

Fauna Assessment of Exmouth Unallocated Crown Land

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Table 1. Total trapping effort (trap-nights) for sites at Exmouth UCL (October 2004).

Site	Trapping period	Assisted Pitfalls	Funnel traps	Elliott Traps	Cage Traps
1	7-12 Oct 2004	50	25	25	25
2	7-12 Oct 2004	50	25	25	25
3	8-13 Oct 2004	50	25	25	25
4	8-13 Oct 2004	50	25	25	25
5	8-13 Oct 2004	50	25	25	25
6	8-13 Oct 2004	50	25	25	25
7	8-13 Oct 2004	50	25	-	-
8	8-13 Oct 2004	50	25	-	-
9	8-13 Oct 2004	50	25	-	-
	Total effort:	450	225	150	150

Table 2. Description of trapping sites at Exmouth UCL (October 2004 survey).
Includes site co-ordinates (datum WGS 84), vegetation types, soil type and landform unit.

Site	UTM Co-ordinates	Vegetation	Soils	Landscape
1	50 K 0200307 E 7583044 N	Moderately low shrubland of <i>Banksia ashbyi</i> and <i>Corymbia</i> sp.	Red Pindan sand	Low rise
2	50 K 0200074 E 7582445 N	Open shrubland of <i>B. ashbyi</i> , <i>Grevillea</i> and emergent <i>Corymbia</i> .	Red and white sand	Floodplain
3	50 K 0200524 E 7582419 N	Open shrubland of <i>B. ashbyi</i> , low <i>Corymbia</i> sp., <i>Grevillea</i> sp. and mixed <i>Acacia</i> .	Red Pindan sand	Floodplain
4	50 K 0201271 E 7581709 N	Low <i>Corymbia</i> and mixed <i>Acacia</i> shrubland.	Alluvial red sandy-clay	Interdunal drainage depression
5	50 K 0201010 E 7580725 N	Open shrubland of <i>Corymbia</i> , <i>Acacia</i> and <i>Grevilleas</i> with <i>Triodia</i> sp.	Red Pindan sand	Upper dune
6	50 K 0200560 E 7580466 N	Open shrubland of <i>Corymbia</i> , <i>Acacia</i> and <i>Grevillea</i> with <i>Triodia</i> sp.	Red Pindan sand	Dune mid-slope
7	50 K 0200629 E 7578409 N	Swale with low mixed <i>Acacia</i> and emergent <i>Corymbia</i> on a clayey sand.	Alluvial red sandy-clay	Dune-swale
8	50 K 0199140 E 7578221 N	Sparse clumps of low <i>Corymbia</i> and <i>Triodia</i> (appears long unburnt relative to surrounding landscape).	Red sandy-loam	Sandy floodplain
9	50 K 0198264 E 7578111 N	Occasional low <i>Corymbia</i> and <i>Grevillea</i> shrubland over <i>Triodia</i> sp..	Red sandy-loam with some exposed limestone	Sandy floodplain

Sources of Information

In addition to the results from the field survey, lists of fauna expected to occur in the study area were produced using information from a number of sources. These included publications that provide information on general patterns of distribution of frogs (Tyler *et al.* 2000), reptiles (Storr *et al.* 1983, 1990, 1999 and 2002), birds (Barrett *et al.* 2003; Johnstone and Storr 1998), and mammals (Menkhorst and Knight 2001; Strahan 1995). Kendrick (1993) lists reptiles recorded in the Cape Ranger area, while specimen records of frogs, reptiles, birds and mammals held by the WA Museum were obtained for the region bounded by 21° 45' to 22° 30'S, and 113° 45' to 114° 15'E. Birds Australia's New Atlas database was searched for the same area.

These sources of information were used to create lists of species expected to occur at the site. As far as possible, expected species are those that are likely to utilise the project area, and such lists exclude species that have been recorded in the general region as vagrants or for which suitable habitat is absent. Particularly among the birds, for example, vagrants can be recorded almost anywhere.

Taxonomy and nomenclature for fauna species used in this report generally follow the WA Museum (2001) for amphibians, reptiles and mammals, and Christidis and Boles (1994) for birds.

RESULTS AND DISCUSSION

The trapping program recorded a total of 64 vertebrate fauna species including 31 reptiles, 25 birds and eight mammals (see Tables 3, 4 and 5). A small number of invertebrates were also collected and lodged with the WA Museum. Invertebrates collected were in the groups likely to include short-range endemics such as mygalomorph spiders, isopods and millipedes.

Frogs

Although no frogs were collected during the October survey, three species may be recorded during more suitable conditions (see Table 6). All three species have Eremaean distributions, although the Tawny Trilling Frog *Neobatrachus fulvus* appears to be restricted to near-coastal areas of the western Pilbara.

Reptiles

A total of 31 reptile species was recorded in the study of a possible 90 species recorded on the Cape Range Peninsula (see Table 7). The most abundant and widespread species were *Ctenophorus femoralis*, *Lerista bipes* and *Nephrurus levis occidentalis*. The former of these was abundant throughout the entire study area. A summary of reptile capture data is given in Table 3. Two species, the gecko *Gehyra punctata* and Burton's Legless-Lizard *Lialis burtoni*, were only recorded from areas outside the study site. The gecko is associated with rocky environments and might not occur in the study area, but the legless lizard is widespread and is very likely to be present.

Keast (1959) and Pianka (1972) have examined the biogeographic and habitat affinities of some of the reptile species found in the Exmouth UCL, and these are presented in Table 3 where appropriate. The affinities are as follows:

	Code	Affinity type	Reference
Standard Biogeographical affinities	U	Ubiquitous	Keast (1959)
	N	Northern	
	E	Eremean	
	B	Bassian	
Desert Habitat affinities	S	Sandplain	Pianka (1972)
	S-T	Sandplain- <i>Triodia</i>	
	SA-T	Shrubland <i>Acacia-Triodia</i>	
Specific habitat affinities	Ex-S	Exmouth Sandplain	

In addition to species listed under these affinities by Keast (1959) and Pianka (1972), many of the remaining species are known to have specific affinities on the basis of the general literature. These are also indicated on Table 3.

The reptile assemblage contains species from a range of affinities, and while only *Ctenophorus femoralis* is endemic to the Exmouth sandplains, those species listed as from sandplain habitats are likely to be restricted to that habitat within the Cape Range Peninsula. The skink *Lerista elegans* is unusual in having southern (Bassian) affinities.

Some species were unevenly distributed across the sites, suggesting that they are more abundant in some areas than others in response to subtle differences in habitat. Although numbers of captures were generally too low to draw firm conclusions, species showing such trends included the burrowing skink *Lerista bipes*, most commonly caught at site 5 (upper dune), and the gecko *Diplodactylus conspicillatus*, most commonly caught at sites 4 and 9 (sandy clay or sandy loam). Site 8, noted as being long unburnt compared with other sites, supported a high number of species and had the highest number of captures, but the lowest number of the dragon *Ctenophorus femoralis*.

The study at the UCL was carried out at the same time, in similar sandy habitats and with the same sampling effort as a study in the Learmonth Air Weapons Range (LAWR) just south of Cape Range National Park and about 70km south of the Exmouth UCL. A similar suite of reptile species was recorded at the two sites, but there were 47 species at the LAWR compared with 31 at the UCL. The LAWR actually had 20 species not recorded at the UCL, while the latter had 6 species not recorded at the LAWR. Eight of the species found only at the LAWR were associated with coastal or rocky habitats not present in the UCL, but that means 12 species found on sandy soils at the LAWR were not found in the UCL, and six species found on sandy soils at the UCL were not found in the LAWR. Such a difference may be a sampling effect, as all species are unlikely to be

found in a single sampling session. Supporting this, almost all species recorded at only one of the sites were caught in low numbers (<5 specimens), suggesting a stochastic difference (a difference due to chance). A few of the species, however, were commonly caught at one site but were absent at the other. For example, at the LAWR there were 7 specimens of the skink *Lerista muelleri* and 30 specimens of *Lerista uniduo*, whereas at the UCL there were 45 specimens of *Lerista bipes*. The records for *L. uniduo* and *L. bipes* are especially interesting as the two species are very similar morphologically. *L. uniduo* is endemic to sandy soils of the Cape Range Peninsula whereas *L. bipes* occurs across much of Western Australia, and it would be interesting to determine if they coexist anywhere within the range of *L. uniduo*.

The 31 reptile species recorded in the UCL is only about a third of the reptile species recorded on the Cape Range Peninsula, but the study area lacks many of the habitats present elsewhere in the region. Despite this, one species, the skink *Ctenotus hanloni*, is not listed by Kendrick (1993) or in the WA Museum database. It was also recorded in the LAWR area.

Table 3. Reptile capture data for Exmouth UCL survey. Numbers represent individual animals recorded during trapping period of 7-13/10/04. It includes results of all trapping, hand searching and observations. The "Off-site" column includes all opportunistic records such as road spotting and observations in areas directly adjacent to but not within the UCL site. Table includes details of biogeographic and habitat affinities for selected species. R indicates species associated with rocky environments; other codes are explained in Table 3.

Species	Affinities	Trap Site number									Off-site
		1	2	3	4	5	6	7	8	9	
<i>Diplodactylus conspicillatus</i>	N			1	9			3	1	6	8
<i>D. stenodactylus</i>	S	1	1	1	3				2		
<i>Gehyra punctata</i>	R										1
<i>G. variegata</i>	U	1	3	1	2		5	1	12	2	1
<i>Heteronotia binoei</i>	U		4	1						2	3
<i>Nephrurus levis occidentalis</i>	E	3	5	2	2	5	1	3	7	5	9
<i>Strophurus strophurus</i>	N/SA-T			2	1			1	6	1	2
<i>S. jeanae</i>									1		
<i>Lialis burtonis</i>	U										2
<i>Ctenotus rufescens</i>	S	1		2					2		
<i>C. iapetus</i>				1		1					
<i>C. hanloni</i>		1	1				1				
<i>Cyclodomorphus m. melanops</i>						1					
<i>Egernia inornata</i>	S							1	1		
<i>Eremiascincus fasciolatus</i>	S-T	3		3	1	4	6	4	5		
<i>Lerista bipes</i>	S	6	3	4	1	12	6	3	3	7	3
<i>L. elegans</i>	B/S					1	2			1	
<i>L. lineopunctulata</i>					1						1
<i>L. p. planiventralis</i>	S					5					
<i>Menetia greyii</i>	U		1	1				1			
<i>Morethia ruficauda exquisita</i>	R		1								2
<i>Notoscincus o. ornatus</i>			1			1		1		1	
<i>Ctenophorus nuchalis</i>									2		1

<i>C. femoralis</i>	Ex-S	22	28	24	12	22	10	11	9	21	6
<i>Diporiphora winneckeii</i>	S	1									
<i>Pogona minor minor</i>		1		1				3			
<i>Varanus eremius</i>	S-T			1		1	2	3		1	
<i>V. gouldii gouldii</i>	U					1				1	
<i>Ramphotyphlops grypus</i>						1					1
<i>R. hamatus</i>					1	3		1			1
<i>Simoselaps bertholdi</i>									1	1	
Number of species:		10	10	14	10	13	8	13	13	12	
Number of captures:		40	48	45	33	48	33	36	52	49	

Birds

Of a possible 94 species, 25 were recorded from the Exmouth UCL area, with details of those species recorded given in Table 5 and a full list of possible species given in Table 9. The depauperate bird fauna may be a combination of several factors including a lack of flowering plants and no surface water during the October survey period; and limited habitat diversity. The recent fire may also have affected the result.

The most abundant and widespread bird species was the Singing Honeyeater. Although the Crested Bellbird was also widely recorded, this was quite likely a result of the species' ubiquitous call. Sites 2 and 9 were the most species rich, with 8 and 9 species respectively. The majority of those species recorded during the October 2004 survey have either widespread or Eremaean distributions.

Table 4. Bird species recorded from sites within the Exmouth UCL study area. Presence of species at a site is indicated by '+'. Opportunistic records are from other areas inside the study area or immediately adjacent habitats.

Species	Sites										Opp
	1	2	3	4	5	6	7	8	9		
Emu											+
Osprey											+
Wedge-tailed Eagle											+
Nankeen Kestrel		+		+	+						
Spinifex Pigeon											+
Crested Pigeon		+			+		+				
Galah											+
Little Corella						+					
Australian Ringneck						+				+	
Horsfield's Bronze-Cuckoo			+		+					+	

distributions, however it should be recognized that other mammal species potentially occurring in the area are would be at the limit of their distribution.

Table 5. Small mammal capture data for Exmouth UCL (October 2004)

Species	Site	1	2	3	4	5	6	7	8	9
Lesser Hairy-footed Dunnart	<i>Sminthopsis youngsoni</i>			1		2	1		2	1
Spinifex Hopping- Mouse	<i>Notomys alexis</i>	1					2			
Delicate Mouse	<i>Pseudomys delicatulus</i>		1						1	
Sandy Inland Mouse	<i>Pseudomys hermannsburgensis</i>	1	1	1	1	2				

CONCLUSIONS

The Exmouth UCL contains an isolated dunefield habitat supporting an unusual assemblage of fauna species, including a rich reptile fauna. The area's faunal assemblage includes both northern and southern species, some of which are at the limit of their distribution. It also includes a number of species that have isolated populations on the Cape Range Peninsula.

The dunefield habitat is not well represented within the existing Cape Range National Park. Therefore, species closely associated with this habitat are likely to be uncommon within the existing reserved land. This includes approximately a third of the reptile species and over half the mammal species recorded during the survey. The presence of large populations of species associated with sandy soils suggests that the UCL would be a worthy inclusion in the National Park, as this is a different faunal assemblage from that found in the mostly rocky environments of the existing reserve.

Compared with similar dunefield habitat just south of the national park (the LAWR), the Exmouth UCL supports a similar but not identical faunal assemblage.

Table 6. Frog species expected to occur in the Exmouth UCL area, based on habitat preferences and current distribution.

FROGS	
HYLIDAE	
Main's Frog	<i>Cyclorana maini</i>
MYOBATRACHIDAE	
Tawny Trilling Frog	<i>Neobatrachus fulvus</i>
Shoemaker Frog	<i>Neobatrachus sutor</i>

Table 7. Reptile species recorded or expected to occur in the Exmouth UCL area, based on Kendrick (1993) and WA Museum specimen records. Species recorded during the October 2004 survey are indicated by '+'.

REPTILES	Stat us
GEKKONIDAE (geckos)	
Clawless Gecko	<i>Crenadactylus ocellatus horni</i>
Fat-tailed Diplodactylus	<i>Diplodactylus conspicillatus</i> +
	<i>Diplodactylus mitchelli</i>
	<i>Diplodactylus ornatus</i>
	<i>Diplodactylus stenodactylus</i> +
Pilbara Dtella	<i>Gehyra pilbara</i>
Spotted Dtella	<i>Gehyra punctata</i> +
Tree Dtella	<i>Gehyra variegata</i> +
Bynoe's Gecko	<i>Heteronotia binoei</i> +
	<i>Nephrurus levis occidentalis</i> +
Spiny-tailed Gecko	<i>Strophurus ciliaris aberrans</i>
Jewelled Gecko	<i>Strophurus elderi</i>
	<i>Strophurus jeanae</i> +
	<i>Strophurus rankini</i>
	<i>Strophurus strophurus</i> +
PYGOPODIDAE (legless-lizards)	
	<i>Aprasia fusca</i>
	<i>Delma australis</i>
	<i>Delma nasuta</i>
	<i>Delma pax</i>

	<i>Delma tincta</i>	
Burton's Legless-Lizard	<i>Lialis burtonis</i>	+
Hooded Scaly-foot	<i>Pygopus nigriceps</i>	

Table 7. (cont.)

SCINCIDAE (skinks)		Stat us
	<i>Carlia munda</i>	
	<i>Cryptoblepharus carnabyi</i>	
Fence Skink	<i>Cryptoblepharus plagiocephalus</i>	
	<i>Ctenotus duricola</i>	
	<i>Ctenotus grandis titan</i>	
	<i>Ctenotus iapetus</i>	+
	<i>Ctenotus pantherinus ocellifer</i>	
	<i>Ctenotus hanloni</i>	++
	<i>Ctenotus rufescens</i>	+
	<i>Ctenotus saxatilis</i>	
	<i>Cyclodomorphus m. melanops</i>	+
	<i>Egernia inornata</i>	+
Narrow-banded Sand- swimmer	<i>Eremiascincus fasciolatus</i>	+
Broad-banded Sand- swimmer	<i>Eremiascincus richardsonii</i>	
	<i>Glaphyromorphus isolepis</i>	
	<i>Lerista allochira</i>	
	<i>Lerista bipes</i>	+
	<i>Lerista elegans</i>	+
	<i>Lerista lineopunctulata</i>	+
	<i>Lerista macropisthopus fusciceps</i>	
	<i>Lerista muelleri</i>	
	<i>Lerista p. planiventralis</i>	+
	<i>Lerista praepedita</i>	
	<i>Lerista uniduo</i>	
	<i>Menetia greyii</i>	+
	<i>Menetia surda</i>	
	<i>Morethia lineocellata</i>	
	<i>Morethia ruficauda exquisita</i>	+

	<i>Notoscincus ornatus</i> <i>ornatus</i>	+
Central Blue-tongue Lizard	<i>Tiliqua multifasciata</i>	+
AGAMIDAE (dragon lizards)		
	<i>Amphibolurus gilberti</i>	
	<i>Amphibolurus longirostris</i>	
Central Netted Dragon	<i>Ctenophorus nuchalis</i>	+
Western Netted Dragon	<i>Ctenophorus reticulatus</i>	
	<i>Ctenophorus clayi</i>	
Spotted Dragon	<i>Ctenophorus maculatus</i> <i>badius</i>	

Table 7. (cont.)

AGAMIDAE (cont.)		Stat us
	<i>Ctenophorus femoralis</i>	
Military Dragon	<i>Ctenophorus isolepis</i>	
	<i>Diporiphora winneckeii</i>	+
Thorny Devil	<i>Moloch horridus</i>	
Western Bearded Dragon	<i>Pogona minor minor</i>	+
	<i>Rankinia parviceps</i> <i>parviceps</i>	
VARANIDAE (monitor lizards)		
Ridge-tailed Monitor	<i>Varanus acanthurus</i>	
	<i>Varanus brevicauda</i>	
	<i>Varanus eremius</i>	+
Sand Monitor	<i>Varanus gouldii</i> <i>gouldii</i>	+
	<i>Varanus tristis</i>	
TYPHLOPIDAE (blind snakes)		
	<i>Ramphotyphlops ammodytes</i>	
	<i>Ramphotyphlops grypus</i>	+
	<i>Ramphotyphlops hamatus</i>	+
	<i>Ramphotyphlops splendidus</i>	
BOIDAE (pythons)		

Pygmy Python	<i>Antaresia perthensis</i>	
Stimson's Python	<i>Antaresia stimsoni</i> <i>stimsoni</i>	
Black-headed Python	<i>Aspidites</i> <i>melanocephalus</i>	
ELAPIDAE (front-fanged snakes)		
Pilbara Death Adder	<i>Acanthophis wellsi</i>	
North-western Shovel-nosed Snake	<i>Brachyurophis</i> <i>approximans</i>	
Black-necked Whip-snake	<i>Demansia calodera</i>	
Yellow-faced Whipsnake	<i>Demansia psammophis</i> <i>cupreiceps</i>	
Rufous Whipsnake	<i>Demanisa rufescens</i>	
Moon Snake	<i>Furina ornata</i>	
Black-naped Snake	<i>Neelaps bimaculatus</i>	
Mulga Snake	<i>Pseudechis australis</i>	
Ringed Brown Snake	<i>Pseudonaja modesta</i>	
Gwardar	<i>Pseudonaja nuchalis</i>	
Jan's Banded Snake	<i>Simoselaps bertholdi</i>	+
West Coast Banded Snake	<i>Simoselaps</i> <i>littoralis</i>	
Rosen's Snake	<i>Suta fasciata</i>	
Spotted Snake	<i>Suta punctulata</i>	

Table 8. Bird species recorded or expected to occur in the Exmouth UCL study area. Those species recorded during the field survey are indicated by '+'.²

BIRDS	Statu s
CASUARIIDAE (emu)	
Emu	<i>Dromaius</i> <i>novaehollandiae</i>
	+
PHASIANIDAE (true quails)	
Brown Quail	<i>Coturnix ypsilophora</i>
ACCIPITRIDAE (eagles, hawks and kites)	
Osprey	<i>Pandion haliaetus</i>
	+
Black-shouldered Kite	<i>Elanus caeruleus</i>
Black-breasted Buzzard	<i>Hamirostra</i> <i>melanosternon</i>
Black Kite	<i>Milvus migrans</i>

Brahminy Kite	<i>Haliastur indus</i>	
Brown Goshawk	<i>Accipiter fasciatus</i>	
Collared Sparrowhawk	<i>Accipiter cirrocephalus</i>	
Little Eagle	<i>Aquila morphnoides</i>	
Wedge-tailed Eagle	<i>Aquila audax</i>	+
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	
Spotted Harrier	<i>Circus assimilis</i>	
FALCONIDAE (falcons)		
Brown Falcon	<i>Falco berigora</i>	
Australian Kestrel	<i>Falco cenchroides</i>	+
Australian Hobby	<i>Falco longipennis</i>	
OTIDIDAE (bustard)		
Australian Bustard	<i>Ardeotis australis</i>	
TURNICIDAE (button-quails)		
Little Button-quail	<i>Turnix velox</i>	
BURHINIDAE (stone-curlews)		
Bush Stone-curlew	<i>Burhinus grallarius</i>	
COLUMBIDAE (doves and pigeons)		
Crested Pigeon	<i>Ocyphaps lophotes</i>	+
Spinifex Pigeon	<i>Geophaps plumifera</i>	+
Diamond Dove	<i>Geopelia cuneata</i>	
Peaceful Dove	<i>Geopelia striata</i>	
Bar-shouldered Dove	<i>Geopelia humeralis</i>	

Table 8. (cont.)

PSITTACIDAE (cockatoos and parrots)		Statu
Galah	<i>Cacatua roseicapilla</i>	+
Little Corella	<i>Cacatua sanguinea</i>	+
Cockatiel	<i>Nymphicus hollandicus</i>	
Australian Ringneck	<i>Platycercus zonarius</i>	+
Budgerigar	<i>Melopsittacus undulatus</i>	
Night Parrot	<i>Pezoporus occidentalis</i>	

CUCULIDAE (cuckoos)		
Pallid Cuckoo	<i>Cuculus pallidus</i>	
Black-eared Cuckoo	<i>Chrysococcyx osculans</i>	
Horsfield's Bronze-Cuckoo	<i>Chrysococcyx basalis</i>	+
TYTONIDAE (barn owls)		
Barn Owl	<i>Tyto alba</i>	+
PODARGIDAE (frogmouths)		
Tawny Frogmouth	<i>Podargus strigoides</i>	
CAPRIMULGIDAE (nightjars)		
Spotted Nightjar	<i>Eurostopodus argus</i>	
AEGOTHELIDAE (owlet-nightjars)		
Australian Owlet-nightjar	<i>Aegotheles cristatus</i>	
APODIDAE (swifts)		
Fork-tailed Swift	<i>Apus pacificus</i>	
HALCYONIDAE (kingfishers)		
Red-backed Kingfisher	<i>Todiramphus pyrrhopygia</i>	
Sacred Kingfisher	<i>Todiramphus sanctus</i>	
MEROPIDAE (bee-eaters)		
Rainbow Bee-eater	<i>Merops ornatus</i>	+
MALURIDAE (Australian wrens)		
Variegated Fairy-wren	<i>Malurus lamberti</i>	
White-winged Fairy-wren	<i>Malurus leucopterus</i>	
Rufous-crowned Emu-wren	<i>Stipiturus ruficeps</i>	
Striated Grasswren	<i>Amytornis striatus</i>	
Thick-billed Grasswren	<i>Amytornis textilis</i>	

Table 8. (cont.)

PARDALOTIDAE (pardalotes and allies)		Status
Red-browed Pardalote	<i>Pardalotus rubricatus</i>	+
Striated Pardalote	<i>Pardalotus striatus</i>	

ACANTHIZIDAE (thornbills and allies)		
Rufous Fieldwren	<i>Calamanthus campestris</i>	
Redthroat	<i>Pyrrholaemus brunneus</i>	
Weebill	<i>Smicrornis brevirostris</i>	
Western Gerygone	<i>Gerygone fusca</i>	
MELIPHAGIDAE (honeyeaters)		
Brown Honeyeater	<i>Lichmera indistincta</i>	+
Black Honeyeater	<i>Certhionyx niger</i>	
Singing Honeyeater	<i>Lichenostomus virescens</i>	+
Grey-headed Honeyeater	<i>Lichenostomus keartlandi</i>	
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	
Yellow-throated Miner	<i>Manorina flavigula</i>	+
Spiny-cheeked Honeyeater	<i>Acanthagenys rufogularis</i>	+
Crimson Chat	<i>Epthianura tricolor</i>	
PETROICIDAE (Australian robins)		
Red-capped Robin	<i>Petroica goodenovii</i>	
Hooded Robin	<i>Petroica cucullata</i>	
POMATOSTOMIDAE (Australian babbblers)		
Grey-crowned Babbler	<i>Pomatostomus temporalis</i>	
CINCLOSOMATIDAE (quail-thrush and wedgebills)		
Chiming Wedgebill	<i>Psophodes occidentalis</i>	
PACHYCEPHALIDAE (whistlers and allies)		
Crested Bellbird	<i>Oreoica gutturalis</i>	+
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	
DICRURIDAE (fly-catchers)		
Grey Fantail	<i>Rhipidura fuliginosa</i>	
Willie Wagtail	<i>Rhipidura leucophrys</i>	
Australian Magpie- lark	<i>Grallina cyanoleuca</i>	+
CAMPEPHAGIDAE (cuckoo-shrikes and trillers)		

Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	+
White-winged Triller	<i>Lalage tricolor</i>	

Table 8. (cont.)

		Statu s
ARTAMIDAE (woodswallows)		
White-breasted Woodswallow	<i>Artamus leucorhynchus</i>	
Masked Woodswallow	<i>Artamus personatus</i>	
Black-faced Woodswallow	<i>Artamus cinereus</i>	+
Little Woodswallow	<i>Artamus minor</i>	
CRACTICIDAE (butcherbirds and allies)		
Grey Butcherbird	<i>Cracticus torquatus</i>	
Pied Butcherbird	<i>Cracticus nigrogularis</i>	+
Australian Magpie	<i>Cracticus tibicen</i>	
CORVIDAE (crows and ravens)		
Torresian Crow	<i>Corvus orru</i>	+
Little Crow	<i>Corvus bennetti</i>	
PTILONORHYNCHIDAE (bowerbirds)		
Western Bowerbird	<i>Ptilonorhynchus maculatus</i>	+
HIRUNDINIDAE (swallows and martins)		
White-backed Swallow	<i>Cheramoeca leucosternus</i>	
Welcome Swallow	<i>Hirundo neoxena</i>	
Tree Martin	<i>Hirundo nigricans</i>	
Fairy Martin	<i>Hirundo ariel</i>	
ZOSTEROPIDAE (white-eyes)		
Silvereye	<i>Zosterops lateralis</i>	
SYLVIIDAE (songlarks and allies)		
Spinifex-bird	<i>Eremiornis carteri</i>	
Rufous Songlark	<i>Cincloramphus mathewsi</i>	
Brown Songlark	<i>Cincloramphus cruralis</i>	
ALAUDIDAE (bushlark)		
Singing Bushlark	<i>Mirafrja javanica</i>	
DICAEIDAE (flower-peckers)		

Mistletoebird	<i>Dicaeum hirundinaceum</i>	
PASSERIDAE (finches)		
Zebra Finch	<i>Taeniopygia guttata</i>	+
Painted Finch	<i>Emblema pictum</i>	
MOTACILLIDAE (pipits)		
Australian Pipit	<i>Anthus australis</i>	

Table 9. Mammal species recorded or expected to occur in the Exmouth UCL study area. Those species recorded by way of scats or tracks are indicated by 's', whilst species recorded by direct observation/capture are indicated by '+'.

MAMMALS	Status
TACHYGLOSSIDAE (echidna)	
Echidna	<i>Tachyglossus aculeatus</i> s
DASYURIDAE (carnivorous marsupials)	
(Little Red)	
Kaluta	<i>Dasykaluta rosamondae</i>
Pilbara Ningauai	<i>Ningauai timealeyi</i>
	<i>Planigale sp</i>
Tan False Antechinus	<i>Pseudantechinus roryi</i>
Striped-faced Dunnart	<i>Sminthopsis macroura</i>
Lesser Hairy-footed Dunnart	<i>Sminthopsis youngsoni</i> +
MACROPODIDAE (kangaroos and wallabies)	
Euro	<i>Macropus robustus erubescens</i> +
Red Kangaroo	<i>Macropus rufus</i>
EMBALLONURIDAE (sheathtail bats)	
Common Sheathtail Bat	<i>Taphozous georgianus</i>
Yellow-bellied Sheathtail Bat	<i>Saccolaimus flaviventris</i>
MOLOSSIDAE (freetail bats)	
White-striped Mastiff Bat	<i>Tadarida australis</i>
Northern Freetail Bat	<i>Chaerephon jobensis</i>
Beccari's Freetail Bat	<i>Mormopterus beccari</i>
VESPERTILIONIDAE (evening bats)	
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>
Lesser Long-eared Bat	<i>Nyctophilus geoffroyi</i>

Inland Cave Bat	<i>Vespadelus finlaysoni</i>	
Little Broad-nosed Bat	<i>Scotorepens greyii</i>	
MURIDAE (rodents)		
Spinifex Hopping Mouse	<i>Notomys alexis</i>	+
Delicate Mouse	<i>Pseudomys delicatulus</i>	+
Sandy Inland Mouse	<i>Pseudomys hermannsburgensis</i>	+
INTRODUCED FAUNA		
House Mouse	<i>Mus musculus</i>	
Black Rat	<i>Rattus rattus</i>	
Red Fox	<i>Vulpes vulpes</i>	
Dog/Dingo	<i>Canis lupus/dingo</i>	+
Feral Cat	<i>Felis catus</i>	+
European Rabbit	<i>Oryctolagus cuniculus</i>	
Goat	<i>Capra hircus</i>	

Table 10. Extinct mammal fauna of the Cape Range Peninsula that may have occurred in the Exmouth UCL study area. Includes locally extinct fauna species.

DASYURIDAE (carnivorous marsupials)		
Thylacine		<i>Thylacinus cynocephalus</i>
Kultarr		<i>Antechinomys laniger</i>
Mulgara		<i>Dasyercus cristicauda</i>
Chuditch		<i>Dasyurus geoffroii</i>
Northern Quoll		<i>Dasyurus hallucatus</i>
Red-tailed Phascogale		<i>Phascogale calura</i>
Long-tailed Dunnart		<i>Sminthopsis longicaudata</i>
Ooldea Dunnart		<i>Sminthopsis ooldea</i>
PERAMELIDAE (bandicoots and bilbies)		
Golden Bandicoot		<i>Isodon auratus</i>
Western Barred Bandicoot		<i>Perameles bougainville</i>
Greater Bilby		<i>Macrotis lagotis</i>
MACROPODIDAE (kangaroos, wallabies and bettongs)		
Boodie		<i>Bettongia leseur</i>
Spectacled Hare-wallaby		<i>Lagorchestes conspicillatus</i>
PHALANGERIDAE (brushtail possums)		
Common Brushtail Possum		<i>Trichosurus vulpecula</i>

MURIDAE (rodents)	
Forrest's Mouse	<i>Leggadina forresti</i>
Long-tailed Hopping Mouse	<i>Notomys longicaudatus</i>
Short-tailed Hopping Mouse	<i>Notomys amplus</i>
Desert Mouse	<i>Pseudomys desertor</i>
Djoongari	<i>Pseudomys fieldi</i>
Western Chestnut Mouse	<i>Pseudomys nanus</i>
Pale Field Rat	<i>Rattus tunneyi</i>

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