A RECORD OF REPRODUCTION IN CAPTIVE *DELMA AUSTRALIS* AND *D. FRASERI* (*Lacertilia: Pygopodidae*)

By Brian Bush, P.O. Box 192, Esperance, Western Australia.

During the first week in December, 1982 3 gravid *Delma australis* Kluge and 1 gravid *D. fraseri* Gray were collected at Lort River, W.A. in lat. 33°45' S, long. 121°15' E and retained until oviposition was observed on 19, 22 and 25 December respectively in *D. australis*, and on the 23 December in *D. fraseri*. All clutches contained 2 eggs which were weighed and measured along with the repsective females immediately following parturition (see Figure 1). For method of incubation see Bush (1983). Incubation temperature = 28°C ± 4.

Within 24 hours of commencing incubation, 4 eggs comprising a clutch each from two of the *D. australis* specimens were found to be badly desiccated and therefore removed for perserving. It is believed that these eggs were infertile. The remaining two clutches (1 clutch/species) absorbed moisture and increased in size. On 12 February, 1983 the eggs were measured for size, but not weight; as my previous attempts at laboratory incubating the eggs of these species had been unsuccessful, I was reluctant to disturb this sample. Although all the eggs had increased noticably in size, one *D. australis* egg increased by an estimated 10%, and had changed from an elongate, oval-shape with straight sides to a bean-shape with curved, parallel sides. For increases in the other eggs see Figure 1.

	Female		Egg					Hatchling	
	S-VL	Weight	Size	weight	12 Feb.*		Incubation period (days)	S-VL	Weight
Species	(mm)	(mm)	(gm)	(gm)	Size	%Inc		(mm)	(gm)
australis A	73	1.41	14 x	0.33					
			13 x 5	0.29					
B	75	1.43	14 x 4	0.29	15 x 6	60			
			13 x 5	0.30	17 x 8	109	66	31	0.26
C	75	1.30	16 x 5	0.19					
			16.5 x 5	0.20					
D. fraseri	115	8.45	22 x 8	1.14	23 x 10	31	77	43	0.72
			23 x 7-8	1.04	27x 9-11	57	74	45	0.96

Figure 1. Female, egg and hatchling data for *Delma australis* and D. fraseri.
* This date in itself is not significant apart from being the only day during incubation that the eggs were disturbed so that measurements could be taken.

On 25 February the bean-shaped *D. australis* egg hatched; the other failed to, and when dissected several days later it was found that the embryo had died well prior to full term development. The hatchling's colour and pattern (in this species all markings are restricted to the throat region) was the same as in adults.

The *D. fraseri* eggs hatched on 6 and 9 March respectively. These hatchlings were vividly marked with black, white and reddish-orange on the head and nape (Fig. 2). In adults these markings are barely discernible, and in many individuals they have faded completely.

All hatchlings were weighed and measured for snout-vent length as soon as they had cleared the egg-case. Measurements of weight were obtained using mechanical balance-scales calibrated in 0.1 grain (≙ 0.0065 gram).

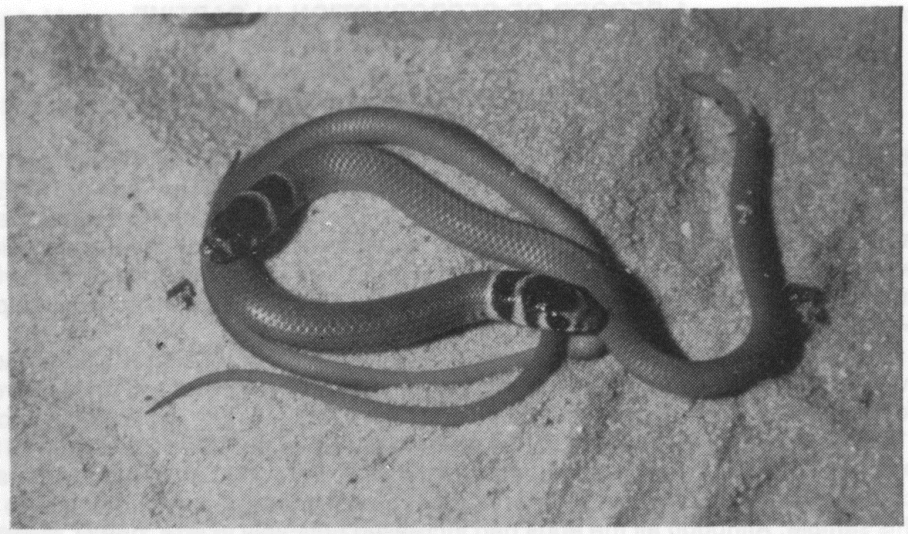

Figure 2. *Delma fraseri* hatchlings.

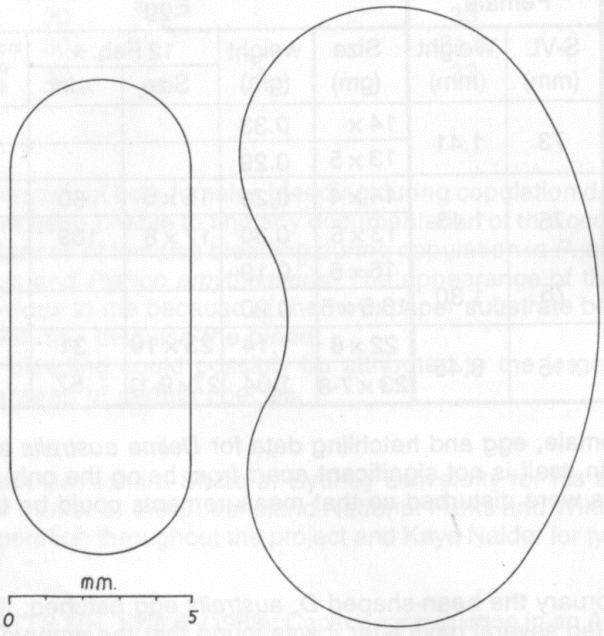

Figure 3. The *Delma australis* egg mentioned in text. On the left as it was at parturition, and on the right as it was after 53 day's incubation.

Literature cited

BUSH, B. (1983): Notes on reproduction in captive *Menetia greyii* (Lacertilia: Scincidae). — W. Aust. Nat., 15(6):130