

## V REPTILES AND FROGS OF BILLYACATTING HILL NATURE RESERVE

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Twenty species of reptiles and four of frogs were collected from Billyacatting Hill Nature Reserve (No. 17746) during the October/November 1972 (spring) and March/April 1974 (autumn) surveys. They are listed below with date of collection and number collected each survey. All specimens were dissected and sexed, if undamaged. Data on habitat and reproduction are included. Clutch size is listed as (for example) 2,3 eggs, being left and right oviducts respectively.

### LEPTODACTYLIDAE

*Heleioporus albopunctatus*. One in mallee/woodland at night in spring. Several on surface and males calling from burrows on 4 April after ca 100 mm rain the previous day.

*Neobatrachus centralis*. In autumn. Common in creekbeds and calling while floating in pools after heavy rain (see previous species).

*Pseudophryne guentheri*. Four in spring under litter at moist soak. Common in autumn in low-lying clay areas after heavy rain on 3 April. One aestivating under granite slab before rain.

*Ranidella pseudinsignifera*. A few in spring under moist litter at soak, and a few in autumn after heavy rain on 3 April.

### GEKKONIDAE

*Crenadactylus ocellatus*. Two in spring and 5 in autumn. Under sedges, litter, roadside spoil, logs and old tins. Female with snout-vent length (SVL) 32 mm collected 2 November had 1,1 eggs 8 mm long. One autumn specimen (SVL 17) was juvenile.

*Diplodactylus maini*. One in autumn from clay soil in open Salmon Gum (*Eucalyptus salmonophloia*)/Gimlet (*E. salubris*) woodland with *Atriplex* ground cover.

*Diplodactylus granariensis*. Five in spring and 8 in autumn. On logs and litter in Salmon Gum/Gimlet woodland at night. November males (SVL 47-55) had large testes (6 mm). Female (SVL 58) collected 3 November had 1,1 eggs 14 mm long. Four autumn specimens (SVL 32-37) were juveniles.

*Gehyra variegata*. Fifteen in spring and 10 in autumn. Under exfoliated granite, inside rotting Salmon Gum logs in daytime and in Salmon Gum/Gimlet woodland at night. Spring males (SVL 41-48) had large testes (4-5 mm), a female (SVL 47) collected 2 November had 0,1 egg 12.5 mm

long, another female (SVL 41) collected 3 November had 0,1 eggs 11 mm long. Two autumn specimens (SVL 23, 29) were juvenile.

*Heteronotia binoei*. Two in spring and 3 in autumn. Under granite slabs embedded in soil, in bulldozer spoil and rotting Salmon Gum log. A juvenile collected 3 November had SVL 26 compared with 3 autumn juveniles with mean SVL 26.

*Oedura reticulata*. Eleven in spring and 9 in autumn. Base of Gimlet trees at night. Seven spring males (SVL 57-64) had large testes (5.5 mm). A spring juvenile had SVL 28 compared with 3 autumn juveniles with mean SVL 30.

*Phyllurus milii*. Three in spring and 2 in autumn. Under exfoliated granite and in Salmon Gum woodland at night. A spring male (SVL 73) had large testes (5 mm) and a female (SVL 78) collected 2 November had 0,2 eggs 8 mm long.

#### AGAMIDAE

*Amphibolurus minor*. One in spring from dead limb of tree above surrounding foliage. Male with SVL 114 had large testes (11 mm).

*Amphibolurus ornatus*. Three in spring and 12 in autumn. Granite outcrops. Three autumn specimens were adult (SVL 77-81) and 9 were juvenile (SVL 34-50, mean 44.8).

#### PYGOPODIDAE

*Delma fraseri*. Two in spring. Under Wandoo (*Eucalyptus wandoo*) log and on edge of reserve.

*Delma australis*. One in spring. Under bulldozer spoil.

#### SCINCIDAE

*Cryptoblepharus plagiocephalus*. One in spring. On logs in Wandoo woodland.

*Lerista macropisthopus*. One in spring. Under large granite slab embedded in loam. Male (SVL 95) with large testes (8 mm).

*Lerista muelleri*. Three in spring and one in autumn. In dead mallee stumps, under bulldozer spoil and under log in Salmon Gum woodland. Spring males (SVL 35, 38) had large testes (3.5 mm).

*Menetia greyii*. Four females in spring. Under litter. Three (SVL 28-30) collected between 30 October and 3 November had single eggs between 4.5 and 7.7 mm long.

*Morethia butleri*. Two in autumn. On logs in Salmon Gum/Gimlet woodland.

## VARANIDAE

*Varanus gouldii*. Several seen in spring and autumn. Two copulating on roadside on 1 November. Juvenile dug from burrow on 2 April.

## ELAPIDAE

*Pseudonaja nuchalis*. Three collected in spring.

*Denisonia gouldii*. One in autumn from bulldozer spoil.

*Pseudechis australis*. Male collected from entrance to Rainbow Bee-eater (*Merops ornatus*) burrow in November.

## DISCUSSION

Billyacatting Hill is the most north-easterly known locality of *Oedura reticulata*, a species which we believe to be most frequent in Gimlet (*Eucalyptus salubris*) woodland. This gecko lives in hollows with narrow openings near the base of the trees. *Morethia butleri*, a skink which straddles the mulga-eucalypt line, is not usually recorded on wheatbelt reserves. Its presence here and the apparent absence of the more southern *M. obscura* is interesting considering that two winter rainfall frogs, *Ranidella pseudinsignifera* and *Pseudophryne guentheri* were present. The suggestion that Billyacatting Hill is an outlier of some south-western species is further supported by the presence of the two plants *Acacia alata* and *Melaleuca viminea*.

The other reptile species are all within their known range.

The reproductive data obtained agree with those from other wheatbelt reserves where gravid reptiles have been collected. Five of the eight gecko species had large eggs in oviducts in November. Most spring adults of *Oedura reticulata* were males with large testes, and the only spring *Amphibolurus minor* had large testes also.

Only five species of skinks were collected. *Lerista macropisthopus* and *L. muelleri* had large testes in November, and *Menetia greyii* was gravid on 30 October. The goanna *Varanus gouldii* was seen copulating on 1 November.

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