

Lycodon aulicus capucinus a colubrid snake introduced to Christmas Island, Indian Ocean

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Christmas Island lies in the north-eastern Indian Ocean in latitude 10°25'S, longitude 105°43'E, about 320 km south of Java. Until 31 December 1987 it was mined for phosphate. Cogger *et al.* (1983) record 10 species of reptile from the island, of which five are endemic, viz. *Cyrtodactylus* sp., *Lepidodactylus listeri*, *Cryptoblepharus egeriae*, *Emoia nativitatis* and '*Ramphotyphlops*' *exo-coeti*.

On 3 November 1987 the Western Australian Museum received a preserved snake from Mr D.J. Phillips, Government Conservator, Australian National Parks and Wildlife Service on Christmas Island. Since then another specimen has been forwarded and, according to Mr Phillips (in litt. 26.11.87), another has been seen. Both specimens are Wolf or House snakes (*Lycodon aulicus*) a species which ranges from India south and east to Timor and the Philippines (M.A. Smith 1943). They belong to the South-East Asian race *L. a. capucinus*.

Details of specimens (measurements in mm): WAM 96843 (female) SVL 605; tail 115; ventrals 194; anal divided; subcaudals 61, divided; midbody scale rows 17; stomach empty. WAM 97796 (damaged) SVL 355; tail 63; midbody scale rows 17. The first specimen is purplish-brown on the back with odd white-edged scales; lower flanks and lips whitish; three rows of nuchal scales white-edged. The other has more white-edge scales, aligned to form narrow zigzag bands. Both have moderately well developed ventrolateral keels.

Cogger *et al.* (1983) did not collect this species during their work on the island in 1979. Neither did Dr J.N. Dunlop who spent 18 months there working for the Australian National Park and Wildlife Service, including an extensive reptile trapping programme. This and the fact that all three records are from the port area suggest the introduction occurred between April 1987 when Dunlop left and October 1987 when the first specimen was collected.

The 'East Crystal' is the regular supply ship for the island. It calls from Singapore every two to three weeks, and in the past has back-loaded phosphate to Indonesia and Malaysia (recently mostly the latter). The only other vessels to call in 1987 were two Australian Navy ships the 'Derwent' and the 'Swan' (June-July) and a private vessel in September (J.N. Dunlop pers. comm.).

Lycodon aulicus lays 3-11 eggs, possibly breeds twice a year, is arboreal and lives on geckos, skinks and small mammals (M.A. Smith 1943). With these attributes it could pose a threat to the island's small vertebrate fauna, especially the

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five species of endemic reptile (*loc. cit.*) and the Christmas Island Shrew (*Crocidura attenuata trichura*). It is impossible to predict what might happen should it become established. At worst it could be as catastrophic as the introduction to Guam of the Cat Snake (*Boiga irregularis*) which apparently was a major factor in the virtual extinction of most of Guam's native birds (Fritz and Scott 1986).

The remainder of the Western Australian Museum's Christmas Island reptile collection comprises *Cyrtodactylus* sp. (19 specimens), *Hemidactylus frenatus* (7), *Lepidodactylus listeri* (1), *Cryptoblepharus egeriae* (3), *Emoia nativitatis* (16), *Emoia atrocostata* (1) and '*Ramphotyphlops*' *exocoeti* (1).

References

- Cogger, H.G., Sadler, R. and Cameron, E. (1983). *The Terrestrial Reptiles of Australia's Island Territories*. The Australian National Park and Wildlife Service. Special Publication No. 11. ANPWS, Canberra.
- Fritz, T.H. and Scott, N.J. Jnr (1986). Snake Systematics Newsletter No. 4, June 1986.
- Smith, M.A. (1943). *The Fauna of British India*. Vol. III. Serpentes. Taylor and Francis, London.

Guide to Authors

Subject Matter

Reviews, observations and results of research into all branches of natural science and human studies will be considered for publication. However, emphasis is placed on studies pertaining to Western Australia. Full length papers should not normally exceed 30 typed pages. Short communications should not normally exceed three typed pages and this category of paper is intended to accommodate observations, results or new records of *significance*, that otherwise might not get into the literature, or for which there is a particular urgency for publication. All material must be original and not have been published elsewhere.

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Authors are advised to follow the layout and style in the most recent issue of the *Rec. West. Aust. Mus.* including headings, tables, illustrations and references.

The title should be concise, informative and contain key words necessary for retrieval by modern searching techniques. Names of new taxa must not be included. An abridged title (not exceeding 50 letter spaces) should be included for use as a running head.

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Numbers should be spelled out from one to nine in descriptive text; figures used for 10 or more. For associated groups, figures should be used consistently, e.g. 5 to 10, not five to 10.

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Synonymies should be given in the short form (taxon, author, date, page) and the full reference cited at the end of the paper.

Manuscripts

The original and two copies of manuscripts and figures should be submitted to the Editorial Committee, c/- Publications Department, Western Australian Museum, Francis Street, Perth, Western Australia 6000. They must be in double-spaced typescript on A4 sheets. All margins should be at least 30 mm wide. Tables plus headings and legends to illustrations should be typed on separate pages. The desired positions for insertion of tables and illustrations in the text should be indicated in pencil. Tables should be numbered consecutively, have headings which make them understandable without reference to the text, and be referred to in the text.

High quality illustrations are required to size (13.5 cm x 18 cm) or no larger than 32 cm x 40 cm with sans serif lettering suitable for reduction to size. Photographs must be good quality black and white prints, 13 cm x 18 cm (5 inches x 7 inches). If scale line and lettering are required on photographs *do not* place directly on to print. They should be positioned on a clear paper or film overlay. Scale must be indicated on illustrations. All maps, line drawings, photographs and graphs, should be numbered in sequence and referred to as Figure/s in the text and captions. Each must have a brief, fully explanatory caption.

In papers dealing with historical subjects references may be cited as footnotes. In all other papers references must be cited in the text by author and date and all must be listed alphabetically at the end of the paper. The names of journals are abbreviated according to *World List of Scientific Periodicals*. The use of 'unpublished data' or 'personal communication' is discouraged.

Processing

Papers and short communications are reviewed by at least two referees and acceptance or rejection is then decided by an editorial committee.

The senior author is sent two sets of galley proofs (one to be retained) and one set of page proofs which must be returned promptly.

The senior author will receive fifty free offprints of the paper. Additional offprints can be ordered at page proof stage.

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