CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

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INFORMATION SUPPORTING PROPOSAL COP18 PROP. 28, TO INCLUDE GEKKO GECKO IN APPENDIX II, AS SUBMITTED BY THE EUROPEAN UNION, INDIA, PHILIPPINES AND UNITED STATES OF AMERICA

1. This document has been submitted by the European Union and United States of America in relation to proposal CoP18 Prop. 28.*

Introduction

This document has been compiled to supplement the information provided in amendment proposal CoP18 Prop. 28, to include the tokay gecko (*Gekko gecko*) in Appendix II, as submitted by the European Union, India, Philippines and the United States of America.

It highlights a number of key points, responding to the concerns raised within the Secretariat's assessment of the proposal in CoP18 Doc. 105.1 Annexes 1 and 2:

- Despite reports that trade in *G. gecko* may have decreased from a peak in 2010/2011, overall trade volumes, as well as demand for the species in key consumer countries, appear to remain extremely high. More than 770,000 individuals are exported annually, and combined with undocumented illegal exports, international trade is likely in excess of a million individuals annually. In the absence of population estimates or trends from key exporting countries, such as Thailand and Indonesia, there is a lack of empirical evidence on whether current harvest and trade levels of wild specimens are sustainable. However, population declines that are likely to have been caused by over-collection of individuals have been reported in eight range States.
- As a key consumer, China's populations have experienced national declines, and one expert suggested that populations may now only be stable within protected areas in the country.
- Although the global extinction risk for *G. gecko* was recently classified as Least Concern in the IUCN Red List, this assessment does not dispel any concerns in relation to population declines at national scales due to harvest for trade, and the Red List assessment itself notes that "**international trade monitoring is needed**".
- International trade in live wild specimens as pets may have declined over the past 10 years, but this trade represents only a small fraction of the overall trade in this species, and, if considered in isolation, does not pose a risk to the species. Regulation through CITES is necessary to address the key trade for medicinal purposes within Asia, which is predominantly in dried form, but can also be in live specimens.
- Despite the adaptability of *G. gecko* to human modified habitats and the description of the species as "common" in many areas, densities of *G. gecko* in natural habitats can be lower than those in non-natural habitats, where artificial illumination provides food sources at unnaturally high levels (G. Benyr, pers. obs).

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* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

- Considering the very high trade volumes and evidence of decline within multiple range States as a result of overexploitation, the proponents consider that *G. gecko* meets the criteria for inclusion in Appendix II in accordance with Article II, Paragraph 2 (a) of the Convention and satisfying Criterion B of Annex 2a of Resolution 9.24 (Rev. CoP17).

Some of these points are further elaborated on the following page.

Trade volumes and demand for *Gekko gecko* appears to remain extremely high

Current international trade in the species is likely to exceed one million individuals annually. Trade in *G. gecko* is thought to have experienced a spike in 2010-2011 following claims that derivatives of the species could cure HIV/AIDS (Caillabet, 2013). However, *G. gecko* has continued to be reported in trade in considerable amounts following the 2010/2011 spike, even after recognition that the claims were unfounded. Thailand reported exports of 1 455 362 "live and dried" specimens from 2017-2018 [average 727 681 specimens per year] (CITES MA of Thailand, *in litt.* to European Commission, 2018). Caillabet (2013) reported that the export of dead, dried specimens from Indonesia was not permitted, yet according to an online Chinese news article in 2016[1], a substantial trade in "thousands" of dried specimens was occurring from Probolingo in East Java. This suggests continuation of illegal trade from Indonesia, first highlighted by Nijman *et al*. (2012), who reported that, despite an export quota set at 45,000 live specimens in 2006, 1.2 million individuals were illegally exported from Indonesia to China. The same Chinese news report suggested that demand for the species for the purposes of traditional medicine and beauty products continued to increase in China, Japan, Southeast Asia and other countries[1]. In 2011, 6.75 tonnes (225,000 dried geckos (Caillabet, 2013)) of illegally harvested specimens of *G. gecko* were seized en route from Indonesia to Hong Kong SAR.

Utilization of the species is deeply rooted in Chinese culture, and demand in China was considered to remain "extremely high", particularly for "indigenous gecko" (*G. gecko*) (which sold for around USD 11-15 in Chongzuo of Guangxi in 2013-2014) (J. Yang *in litt.* to UNEP-WCMC, 2019). However local supply of *G. gecko* has been unable to meet the demand in China for some time. For example, in the late 1990s it was estimated that the demand in Guangxi was 300 000 geckos, compared to the 30 000 that could be supplied from the region itself (Lu, 2000). Trade in *G. gecko* at the Guangxi border in 2000 was estimated at around 100 000 individuals (Lu, 2000). According to an online news report in 2016, dried *G. gecko* specimens originating from Indonesia were sold in China for USD 43[1].

In Viet Nam, a 2018 online news article[2] reported that the consumer market for *G. gecko* had expanded to the provinces of Quang Ninh, Hanoi, Thai Nguyen, Cao Bang, Bac Kan and Lang Son, and noted that demand for the species outstripped supply. Based on observed online adverts for the species, demand in Lao PDR was also considered high, with large sums reportedly paid for the biggest specimens (M. Brocklehurst *in litt.* to UNEP-WCMC, 2019).

Trade volumes for captive-bred specimens from Indonesia are unknown; however in March 2014, the Indonesian Ministry of Forestry permitted six companies to export over three million, live, captive-bred tokay geckos for the pet trade (Nijman and Shepherd, 2015). Considerable concerns have been expressed by several authors about the ability of these companies to breed geckos in such numbers, and whether the facilities are laundering wild-caught individuals and exporting dried specimens (Nijman and Shepherd, 2015). Preliminary research has also indicated that live specimens originating from Lao PDR are being sent to Malaysia and Indonesia, possibly to the breeding facilities in these countries that reportedly export captive bred specimens to China (M. Brocklehurst *in litt.* to UNEP-WCMC, 2019).

The species appears to have experienced declines in the main consumer and exporting range States

There are reports of *G. gecko* population declines likely as a result of over-exploitation, in eight out of the species' thirteen native range States (Bangladesh, China, India, Indonesia, Myanmar, Philippines, Thailand and Viet Nam).

China and Viet Nam are considered to be the principal consumer countries of *G. gecko* for traditional medicine (Stuart, 2004; Nijman *et al*., 2012; Caillabet, 2013). The population of *G. gecko* in China was reported to have been "drastically reduced" as a result of hunting and habitat destruction, and the species was categorised as "Critically Endangered" in the 2015 red list of China's vertebrates (Jiang *et al.* 2016)[3] . One of the IUCN Red List assessors noted that within China, the species is now uncommon in the wild, with only a few stable populations in nature reserves [in Hong Kong SAR, central Guangdong, southwestern Guangxi and southern Yunnan], whereas populations outside of protected areas were considered to have continued to decrease as a result of "continuous illegal hunting" (J. Yang *in litt.* to UNEP-WCMC, 2019).

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1 https://kknews.cc/zh-hk/other/3qoeq8.html

2 https://nongnghiep.vn/kinh-nghiem-cua-nguoi-nuoi-tac-ke-lai-500-trieu-dong-nam-post232150.html

3 *On the basis of IUCN criteria A1abcde+2cd+3cd+ 4bcd. The list treats* G. reevesii *as a separate species, but also classified it as Critically Endangered based on the same criteria*

The Red Data Book of Viet Nam (unpublished revised version, 2015) classified *Gekko gecko* [and *G. reevesii*] as Near Threatened, with a declining population (but by less than 30%). An online article reported that, due to increasing demand for *G. gecko* for the domestic market as well as for export (as both medicine and as meat), the species had experienced rapid declines in the country[4].

Indonesia and Thailand are the key exporting range States. While some authors found *G. gecko* to be common in some locations in Indonesia such as Bali (Janiawati *et al*. 2016) and a protected area in Sulawesi (Wanger *et al*. 2011), in Java, where most animals are harvested (MA of Indonesia *in litt*. to European Commission, 2018), the species was reported to have been "difficult to find in the past few years" (A. Miller pers. com. to IUCN/TRAFFIC, 2019).

Singh and Choudhury (2016) also reported "drastic declines" of the species in the Barak valley, southern Assam, India, as a result of illegal wild harvest and trading. The authors noted that "if immediate attention is not given to the species, it is quite likely that the species will soon come under the endangered category".

International trade monitoring is needed

The 2019 IUCN assessment of *G. gecko* noted that "**international trade monitoring is needed, potentially including CITES monitoring to collect data on trade volumes**" (Lwin *et al.* 2019). It also noted that "regulation of trade and enforcement of quotas where these exist would be beneficial" (Lwin *et al.* 2019). Regulation of trade is required to ensure that the harvest of specimens from the wild is not reducing the population to a level at which its survival might be threatened by continued harvesting. Populations of *G. gecko* are declining or have been severely depleted where harvest has taken place within a number of range States.

Conclusion

Inclusion of *G. gecko* in CITES Appendix II would allow the characterisation of the full scale of international legal trade in the species through monitoring of trade data, and could address any concerns relating to the captive-breeding of the species under Resolution 17.7 on "*Review of trade in animal specimens reported as produced in captivity*". It would also promote the collection of population data throughout the species range. Considering the very high harvest volumes with little to no conservation management, and taking into account evidence of declines within multiple range States as a result of overexploitation and illegal trade, the proponents find that *G. gecko* meets the criteria for inclusion in Appendix II in accordance with Article II, Paragraph 2 (a) of the Convention and satisfying Criterion B of Annex 2a of Resolution 9.24 (Rev. CoP17)..

4 http://thegioicontrung.info/index.php?thamso=chitiet_tintuc&id=323

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