland, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24081 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24085 Balaenopteridae 24081 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Megaptera Megaptera Megaptera Megaptera Megaptera	novaeangliae dugon dugon novaeangliae dugon novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong humpback whale humpback whale humpback whale humpback whale	Animalia	OS OS OS OS OS OS CD CD CD CD CD CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouthout for Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf_to_BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014
Dugong dugon Dugong dugon Megaptera novaeangliae Dugong dugon Megaptera novaeangliae	24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24051 Balaenopteridae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24084 Dugongidae 24085 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae 24051 Balaenopteridae	Megaptera Dugong Dugong Megaptera Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong Dugong Megaptera Dugong Megaptera	novaeangliae dugon dugon novaeangliae dugon novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae novaeangliae	humpback whale dugong dugong humpback whale dugong dugong dugong dugong dugong dugong dugong dugong dugong humpback whale dugong humpback whale humpback whale humpback whale humpback whale humpback whale humpback whale	Animalia	OS OS OS OS OS OS OS CD OS CD	MAMMAL	Certain	survey	2 EXMOUTH GULF 1 EXMOUTH GULF 1 N/A 2 EXMOUTH GULF 2 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 2 EXMOUTH GULF 2 EXMOUTH GULF 2 EXMOUTH GULF 4 EXMOUTH GULF 5 EXMOUTH GULF 6 EXMOUTH GULF 6 EXMOUTH GULF 7 EXMOUTH GULF 8 EXMOUTH GULF 9 EXMOUTH GULF 1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmot 3000 ExmouthGulf to, BarrowIsland, Exmot 3000 Exmouth Gulf to Barrow Island, Exmot 3000	2013 2014 2012 2014 2014 2014 2014 2014 2014

Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	ni 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae		novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain		2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
		Megaptera	-							survey				
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Orcaella heinsohni	24060 Delphinidae	Orcaella	heinsohni		Australian snubfin dolphin	Animalia	P4	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	ot 3000	2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
							CD							
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia		MAMMAL	Certain	survey	4 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	ot 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	or 3000	2014
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
			-							survey				
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	2 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	3 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf to BarrowIsland, Exm	or 3000	2014
	24051 Balaenopteridae				humpback whale	Animalia	CD	MAMMAL	Certain		2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Megaptera novaeangliae		Megaptera	novaeangliae							survey				
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	2 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	οι 3000	2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
			-								·			2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	2 N/A	ExmouthGulf_to_BarrowIsland, Exm		
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	oı 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	ot 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
							P4	MAMMAL			5 N/A	ExmouthGulf to BarrowIsland, Exmo		
Sousa sahulensis	0 Delphinidae	Sousa	sahulensis		Australian humpback dolphin	Animalia			Certain	Survey				2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	ot 3000	2013
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
			-											
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
Megaptera novaeangliae	24051 Balaenopteridae	Megaptera	novaeangliae		humpback whale	Animalia	CD	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	อเ 3000	2012
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo	ni 3000	2013
	24084 Dugongidae					Animalia	OS	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon		Dugong	dugon		dugong					survey				
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2012
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	9 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	os	MAMMAL	Certain	survey	1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
						Animalia	OS	MAMMAL	Certain		1 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong					survey				
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	survey	2 EXMOUTH GULF	Exmouth Gulf to Barrow Island, Exmo		2013
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf to BarrowIsland, Exm	ot 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
						Animalia	OS	MAMMAL	Certain		1 N/A			
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong					Survey	· · · · · · · · · · · · · · · · · · ·	ExmouthGulf_to_BarrowIsland, Exm		2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm	οι 3000	2014
Dugong dugon	24084 Dugongidae	Dugong	dugon		dugong	Animalia	OS	MAMMAL	Certain	Survey	1 N/A	ExmouthGulf_to_BarrowIsland, Exm		2014
Arenaria interpres interpres	2 100 1 Dagongrade													1999
	24770 Coolonacidae	Aronaria	intorproc	intorproc	ruddu turnetono	Animalia		DIDD	Madarataly cartain			Charles Knife Beach		
	24778 Scolopacidae	Arenaria	interpres	interpres	ruddy turnstone	Animalia	IA	BIRD	Moderately certain	Observational	1 LEARMONTH	Charles Knife Beach	500	
Merops ornatus	24778 Scolopacidae 24598 Meropidae	Arenaria Merops	interpres ornatus	interpres	ruddy turnstone rainbow bee-eater	Animalia Animalia	IA	BIRD BIRD	Moderately certain Moderately certain			Charles Knife Beach Beach	100	2007
Tringa nebularia				interpres		Animalia				Observational	1 LEARMONTH			
	24598 Meropidae 24808 Scolopacidae	Merops Tringa	ornatus nebularia	interpres	rainbow bee-eater common greenshank, greensha	Animalia nk Animalia	IA	BIRD	Moderately certain Moderately certain	Observational Observational Observational	1 LEARMONTH 1 LEARMONTH	Beach Cape Range NP	100 100	2007 1999
Tringa nebularia Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae	Merops Tringa Ardea	ornatus nebularia modesta	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret	Animalia nk Animalia Animalia	IA IA IA	BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Beach Cape Range NP pilgramunna	100 100 100	2007 1999 2010
Tringa nebularia Ardea modesta Numenius phaeopus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae	Merops Tringa Ardea Numenius	ornatus nebularia modesta phaeopus	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel	Animalia nk Animalia Animalia Animalia	IA IA IA	BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Beach Cape Range NP pilgramunna pilgramunna	100 100 100 100	2007 1999 2010 2010
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae	Merops Tringa Ardea Numenius Calidris	ornatus nebularia modesta phaeopus ruficollis	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint	Animalia nk Animalia Animalia Animalia Animalia	IA IA IA IA	BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake	100 100 100 100 100	2007 1999 2010 2010 2011
Tringa nebularia Ardea modesta Numenius phaeopus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae	Merops Tringa Ardea Numenius	ornatus nebularia modesta phaeopus	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel	Animalia nk Animalia Animalia Animalia	IA IA IA	BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK 1 CAPE RANGE NATIONAL PARK	Beach Cape Range NP pilgramunna pilgramunna	100 100 100 100	2007 1999 2010 2010
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae	Merops Tringa Ardea Numenius Calidris	ornatus nebularia modesta phaeopus ruficollis	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint	Animalia nk Animalia Animalia Animalia Animalia	IA IA IA IA	BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake	100 100 100 100 100	2007 1999 2010 2010 2011
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae	Merops Tringa Ardea Numenius Calidris Calidris Merops	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia	IA IA IA IA IA	BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth	100 100 100 100 100 100 100	2007 1999 2010 2010 2011 2011 2000
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA IA IA IA IA IA	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational Observational Observational Observational Observational Observational Observational Observational Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest	100 100 100 100 100 100 100 100	2007 1999 2010 2010 2011 2011 2000 2002
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus Ardea modesta Merops ornatus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 41324 Ardeidae 24598 Meropidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay	100 100 100 100 100 100 100 100 100	2007 1999 2010 2010 2011 2011 2000 2002 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops omatus Tringa nebularia	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Meropidae 41324 Ardeidae 24598 Meropidae 24598 Meropidae 24808 Scolopacidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint reinbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay	100 100 100 100 100 100 100 100 100 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops ornatus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 41324 Ardeidae 24598 Meropidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus	interpres	rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island	100 100 100 100 100 100 100 100 100 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops omatus Tringa nebularia	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Meropidae 41324 Ardeidae 24598 Meropidae 24598 Meropidae 24808 Scolopacidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint reinbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha	Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF 1 EXMOUTH GULF 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay	100 100 100 100 100 100 100 100 100 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus Ardea modesta Merops ornatus Tringa nebularia Arenaria interpres interpres Merops ornatus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 24598 Meropidae 24598 Scolopacidae 24598 Meropidae 24808 Scolopacidae 24778 Scolopacidae 24598 Meropidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha ruddy turnstone rainbow bee-eater	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn	100 100 100 100 100 100 100 100 100 500 5	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops ornatus Tringa nebularia Arenaria interpres interpres Merops ornatus Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Meropidae 41324 Ardeidae 24598 Meropidae 24598 Meropidae 24808 Scolopacidae 24778 Scolopacidae 24788 Meropidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint reinbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha ruddy turnstone rainbow bee-eater great egret, white egret great egret, white egret	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn	100 100 100 100 100 100 100 100 500 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops omatus Tringa nebularia Arenaria interpres interpres Merops omatus Ardea modesta Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 41324 Ardeidae 24598 Meropidae 24778 Scolopacidae 24778 Scolopacidae 24778 Scolopacidae 24598 Meropidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea Ardea Ardea	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta modesta		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensharuddy turnstone rainbow bee-eater great egret, white egret	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn Giralia Stn	100 100 100 100 100 100 100 100 100 500 5	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus Ardea modesta Merops ornatus Tringa nebularia Arenaria interpres interpres Merops ornatus Ardea modesta Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24589 Meropidae 41324 Ardeidae 24598 Meropidae 24808 Scolopacidae 24778 Scolopacidae 24788 Meropidae 41324 Ardeidae 41324 Ardeidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea Ardea Ardea Numenius	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta modesta modesta madagascariensis		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha ruddy turnstone rainbow bee-eater great egret, white egret great egret, white egret great egret, white egret eastern curlew	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn Giralia Station Giralia Station	100 100 100 100 100 100 100 100 100 500 5	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops omatus Ardea modesta Merops omatus Tringa nebularia Arenaria interpres interpres Merops omatus Ardea modesta Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24598 Meropidae 41324 Ardeidae 24598 Meropidae 24778 Scolopacidae 24778 Scolopacidae 24778 Scolopacidae 24598 Meropidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea Ardea Ardea	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta modesta		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensharuddy turnstone rainbow bee-eater great egret, white egret	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn Giralia Stn	100 100 100 100 100 100 100 100 500 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus Ardea modesta Merops ornatus Tringa nebularia Arenaria interpres interpres Merops ornatus Ardea modesta Ardea modesta	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Scolopacidae 24589 Meropidae 41324 Ardeidae 24598 Meropidae 24808 Scolopacidae 24778 Scolopacidae 24788 Meropidae 41324 Ardeidae 41324 Ardeidae 41324 Ardeidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea Ardea Ardea Numenius	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta modesta modesta madagascariensis		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha ruddy turnstone rainbow bee-eater great egret, white egret great egret, white egret great egret, white egret eastern curlew	Animalia nk Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn Giralia Station Giralia Station	100 100 100 100 100 100 100 100 100 500 5	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003
Tringa nebularia Ardea modesta Numenius phaeopus Calidris ruficollis Calidris ruficollis Merops ornatus Ardea modesta Merops ornatus Tringa nebularia Arenaria interpres interpres Merops ornatus Ardea modesta Ardea modesta Ardea modesta Ardea modesta Ardea modesta Numenius madagascariensis Charadrius mongolus	24598 Meropidae 24808 Scolopacidae 41324 Ardeidae 25742 Scolopacidae 24788 Scolopacidae 24788 Meropidae 41324 Ardeidae 24598 Meropidae 24598 Meropidae 24598 Meropidae 24788 Scolopacidae 24788 Scolopacidae 24778 Scolopacidae 41324 Ardeidae 41324 Ardeidae 41324 Ardeidae 24798 Scolopacidae 25576 Charadriidae	Merops Tringa Ardea Numenius Calidris Calidris Merops Ardea Merops Tringa Arenaria Merops Ardea Ardea Numenius Charadrius	ornatus nebularia modesta phaeopus ruficollis ruficollis ornatus modesta ornatus nebularia interpres ornatus modesta modesta modesta modesta modesta modesta modesta modesta modesta modesta modesta		rainbow bee-eater common greenshank, greensha great egret, white egret whimbrel red-necked stint rainbow bee-eater great egret, white egret rainbow bee-eater common greenshank, greensha ruddy turnstone rainbow bee-eater great egret, white egret great egret, white segret eastern curlew lesser sand plover	Animalia nk Animalia nk Animalia Animalia Animalia Animalia Animalia Animalia Animalia Animalia	IA I	BIRD BIRD BIRD BIRD BIRD BIRD BIRD BIRD	Moderately certain	Observational	1 LEARMONTH 1 LEARMONTH 1 LEARMONTH 1 CAPE RANGE NATIONAL PARK 1 LEARMONTH 1 EXMOUTH GULF	Beach Cape Range NP pilgramunna pilgramunna cape range np osprey lake cape range np osprey lake Learmouth Bay of Rest Exmouth Gulf - Gales Bay Exmouth Gulf - Gales Bay Roberts Island Giralia Stn Giralia Stn Giralia Station Giralia Bayion	100 100 100 100 100 100 100 100 500 500	2007 1999 2010 2010 2011 2011 2000 2002 2003 2003

Arenaria interpres interpres	24778 Scolopacidae	Arenaria	interpres	interpres	ruddy turnstone	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF	Doole Island	500	2001
Calidris acuminata	24779 Scolopacidae	Calidris	acuminata		sharp-tailed sandpiper	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF	Doole Island	500	2001
Limosa lapponica	30932 Scolopacidae	Limosa	lapponica		bar-tailed godwit	Animalia	IA (& VU at su BIRD	Moderately certain	Observational	1 EXMOUTH GULF	Doole Island	500	2001
Pluvialis squatarola	24383 Charadriidae	Pluvialis	squatarola		grey plover	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF	Doole Island	500	2001
Glareola maldivarum	24481 Glareolidae	Glareola	maldivarum		oriental pratincole	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF	tidal flats Bullara station	100	2011
Calidris acuminata	24779 Scolopacidae	Calidris	acuminata		sharp-tailed sandpiper	Animalia	IA BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Limosa lapponica	30932 Scolopacidae	Limosa	lapponica		bar-tailed godwit	Animalia	IA (& VU at su BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Ardea modesta	41324 Ardeidae	Ardea	modesta		great egret, white egret	Animalia	IA BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Calidris acuminata	24779 Scolopacidae	Calidris	acuminata		sharp-tailed sandpiper	Animalia	IA BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Limosa lapponica	30932 Scolopacidae	Limosa	lapponica		bar-tailed godwit	Animalia	IA (& VU at su BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Tringa glareola	24806 Scolopacidae	Tringa	glareola		wood sandpiper	Animalia	IA BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Ardea modesta	41324 Ardeidae	Ardea	modesta		great egret, white egret	Animalia	IA BIRD	Moderately certain	Observational	1 LEARMONTH		18000	1978
Arenaria interpres interpres	24778 Scolopacidae	Arenaria	interpres	interpres	ruddy turnstone	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF		18000	1981
Limosa lapponica	30932 Scolopacidae	Limosa	lapponica		bar-tailed godwit	Animalia	IA (& VU at su BIRD	Moderately certain	Observational	1 EXMOUTH GULF		18000	1981
Merops ornatus	24598 Meropidae	Merops	ornatus		rainbow bee-eater	Animalia	IA BIRD	Moderately certain	Observational	1 EXMOUTH GULF		18000	1977



# **APPENDIX C**

Fauna Species List

Key: EPBC = Environmental Protection and Biodiversity Conservation Act 1999, WC = Wildlife Conservation Act 1950, DPaW = Department of Parks and Wildlife Priority Code, A = Listed in Naturemap, B= DEC Threatened and Priority fauna search, C = EPBC Protected Matters search, D= Current Survey

Note: For Definitions of Conservation Codes see Appendix A.

REPTILES	Conservation Codes										
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D			
AGAMIDAE											
Amphibolurus longirostris	Long-nosed Dragon				Χ						
Ctenophorus sp.	Ctenophorus sp.							X			
Ctenophorus clayi	Collared Dragon				Χ						
Ctenophorus femoralis	Dune Dragon				Χ						
Ctenophorus isolepis	Military Sand Dragon				Χ						
Ctenophorus nuchali	Central Netted Dragon				Χ						
Pogona minor	Dwarf Bearded Dragon				Χ						
DIPLODACTYLIDAE		·									
Diplodactylus capensis	Cape Range Stone Gecko			P2		Х					
GEKKONIDAE	<u> </u>			•			•				
Gehyra variegata	Tree Dtella				Х			X			
Hemidactylus frenatus	Asian House Gecko				Χ		Х				
Heteronotia benoei	Bynoe's Gecko				Χ						
PYGOPODIDAE		•	•	•	•	•	•	•			
Aprasia rostrata	Monte Bellow Worm-lizard	VU				Χ					
Lialis burtonis	Burton's Snake Lizard				Х						
SCINCIDAE	·			•			•				
Ctenotus sp.	Ctenotus sp.							X			
Ctenotus schomburgkii	Schomburgks Ctenotus				Х						
Ctenotus saxatilis	Rock Ctenotus				Χ						
Cyclodomorphus melanops	Slender Blue Tongue				Х						
Eremiascincus isolepis	Northern Bar-lipped Skink				Х						
Lerista allochira	Cape Range Slider			P3		Χ					
Lerista petersoni	Phantom Mole Slider				Х						
Leriista uniduo	Spotted Broad-blazed Slider				Х						
Tiliqua multifasciata	Central Blue-tongue				Х						
VARANIDAE	<u> </u>										
Varanus gouldii	Goulds Sand Monitor							X			

REPTILES		Conservation Codes										
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D				
BOIDAE												
Antaresia stimsoni	Stimson's Python							X				
ELAPIDAE												
Pseudonaja mengdeni	Western Brown Snake				Х							
Pseudonaja modesta	Ringed Brown Snake				Χ							

<sup>[</sup>X] fauna species recorded.

<sup>[\*]</sup> denotes introduced species.

Key: EPBC = Environmental Protection and Biodiversity Conservation Act 1999, WC = Wildlife Conservation Act 1950, DPaW = Department of Parks and Wildlife Priority Code, A = Listed in Naturemap, B = DEC Threatened and Priority fauna search, C = EPBC Protected Matters search, D = Current Survey

**Note:** For Definitions of Conservation Codes see Appendix A.

BIRDS	Conservation Codes									
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D		
CASUARIIDAE										
Dromaius novaehollandiae	Emu							Χ		
COLUMBIDAE	•									
Columba livia	Rock Pigeon				Χ		Χ			
Geopelia cuneata	Diamond Dove							Χ		
Geopeliahumeralis	Bar-shouldered				Χ					
Ocyphaps lophotes	Crested Pigeon							Χ		
APODIDAE										
Apus pacificus	Fork-tailed Swift	MiMa	S5				Χ			
PROCELLARIIDAE										
Macronectes giganteus	Southern Giant-Petrel	En					Χ			
Ardenna carneipes	Flesh-footed Shearwater	MiMa	S5				Χ			
Calonectris leucomelas	Streaked Shearwater	MiMa	S5				Χ			
Puffinus pacificus	Wedge-tailed Shearwater		S5		Χ					
DIOMEDEIDAE										
Thalassarche impavida	Campbell Albatross	Vu					Χ			
FREGATIDAE								•		
Fregata ariel	Lesser Frigatebird	MiMa	S5				Χ			
PHALACROCORACIDAE										
Phalacrocorax sulcirostris	Little Black Cormorant				Χ					
Phalacrocorax varius	Pied Cormorant				Χ					
PELECANIDAE										
Pelecanus conspicillatus	Australian Pelican				Χ					
CICONIIDAE	•									
Ephippiorhynchus asiaticus	Black-necked Stork				Χ					
ARDEIDAE										
Ardea modesta	Eastern Great Egret	Ma	S5		Χ	Χ	Χ			
Ardea ibis	Cattle Egret	Ma	S5		Χ		Χ			
Egretta garzetta	Little Egret	Ma	S5		Χ					
Egretta novaehollandiae	White-faced Heron				Χ					
ACCIPITRIDAE										
Aquila audax	Wedge-tailed Eagle							Χ		
Circus assimilis	Spotted Harrier				Χ			Χ		
Haliaeetus leucogaster	White-bellied Sea-Eagle	Ma			Χ		Χ			
Haliastur indus	Brahminy Kite				Χ					

BIRDS	Conservation Codes										
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D			
Haliastur sphenurus	Whistling Kite				Χ			X			
Pandion cristatus	Osprey	MiMa	S5		Χ		Χ	Χ			
FALCONIDAE				•							
Falco cenchroides	Nankeen Kestrel				Χ			Χ			
GRUIFORMES				-							
Grus rubicunda	Brolga				Χ						
HAEMATOPODIDAE				•							
Haematopus fuliginosus	Sooty Oysercatcher				Χ			Χ			
Haematopus longirostris	Pied Oystercatcher							Х			
CHARADRIIDAE											
Charadrius leschenaultii	Greater Sand Plover	Vu, MiMa	S3		Χ						
Charadrius mongolus	Lesser Sand Plover	En, MiMa	S5			Х		Χ			
Charadrius ruficapillus	Red-capped Plover				Х						
Charadrius veredus	Oriental Plover	MiMa					Χ				
Pluvialis squatarola	Grey Plover	MiMa			Χ	Х					
GLAREOLÍDAE				•							
Glareola maldivarum	Oriental Pratincole	MaMi				Х	Χ				
LARIDAE											
Anous stolidus	Common Noddy	MiMa					Χ				
Chroicocephalus novaehollandiae	Silver Gull				Х			X			
Hydroprogne caspia	Caspian Tern	MiMa			Х	Х	Χ	X			
Thalasseus bengalensis	Lesser Crested Tern	Ma			Х			X			
Thalasseus bergii	Crested Tern	MiMa			Х			X			
Sterna fuscata	Sooty Tern	Ma					Χ				
Sternula nereis	Australian Fairy Tern	Ma			Х	Х	X	-			
SCOLOPACIDAE	, taoti aliani i alii y i oi ii	IVIG			Λ.	Λ.	7.	_			
Actitis hypoleucos	Common Sandpiper	MaMi			Χ		Х				
Arenaria interpres	Ruddy Turnstone	MaMi			X	Х	7.	-			
Calidris acuminata	Sharp-tailed Sandpiper	MaMi			X	X	Х				
Calidris canutus	Red Knot	En					X	-			
Calidris ferruginea	Curlew Sandpiper	CE, MaMi			Х		X				
Calidris melanotos	Pectoral Sandpiper	Mi					X				
Caliris ruficollis	Red-necked Stint	MaMi			Х	Х	,				
Calidris tenuirostris	Great Knot	CE, MaMi	S5		X						
Limosa lapponica	Bar-tailed Godwit	MaMi			X	Х	Х				
Limosa lapponica baueri	Bar-tailed Godwit (Western Alaskan)	Vu					X				
Limosa lapponica baden Limosa lapponica menzbieri	Bar-tailed Godwit (Western Alaskan)	CE					X	-			
Numenius madagascariensis	Eastern Curlew	CE				Х	X	-			
Numenius phaeopus	Whimbrel	MaMi				X					
Tringa brevipes	Grey-tailed tattler	MaMi		P4	X	^					
Tringa previpes Tringa glareola	Wood Sandpiper	MaMi		F <del>4</del>	^	Х		-			
Tringa giareoia Tringa nebularia	Common Greenshank	MaMi			X	X	Х	-			
CACATUIDAE	Common Greenshank	IVIAIVII			^	^	Λ				

BIRDS	Conservation Codes									
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D		
Melopsittacus undulatus	Budgerigar							X		
PSITTACIDAE		•	•							
Eolophus roseicapillus	Galah							Χ		
Pezoporus occidentalis	Night Parrot	En					Χ			
HALCYONIDAE										
Todiramphus chloris	Collared Kingfisher				Χ					
Todiramphus pyrrhopygius	Red-backed Kingfisher				Χ					
Todiramphus sanctus	Sacred Kingfisher				Χ					
MEROPIDAE		•	•	-	•	•		-		
Merops ornatus	Rainbow Bee-eater	Ma	S5		Χ	Χ	Χ			
MALURIDAE	·	•	•							
Malurus lamberti	Variegated Fairy-wren							Χ		
Malurus leucopterus	White-winged Fairy-wren				Χ					
ACANTHIZIDAE										
Gerygone tenebrosa	Dusky Gerygone				Χ					
MELIPHAGIDAE	, , , , , ,				•					
Epthianura aurifrons	Orange Chat				Χ					
Lichenostomus virescens	Singing Honeyeater				Χ			Χ		
Lichmera indistincta	Brown Honeyeater				Χ					
Manorina flavigula	Yellow-throated Miner				Χ			Χ		
CAMPEPHAGIDAE		•	•			•		•		
Coracina novaehollandiae	Black-faced Cuckoo-shrike				Χ			Χ		
PACHYCEPHALIDAE	<u> </u>		•	•						
Colluricincla harmonica	Grey Shrike-thrush				Χ					
Pachycephala lanioides	White-breasted Whistler				Χ					
Pachycephala melanura	Mangrove Golden Whistler				Χ					
ARTÁMIDAE		•	•							
Artamus leucorynchus	White-breasted Woodswallow				Χ					
Artamus personatus	Masked Woodswallow							X		
CRACTICIDAE	•	•	•							
Cracticus nigrogularis	Pied Butcherbird							Χ		
RHIPIDURIDAE	•	•	•							
Rhipidura albiscapa	Grey Fantail				Χ					
Rhipidura leucophrys	Willie Wagtail				Χ			X		
Rhipidura phasiana	Mangrive Grey Fantail				Χ					
MONARCHIDAE										
Grallina cyanoleuca	Magpie-Lark							Χ		
CORVIDAE										
Corvus bennetti	Little Crow				Χ					
Corvus orru	Torresian Crow							Χ		
PETROICIDAE										
Peneonanthe pulverulenta	Mangrove Robin				Χ					
MEGALURIDAE										

BIRDS	Conservation Codes							
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D
Cincloramphus cruralis	Brown Songlark							X
HIRUNDINIDAE								
Cheramoeca leucosterna	White-backed Swallow				Χ			
Hirundo neoxena	Welcome Swallow				Χ			
Hirundo rustica	Barn Swallow	MiMa	S4				Χ	
Petrochelidon nigricans	Tree Martin				Χ			
NECTARINIIDAE								
Dicaeum hirundinaceam	Mistletoebird				Χ			
ESTRILDIDAE								
Taeniopygia guttata	Zebra Finch							X

Key: EPBC = Environmental Protection and Biodiversity Conservation Act 1999, WC = Wildlife Conservation Act 1950, DPaW = Department of Parks and Wildlife Priority Code, A = Listed in Naturemap, B = DEC Threatened and Priority fauna search, C = EPBC Protected Matters search, D = Current Survey

Note: For Definitions of Conservation Codes see Appendix A.

MAMMALS	Conservation Codes									
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D		
DASYURIDAE		_, _,								
Dasyurus hallucatus	Northern Quoll	En					Χ			
Phascogale calura	Red-tailed Phascogale	Vu				Χ				
Sminthopsis longicaudata	Long-tailed Dunnart				P4	Х				
PERAMELIDAE				•			•			
Isoodon auratus barrowensis	Barrow Island Golden Bandicoot	Vu	S3			Χ				
POTOROIDAE										
Bettongia lesueur	Burrowing Bettong	Ex	S4			Х				
Potopus platyops	Broad-faced Potoroo	Ex	S4			Х				
MACROPODIDAE	·									
Macropus fuliginosus	Western Grey Kangaroo							Χ		
Petrogale lateralis lateralis	Black-flanked Rock-wallaby	En				Χ	Χ			
HIPPÖSIDERIDAE	,			•			•			
Rhinonicteris aurantia	Pilbara Leaf-nosed Bat	Vu					Χ			
EMBALLONURIDAE	•									
Taphozous georgianus	Common Sheath-tailed Bat							Χ		
VESPERTILIONIDAE	·									
Chalinolobus gouldii	Gould's Wattled Bat							Χ		
Nyctophilus geoffroyi	Lesser Long-eared Bat				Χ					
Scotorepens greyii	Little Broad-nosed Bat							Χ		
Vespadelus finlaysoni	Finlaysons Cave Bat							Χ		
MURIDAE										
Leporillus apicalis	Lesser Stick-nest Rat					Χ				
Mesembriomys macrurus	Golden-backed Tree-rat			P4		Χ				
*Mus musculus	House Mouse				Χ		Χ			
Pseudomys chapmani	Western Pebble-mouse			P4		Χ				
Pseudomys fieldi	Shark Bay Mouse	Vu				Χ				
Rattus rattus	Black rat				Χ		Χ			
Rattus tunneyi	Pale Field-rat				Χ					
Zyzomys pedunculatus	Central Rock-rat	CE	S1			Χ				
LEPORIDAE										
*Oryctolagus cuniculus	European Rabbit				Χ		Χ	Χ		
CANIDAE										
*Vulpes vulpes	Red Fox				Χ		Χ			
FELIDAE										
*Felis catus	Feral Cat				Χ		Χ			
EQUIDAE										
*Equus caballus	Horse						Χ			

MAMMALS	Conservation Codes									
Scientific Name	Common Name	EPBC	WC	DPaW	Α	В	С	D		
BOVIDAE										
Capra hircus	Goat						Χ			

[X] fauna species recorded.[\*] denotes introduced species.



## **APPENDIX D**

Habitat Assessments

### FAUNA HABITAT ASSESSMENT SHEET - 360 ENVIRONMENTAL

(North West)

Location: Exmouth - Subsea 7

Habitat Assessment: 1

Project: 2198

 Date: 13/06/2017
 Easting: 201998

 Quadrat Size: 50 x 50
 Northing: 7535474

Aspect

W N/A



Soil Texture	(Ber	l) sand	sandy	-loam	ı	oam	crack	cracking clay		
Son Texture	(1160	i) saliu	Salidy	-104111	VEGETATION		CIGON	ing city	cla	. y
	Dune ridge	Other:		.e. %				Cover		
otion	Acacia Shrubland	Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descri	Riverine Woodland	Overstorey	Acacia sp.		2	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	/			0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST F	IRE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	Ge	eneral			DISTURBA	NCE		Cattle	Э	
Tracks	0 heavy	1 medium *	2 mild (tracks)	3 none		0 heavy	1 medium	2 mild	3 none	
					ROUND COV					
Bare Ground	0 <5% 0	1 <20% <b>1</b>	2 20-60% 2	3 60-100% 3	Hummock Grass	0 <5% <b>0</b>	1 <20% 1	2 20-60% 2	3 60-100% 3	
Rock	<5%	<20%	20-60%	60-100%	Other Grass	<5%	< 20%	20-60%	60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				М	ICROHABITAT	rs				
Burrowin	ng Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
	iting Slabs	0 none 0	0-30% 1	2 30-70% 2	3 70-100% 3	Small Tree Hollows Water	0 none 0	1 rare 1	2 moderate 2	3 common
	Crevices	none 0	0-30% 1	30-70% 2	70-100% 3	Prescence Distance to	none	rare 1	moderate 2	3 common
Во	oulders	none	0-30%	30-70%	70-100%	Water	>5km	2-5km	500m - 2km	<500m
Suitabil	lity for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	Caves	Absent	Present			Woody Debris	0 none	rare	2 moderate	3 common
					SPECIES					
М	lulgara	YES	NO	]	Suitable habita	at with sandy soil a	and within distr	ibution but no sig	ns	
E	Bilby	YES	NO	DETAILS	Outside of spe	ecies distribution				
(	Quoll	YES	NO	DET						
Pebb	le Mouse	YES	NO							
	Birds			Mammals				Reptiles		
Zebra Finch		Yellow-throated		Rabbit scats				G.variegata		
Singing Hone Crow	eyeater	Variagated Fairy Pied Butcherbird								
Crested Pige	eon	ca Batorierbilla								

#### FAUNA HABITAT ASSESSMENT SHEET - 360 ENVIRONMENTAL (North West) Location: Exmouth - Subsea 7 Habitat Assessment: 2 Project: 2198 Easting: 202895 Date: 13/06/2017 Aspect Northing: 7535572 Quadrat Size: 50 x 50 N/A Soil Texture (Red) sand sandy-loam cracking clay clay VEGETATION Vegetatio n Species Dune swale Average Height (m) Cover Scattered Vegetation Description Stratum Thick Sparse Moderate Plants 3 60-100% 1 2 Overstorey <20% Acacia sp. 60-100% Midstorey 2 Ground Cover Triodia 0.5 20-60% CONDITION LAST FIRE 2 Good 4 3 Degraded >5 Yr Scale:

General					DISTURBA	NCE	Cattle				
	0	1	2	3		0	1	2	3		
Tracks	heavy	medium *	mild (tracks)	none		heavy	medium	mild	none		
				G	ROUND COVE	ER .					
Bare	0	1	2	3	Hummock	0	1	2	3		
Ground	<5%	<20%	20-60%	60-100%	Grass	<5%	<20%	20-60%	60-100%		
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%		
Logs	0	<b>&lt;20%</b>	20-60%	3	Other:	<5% 0	1	20-60%	3		
>10cm	<5%	<20%	20-60%	60-100%	Other.	<5%		20-60%	60-100%		
				M	IICROHABITAT	rs					
	0 1	0		2			0	1	2		
Burrowing	Suitability	Rock	1 Stony	Sandy Loam	3 Sand	Peeling Bark	none	rare	moderate	3 common	
Pebble	s Stones	0	1	2	3	Large Tree	0	1	2	3 common	
		none	0-30%	30-70%	70-100%	Hollows	none	rare	moderate		
Exfoliat	ing Slabs	0 none	0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	rare	moderate	3 common	
Book (	Crevices	0	1	2	3	Water	0	1	2	0	
HOCK	revices	none	0-30%	30-70%	70-100%	Prescence	none	rare	moderate	3 common	
Par	ılders	0	1	2	3	Distance to	0	1	2	3	
DOL	liders	none	0-30%	30-70%	70-100%	Water	>5km	2-5km	500m - 2km	<500m	
Suitabili	ty for Bats	ΥE	S	١	10	Termite Mounds	0 none	1 rare	2 moderate	3 common	
		A1 .	Б				0	1	2		
C	aves	Absent	Present			Woody Debris	none	rare	moderate	3 common	
					SPECIES						
Ми	ılgara	YES	NO		Suitable habita	at with sandy soil a	ınd within distri	bution but no si	gns		
В	ilby	YES	NO	DETAILS	Outside of species distribution						
Ç	uoll	YES	NO	DET,							

Reptiles

NO

Mammals Cat

Pebble Mouse

Emu

Location: Exmouth - Subsea 7 Habitat Assessment: 3

Date: 13/06/2017	Easting: 204181	Aspect	N	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7535618	Aspect	Е	S	W	N/A



			or with a strictly and the strictly								
Soil Texture	(Red	l) sand	sandy	r-loam	I	oam	crack	ing clay	clay		
					VEGETATION						
	Dune swale	Other:		atio	e t			Cover			
ption		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick		
Descri		Overstorey	Acacia sp.		2	0 <5%	1 <20%	2 20-60%	3 60-100%		
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%		
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
			CONDITION					LAST F	IRE		
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr	
	G	eneral			DISTURBA			Cattle			
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none		
				G	ROUND COVI	R					
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Rock	0 <5%	<20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	20-60%	3 60-100%		
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%		
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%		
>10cm	<b>\370</b>	<20%	20-00%		IICROHABITA		<2U%	20-00%	60-100%		
	0 1	0		2			0	1	2		
Burrowin	g Suitability	Rock	1 Stony	Sandy Loam	3 Sand	Peeling Bark	none	rare	moderate	3 common	
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common	
Exfolia	ting Slabs	0	1	2	3	Small Tree	0	1	2	3 common	
Book	Crevices	none 0	0-30% 1	30-70% 2	70-100% 3	Hollows Water	none 0	rare 1	moderate 2	3 common	
TIOCK	OTEVICES	none	0-30%	30-70%	70-100%	Prescence	none	rare	moderate		
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 <b>500m - 2km</b>	3 <500m	
Suitabil	ity for Bats	YE	S	N	10	Termite	0	1	2	3 common	
	aves	Absent	Present			Mounds Woody Debris	none 0 none	rare 1 rare	moderate 2 moderate	3 common	
					SPECIES		Hone	1010	moderate		
М	ulgara	YES	NO		Suitable habit	at with sandy soil a	and within dist	ibution but no sig	gns		
E	Bilby	YES	NO	AIL.S	Outside of spe	ecies distribution					
(	Quoll	YES	NO	DETAILS							
Pebb	le Mouse	YES	NO	1							
Е	Birds			Mammals				Reptiles			
Zebra Finch				Sheep							
Variagated I											
Willie Wagta	Ш										

#### FAUNA HABITAT ASSESSMENT SHEET - 360 ENVIRONMENTAL

(North West)

Location: Exmouth - Subsea 7 Habitat Assessment: 4

Date: 13/06/2017	Easting: 203950	Aspect	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7534800	Aspect	S		N/A



		SW						*		
Soil Texture	(Red	) sand	sandy	-loam	I	oam	cracl	king clay	cla	у
					VEGETATION	l .				
	Dune ridge	Other:		atio	h tge			Cover		
ption		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descri		Overstorey	Acacia sp.		2	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST FI	RE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	G	eneral			DISTURBA			Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none	
				G	ROUND COV	ER				
Bare	0	1	2	3	Hummock	0	1	2	3	
Ground Rock	<5% <b>0</b>	<20% 1	<b>20-60%</b> 2	60-100% 3	Grass Other Grass	<5% <b>0</b>	<20% 1	<b>20-60%</b>	60-100% 3	
	<b>&lt;5%</b>	<20% <b>1</b>	20-60% 2	60-100% 3		<5% 0	<20% 1	20-60% 2	60-100% 3	
Leaf Litter Logs	<5% <b>0</b>	<20%	20-60% 2	60-100% 3	Herbs Other:	<5% 0	<20% 1	20-60% 2	60-100% 3	
>10cm	<5%	<20%	20-60%	60-100%	Other.	<5%	<20%	20-60%	60-100%	
				N	MICROHABITA	TS				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	ting Slabs	0	1	2	3	Small Tree	0	1	2	3 common
Book	Crevices	none 0	0-30% 1	30-70% 2	70-100% 3	Hollows Water	none 0	rare 1	moderate 2	3 common
		none 0	0-30% 1	30-70% 2	70-100% 3	Prescence Distance to	none	rare 1	moderate 2	3
Во	ulders	none	0-30%	30-70%	70-100%	Water	>5km	2-5km	500m - 2km	<500m
Suitabil	ity for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES		Hone	Tale	moderate	
М	ulgara	YES	NO		Suitable habit	at with sandy soil a	and within dist	ribution but no sign	ns	
	Bilby	YES	NO	AILS		ecies distribution				
(	Quoll	YES	NO	DETAILS						
Pebb	le Mouse	YES	NO							
E	Birds			Mammals				Reptiles		
Zebra Finch										
Willie Wagta	ail									
Budgies										

Location: Exmouth - Subsea 7 Habitat Assessment: 5

Date: 13/06/2017	Easting: 203600	Aspect	Ν	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7534250	Aspect	Е	S	W	N/A



								7		
Soil Texture	(Red	) sand	sandy	∕-loam	lo	oam	cracl	king clay	cla	ıy
					VEGETATION					
	Dune swale	Other:		statio	Average Height (m)	-		Cover		
ption		Stra	itum	Vegetatio n Species	Ave Hei (n	Scattered Plants	Sparse	Moderate	Thick	
Descri	Riverine Woodland	Overstorey	Acacia sp.		2	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
Š		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST FI	RE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	C	General			DISTURBA	ANCE		Cattle		
Γracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none	
					ROUND COV					
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	/ICROHABITA	rs				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfoliat	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock	Crevices	0 none	1 0-30%	2	3	Water Prescence	0 none	1 rare	2 moderate	3 common
Bo	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabili	ty for Bats	YE			10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES					
М	ulgara	YES	NO	(0	Suitable habita	nt with sandy soil a	nd within distr	ibution but no sign	s	
Е	Bilby	YES	NO	DETAILS	Outside of spe	cies distribution				
	Quoll	YES	NO	DE						
	le Mouse	YES	NO					5		
E	Birds			Mammals				Reptiles		

### FAUNA HABITAT ASSESSMENT SHEET - 360 ENVIRONMENTAL

(North West)

Location: Exmouth - Subsea 7 Habitat Assessment: 6

Date: 14/06/2017	Easting: 202958	Aenact	Ν	NE	SW	NW
Quadrat Size: 50 x 50	Northing: 7533162	Aspect	E	SE	W	N/A



		100	E WE			100	k spills			
Soil Texture	(Red	) sand	sandy	-loam		loam	crac	king clay	cla	ay
	Spinifex plain	Other:		tatio	VEGETATION	N		Cover		
iption		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descr	Riverine Woodland	Overstorey				0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey				0 <5%	1 <20%	2 20-60%	3 60-100%	
<b>&gt;</b>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST F	RE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	G	eneral			DISTURE	ANCE		Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none	
					ROUND CO					
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	<5%	1 <20%	2 20-60%	3 60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	/ICROHABITA	ATS				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0	1 rare	2 moderate	3 common
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	none 0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabili	ity for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES					
Mi	ulgara	YES	NO		Suitable habi	at with sandy soil a	ınd within dist	ribution but no sig	ns	
E	Bilby	YES	NO	DETAILS	Outside of sp	ecies distribution				
(	Quoll	YES	NO	DEJ						
	le Mouse	YES	NO							
E	Birds			Mammals				Reptiles		
				Rabbit scats				Very old Varanid		ibly Gouldii)
								Ctenotus sp.	(2000	.,saran,

### FAUNA HABITAT ASSESSMENT SHEET - 360 ENVIRONMENTAL

(North West)

Location: Exmouth - Subsea 7 Habitat Assessment: 7

Date: 14/06/2017	Easting: 202592	Aspect	Ν	NE	SW	NW
Ouadrat Size: 50 x 50	Northing: 7532587	Aspect	E	SE	w	N/A



		100	25/5		1000	UTION SERVICE	2000	180 (9)		
Soil Texture	(Red	) sand	sandy	r-loam		oam	crac	cking clay	cla	у
	Spinifex plain	Other:		Vegetatio n Species	VEGETATION age			Cover		
otion		Stra	tum	Vege n Spe	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descrip		Overstorey	Acacia sp.		2	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST FI	RE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	G	eneral			DISTURBA	ANCE		Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep and rabbit)	3 none	
				G	ROUND COV	ER				
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				M	(ICROHABITA	TS				
Burrowir	ng Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebbl	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	iting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common
Во	oulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabil	ity for Bats	YE	:S	N	0	Termite Mounds	0 none	1 rare	2 moderate	3 common
C	Caves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES					
	ulgara	YES	NO	(0	Suitable habita	at with sandy soil a	and within dist	tribution but no sigr	s	
	Bilby	YES	NO	DETAILS	Outside of spe	ecies distribution				
	Quoll	YES	NO	B						
	le Mouse	YES	NO							
Pied Butche	Birds			Mammals Pabbit seets				Reptiles		
ried Butche	ınıra			Rabbit scats Kangaroo sca						

Location: Exmouth - Subsea 7 Habitat Assessment: 8

Project: 2198

 Date: 14/06/2017
 Easting: 199375
 Aspect
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7527066
 E
 SE
 W
 N/A



						NAME OF THE PERSON NAME OF THE P		The state of the s			
Soil Texture	(Red	) sand	sandy	-loam	le	oam	crac	king clay	cla	у	
	Spinifov plain	Other:		.o. %	VEGETATION		0				
_	Spinifex plain Acacia	Stra	hum	Vegetatio n Species	Average Height (m)	Scattered	0	Cover	Thirt		
riptio	Shrubland	Sila	Luin	> -	ά±	Plants	Sparse	Moderate	Thick		
Desc		Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%		
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
			CONDITION			0		LAST FI	RE		
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr	
	G	General			DISTURBA	NCE		Cattle			
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none		
				G	ROUND COV	ER .					
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%		
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%		
				N	IICROHABITA'	rs					
Burrowing	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common	
Exfoliat	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common	
Rock (	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common	
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	
Suitabili	ty for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common	
C	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common	
					SPECIES						
Мι	ulgara	YES	NO	(0	Suitable habita	it with sandy soil a	nd within distr	ibution but no sign	s		
	Bilby	YES	NO	DETAILS	Outside of spe	cies distribution					
	Quoll	YES	NO	Œ							
	e Mouse Birds	YES	NO	Mammals				Reptiles			
				- Idininiaro							

Location: Exmouth - Subsea 7 Habitat Assessment: 9

Project: 2198

 Date: 14/06/2017
 Easting: 199300
 Aspect
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7527300
 E
 SE
 W
 N/A



						V.				
Soil Texture	(Red	) sand	sandy	-loam	le	oam	cracl	king clay	cla	у
					VEGETATION					
	Spinifex plain	Other:		£ 8				Cover		
_	Acacia	01	t	Vegetatio n Species	Average Height (m)	Scattered			771.1	
ptior	Shrubland	Stra	tum	> =	₹º	Plants	Sparse	Moderate	Thick	
n Descri	Riverine Woodland	Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST F	IRE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	C	General			DISTURBA	NCE		Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild (sheep)	3 none	
				G	ROUND COVI	ER .				
Bare	0	1	2	3	Hummock	0	1	2	3	
Ground Rock	<5% <b>0</b>	<20% 1	<b>20-60%</b> 2	60-100% 3	Grass Other Grass	<5% <b>0</b>	<20% 1	20-60% 2	<b>60-100%</b>	
	<5% 0	<20% 1	20-60% 2	60-100% 3		<5% 0	<20% 1	20-60%	60-100% 3	
Leaf Litter	<5%	<20%	20-60%	60-100%	Herbs	<5%	<20%	20-60%	60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	MICROHABITA	rs				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0	1	2 moderate	3 common
Exfoliat	ting Slabs	none 0	1	2	3	Small Tree	none 0	rare 1	2	3 common
		none 0	0-30% 1	30-70% 2	70-100% 3	Hollows Water	none 0	rare 1	moderate 2	
Hock	Crevices	none	0-30%	30-70%	70-100%	Prescence	none	rare	moderate	3 common
Boo	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabili	ity for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES					
Ми	ulgara	YES	NO		Suitable habita	it with sandy soil a	nd within distr	ibution but no sigr	ıs	
Е	Bilby	YES	NO	AILS	Outside of spe	cies distribution				
Ç	Quoll	YES	NO	DETAILS						
Pebbl	le Mouse	YES	NO	1 -						
В	Birds			Mammals				Reptiles		

Location: Exmouth - Subsea 7 Habitat Assessment: 10

Project: 2198

Easting: 198634 Date: 15/06/2017 Aspect Northing: 7526316 Quadrat Size: 50 x 50 N/A



Soil Texture	(Red	l) sand	sandy	-loam	lo	oam	crack	king clay	cla	iy
					VEGETATION					
	Dune Ridge	Other:		tatio	erage eight (m)			Cover	,	
tion		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descrip		Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description	Other Grassland	Midstorey	·			0 <5%	1 < 20%	2 20-60%	3 60-100%	
<b>%</b>	Euc Woodland	Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST F	IRE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	(	General			DISTURBA			Cattle		
Telstra Track	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
					ROUND COVI					
Bare Ground	0 <5% <b>0</b>	1 <20% 1	2 20-60% 2	3 60-100% 3	Hummock Grass	0 <5% <b>0</b>	1 <20% 1	2 20-60% 2	3 60-100% 3	
Rock	<5% 0	<20% 1	20-60% 2	60-100% 3	Other Grass	<5% 0	<20% 1	20-60% 2	60-100% 3	
Leaf Litter	<5%	<20%	20-60%	60-100%	Herbs	<5%	<20%	20-60%	60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	IICROHABITAT	rs				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock (	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabili	ty for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common
					SPECIES					
Мі	ulgara	YES	NO		Suitable habita	it with sandy soil a	nd within distr	bution but no sig	ns	
Е	Bilby	YES	NO	DETAILS	Outside of spe	cies distribution				
Ç	Quoll	YES	NO	DEJ						
	e Mouse	YES	NO							
	Birds			Mammals				Reptiles		
Brown Songla	ark							Ctenophorous b	urrows	

Location: Exmouth - Subsea 7 Habitat Assessment: 11

Project: 2198

 Date: 15/06/2017
 Easting: 198884
 Aspect
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7526240
 E
 SE
 W
 N/A



Tracks   DISTURBANCE   Cattle											
Public	Soil Texture	(Red	) sand	sandy	r-loam	le	oam	crack	king clay	cla	у
Property   Property		Dube swale	Other:		atio				Cover		
Scale   Pristing	otion		Stra	tum	Vegeta n Spec	Avera Heig (m)		Sparse	Moderate	Thick	
Scale   Pristing	Descri		Overstorey	Acacia sp.		2.5					
Scale   Pristing	/egetation		Midstorey	Acacia sp.		1					
Scale			Ground Cover	Triodia		0.5			•		
Scale   Pristine   Excellent   Very Good   Cood   Degraded   Completely   Comple				CONDITION			0		LAST F	IRE	
Tracks   No	Scale:					1 Degraded	Completely				3 >5 Yr
Tracks   Neavy   Medium * Mild   None   N		C	General			DISTURBA	ANCE		Cattle		
Bare   Caround   Cash   Cas	Tracks							1 medium			
Ground					G	ROUND COVI	ER				
Nock   <5%   <20%   20.60%   60.100%   Other Gress   <5%   <20%   20.60%   60.100%   Color		<5%	<20%	20-60%	60-100%		<5%	<20%	20-60%	60-100%	
Leaf Littler	Rock	<5%				Other Grass					
Logs	Leaf Litter					Herbs					
Burrowing Suitability		0	1	2	3 60-100%		0 <5%	1	2	3	
Pebbles Stones					N	MICROHABITA'	TS				
Pebbles Stones	Burrowing	g Suitability	Rock		Sandy Loam			none	rare	moderate	3 common
Exfoliating Slabs	Pebble	es Stones								I	3 common
Rock Crevices	Exfoliat	ting Slabs	0								3 common
Suitability for Bats	Rock (	Crevices	0	1	2	3	Water	0	1	2	3 common
Caves   Absent   Present   Present   Woody Debris   One one of the present   One of the pre	Воц	ulders			I		Water				3 <500m
Caves     Absent     Present     Image: Control of the present of t	Suitabili	ty for Bats	YE	S	N	10				I	3 common
Mulgara YES NO Bilby YES NO Quoll YES NO Pebble Mouse YES NO  Suitable habitat with sandy soil and within distribution but no signs Outside of species distribution	Ca	aves	Absent	Present				0	1	2	3 common
Bilby YES NO Quoll YES NO Pebble Mouse YES NO						SPECIES					
Pebble Mouse YES NO	j			NO	(0	Suitable habita	at with sandy soil a	ınd within distri	bution but no sign	ıs	
Pebble Mouse YES NO				TAILS	Outside of spe	cies distribution					
	Ç	Quoll			Œ.						
Birds Mammale Rentiles			YES	NO							
Topino I a la l	В	Sirds			Mammals				Reptiles		

Location: Exmouth - Subsea 7 Habitat Assessment: 12

Project: 2198

 Date: 15/06/2017
 Easting: 199650
 Aspect
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7527725
 E
 SE
 W
 N/A



				- 19	424	100				
Soil Texture (Red) sand		sandy	sandy-loam		loam		cracking clay		у	
	Dune Ridge	Other:		္ ဖွ	VEGETATION					
	Acacia			Vegetatio n Species	Average Height (m)	Scattered	_	Cover		
ption	Shrubland	Stra	tum	> °	₹±	Plants	Sparse	Moderate	Thick	
Descri	Riverine Woodland	Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.			0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST FI	IRE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	C	General			DISTURBA	ANCE		Cattle		
Telstra Track	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild	3 none	
				G	ROUND COV	ER				
Bare Ground	0 <5% <b>0</b>	1 <20% 1	<b>2</b> <b>20-60%</b> 2	3 60-100% 3	Hummock Grass	0 <5% <b>0</b>	1 <20% 1	2 20-60% 2	3 60-100% 3	
Rock	<5% 0	<20% 1	20-60% 2	60-100% 3	Other Grass	<5% 0	<20% 1	20-60% 2	60-100% 3	
Leaf Litter	<5%	<20%	20-60%	60-100%	Herbs	<5%	<20%	20-60%	60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	/ICROHABITA	rs				
Burrowing	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 commor
Pebble	s Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfoliat	ing Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0	1	2 moderate	3 commor
Rock (	Crevices	0	1	2	3	Water	none 0	rare 1	2	3 commor
Воц	ulders	none 0 none	0-30% 1 0-30%	30-70% 2 30-70%	70-100% 3 70-100%	Prescence Distance to Water	none 0 >5km	rare 1 2-5km	moderate 2 500m - 2km	3 <500m
Suitabili	ty for Bats	YE	S	N	10	Termite	0	1	2	3 commor
	aves	Absent	Present			Mounds Woody Debris	none 0 none	rare 1 rare	moderate 2 moderate	3 commor
					SPECIES					
Ми	ılgara	YES	NO		Suitable habita	nt with sandy soil a	nd within distri	bution but no sign	ıs	
Bilby		YES	NO	DETAILS	Outside of spe	cies distribution				
Ç	uoll	YES	NO	DET						
Pebbl	e Mouse	YES	NO							
В	irds			Mammals				Reptiles		

Location: Exmouth - Subsea 7 Habitat Assessment: 13

Project: 2198

 Date: 16/06/2017
 Easting: 201750
 Aspect
 N
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7531250
 E
 SE
 W
 N/A



Soil Texture	(Red) sand		sandy-loam		loam		cracking clay		cla	у
					VEGETATION					
	Dube swale	Other:		atio	t de	Cover				
tion	Acacia Shrubland	Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descrip		Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION					LAST FI	RE	
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	(	General			DISTURBA	ANCE		Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild rabbits	3 none	
				G	ROUND COVI	ER .				
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	(ICROHABITA	rs				
Burrowin	ng Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	iting Slabs	0 none	1 0-30%	2	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common
Во	oulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabil	ity for Bats	YE	S	N	0	Termite Mounds	0 none	1 rare	2 moderate	3 common
С	Caves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common

	SPECIES SPECIES									
Mulgara	YES	NO		Suitable habitat with sandy soil and within distribution but no signs						
Bilby	YES	NO	AILS	Outside of species distribution						
Quoll	YES	NO	DET,							
Pebble Mouse	YES	NO								
Birds			Mammals	Reptiles						

Location: Exmouth - Subsea 7 Habitat Assessment: 14

Project: 2198

 Date: 16/06/2017
 Easting: 199650
 Aspect
 N
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7527725
 E
 SE
 W
 N/A



Soil Texture (Red) sand		sandy-loam		loam		cracking clay		cla	ij		
					VEGETATION						
	Dune Ridge	Other:		atio	age ht	Cover					
tion		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick		
Descrip		Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
Vegetation Description		Midstorey	Acacia sp.			0 <5%	1 <20%	2 20-60%	3 60-100%		
Š		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%		
			CONDITION					LAST FI	RE		
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr	
	(	General			DISTURBA	ANCE		Cattle			
Track	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild	3 none		
				G	ROUND COVI	ER					
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%		
Leaf Litter	0 <5%	1 <20%	20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 2 20-60%	3 60-100%		
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%		
				N	IICROHABITA	rs					
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common	
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common	
Exfolia	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common	
Rock	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common	
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m	
Suitabil	ity for Bats	YE	S	N	0	Termite Mounds	0 none	1 rare	2 moderate	3 common	
С	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common	

	SPECIES SPECIES									
Mulgara	YES	NO		Suitable habitat with sandy soil and within distribution but no signs						
Bilby	YES	NO	AILS	Outside of species distribution						
Quoll	YES	NO	DET,							
Pebble Mouse	YES	NO								
Birds			Mammals	Reptiles						

Location: Exmouth - Subsea 7 Habitat Assessment: 15

Project: 2198

 Date: 16/06/2017
 Easting: 198884
 Aspect
 N
 NE
 SW
 NW

 Quadrat Size: 50 x 50
 Northing: 7526240
 E
 SE
 W
 N/A



Soil Texture	Soil Texture (Red) sand		sandy-loam		loam		cracking clay		cla	у
					VEGETATION					
	Dube swale	Other:		atio	ige ht			Cover		
otion		Stra	tum	Vegetatio n Species	Average Height (m)	Scattered Plants	Sparse	Moderate	Thick	
Descrip		Overstorey	Acacia sp.		2.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
Vegetation Description		Midstorey	Acacia sp.		1	0 <5%	1 <20%	2 20-60%	3 60-100%	
>		Ground Cover	Triodia		0.5	0 <5%	1 <20%	2 20-60%	3 60-100%	
			CONDITION				IRE			
Scale:	5 Pristine	4 Excellent	3 Very Good	2 Good	1 Degraded	0 Completely Degraded	0 <1 year	1 1 -3 Yr	2 4-5 Yr	3 >5 Yr
	(	General			DISTURBA	ANCE		Cattle		
Tracks	0 heavy	1 medium *	2 mild	3 none		0 heavy	1 medium	2 mild rabbits	3 none	
				G	ROUND COVI	ER .				
Bare Ground	0 <5%	1 <20%	2 20-60%	3 60-100%	Hummock Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Rock	0 <5%	1 <20%	2 20-60%	3 60-100%	Other Grass	0 <5%	1 <20%	2 20-60%	3 60-100%	
Leaf Litter	0 <5%	1 <20%	2 20-60%	3 60-100%	Herbs	0 <5%	1 <20%	2 20-60%	3 60-100%	
Logs >10cm	0 <5%	1 <20%	2 20-60%	3 60-100%	Other:	0 <5%	1 <20%	2 20-60%	3 60-100%	
				N	IICROHABITA <sup>*</sup>	rs				
Burrowin	g Suitability	0 Rock	1 Stony	2 Sandy Loam	3 Sand	Peeling Bark	0 none	1 rare	2 moderate	3 common
Pebble	es Stones	0 none	1 0-30%	2 30-70%	3 70-100%	Large Tree Hollows	0 none	1 rare	2 moderate	3 common
Exfolia	ting Slabs	0 none	1 0-30%	2 30-70%	3 70-100%	Small Tree Hollows	0 none	1 rare	2 moderate	3 common
Rock (	Crevices	0 none	1 0-30%	2 30-70%	3 70-100%	Water Prescence	0 none	1 rare	2 moderate	3 common
Во	ulders	0 none	1 0-30%	2 30-70%	3 70-100%	Distance to Water	0 >5km	1 2-5km	2 500m - 2km	3 <500m
Suitabili	ty for Bats	YE	S	N	10	Termite Mounds	0 none	1 rare	2 moderate	3 common
C	aves	Absent	Present			Woody Debris	0 none	1 rare	2 moderate	3 common

	SPECIES SPECIES									
Mulgara	YES	NO		Suitable habitat with sandy soil and within distribution but no signs						
Bilby	YES	NO	AILS	Outside of species distribution						
Quoll	YES	NO	DET,							
Pebble Mouse	YES	NO								
Birds			Mammals	Reptiles						



10 Bermondsey Street West Leederville WA 6007 **t** (+618) 9388 8360 **f** (+618) 9381 2360
PO BOX 14, West Perth WA 6872 **w** 360environmental.com.au **e** admin@360environmental.com.au

opeople oplanet oprofessional