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A Queensland Government Project
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Range extension for the leaf-tailed gecko *Phyllurus gulbaru* in North Queensland.

The Gulbaru gecko (*Phyllurus gulbaru*, Carphodactylidae: Hoskin, Couper & Schneider, 2003) is a leaf-tailed gecko currently known only from the Paluma Range in the southern edge of the Wet Tropics north-west of Townsville, Queensland (Hoskin, Couper & Schneider 2003). It is restricted to two sub-populations, separated by unsuitable habitat, which cover a total area of 21 km² with an actual range of approximately 14 km² (Hoskin *et al.* 2003). Listed as critically endangered (International Union for Conservation of Nature [IUCN], 2010; *Environment Protection and Biodiversity Conservation Act* 2015), most of its rainforest habitat is currently unprotected. In this short note we report a range extension of *Phyllurus gulbaru*.

On 8th October 2015, a Gulbaru gecko was sighted serendipitously during a spotlighting survey at Hervey's Range (-19.4°, 146.5°), on the edge of the Einasleigh Uplands, north-west of Townsville, more than 5 km from Patterson's Gorge in the Paluma Range. The gecko was found on the underside of a large boulder which formed the ceiling of a cave within piled boulders and rocks. A further two specimens were located within approximately twenty meters of the first gecko, in similar boulder-strewn habitat. The geckos were photographed and identified using the following characters, according to the key to *Phyllurus* in Wilson (2005): tail cylindrical; rostral scale partly divided; 8 pale bands on original tail (Fig.1).

The boulders in this dry rainforest habitat are large and stacked to form complex chambers and crevices. These boulders retain moisture better than the surrounding habitat, supporting an array of flora and fauna absent from the grassland and dry woodland across much of Hervey's Range.

The occurrence of *P. gulbaru* population represents a significant south-easterly extension for this species. It is presently unclear whether this discovery represents a completely separate population. With a road and seemingly unsuitable habitat between the Patterson's Gorge and Hervey's range populations, genetic analysis would be valuable in determining the level of divergence between the two populations. A large threat to *P. gulbaru* is the attention of poachers. Geckos are highly coveted among herpetoculturists and are often targeted by poachers (Nelson 2016). This is especially true of Australian leaf-tailed and broad-tailed geckos which are part of Australia's only entirely endemic reptile Family, and which inhabit very specific and limited ranges making them easy to find once their habitat has been accessed. The encouraging discovery of this population of *P. gulbaru* should therefore not undermine the value of protecting all existing populations, and thus our data depicting their exact location has not been included here.



FIG. 1. *Phyllurus gulbaru*

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