

V REPTILES AND FROGS OF DUROKOPPIN AND KODJ KODJIN NATURE RESERVES

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Reptiles and frogs were collected on Durokoppin (DR) and Kodj Kodjin Reserves (KKR) between 8-17 October 1975 and 8-15 April 1976. A few specimens were collected on 26-27 January 1977. Specimens were collected by similar methods to those outlined by Chapman & Dell (1978). For location and details of Reserves see Muir (this report). Specimens caught (R56497-56663) are in the Western Australian Museum. Measurements are in millimetres.

LEPTODACTYLIDAE

Heleioporus albopunctatus

DR. Common at night along watercourses in Wandoo woodland (*Eucalyptus wandoo*) in April and October. Four collected in April in DR loc. 1.5 and 5 collected in October in DR loc. 1.23.

Pseudophryne guentheri

DR. At night along watercourses in woodland and mallee. Two collected in DR loc. 1.5 in April and one under litter in mallee in October. Tadpoles numerous in drying-up pools in DR loc. 1.25 on 14 April. Tadpoles had not developed hind-limbs.

GEKKONIDAE

Crenadactylus ocellatus

DR and KKR. Woodland and scrub. One collected in KKR loc. 1.5 in April; one collected in DR loc. 3.7 in October.

Diplodactylus maini

DR and KKR. Woodland, shrubland and heath. Collected in DR loc. 1.5, 1.23, 3.25, 3.26, 3.33, 4.2, 4.4, 4.5, 4.6, 4.9, and KKR loc. 1.5. Thirty-three collected on DR in April and 4 in October; 6 collected on KKR in April and 2 in October.

Five October males (SVL 40-46) were probably breeding, they had enlarged testes up to 5.5 mm long. Two October females (SVL 45,46) were commencing breeding, they had one large follicle *ca* 3.5 mm in each ovary and up to 5 small follicles < 1.5 mm.

In April there were two population sizes: 25 adults ranged from SVL 39-48 and 8 juveniles ranged from SVL 27-34 (mean 31). Of the adults, 13

were males ranging from SVL 39-45 (mean 43) and 12 were females ranging from SVL 42-48 (mean 45.1).

In April many were seen but not collected along tracks on DR. Forty-three were counted in 1 km of track through DR loc. 3.26, 4.5, 3.25, 2.4, 3.30 and 4.6.

Diplodactylus pulcher

DR. Woodland, mallee and shrubland. Seven collected in April in DR loc. 1.5, 2.4, 3.29 and 3.33. Six were adults and 1 was juvenile. Four had stomachs crammed with between 80 and 120 *Eutermes* sp. termites.

Diplodactylus spinigerus

DR. Shrubland. One collected in October in DR loc. 3.29. It was a male (SVL 61), probably breeding, and had large testes (12 mm).

Diplodactylus granariensis

DR. Woodland. Three collected in DR loc. 1.5 in April, 2 collected in DR loc. 1.16 in January.

Gehyra variegata

DR and KKR. Woodland, shrubland and lithic complex. Five collected in October, 7 in April, and 1 in January. Collected in DR loc. 1.5, 1.15, 1.16, 3.21, 3.22, 5.1, 5.2 and KKR loc. 1.5.

Two October males (SVL 42,48) were probably breeding, they had testes 5 mm long. An October female (SVL 49) had one large yolky follicle 4 mm long in the right ovary. The largest follicle in the left ovary was only 2 mm.

Two population sizes were collected in April: 5 adults with SVL 42-51 (mean 44.6) and 2 subadults with SVL 39. The smallest juvenile (SVL 26) was collected in October.

Heteronotia binoei

DR. Woodland; under bulldozer spoil. One collected in DR loc. 1.14 in October. It was a male (SVL 50), probably breeding, with large testes 6 mm long.

Oedura reticulata

DR and KKR. Woodland; on KKR they were at the base of Wandoo or Gimlet (*E. salubris*) trees. Two collected in April, 9 in October and 1 in January. Collected in DR loc. 1.16, 1.22 and KKR loc. 1.5, 1.8.

Three October males (SVL 58-62) were probably breeding, they had

large testes 8 mm long. Two October females (SVL 66,69) had a large follicle 4.5 mm long in each ovary. Each ovary also had 4 or 5 small follicles < 1.5 mm. Three October specimens were juveniles (SVL 31-32).

Phyllurus milii

DR. Lithic complex under exfoliated granite in DR loc. 5.1. One collected in October — male (SVL 79) probably breeding, it had large testes 8 mm long.

PYGOPODIDAE

Delma australis

DR. Shrubland; under roadside spoil. Three collected in October in DR loc. 3.7. Two males (SVL 58, 60) were probably breeding, they had large testes 6 and 9 mm long respectively. A female (SVL 70) had one large follicle (2.5 mm) in each ovary, and 3 small follicles < 1.5 mm.

Delma fraseri

DR. Shrubland; under roadside spoil. Three collected in October in DR loc. 3.7. Two males (SVL 100, 108) were probably breeding, they had large testes 11 and 13 mm long respectively. A female (SVL 89) had one large follicle 3 mm in each ovary, and 2 small follicles < 1.5 mm. The stomach of the female had the remains of a cockroach (Blattidae).

Lialis burtonis

DR. Shrubland; one collected in October in DR loc. 3.24. It was a male (SVL 127), probably breeding, with large testes 8 mm long. An adult skink *Morethia obscura* was in its stomach.

Pygopus lepidopus

DR. Mallee; one collected in October in DR loc. 2.5. It was a female (SVL 180) and had one egg in each oviduct. Eggs measured 29 and 26 mm respectively. Each ovary had a large yolky follicle 6 mm long and three smaller follicles grading from 4 mm to 1.5 mm. This specimen could possibly produce five clutches, each of two eggs.

AGAMIDAE

Amphibolurus cristatus

DR and KKR. Woodland and mallee. One collected in January, one in April and two in October; in DR loc. 1.20, and KKR loc. 1.5 and 2.3.

An October male (SVL 87) was probably breeding, it had large testes 8 mm long. An October female had two large yolky follicles 7 mm long in the right ovary and three similar size follicles in the left. In the right and left ovaries respectively there were 7 and 8 small follicles less than 2 mm long.

All sightings were in woodland or mallee where some fallen trees exceeded 15 cm in diameter; they provide hollow logs in which the animals live.

The January specimen had several species of terrestrial Coleoptera, numerous Formicidae, a centipede (Chilopoda) and a Hemiptera in its stomach.

Amphibolurus maculatus griseus

DR. Shrubland and heath. One collected in April and two in October; in DR loc. 3.24, 3.25 and 4.3. Two males (SVL 47,54) collected in October were probably breeding, they had large testes 5 mm long.

Amphibolurus minor

DR. Heath; one collected in October in DR loc. 4.3. It was a female (SVL 103) with four eggs in the left oviduct and three in the right. Eggs were ca 22 mm long.

Amphibolurus ornatus

DR. Lithic complex; two collected in October at DR loc. 5.2. A male (SVL 92) was probably breeding, it had large testes 7 mm long. A female (SVL 91) had two eggs in the right oviduct and one in the left; eggs were 22 mm long.

Amphibolurus reticulatus

DR. Shrubland; one collected in October under bulldozer spoil in DR loc. 3.14.

SCINCIDAE

Cryptoblepharus plagiocephalus

DR and KKR. Woodland. Two collected in April and one in October; in DR loc. 1.20 and KKR loc. 1.5. A tiny juvenile (SVL 20) was collected in April.

Ctenotus pantherinus

DR and KKR. Shrubland; under bulldozer spoil and in burrows or under rubbish in gravel-pits. Three collected in April and seven in October. Three

October males (SVL 77-81) were probably breeding, they had large testes 8-10 mm long compared to an April male (SVL 67) with 4 mm testes.

Ctenotus schomburgkii

DR and KKR. Woodland, mallee, shrubland and heath. Four collected in April and one in October; in DR loc. 3.24, 4.3 and KKR loc. 1.5 and 2.9. In April they were active during daytime; the October specimen was caught in a pit-trap.

Lerista muelleri

DR and KKR. Woodland and shrubland; under bulldozer spoil and in rotting logs. Two collected in April and ten in October; in DR loc. 3.7 and KKR loc. 1.5. Two October males (SVL 39) had large testes 3.5 mm long. An October female (SVL 41) had follicles only 0.8 mm diameter, whereas two April females (SVL 43) had follicles between 1 mm and 1.5 mm diameter.

Menetia greyii

DR and KKR. Woodland and lithic complex. Two collected in April; in DR loc. 5.1 and KKR loc. 1.5.

Morethia obscura

DR and KKR. Mallee and shrubland. One collected in October in KKR loc. 2.9. It was a male (SVL 45) with large testes 6.5 mm long. One was found in the stomach of a *Lialis burtonis* collected in October in DR loc. 3.24

Tiliqua occipitalis

DR and KKR. One collected on each Reserve in October; four others seen. DR loc. 1.6, 3.7 and KKR loc. 3.2.

Tiliqua rugosa

DR and KKR. One collected on KKR in October, many others seen on both Reserves. Recorded in DR loc. 1.5, 2.5, 3.7, 3.8, 3.23, 4.3, 5.1 and KKR loc. 1.5, 2.10, 3.2.

ELAPIDAE

Denisonia gouldii

DR. Shrubland and heath. Three collected in October; in DR loc. 3.7 and 4.3. They were under bulldozer spoil.

Pseudechis australis

DR. Shrubland. A juvenile was run-over on track in DR loc. 3.23 in October.

Pseudonaja nuchalis

KKR. Woodland. A juvenile was collected in October in a hollow log in KKR loc. 1.5.

Vermicella bertholdi

KKR. Woodland. One collected in October in termite mound in KKR loc. 1.5.

Vermicella semifasciata

DR. Shrubland. Two collected in April under bulldozer spoil in DR loc. 4.3.

DISCUSSION

A total of two frogs and thirty-one reptile species were collected on Durokoppin and Kodj Kodjin Reserves. Of these, eighteen were confined to DR and two confined to KKR. Thus, only thirteen species were common to both Reserves. Two species, *Phyllurus milii* and *Amphibolurus ornatus* were collected on granite which is confined to DR. If we omit frogs which require certain types of drainage the remaining sixteen species had a mean number of 2.3 individuals collected per species. This is in contrast to a mean of 9.6 for the thirteen species common to both Reserves. It is likely that collection bias is responsible for apparent differences between the Reserves. Excluding external boundaries there is *ca* 9.5 km of tracks on DR and only *ca* 1 km on KKR. Seven species collected only on DR were on tracks or bulldozer spoil on edges of tracks.

The herpetofauna of DR and KKR is typical for the wheatbelt generally; all species have been collected on other reserves being studied in the wheatbelt survey.

Breeding data is included for 18 species. The frog *Pseudophryne guentheri* had tadpoles in April; six gecko species, four pygopodids, four agamids and three skinks had enlarged testes (some also had yolky ovarian follicles) in October, indicating they were commencing breeding. Included in this list are *Amphibolurus minor* and *A. ornatus* which had eggs in their oviducts.

VI ACKNOWLEDGEMENTS

The October 1975 faunal survey of Durokoppin and Kodj Kodjin Reserves was in part conducted by K. Morris, M. Jackson and G. Harold while they were wholly supported by a Regional Employment Development Scheme grant to D.J. Kitchener.

The vegetation study was supported by an Australian Biological Resources Study Interim Council grant to D.J. Kitchener. Staff of the Western Australian Herbarium assisted with identification of some of the plants.

We would also like to thank G. Barron for assistance in the field; and Susan Postmus for identifying stomach contents of reptiles and mammals.

We are grateful to G.M. Storr for reading the manuscript.

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