

Inclusion of Turquoise Dwarf Gecko *Lygodactylus williamsi* in Appendix I

Proponents: United Republic of Tanzania and European Union

Summary: The Turquoise Dwarf Gecko *Lygodactylus williamsi* is a species endemic to eastern Tanzania where it is known to occur in four isolated tropical lowland forest patches (Kimboza, Ruvu, Mbagalala and Muhalama) in the Uluguru foothills in the Morogoro Region. Within these forests it exclusively occurs on a species of screwpine *Pandanus rabaiensis*. It has an estimated area of occurrence of 20km² and area of occupancy of 8km². The species exhibits distinct sexual dichromatism; males have a striking turquoise-blue back while females and immature males are a greenish-bronze. Reproduction is reported to occur throughout the year with a relatively high output of offspring. Generation time is not known.

The only available quantified information on population status is for that in the Kimboza Forest Reserve, estimated in 2009 at around 150,000 adults based on visual encounter surveys and mean number of specimens found per *P. rabaiensis*. Populations elsewhere have not been quantified; those in the Mbagalala and Muhalama forest patches are believed to be small due to the small number of *P. rabaiensis* trees.

The estimated population in Kimboza forest in 2009 was believed to be around one-third smaller than the carrying capacity, based on the number of *P. rabaiensis* trees. If this represents an actual decline, this may be a result of collection pressure for international trade, which has reportedly been high since 2004. Reports suggest that some 22,000 were collected in 2005 and some 8000 per year in 2006 and 2007.

Despite legal protection (see below), the forests in which the species occurs are also reported to be affected by logging, collection of firewood, conversion to agricultural land and mining of the limestone substrate on which *P. rabaiensis* grows. There have also been reports that *P. rabaiensis* trees are cut down to collect the geckos.

It has been offered for sale online in the recent past in the USA and in Europe, at prices of ca. USD 30-250 per individual. The species has been reported as relatively easy to breed in captivity and specimens reported as captive-bred are offered for sale on the internet^{1,2}. It has been reported that males can lose their striking coloration in captivity, which may result in continuing demand for wild-caught individuals.

Kimboza and Ruvu are both Forest Reserves, protected under the 2002 Forest Act and managed by the Tanzania Forest Service. Collection of wild specimens within these areas requires a license. According to officials from the Tanzania Wildlife Research Institute, collection and export of *L. williamsi* has never been licensed, indicating that all trade in it is illegal^{1,2}. It has been reported that wild-caught specimens of *L. williamsi* are frequently deliberately mislabelled and exported as *Lygodactylus* spp. or as *L. capensis* to facilitate trade.

The species is classified in the IUCN Red List as Critically Endangered (2012).

Analysis: *Lygodactylus williamsi* has a very restricted area of distribution in which the quality of habitat is declining. The abundance of the species is also likely declining, due to habitat loss, and possible due to illegal collection for the international pet trade. It would therefore appear to meet the criteria for inclusion in Appendix I in Res. Conf. 9.24 (Rev. CoP16).

Reviewers: M. Bungard, S. Chng and S. Nash.

References:

Information not referenced in the Summary section is from the Supporting Statement.

¹XE Currency Converter. (2016) *Xe Currency Charts*. <http://www.xe.com/currencycharts>. Viewed on 16 May 2016.

²For example:

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Black Jungle Terrarium (2016) *GECKO- ELECTRIC BLUE LYGODACTYLUS WILLIAMSII*.

http://www.blackjunglerterrariumsupply.com/Gecko-Electric-Blue-Lygodactylus-williamsi_p_1740.html

Fauna Classifieds (2016) *8mo CBB Female Lygodactylus williamsi*.

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Living Art (2016) *Lygodactylus williamsi for sale*.

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Reptile Forums (2016a) *Eastern Lygodactylus williamsi Electric Blue Day Gecko for sale*.
<http://www.reptileforums.co.uk/forums/lizard-classifieds/937163-lygodactylus-williamsi-electric-blue-day.html>.
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<http://www.reptileforums.co.uk/forums/lizard-classifieds/1060475-sale-2-lygodactylus-williamsi-juvenile.html>.
Terraristik (2016) <http://www.terrarium.com/>. 19 May 2016; Snakes at Sunset. (2016). *Electric Blue Geckos for sale (Lygodactylus williamsi)*. <http://snakesatsunset.com/electric-blue-geckos-for-sale-lygodactylus-williamsi/>.
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