

Revision of *Lerista picturata* (Lacertilia: Scincidae) of southern Australia

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Abstract

The former subspecies of *Lerista picturata*, viz. *L. p. picturata*, *L. p. baynesi* and *L. p. edwardsae* are raised to full species. The first two are redescribed.

Introduction

For my revision of *Lerista* in 1972 only 10 *picturata* and 15 *baynesi* were available. The westernmost *baynesi*, in their relatively strong colour pattern, approached *picturata*; and as the 230 km that separated the two taxa left plenty of room for integration, I treated them as conspecific.

Since then another 80 *picturata* and 106 *baynesi* have been accessed. Although the gap between them has been narrowed to 40 km, none of the additional material reveals gene-flow between the two taxa. Consequently they are now regarded as parapatric species. Because *edwardsae* of South Australia is not especially close to either *picturata* or *baynesi*, it too is treated as a full species. The three taxa comprise a subgroup of the *L. macropisthopus* species group characterized by two, rather than three, supraoculars.

This brings me to an error in my previous descriptions of the three species: the first, very wide supraciliary was mistaken for a supraocular. The true nature of this scale is revealed by the odd specimens with four supraciliaries; here, as in many other *Lerista*, the high first and small second supraciliaries have not fused (see figure 1). It is also believed that the large anterior supraocular in the *L. picturata* subgroup is derived from the fusion of the original first and second supraoculars. In other members of the *macropisthopus* group the first supraocular never fuses with the second but commonly fused with anterior supraciliaries.

As this revision is based wholly on specimens in the Western Australian Museum, prefixes have been omitted from catalogue numbers.

Systematics

Lerista picturata (Fry)

Lygosoma (Rhodona) picturatum Fry (1914: 186). Boulder, W.A.

Diagnosis

A large *Lerista* with one finger (terminating in wide flat scale), two toes, movable eyelid, two supraoculars and strong colour pattern (four dark dorsal lines and wide sharp-edged upper lateral stripe).

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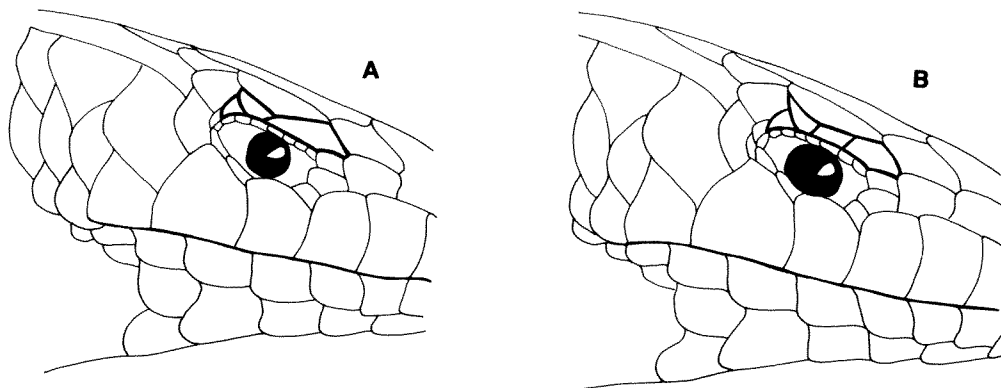


Figure 1. Head scalation in *Lerista picturata* showing (A) fusion of first and second supraciliary scales, as seen in the majority of specimens of the *picturata* subgroup; and (B) lack of fusion of these scales, as occurs in a minority of specimens of the *picturata* subgroup but in many other *Lerista* species (supraciliaries emphasised).

Description

Snout-vent length (mm): 40-92 (N 90, mean 73.4). Length of appendages etc. (% SVL): foreleg 1-2 (N 71, mean 1.4), hindleg 14-20 (N 84, mean 16.8), tail 76-109 (N 24, mean 94.1), snout to foreleg 22-29 (N 77, mean 25.4).

Nasals in contact (N 75). Prefrontals widely separated. Frontoparietals separated, very much smaller than interparietal (N 74). Nuchals 1-6 (N 51, mean 3.8). Supraoculars two, first in contact with frontal. Supraciliaries three with first much the largest (N 69) or four with first and third largest (5). Upper labials six (N 77). Midbody scale rows 20 (N58), 21 (4) or 22 (10). Lamellae under longer toe 10-16 (N 83, mean 12.8).

Upper surface pale brown, slightly tinged reddish and marked with dark brown or blackish brown: blotches on head, four lines on back and stripe from lore to tail (on which it becomes narrower and broken into spots), $1\frac{1}{2}$ -2 scales wide on body. Lower lateral and ventral surfaces yellow in life.

Distribution

Semi-arid south-eastern interior of Western Australia from Riverina and Comet Vale south to lat. 33°S, west to Woolgangie and McDermid Rock and east to Zanthus, Caiguna and Mardabilla Rock. See map, Figure 2.

Remarks

For colour photographs see Storr *et al.* (1981, pl. 15) and Wilson and Knowles (1988, pl. 566).

Material

Eastern Division (WA): Riverina (66287); 14 km ENE Comet Vale (65822-3); Grants Patch (10147); 3.5 km SW Black Flag (73241) and 5 km SW (78535) and 12.5 km WSW (73306, 73318); 16 km S Woolgangie (78714) and 31 km SSE (78752-3); 5 km SW Boulder (22513); 31 km W Randell (12229); Zanthus (12227);

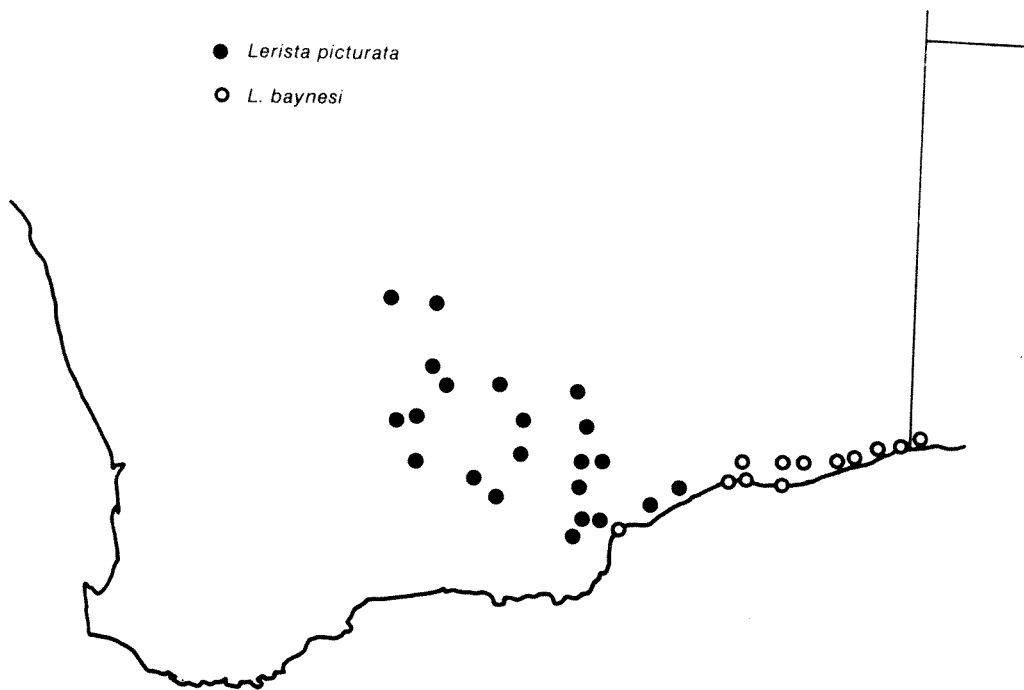


Figure 2. Map of south-eastern Western Australia, showing location of specimens of *Lerista picturata* (spots) and *L. baynesi* (circles).

Buningonia Spring (65575) and 3.5 km SW (65651) and 6.5 km SE (65525, 65592, 65624); 90 km SE Karonie (17340); 20 km N Heartbreak Ridge (65397, 65404, 65475) and 18 km N (65378); 47 km N Balladonia Hotel (29473).

Eucla Division (WA): McDermid Rock (65263, 65270, 65273-6, 65294, 65345, 66172, 74250, 74278, 84221-3, 85109); Norseman (8152, 96172-3, 96258); Heartbreak Ridge (72373); 11 km E Kildwerinia Granite Rock (92028); 2 km S Balladonia Hotel (70004-6) and 13 km S (94239-42); 37 km W Caiguna (66666, 66676); 20 km E Jyndabinbid Rocks (62276-8); 37 km NW Toolinna Rockhole (77795); Mardabilla Rock (93799-801, 93803-6); Coragina Rock (66834-8); 32 km ESE Mt Newmont (59816) and 30 km SE (59825); Deralyinya (93304-10, 93315-22).

Lerista baynesi Storr

Lerista picturata baynesi Storr 1972: 66. (Old) Eucla, W.A.

Diagnosis

A large *Lerista* with one finger (terminating in wide flat scale), two toes, movable eyelid, two supraoculars and very weak to moderately strong pattern (four dark dorsal lines or rows of spots present or absent, and upper lateral stripe narrow and either solid, hollow or diffuse). Further differing from *L. picturata* in its shorter appendages, fewer

subdigital lamellae, more greyish upper surface and whitish rather than yellow lower surface; it is also slightly smaller and more elongate.

Description

Snout-vent length (mm): 36-91 (N 121, mean 69.7). Length of appendages etc. (% SVL): foreleg 0.5-1.5 (N 74, mean 1.0), hindleg 9.5-13.5 (N 71, mean 11.7), tail 70-98 (N 51, mean 82.0), snout to foreleg 20-27 (N 70, mean 23.9).

Nasals in contact (N 53) or very narrowly separated (1). Prefrontals widely separated. Frontoparietals separated, much smaller than interparietal (N 52). Nuchals 1-6 (N 51, mean 3.8). Supraoculars two, first in contact with frontal (N 53).

Supraoculars two, first in contact with frontal (N 53). Supraciliaries three with first much the largest (N 42), two with first much the largest (2) or four with first and third largest (7). Upper labials 6 (N 55). Midbody scale rows 18 (N 4), 20 (40), 21 (1) or 22 (1). Lamellae under longer toe 7-10 (N 53, mean 8.8).

Upper surface pale greyish brown to pale brownish grey, marked with reddish brown, dark brown or blackish brown: four rows of dots or short dashes on back, occasionally coalescing into lines, often faint or absent; upper lateral stripe from lore to tail, at best solid, ragged-edged and about a scale wide on body, at worst hollow or very diffuse.

Distribution

Semiarid far south-east of Western Australia (Roe Plains and extreme south of Hampton Tableland, west to Twilight Cove) and extreme west of South Australia; with an isolated population further west (Bilbunya Dunes). See map, Figure two.

Geographic variation

Colour pattern is weakest in the east. The single specimen from west of the Baxter Cliffs is dorsally pale grey with black markings (four lines and hollow upper lateral stripe); it alone has 22 midbody scale rows.

Remarks

For colour photographs see Storr *et al.* (1981, pl. 15) and Wilson and Knowles (1988, pl. 564).

Material

Eucla Division (WA): Bilbunya Dunes in 32°58'S, 124°19'E (93351); Twilight Cove (28705); Eyre (60814, 67304-5) and 13 km W (66930-42) and 2.5 km N (91964) and 6 km N (91439, 91445) and 7 km N (77861-2); 30 km SE Cocklebidy (94109); Burnabie (60813, 94217-23) and 11 km E (93780-8); top of Madura Pass (28128, 67292); 43 km S Madura (34445) and 48 km E (66848-51); 28 km NNW Middini Beach (91442) and 15 km NNW (91440, 91891); 6 km S Mundrabilla (91298); 8 km SW Yuwanyandi Rockhole (91297, 91437, 91444, 92000) and 19 km S (89966, 91303, 91436, 91441); Eucla Pass (18188, 66642-3) and 40 km WSW (66452-4, 77887, 77892, 77898-9) and 4 kms S (24609-17, 64495-6, 66506-34, 66597, 66606-8, 70011-5) and 10 km ENE (66861).

South Australia: 23 km ENE Eucla Pass (96542).

Lerista edwardsae Storr

Lerista picturata edwardsae Storr (1982: 1).

Diagnosis

A large *Lerista* with no finger (forelimb a tiny stump in groove), two toes, movable eyelid, two supraoculars and strong pattern (two, rarely four, dark dorsal lines and wide sharp-edged upper lateral stripe). Further differing from *L. picturata* and *L. baynesi* in fewer midbody scale rows (mode 18) and usually having no nuchals.

Description

See Storr (1982: 2), where the following corrections should be made: supraoculars two (first in contact with frontal) and supraciliaries usually three (first much the largest). Its strong colour pattern and yellow venter make *L. edwardsae* superficially similar to *L. picturata*, but it is best treated as a full species. It differs from *L. picturata* and *L. baynesi* in its pale silvery grey upper, two (rather than four) dorsal lines or rows of spots, greatly reduced foreleg, lack of nuchals and fewer midbody scale rows.

The known gap between *L. baynesi* and *L. edwardsae* in the far west of South Australia was reduced by Schwaner and Miller (1984) to less than 200 km.

For coloured photograph see Wilson and Knowles (1988, pl. 565).

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