

V REPTILES AND FROGS OF YORKRAKINE ROCK, EAST YORKRAKINE AND NORTH BUNGULLA NATURE RESERVES

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Reptiles and frogs were collected on Yorkrakine Rock (YRR), East Yorkrakine (YER) and North Bungulla (NBR) Nature Reserves between 18-24 November 1974 and 11-16 May 1975. In addition J. Dell collected in NBR on 31 August 1977. Collecting methods included shooting active reptiles with 0.22 calibre dust shot, searching litter, logs, rubbish and roadside spoil, and digging out burrows. Searching at night with head torches was also carried out. All specimens are in the Western Australian Museum with registration numbers R 49188-49205, R 52175-52205, R 52253-52351, R 52353-52389 and R 52487-88.

All specimens were dissected and sexed; their reproductive organs were examined, and gonads and snout-vent lengths (SVL) measured. Clutch sizes are referred to as, for example, '2, 1 eggs'. This means two eggs were in the left and one in the right oviduct. Stomach contents were collected and identified where possible. **Appendix 1** indicates species present, number collected with vegetation location numbers (where known) which are directly referable to Muir (this publication). The annotated list is compiled from data from all 3 reserves. The numbers in brackets refer to number of specimens collected each month.

Annotated List

LEPTODACTYLIDAE

Ranidella pseudinsignifera YRR (November — 1, May — 12). Calling in May. In moist soil at base of granite outcrop.

Heleioporus albopunctatus YRR, NBR (November — 1, May — 7). On clay soil in mallee formation and on moist soil with *Borya nitida* on edge of granite outcrop.

Pseudophryne guentheri YRR, YER, NBR (November — 1, May — 10). On edge of granite, in gravel pit, under leaf mould in mallee formation, and dug from shallow burrow at edge of pool < 12 cm deep at edge of granite outcrop. Tadpoles and eggs in same burrow in May.

GEKKONIDAE

Crenadactylus ocellatus YER, NBR (May — 3). In log and in rubbish tip in mallee formation on heavy clay.

Diplodactylus granariensis YRR, YER, NBR (August — 2, November — 2, May — 10). On ground in litter and in small bushes in Salmon Gum (*Eucalyptus salmonophloia*) woodland on clay loam, in shrubland on fine sandy loam, and in mallee formation on sandy clay. Two November females (SVL 58 mm) each had 1, 1 oviducal eggs (14 x 6 mm and 8 x 6 mm).

Diplodactylus maini YRR, NBR (November — 9, May — 8, August — 2). Dug out of spider burrows in shrublands on gravelly fine sandy loam and in Salmon Gum woodland on clay loam. Three May specimens were juveniles (SVL 27-29 mm) too small to be sexed, as were 2 August specimens (SVL 24 mm). Two November females (SVL 46-48 mm) had 1, 1 oviducal eggs (13 x 6 mm).

Diplodactylus pulcher YRR, YER, NBR (November — 1, May — 7). Dug out of lycosid spider burrows in shrublands on gravelly fine sandy loam and in Salmon Gum woodland on clay loam.

Gehyra variegata YRR, YER, NBR (November — 16, May — 19). On granite outcrop in open at night and under exfoliated granite, under bark of dead Jam (*Acacia acuminata*) trees in woodland on sandy clay loam, under spoil in Salmon Gum woodland on sandy clay, and in rubbish tip in mallee formations. Three November females (SVL 41-47 mm) each had 0, 1; 0, 1 and 1, 0 oviducal eggs (6 x 6 mm, 8 x 7 mm and 10 x 9 mm). A juvenile (SVL 25 mm) collected in November.

Oedura reticulata YER (November — 9, May — 3). On trunks of Gimlet (*Eucalyptus salubris*) and York Gum (*Eucalyptus loxophleba*) trees in woodland on sandy clay. Three November females (SVL 60-67 mm) had 1, 1 oviducal eggs (15 x 6 mm, 17 x 6 mm and 16 x 7, 20 x 8 mm and 14 x 7, 17 x 7 mm). Two May specimens (SVL 32, 33 mm) were juveniles too small to sex.

Phyllurus milii YRR (November — 3, May — 1). In open on granite outcrop at night. Two November females (SVL 76-85 mm) each had 1 yolky follicle (ca 10 x 10 mm and 7 x 6 mm) and 3-4 smaller developing follicles ca 2-3 mm diameter in each ovary. One had a developing shell gland associated with each oviduct.

PYGOPODIDAE

Delma fraseri YRR, YER (November — 1, May — 1). Under decaying log with termites in Salmon Gum woodland on clay loam and under leaf litter in shrubland on clay loam.

Delma grayii NBR (1 specimen, May). In loose earthen spoil in termite mound in shrubland. Juvenile specimen with SVL 44 mm.

Pygopus lepidopodus YRR, YER (November — 2, May — 1). In Jam woodland on sandy clay loam and in *Casuarina acutivalvis* shrubland on sandy clay.

AGAMIDAE

Amphibolurus cristatus YRR (November — 1). In Wandoo (*Eucalyptus wandoo*) and Salmon Gum woodland on sandy clay loam.

Amphibolurus maculatus griseus YER, NBR (November — 3, May — 2). In heath and shrubland on sandy clay.

Amphibolurus minor YER, NBR (November — 2). In heath. A gravid female (SVL 110 mm) with 3, 3 oviducal eggs each ca 22 x 10 mm.

Amphibolurus ornatus YRR (November — 7, May — 1). Under exfoliated granite and in open on granite outcrop. Two November females (SVL 77, 86 mm) had 1, 1 and 3 oviducal eggs (specimen damaged; it was not possible to tell which oviduct they were in). Another female (SVL 84 mm) had 2, 1 yolky follicles ca 7 x 6 mm in each ovary.

Amphibolurus reticulatus YRR, YER (May — 3). Under granite slab on quartz sand, in burrow in Jam woodland on sandy clay loam, and on roadside with adjacent shrubland on sandy clay.

SCINCIDAE

Cryptoblepharus plagiocephalus YRR, YER (November — 2). In rubbish tip in mallee formation and in pile of telegraph poles at edge of granite outcrop. One November female (SVL 41 mm) had 1, 1 yolky follicles (ca 2 x 2 mm) in each ovary.

Ctenotus pantherinus pantherinus YRR (November — 1). In Jam woodland on sandy clay loam. Female (SVL 75 mm) with 1, 2 oviducal eggs (ca 15 x 10 mm).

Ctenotus schomburgkii YRR (November — 1). In decayed log in Salmon Gum woodland on clay loam.

Lerista distinguenda NBR (May — 2). In spoil and broken down termite mounds in shrubland on fine sandy loam.

Lerista muelleri YER, NBR (November — 2, May — 4). In and under hollow, decaying logs in Salmon Gum and Gimlet woodlands on sandy clay.

Menetia greyii YRR, YER, NBR (November — 5, May — 2, August — 1). In Jam woodland on sandy clay loam, in broken up termite mound in shrubland on fine sandy loam, in grass tussocks in Salmon Gum and Gimlet woodland on heavy clays, in mallee formation and in heath on sandy clay. Three November females (SVL 30-33 mm) had 1, 0; 1, 1 and 1, 1 oviducal eggs (4 x 2 mm, 6 x 2 mm and 8 x 4 mm).

Morethia obscura NBR, YRR (November — 2). Under sheet of tin in mallee formation on heavy clay, and under logs in woodland formation, on clayey sand.

Tiliqua occipitalis YRR, YER, NBR (November — 2, May — 3). In break-back trap in shrubland formation on sandy clay and under corrugated iron in mallee formation.

Tiliqua rugosa YRR, YER, NBR (November — 3, May — 3). In breakback traps in shrublands on sandy clay. A November female (SVL 200 mm) had 0, 1 yolky follicle (ca 10 x 10 mm).

TYPHLOPIDAE

Typhlina australis NBR (May — 1). In decaying mallee stump in mallee formation.

ELAPIDAE

Pseudonaja nuchalis YRR (May — 1). Under exfoliated slab at base of granite outcrop. A juvenile (SVL 25 cm).

Denisonia gouldii NBR (May — 4). In termite mounds and under spoil in shrubland on fine sandy loam. One specimen had a *Diplodactylus pulcher* in its stomach.

Discussion

A total of 3 frogs and 27 reptile species were recorded from these three reserves. All species are within their known range and have been previously recorded from reserves in the Western Australian wheatbelt. Only 6 species (*Pseudophryne guentheri*, *Diplodactylus granariensis*, *Gehyra variegata*, *Menetia greyii*, *Tiliqua occipitalis* and *T. rugosa*) were found on all 3 reserves; these species occupy a wide variety of habitats and are common in the wheatbelt. Other species are habitat specific, e.g. *Amphibolurus ornatus* and *Ranidella pseudinsignifera* were only collected on granite and its margins on Yorkrakine Rock Nature Reserve.

Agamids are particularly well represented with 5 species present; this in part reflects the diversity of habitats present on the three reserves.

Eight reptile species (*Diplodactylus granariensis*, *D. maini*, *Gehyra variegata*, *Oedura reticulata*, *Amphibolurus minor*, *Amphibolurus ornatus*, *Ctenotus pantherinus* and *Menetia greyii*), were breeding, i.e. had oviducal eggs in November. *Phyllurus milii*, *Cryptoblepharus plagiocephalus* and *Tiliqua rugosa* had yolky follicles in their ovaries. *Pseudophryne guentheri* tadpoles were collected in May.

APPENDIX 1

Location numbers from Muir (this publication) for reptiles and frogs recorded on Yorkrakine Rock, East Yorkrakine and North Bungulla Nature Reserves. The letters L, H, S, M, refer to unspecified lithic complex, heath, shrubland and mallee formations respectively. They are not described by Muir (this publication).

	Yorkrakine Rock		East Yorkrakine		North Bungulla	
	Nov.	May	Nov.	May	Nov.	May
<i>Ranidella pseudinsignifera</i>	L	L				
<i>Heleioporus albopunctatus</i>	L	L				H
<i>Psuedophryne guentheri</i>	L			2.7		
<i>Crenadactylus ocellatus</i>				2.7		M
<i>Diplodactylus granariensis</i>		1.3	2.5		3.15	
					3.12	
					3.19	
<i>Diplodactylus maini</i>		1.3			3.15	3.9
					3.12	
					3.19	
<i>Diplodactylus pulcher</i>		1.3			3.9	3.15
						3.13
<i>Gehyra variegata</i>	1.2	1.2	2.7	1.1		2.4
	L	L	1.1			
<i>Oedura reticulata</i>			1.1	1.12		
<i>Phyllurus milii</i>	L	L				
<i>Delma fraseri</i>		1.1	S			
<i>Delma grayii</i>						3.12
<i>Pygopus lepidopodus</i>	1.4		3.4	3.4		
<i>Amphibolurus cristatus</i>	1.3					
<i>Amphibolurus maculatus griseus</i>			H			3.4
<i>Amphibolurus minor</i>			H			
<i>Amphibolurus ornatus</i>	L	L				
<i>Amphibolurus reticulatus</i>		1.2		3.4		
		L				
<i>Cryptoblepharus plagiocephalus</i>	L		2.7			
<i>Ctenotus pantherinus</i>	1.7					
<i>Ctenotus schomburgkii</i>	1.1					
<i>Lerista distinguenda</i>						3.12
<i>Lerista muelleri</i>			1.1	1.1		
<i>Menetia greyii</i>	1.4		2.4		2.4	3.12
			1.1		4.5	
<i>Morethia obscura</i>					2.4	
<i>Tiliqua occipitalis</i>				3.4	3.4	3.4
						2.4
<i>Tiliqua rugosa</i>		3.2		3.4		3.13
<i>Typhlina australis</i>						M
<i>Pseudonaja nuchalis</i>		L				
<i>Denisonia gouldii</i>						3.12

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