

Short Communication

New provincial record and range extension of the parachute gecko *Ptychozoon lionotum* Annandale, 1905 in Cambodia, with notes on habitat use

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Paper submitted 24 July 2016, revised manuscript accepted 17 September 2016.

Parachute geckos, genus *Ptychozoon*, are small to medium sized arboreal geckos known for their enigmatic gliding behaviour (Heyer *et al.*, 1970; Young *et al.*, 2002). The genus consists of nine recognized species distributed from eastern India (Pawar & Biswas, 2001) and southern China (Wang *et al.*, 2016) in the north, southwards through Indochina (Taylor, 1963) and the Malay Peninsula (Grismer, 2011) to the Greater Sunda Islands (Min & Das, 2012). *Ptychozoon* species are also known from the Nicobar Islands (Das & Vijayakumar, 2009) and the Philippine Archipelago (Brown *et al.*, 1997). The geographic distribution of this poorly known genus is only now beginning to be reliably understood, and significant gaps in knowledge remain (Brown *et al.*, 2012). Two species of *Ptychozoon* are known from Cambodia, each of which was first recorded recently (within the last decade) and both on the basis of only a single locality (Stuart & Emmett, 2006; Hartmann *et al.*, 2014).

The rare *Ptychozoon trinotaterra* is known from Cambodia on the basis of a single specimen photographed at Preah Khan Temple in Siem Reap Province (Hartmann *et al.*, 2014) (Fig. 1). The smooth-backed parachute gecko *P. lionotum* is known in Cambodia from four specimens collected by Stuart & Emmett (2006) at a single locality in Kirirom National Park in the Cardamom Mountains of southwestern Cambodia (Fig. 1). Here we present the second known locality for *P. lionotum* in Cambodia,

and substantially extend the known range of the species within the country.

On 30 May 2016 at approximately 1130 hrs, DSL observed a single unsexed adult *P. lionotum* in a cleared parking area approximately 160 meters west of Phnom Kulen Waterfall, Phnom Kulen National Park, Svay Leu District, Siem Reap Province (Fig. 1). The individual was observed when it glided from a nearby tree, landing on the shirt of a startled tourist bystander who quickly brushed it off. Once on the ground the lizard was photographed and the specimen was later identified on the basis of the photograph (Fig. 2).

The individual was positively identified as *P. lionotum* on the basis of: 1) four dark dorsal chevrons between the axilla and the groin (versus three in *P. trinotaterra* and *P. kaengkrachanense*); and, 2) a non-expanded tail terminus (as opposed to *P. kuhli*, which possesses a widely expanded terminal flap: Brown *et al.*, 1997). This identification was verified by Rafe M. Brown (University of Kansas Biodiversity Institute) and the photo voucher was deposited in the University of Kansas Digital Archives (KUDA 012461).

This new locality extends the known distribution of *P. lionotum* in Cambodia approximately 250 km north from the only other known locality in Kirirom National Park in the Cardamom Mountains (Stuart & Emmett, 2006).

CITATION: Herr, M.W. & Lee, D.S. (2016) New provincial record and range extension of the parachute gecko *Ptychozoon lionotum* Annandale, 1905 in Cambodia, with notes on habitat use. *Cambodian Journal of Natural History*, 2016, 111–113.



Fig. 1 Localities of parachute geckos, genus *Ptychozoon*, recorded in Cambodia: *P. lionotum* (solid circle), Kirirom National Park (Stuart & Emmett, 2006); *P. trinotaterra* (solid square), Angkor Temple complex (Hartmann *et al.*, 2014); *P. lionotum* (open circle), Phnom Kulen National Park (this study).

This substantial extension indicates that *P. lionotum* is likely to occur throughout the country in areas where appropriate evergreen or semi-evergreen forest habitat persists. Outside of Cambodia, *P. lionotum* is known from extreme eastern India (Pawar & Biswas, 2001), Myanmar (including the type locality: Pegu, Myanmar; Annandale, 1905; Smith, 1935), Thailand (Taylor, 1963), Peninsular Malaysia (Das & Yaakob, 2005; Grismer, 2011), and southern Vietnam (Nguyen *et al.*, 2009). To our knowledge, the species is not known from Laos, but given the proximity of this new locality (ca. 140 km southwest of the Laotian border) it is possible that future surveys may reveal its presence there as well.

Interestingly, our individual was encountered in a small disturbed area (a parking lot) within a forested national park. This observation mirrors earlier reports of *P. lionotum* being encountered near sites of anthropogenic disturbance, but within protected areas (Stuart & Emmett, 2006). Brown (1999) mentions that, with the exception of the disturbance-tolerant *P. kuhli*, the paucity of records for most *Ptychozoon* species is likely a result of their being forest canopy obligates which are rarely encountered. We agree with this assertion, but add that



Fig. 2 Dorsal view of adult *Ptychozoon lionotum* (KUDA 012461) from Phnom Kulen National Park, Siem Reap Province, Cambodia (© Deborah Lee).

within such forest habitats *Ptychozoon* species may be tolerant of small scale disturbance and may utilize edge habitats and man-made structures with some frequency (Grismer, 2011; Sumontha *et al.*, 2012). The paucity of records may therefore be first and foremost a function of the highly cryptic nature of these animals.

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