The case for CITES Appendix I-listing of Earless Monitor Lizards

Lanthanotus borneensis

INTRODUCTION

n September 2014 TRAFFIC published Keeping an Ear to the Ground: Monitoring the Trade in Earless Monitor Lizards (Nijman and Stoner, 2014) in response to the rapid emergence of the Earless Monitor Lizard Lanthanotus borneensis in trade. This is the only species in the family Lanthanotidae and is basal to all other monitor lizards of the genus Varanus (Douglas et al., 2010). It is endemic to the island of Borneo, where it has been recorded in the Malaysian State of Sarawak (Das and Yaakob, 2007) and the Indonesian provinces of West and North Kalimantan (Auliya, 2006; Yaap et al., 2012; Vergner, 2013). Little is known about its occurrence, distribution or ecology, but the seven sites from where it is known are all below ~300 m above sea level, in forested areas, in relatively flat terrain, suggesting the Earless Monitor Lizard is a lowland rainforest specialist. The conservation status of the species has not been evaluated using the IUCN Red List criteria, however, it appears to meet the criteria for Vulnerable on the basis of its restricted habitat, fragmented distribution and inferred habitat loss. More specifically, its area of occupancy is estimated to be <2000 km², it is known from fewer than 10 locations, and there is an inferred decline in the area, extent and quality of the species' habitat (criteria B1ab (iii) in IUCN Red List terminology); if the species's area of occupancy turns out to be <500 km², it would meet the criteria for Endangered.

After not having been observed for decades, in 2012 its rediscovery was announced (Yaap *et al.*, 2012) and international trade in the species soon commenced (Nijman and Stoner, 2014; Altherr, 2014). At present, the internet, especially through social networks, is facilitating this trade, either directly by enabling open sale and trade exchanges, or indirectly through discussions around the species. Presented here is an update on the illegal international trade in the species via the internet, information on current trade networks and countries involved. The authors consider that inclusion of the species in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) may help curb this trade and aid in conservation of the species.

LEGAL STATUS

The Earless Monitor Lizard is the only monitor lizard not currently listed in the CITES Appendices. It is, however, a totally protected species (meaning that any trade is prohibited) in its potential range States, i.e. in Malaysia since 1971, in Brunei Darussalam since 1978 and in Indonesia since 1980. Penalties for trading the species range from a fine of USD1600 and one year's imprisonment (Brunei Darussalam) to USD7850 and three years' imprisonment (Malaysia), to USD8600 and five years' imprisonment (Indonesia).



Earless Monitor Lizard Lanthanotus borneensis.

FAR-REACHING TRADE

Monitoring of online trade activity revealed that at least 95 Earless Monitor Lizards have been offered for sale following the offtake, reported in Nijman and Stoner (2014), of 21 pairs from Kalimantan, Indonesia, in May 2014. Observations of such instances were made in the Czech Republic, France, Germany, Hong Kong, Indonesia, Japan, Malaysia, Russia, UK, Ukraine and the USA (Table 1). Documented routes are from within Europe, linking traders from Germany, France, the Czech Republic, the UK, and from Europe (as supplier) into the USA. The use of social media continues and now includes Instagram (Image 1).



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Country/territory	No. of traders	Minimum
USA	9	22
Malaysia	5	19
Indonesia	7	17
Germany	6	17
Japan	2	7
UK	I	5
Hong Kong	I	3
Czech Republic	I	2
France	I	I
Russia	I	I
Ukraine	Ι	I
Total	35	95

Table I. Minimum number of Earless MonitorLizards offered for sale online,May 2014–October 2015.

Country	Minimum
Japan	8
Indonesia	5
The Netherlands	2
Hungary	4
Total	19

Table 2. Earless Monitor Lizards found to be present but not offered for sale, May 2014–October 2015.

Furthermore, at least 12 other specimens are believed to be exhibited in zoos: a heavily publicized captive breeding population at iZoo, a zoo based in Shizuoka prefecture, Japan, and the Budapest Zoo, Hungary. One professional photographer based in the Netherlands (it is believed that the photograph was taken in France) also exhibited an image of the species, however, none was offered for sale (Table 2). There appears to be no obvious geographic pattern in terms of where demand for this species has been registered. In 2014 the trade network apparently consisted of a relatively small number of people, which has subsequently expanded. Earless Monitor Lizards are currently being offered by traders who are likely capitalizing on the lack of an international trade control mechanism for the species once they are outside national protection in their range States.

International commercial trade continues. On 22 July 2015, a Facebook post (Image 2) was observed and the trader confirmed he was willing to ship to Canada from the USA, illustrating that the importation process fails to act as a barrier. While the numbers reportedly in trade may be moderate compared to some species, the trade is global in nature and is likely to be more extensive than



Image 2. Facebook post offering Earless Monitor Lizards for sale (22 July 2015).



Image 3. At least 15 specimens offered by a seller in Malaysia (7 July 2015).



Image 4.

Article in a reptile and amphibian hobbyist magazine, discussing the first "captive reproduction" of the Earless Monitor Lizard. the few reports encountered. With no burden of proof on current traders to show the origin of their Earless Monitor Lizards and no paperwork necessary, the high prices in the international market make selling the species an attractive business prospect.

Post-2014, a local trade (specifically in Indonesia and Malaysia) has emerged, with prices given in local currency, implying a market at a national level within these range States. On 7 July 2015, an advertisement posted on Facebook offered "a bunch of Borneo Earless Monitors for sale, export available". This is the first documented incidence of the species being offered for sale in Malaysia. Image 3 provides evidence of the quantity the seller is offering. The same seller was also offering Tigers for sale, which reinforces the notion that traders offering Earless Monitor Lizards are often also engaged in the trade of other charismatic Appendix I- or II-listed species. As with most commodities, geographical variance exists in terms of price, dependent on supply, stock and other variables (Table 3). As expected, prices are lower in range States but high prices elsewhere will continue to act as a key driver unless sufficient protection is put in place to ensure trade is regulated.

Captive-born versus captive-bred

As indicated in the introduction, little is known about the biology of Earless Monitor Lizards. In fact, while eggs have been extracted from preserved specimens, until recently none had been laid by captive individuals (Sprackland, 1999); clutch size has been estimated at two, or possibly more (Sprackland, 2010). Shirawa (2015) indicated that iZoo was the first to have bred the species in 2014; the parent stock were wild-caught, making the offspring "captive-born" in CITES terminology (as would be the case if the egg-laying female had been imported gravid), and not "captive-bred" as widely claimed. In the authors' searches on various forums they found no evidence to refute iZoo's "first-ever" claim, and indeed there does not appear to have been any genuine captive breeding of the species to date. Furthermore, the current edition of *HerpNation*, a reptile and amphibian hobbyist magazine, features an article discussing the first "captive reproduction" of the Earless Monitor Lizard achieved at iZoo (Image 4) (Shirawa, 2015).

Despite this, traders from the USA (not elsewhere) have claimed in online forums that the specimens they offer for sale are hatched in captivity in Europe, so it is not illegal for them to be traded in the USA (no distinction is made in these discussions between captive-bred or captive-born). The importation of declared "captivebred" (or what may actually be "captive-born") Earless Monitor Lizards into the USA, circumvents any legal implications in relation to the Lacey Act. However, this Act renders any violation of national laws in the country of origin a criminal offence in the USA and given their protected status in range States, the importation of Earless Monitor Lizards, including captive-born or captive-bred specimens that may have derived from illegally acquired individuals, contravenes the Lacey Act and would allow the authorities in the USA to enforce the law.

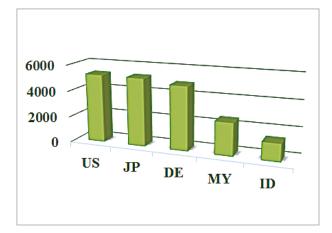


Table 3. Average prices (USD) quoted by country.(USA, Japan, Germany, Malaysia and Indonesia.)

THE CASE FOR CITES APPENDIX I-LISTING

There is strong justification to include the Earless Monitor Lizard in CITES Appendix I, thus making it clear to all Parties that international trade in the species is not permitted, and aiding in the effectiveness of national range State legislation. Importing countries are currently inhibited to take any action when individuals are imported as "captive-bred", which therefore enables illegal trade to continue. None of the three actual and potential range States has permitted legal export of Earless Monitor Lizards, therefore by extension parent stock have been illegally obtained, taken from their natural habitat.

While the population size of this species is currently unknown, the impact of trade is inferred to be great. The few remaining populations are likely to become depleted if international commercial trade is not stopped. Given the paucity of data on the species's occurrence, it is likely that if collectors and traders target one or two locations disproportionately, the impact on small, already fragmented populations will be significant.

Public awareness of both the protected status and conservation status appears to be deficient in the regions where the species occurs: an Appendix I-listing would not only result in higher fines and stronger international efforts to restrict the trade, but also increase both public awareness and national conservation measures.

Currently five species of monitor lizards are listed in Appendix I of CITES, with the other >70 species included in Appendix II; the Earless Monitor Lizard is not listed. Arguably, with the possible exception of the Komodo Dragon Varanus komodoensis (currently assessed as Vulnerable by IUCN), the Earless Monitor Lizard is more heavily affected by trade than the other four Appendix I-listed species: V. bengalensis, V. flavescens, V. griseus and V. nebulosus, which are all relatively common species and are either classified as being of Least Concern or have not yet been assessed.

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Progress towards Appendix I

Nijman and Stoner (2014) stated that there is strong justification for a CITES Appendix I-listing but that, in the interim, Malaysia, Indonesia or Brunei Darussalam should consider listing the species in CITES Appendix III. In April 2015, Malaysia submitted a proposal to list the species in CITES Appendix I (AC28 Doc.22.5) (CITES, 2015) for consideration at the 17th meeting of the Conference of the Parties (CoP17), due to take place in South Africa in September 2016. The proposal was first tabled during the 11th meeting of the ASEAN Experts Group on CITES 7-8 May 2015 in Bandar Seri Begawan (Brunei Darussalam) and was reviewed at the twenty-eighth meeting of the Animals Committee in Tel Aviv (Israel) on 30 August-3 September 2015. Initial feedback from the meeting reports that the proposal received strong support for the species to be tabled for discussion at CoP17.

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UPDATE

On 11 October 2015, a German national was arrested at Soekarno-Hatta International Airport in Jakarta as he attempted to smuggle eight Earless Monitor Lizards out of the country. The investigation by the Crime Directorate of Indonesia's Criminal Investigative Police continues.