



# Species at risk from the pet trade

World Animal Protection analysis on documents to be considered at the 18th Meeting of the Conference of the Parties to CITES



We were known as **WSPA**  
(World Society for the  
Protection of Animals)

Every day, thousands of wild animals are poached or farmed and sold into the global multi-billion-dollar exotic pet trade. With the number of species affected by the pet trade looking for increased protection in the proposals under consideration, the 18th Conference of Parties to CITES is a referendum on the sustainability of the wildlife as pets.

**Photo:** The trade in live otters for pets is an emerging threat to tropical Asian otters.











# World Animal Protection analyses of proposals

World Animal Protection is a global charity whose mission is to move the world to protect animals, working closely with businesses, local communities, governments and the public. We believe that many of the world's social and environmental challenges can only be truly achieved if animals, and the people who depend on them for their livelihoods, are part of the solution. Using evidence-based research, we expose animal welfare issues and work collaboratively with a range of stakeholders to identify and deliver positive, sustainable change. This approach has enabled us put animal welfare on global agendas and improve the lives of both animals and people. Headquartered in London, we are active in more than 50 countries and maintain regional hubs in Africa, Asia, Europe, Latin America and North America.

World Animal Protection works with country Parties by supplying the latest research and insights that advocate for animal protection. At the Eighteenth meeting of the Conference of the Parties (CoP18) in Colombo, Sri Lanka we will be represented by international wildlife and policy experts. Our views on the proposals to amend the Appendices are based on the CITES listing criteria, supported by best available scientific and technical information. In our review of the proposals, it is clear that the international pet trade industry is having a significant impact on the survival of many species across globe. We encourage all Parties to support listings of species subject to the pet trade—listings in Appendix II are critical for understanding trade impacts on wild-sourced specimens, and Appendix I listings are appropriate when commercial markets threaten already imperiled species.

World Animal Protection submits the following recommendations to the Parties (with detailed explanations following). We are not offering recommendations on species that we do not work actively work on.

**Photo left:** In recent years specimens of hump snout lizard have become increasingly popular in the pet markets of Japan, Europe, and the US.

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## Small-clawed otter

(*Aonyx cinereus*)

**Position:** ADOPT

**Proponents:** India, Nepal, and Philippines

**Proposal:** Transfer from App. II to App. I

The wild population of Asian small-clawed otters meets the criteria for listing in Appendix I of CITES. In particular, the wild population meets Criterion C in Resolution Conf. 9.24 (Rev. CoP17) because it has suffered a marked decline inferred on the basis of habitat loss, decline in habitat quality, exploitation, and vulnerability to extrinsic factors. Asian small-clawed otters have declined by more than 30 percent in the last 30 years, due in large part to significant reductions in its range and exploitation for the global trade in otter skins and live animals for the pet trade. Additionally, the Chair of the Otter Specialist Group has indicated that this species has likely declined at least 30% over the last two generations, or 20 years. World Animal Protection notes that a diversity of range States support inclusion of the small-clawed otter in Appendix I.

Asian small-clawed otters have disappeared or declined in many parts of their range. They are believed to be extirpated or extremely rare throughout much of their range in southern China. Recent surveys suggest that small-clawed otters have disappeared from the western Himalayan foothills and perhaps the Indian part of the Sunderbans. It is likely that the present range in India has been diminished, and the species is now considered to be extremely rare in Myanmar. Throughout their range, Asian small-clawed otters are threatened by habitat loss from human development and activities. In addition, poaching for illegal trade in furs, traditional medicine and a burgeoning online trade in otter pups as pets pose a threat to the survival of the species. Small-clawed otters are a popular attraction in zoos and increasingly popular in pet shops, pet fairs, and even in coffee shops. In Japan, our investigations visited 8 otter “cafes” where tourists pay to interact and feed otters in Tokyo.

Trade in live animals is a growing concern. In just two years, between 2015 and 2107, 59 live otters, mostly juveniles, were confiscated in four countries (Indonesia, Malaysia, Thailand and Vietnam), and 32 were identified as Asian small-clawed otters, according to a report by TRAFFIC. The growing trend in trade of live, juvenile small-clawed otters is alarming, especially since many of otters are taken from the wild. World Animal Protection’s investigations into the small-clawed otter trade from Indonesia suggests that although owners of small-clawed otters in Japan—where demand for live otters is growing—claim they have captive-bred otters, many of those otters may be sourced from the wild in Indonesia. Extensive research into the otter trade in Indonesia by TRAFFIC suggests that Indonesia does not have captive breeding facilities for otters that would be capable of producing the quantity of otters found in commerce and trade or facilities that would qualify as breeding “specimens bred in captivity” as defined in Resolution Conf. 10.16 (Rev.).

Multiple TRAFFIC reports have shown that seizures in live small-clawed otters is increasing, and the popularity of the creatures on Instagram and other social media sites is fueling demand and popularity. According to a recent study by researchers at WildCru, otter videos on YouTube have both increased in quantity and in popularity, possibly reflecting emergent growth in demand for live, juvenile otters. An Appendix I listing would facilitate enforcement, especially with regard to online sales and would be helpful in preventing laundering of supposedly captive-bred small-clawed otters.



## Smooth-coated Otters

(*Lutrogale perspicillata*)

**Position:** ADOPT

**Proponents:** India, Nepal

The wild population of smooth-coated otters meets the criteria for listing in Appendix I of CITES. In particular, the wild population meets Criterion C in Resolution Conf. 9.24 (Rev. CoP17) because it has suffered a marked decline inferred on the basis of habitat loss, decline in habitat quality, exploitation, and vulnerability to extrinsic factors. Smooth-coated otters have declined by more than 30 percent in the last 30 years, due in large part to significant reductions in its range and exploitation for the global trade in otter skins and live animal trade.

In the last decade, loss of mangroves to aquaculture, reclamation of wetlands for settlements, aquaculture, stone quarrying and sand mining, large-scale hydroelectric projects, and other habitat alterations have increased, leading to reduced habitat for smooth-coated otters. Marked reductions in smooth-coated otter populations have been observed in many parts of their range due to intense poaching and extensive habitat loss in south and Southeast Asia.

Moreover, according to TRAFFIC, poaching and illegal trade for use as pets, for fur, and for use in traditional medicine poses a significant and growing threat to all tropical Asian otter species. Between 1980 and 2015, 2,949 otter pelts were seized in India; although few are identified to species level, given that smooth-coated otter pelts are particularly desirable, a significant number are likely smooth-coated otter pelts. Evidence of trade exists across the range of this species. In Pakistan, fisherman target smooth-coated otters for their pelts because they fetch high prices from middlemen who move the pelts into Russia. In Iraq, smooth-coated otters are hunted for their pelts and sold to smugglers who operate along Iraq's borders, fetching between 100 and 300 USD per pelt.

The trade in live otters for pets is an emerging threat to tropical Asian otters. Smooth-coated otters were also found for sale in a TRAFFIC study. A study of online trade in otters via five Facebook groups in Thailand from March 2017 to April 2018 found 15 posts offering a total of 29 smooth-coated otters.<sup>1</sup> In addition, there were 88 posts (183 individuals) that were unidentifiable as the photos posted were unclear or the otter were too young to identify at the species level. YouTube seems to play a role in perpetuating demand for live otters, and the increase in posts featuring otters suggests that demand is growing.





Photo: Vidu Gunaratna

## Black-lipped Lizard & Crestless Lizard (*Calotes nigrilabris* & *Calotes pethiyagodai*)

**Position:** ADOPT

**Proponents:** Sri Lanka

**Proposal:** Include in Appendix I

The wild population of black-lipped and crestless lizards meets the criteria for listing in Appendix I of CITES. In particular, the wild population of these species meets Criterion A i) and v) of Resolution Conf. 9.24 (Rev. CoP17) because of their small populations. The Black-lipped lizard also meets the criteria for Criterion B i), iii), iv) and C i) due to the fragmentation of their range, observed decreases in population, and documented vulnerability to extrinsic and extrinsic factors. Crestless lizards qualify for Criterion B iii) and iv) because of the small extent of its range, its vulnerability to habitat loss, and vulnerability to intrinsic and extrinsic factors.

The black-lipped and crestless lizards are endemic to Sri Lanka and strictly protected by domestic legislation which prohibits the export of any Sri Lankan reptile species. However, the rarity of the lizards in the wild and limited availability in the international pet market creates a high demand for the lizards. Smugglers move the lizards from Sri Lanka to Europe, and then European nationals trade to collectors in Europe and the United States.

Most of the recent trade of these lizards are in illegally caught specimens or offspring of an illegally taken breeder stock.<sup>2</sup> An Appendix I listing would require captive breeding facilities to register with the CITES Secretariat and ensure that no wild-caught specimens are traded for commercial purposes. Listing the species would provide important enforcement support to Sri Lankan efforts to protect these species by requiring importing countries to take responsibility for illegal trade on their end.



Photo: Alleyn

## Horned Lizards (*Ceratophora* spp.)

**Position:** ADOPT

**Proponents:** Sri Lanka

The wild population of the horned lizard genus meets the criteria for listing in Appendix I of CITES. The wild population of all five species, which are solely endemic to Sri Lanka, meets Criterion A i), ii), and v) and Criteria B i), iii), and iv) of Resolution Conf. 9.24 (Rev. CoP17) Annex 1. Each species has an observed decline in the number of individuals, small subpopulations, and high vulnerability to both intrinsic and extrinsic factors. Further, each species' wild population has a restricted area of distribution characterized by fragmentation, high vulnerability to extrinsic factors and an observed decrease in the area and quality of habitat, the number of individuals, and the number of subpopulations.

The entire genus is strictly protected in Sri Lanka; no exports for commercial purposes are permitted by law. However, since 2011 specimens have increasingly shown up in U.S. and European pet markets.<sup>3</sup> The lizards' coloration and rostral structure create a high demand in the pet trade, with pairs selling for up to 2,500€. Smuggling and sale into the pet trade is facilitated by the fact that apart from the United States no other country has legislation prohibiting the sale of specimens that were illegally captured and exported in the country of origin. An Appendix I listing will give Parties clear enforcement authority to minimize the threat the commercial pet trade market imposes on this genus of lizards.





Photo: reptiles4all

## Pygmy Lizards (*Cophotis ceylanica* & *Cophotis dumbara*)

**Position:** ADOPT

**Proponents:** Sri Lanka

The wild population of pygmy lizards meets the criteria for listing in Appendix I of CITES. *Cophotis ceylanica* meets Annex 1, Criterion B i), iii), and iv) of Resolution Conf. 9.24 (Rev.CoP17). The species has a restricted area of distribution with fragmented populations occurring at very few locations, which are highly vulnerable to intrinsic and extrinsic factors and the species has suffered an observed decrease in the area of distribution, the area of habitat and quality of habitat. *Cophotis dumbara* meets Criterion A i) and v) and Criterion B i), iii) and iv) because the species has a small population, is subject to a projected decline of individuals, and there is an observed decline in quality of habitat. The species is highly vulnerable to intrinsic and extrinsic factors and a restricted area of distribution with fragmented populations occurring at very few locations which are highly vulnerable to intrinsic and extrinsic factors. Further, the species has suffered an observed decrease in the area of distribution, the area of habitat and quality of habitat.

Both *Cophotis ceylanica* and *Cophotis dumbara* are endemic to Sri Lanka and are protected from harvest under national legislation, so trade is primarily illegal. However, an increased European online market has created an international pet trade for live specimens in Europe, the United States, and Asia. Pygmy lizards are presumed to be illegally smuggled out of Sri Lanka by professional collectors, local villagers, scientists, and tourists. There is also evidence of live wild-caught lizards sold illegally under the false pretense of being captive-bred.

The demand for these lizards in the international pet market has created a lucrative smuggling business. An Appendix I listing would establish international management and enforcement authorities to end the commercial trade of wild pygmy lizards. A listing would also require captive-breeding facilities to register with the CITES Secretariat, which will ensure wild-caught specimens are not taken or sold to further protect the species from extinction.



Photo: 1worldphotography

## Hump Snout Lizard (*Lyriocephalus scutatus*)

**Position:** ADOPT

**Proponents:** Sri Lanka

The wild population of hump snout lizard meets the criteria for listing in Appendix I of CITES. In particular, the wild population meets Criterion B iii) and iv) of Annex 1 in Resolution Conf. 9.24 (Rev. CoP17) because the species has a restricted area of distribution and is characterized by a high vulnerability to intrinsic and extrinsic factors. Further, the species has an observed and inferred decrease in both area and quality of habitat. The hump snout lizard is monotypic and endemic to Sri Lanka.

In recent years specimens of hump snout lizard have become increasingly popular in the pet markets of Japan, Europe, and the US. The high demand for the unique and rare species has created a highly profitable market for international pet traders. The hump snout lizard is highly desirable for its large and stout body, varying ornamentation, bright body colors, relatively wide tolerance of environmental conditions, non-cryptic and other behaviors such as body lifting, head bobbing and gular sac display. An Appendix I listing would create overarching enforcement for each importing and exporting country involved in the trade and effectively eliminate the commercial pet trade. The regulation would subsequently end the negative impact the international pet market has on hump snout lizard population numbers in Sri Lanka.



Photo: Daniel Castillo

## Leopard Geckos (*Goniurosaurus* spp.)

**Position:** ADOPT

**Proponents:** China, European Union and Viet Nam

The proposed species satisfies both criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). It is known, or can be inferred or projected, that the regulation of trade in the following species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future; and, it is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

Geckos of the genus *Goniurosaurus* have been popular in the pet market since the 1990s because of their appearance. Extensive markets exist in both the United States and Europe. Traders are incentivized to poach and collect excessively because especially rare species sell for high prices. One dealer exported over 10,000 individuals of *G. luisi* and *G. araneus* to the United States for the pet trade. *G. luisi* reach prices up to 2,000 USD per individual in importing countries. These two *Goniurosaurus* had been overexploited for commercial use, which presumably led to local population extinctions. Annually, hundreds of captive-born juveniles of *Goniurosaurus* species are available in the international pet market for about 40 USD each. A market survey of Europe in March 2018 confirmed that the trade in *Goniurosaurus* specimens mainly takes place online or at international reptile fairs. A total of 535 specimens of six *Goniurosaurus* species were spotted for sale on 120 different online advertisements between September 2017 and March 2018.

In Viet Nam, specimens of *Goniurosaurus* also appear for sale on internet platforms and are taken from the wild for export. According to one dealer in Dong Nai Province in southern Viet Nam, 50 animals were illegally imported from China in 2016 and then smuggled to Thailand with a higher price of 150 USD per individual. According to Vietnamese traders in *G. luisi*, deals containing at least 50 specimens per deal are frequently being exported to Thailand and Indonesia without any permits for prices of 100-150 USD per individual, from where specimens will allegedly be mainly exported to Europe and the United States.



Photo: Hanif ikhwan Saputra

## Tokay Gecko (*Gekko gecko*)

**Position:** ADOPT

**Proponents:** European Union, India, Philippines and United States of America

*Gekko gecko* biologically qualifies to be included in Appendix II because the species satisfies criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). Regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. International trade in *G. gecko* is reported to be extraordinarily high, and several range countries are reporting population declines. Collection for trade is considered to be the principal cause of the decline in populations assessed. The tokay gecko has not been assessed by the IUCN and has never been proposed for listing in the CITES Appendices.

Tokay geckos have been used in Chinese traditional medicine for hundreds of years and are sold throughout southeast Asia in dried form or preserved in alcohol; to a lesser extent, live specimens are also traded in the international pet market. Thailand reported exporting over one million live specimens between 2014-2018, and 1.45 million live and dried specimens in 2017-2018; however, from Taiwan's import numbers, estimates are much higher.

Indonesia, India, Malaysia, Bangladesh, and the Philippines have domestic legislation protecting the species, but illegal trade still occurs in large numbers. Illegal exports are also thought to be facilitated by laundering wild-caught geckos through captive-bred facilities.



## Grenadines Clawed Gecko (*Gonatodes daudini*)

**Position:** ADOPT

**Proponents:** Saint Vincent and the Grenadines

*Gonatodes daudini* meets biological criteria B i), iii), and iv), and C i) of Annex 1 of Resolution Conf. 9.24 (CoP17). Criterion B because the wild population has a very restricted area of distribution and is characterized by: i) occurrence at only one location; iii) a high vulnerability to intrinsic and extrinsic factors; and, iv) an observed decrease in the number of individuals and quality of habitat. Criterion C i) because the species has had a marked decline in the population size in the wild, which has been observed as ongoing. The IUCN listed the species on the Red List as critically endangered in 2011.

The Grenadines clawed gecko is endemic to Chatham Bay on Union Island in the Grenadines archipelago. Live specimens of the Grenadines clawed gecko are used for the exotic pet trade. The species is critically affected by trade, and that trade is having a highly detrimental impact on the status of the species because of both the extracting of individuals and the critical damage to the habitat during the collection process. Illegal trade was reported shortly after the species was discovered and a significant number of lizards have been taken from the wild. Dealers in the United States, the United Kingdom, the Netherlands, and Germany have offered live specimens at high prices online, but the origin of these animals is unknown.

Due to their severely restricted range (estimated to only be about 1 square kilometer) as a result of historic deforestation and degradation, any removal may be disastrous for the species. Despite national protection, stricter regulation of trade, including effective enforcement, is needed to combat illegal trade in destination countries and combat poaching.



Photo: Roger Wasley

## Grandidier's Madagascar Ground Gecko (*Paroedura androyensis*)

**Position:** ADOPT

**Proponents:** European Union and Madagascar

*Paroedura androyensis* meets criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) because it is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. The species is rare with a declining population trend, and may be affected by trade according to the definition in Annex 5 ii) of Res. Conf. 9.24 (Rev. CoP17). The species is endemic to Madagascar and is classified as vulnerable in the IUCN Red List with a decreasing population trend.

The species has not been proposed for inclusion in the CITES Appendices before. *Paroedura androyensis* is confined to intact forests, which are at risk from timber extraction for charcoal production and land clearance for slash and burn agriculture, both of which are ongoing throughout the species' range. An additional threat is the international trade of the species in the pet trade. 6,392 live-specimens of Grandidier's Madagascar ground gecko were exported in a five-year period for the pet trade, most of which were wild-caught. The species is unique and rare, creating a high demand for live specimens in pet markets.





Photo: Keith Pomakis

## Spiny-Tail Iguana (*Ctenosaura* spp.)

**Position:** ADOPT

**Proponents:** El Salvador and Mexico

Background: The spiny-tailed iguana species is proposed for inclusion in Appendix II by El Salvador and Mexico.

Biological Criteria:

Legal Trade:

Illegal Trade:



Photo: Parham Beyhaghi

## Spider-tailed Horned Viper (*Pseudocerastes urarachnoides*)

**Position:** ADOPT

**Proponents:** Iran

*Pseudocerastes urarachnoides* meets criteria A and B of Annex 1 of Resolution Conf. 9.24 (Rev. CoP14). It is known, or can be inferred or projected, that the regulation of trade in the species is necessary to avoid it becoming eligible for inclusion in Appendix I in the near future; and it is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. Habitat destruction and effects of climate change, like drought, also threaten this species.

As a fairly newly species there is little information on its biology and life cycle, and the species is considered as data deficient in the IUCN Red List. Because of the species' unique characteristics, live specimens of the spider-tailed horned viper are desired for the international pet trade and European markets. The biggest threat to the species is the illegal collection to cover the demand for national and international trade. A listing in CITES Appendix II is needed to control the demand from international markets and the pet trade.

Under Iranian legislation any hunting, killing or catching of all reptiles is prohibited. In addition, any export of live wild animals without a license or approval from the Department of Environment is also prohibited. There have been no permits issued for the legal capture and, or export of spider-tailed horned viper; therefore, any trade in the species is illegal.

Detailed records for the volume of illegal trade of spider-tailed horned vipers are lacking, but there are strong indications that this species is illegally collected and smuggled out of the country. In June 2018, ten live specimens were smuggled to Germany. In 2016, a report showed that the species has been found in Europe, and a recent survey verified that German nationals have listed the species as household pets. The sale of species on Facebook groups have also been tracked.



Photo: Asian Species Action Partnership

## Bourret's Box Turtle (*Cuora bourreti*)

**Position:** ADOPT

**Proponents:** Viet Nam

*Cuora bourreti* qualifies for transfer from Appendix II to Appendix I because it meets Annex I, criteria A v) and C i) of Resolution Conf. 9.24 (Rev.CoP17). The species meets criterion A v) because its biological characteristics of slow growth, late maturity, limited annual reproductive output, and high egg and juvenile mortality rates makes the species extremely vulnerable to exploitation. The species also meets criterion C i) because it has been documented to have declined severely across its range as a result of collection for trade. The population trend data strongly suggests that Bourret's box turtles have been subject to unsustainable collection for the past 15-20 years, and this has resulted in the depletion if not collapse of each population that has been surveyed.

The Bourret's box turtle is endemic to Viet Nam and Laos and listed in the IUCN Red List as critically endangered with a decreasing population trend. Available information indicates that most turtles are exported to Hong Kong and southern China markets for the food or pet market. The species is in high demand and collecting occurs from casual encounters and targeted searches for turtles involving trained dogs or burning undergrowth to drive and expose turtles. Bourret's box turtle is legally protected in both range States, Lao PDR and Viet Nam, but enforcement has been insufficient. Collected turtles are traded, mostly illegally, through a network of local middlemen before being exported. A study recorded over 15,000 *Cuora galbinifrons* including *C. bourreti* traded in Hong Kong markets alone over three years, compared to the 886 *C. galbinifrons* recorded in the CITES trade database as net exported worldwide, indicating a large number of unrecorded trade.

Commercial turtle farms in East Asia drive demand for animals collected from the wild, as they are the primary purchasers of wild-collected turtles. Habitat loss and degradation are considered a significant but more localized threat to the species.



Photo: Adrian Pingstone

## Southern Vietnam Box Turtle (*Cuora picturata*)

**Position:** ADOPT

**Proponents:** Viet Nam

Vietnamese box turtles qualify for transfer from Appendix II to Appendix I because it meets Annex I, criteria A i) and v), B iii) and iv), and C i). The species meets criteria A i) and v) because of its small declining population and intrinsic population vulnerability. In nature egg and hatchling mortality rates are high and recruitment is slow. The species is challenging to establish and reproduce in captivity, and the great majority of trade is understood to concern animals collected from the wild. The species meets criteria B iii) and iv) because of the restricted area of distribution, declining population, and intrinsic vulnerability. The species also meets criterion C i) because of the species past and ongoing severe decline in population due to exploitation. The Vietnamese box turtle is endemic to Viet Nam and listed in the IUCN Red List as critically endangered with a decreasing population trend.

The main use of Vietnamese box turtles is the trade of live specimens in the international pet market and previously, the use of live specimens in the Asian consumption trade. Long-lived, late-maturing species with limited annual reproductive output and high juvenile mortality, as exemplified by the Vietnamese box turtle, have proven to be highly susceptible to overexploitation, particularly of adult animals. The population status and trends strongly suggest that Vietnamese box turtles have been subject to unsustainable collection for the past 15-20 years and this has resulted in the depletion if not collapse of its populations. Of particular significance is that commercial turtle farms in East Asia create a specific demand for animals collected from the wild, being considered the primary purchasers of wild-collected turtles and driving the collection of the last remaining wild animals through increased trade prices.

The past and ongoing pattern of local, casual exploitation combined with the unsustainable targeted collection for illegal trade in its highly restricted area of occurrence, will likely continue unless stronger measures are implemented. The slow recruitment and late maturity make the species intrinsically vulnerable to exploitation. Domestic and international enforcement of existing regulations may be insufficient to safeguard the long-term survival of this restricted range species; transfer from CITES Appendix II to I is expected to more effectively address illegal trade in this species.



Photo: Fredly fish 4

## Annam Leaf Turtle (*Mauremys annamensis*)

**Position:** ADOPT

**Proponents:** Viet Nam

The Annam leaf turtle meets criteria A i), ii), and v), B iii) and iv), and C i) of Annex 1 of Resolution Conf. 9.24 (Rev. CoP17). The species meets criteria A and B because of the small and declining size of wild populations, the vulnerability to intrinsic factors, the decline in extent and quality of the species range, the decrease in the number of observed individuals in the wild, the restricted area of distribution in the wild, and the decreased area and quality of habitat. The Annam leaf turtle meet criterion C because the species population has declined severely across the species very limited range because of unsustainable collection for trade.

The IUCN categorizes the turtles as critically endangered in the Red List. The species is endemic to Viet Nam and is restricted in its natural occurrence to just three central provinces. The species was reasonably common until the early to mid-1990s, when it became subject to commercial trade, which apparently led to the collapse of the entire species' population within a few years. Its life history attributes, i.e. late maturity, modest annual reproductive output, and high egg and juvenile mortality rates, make the species intrinsically vulnerable to over-exploitation, particularly of adults

The Annam leaf turtle was included in CITES Appendix II at CoP12. A Periodic Review of the species was prepared by Viet Nam and the Animals Committee agrees with the recommendation to transfer the species to Appendix I.

The primary threat to *Mauremys annamensis* is collection to meet demand for live specimens in the international pet trade and specimens for consumption in Asia, including as traditional medicine. The species is popular for aquaculture in Viet Nam and China, where large numbers are reportedly kept and produced. Aquaculture facilities are widely perceived to continue to acquire breeding stock from the wild, which is believed to be fueling illegal collection efforts and transboundary trade.



## Indian Star Tortoise (*Geochelone elegans*)

**Position:** ADOPT

**Proponents:** Bangladesh, India, Senegal, and Sri Lanka

The Indian Star Tortoise meets the biological criteria found in paragraphs C i) and ii) of Resolution Conf. 9.24 (Rev. CoP16), Annex 1, due to a marked decline in population sizes in the wild observed as ongoing or inferred or projected on the basis of levels or patterns of exploitation, a high vulnerability to intrinsic (i.e. late maturity, low reproductive output, long generation time and low population recovery potential), extrinsic factors (i.e. a decrease in the area and quality of habitat), and a reduction in recruitment due to indiscriminate off-take.

The Indian Star tortoise is the single most seized species of tortoise or freshwater turtle worldwide and is thought to represent around 11% of global seizures involving these taxa. There are concerns that this species is being smuggled from India and Sri Lanka into pet markets in Asia, Europe, and the United States. However, the majority of animals appear to be destined for use as exotic pets in Asian countries, such as Thailand and China.

Indian star tortoises are in demand as pets due to the beauty of the star pattern on their shells, but they are mostly protected domestically, so the trade is primarily illegal. An Appendix I listing would ensure that both the exporting and importing countries involved in trade have clear enforcement authority so that a swift end to the commercial trade driving this species toward extinction might end.





Photo: wrangel

## Pancake Tortoise (*Malacochersus tornieri*)

**Position:** ADOPT

**Proponents:** Kenya and United States of America

The pancake tortoise meets criteria B i), iii), and iv) of Resolution Conf. 9.24 (Rev. CoP17) Annex 1. The wild population of tortoises has a restricted area of distribution and is characterized by fragmentation, a high vulnerability to intrinsic and extrinsic factors, and an observed decrease in the area of habitat and the number of subpopulations. Further, the species meets criterion C i) due to a marked decline in the population size in the wild, which has been observed as ongoing. *Malacochersus tornieri* has very rigid habitat requirements, low densities and fragmented populations, very low reproductive potential, and continuing overexploitation for the international live animal trade. The species has recently been proposed to move from vulnerable to critically endangered in the IUCN Red List.

The vast majority of pancake tortoise specimens are traded as live animals for the commercial pet trade, although a few trade in bodies, carapaces, and skins have also been recorded. Due to its unique appearance and behavior, with a flat and flexible shell that allows it to wedge into rock crevices, the species is highly desired in the international pet trade. Overexploitation for commercial trade is considered the single most important threat, with large and increasing numbers of animals recorded in trade. The major importers of the species in the last two decades has been Japan, followed by the United States, Hong Kong and the EU.

Since the species was first listed on CITES in 1975, a total of 47,061 live animals were recorded as exported and 48,342 imported, according to CITES trade statistics. Trade has been significantly increasing in the last ten years, Tanzania has previously been the biggest exporter of the species, with a total of 10,966 recorded

exports and 18,889 recorded imports between 1985 and 2016. Zambia has emerged as the major exporter since 2006, soon after the species was confirmed to exist in the country. Zambia exported a total of 24,310 specimens until 2016, with 21,830 of these declared to have been bred in captivity (C). Export numbers from Zambia have been highly fluctuating from year to year, with a maximum of 6,400 declared exports in 2011. With no public information available on the operation of breeding facilities in Zambia and only a single Zambian population described in an isolated, unprotected area and an estimated population of 518 animals, concerns have been raised that tortoises may actually originate from other countries

The CITES Secretariat reported the seizure of 370 specimens allocated to 13 seizure cases between 2000-2015. In 2006, officials in Hungary seized 55 specimens of pancake tortoise and other tortoises from a lorry arriving from Serbia and destined to Rotterdam. The Czech authorities are reported to have seized 888 *M. tornieri* in the year 2000.

Appendix I listing will enhance the fight against illegal trade by requiring that both exporting and importing countries issue permits and make findings and ensuring that enforcement is both an exporting and importing country priority. Furthermore, an Appendix I listing would also require captive breeding facilities to register with the Secretariat, allowing for a clearer understanding of whether specimens are being taken from the wild and traded under the captive-bred or ranched source code.



Photo: webguzs

## Glass Frogs

(*Hyalinobatrachium* spp., *Centrolene* spp.,  
*Cochranella* spp., and *Sachatamia* spp.)

**Position:** ADOPT

**Proponents:** Costa Rica and El Salvador

Some species of the genera proposed are eligible for inclusion in Appendix II because they meet criterion A of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). The species meet the criteria because an observed and/or projected decline in the area and quality of the habitat and because the wild populations are vulnerable to other intrinsic or extrinsic factors. The regulation is necessary to avoid the species from becoming eligible for inclusion in Appendix I in the near future.

Other species of glass frogs that have been regularly traded meet criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) because it is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences.

The additional species of glass frogs meet the Criteria of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) because the specimens of the species in the form in which they are traded resemble specimens of a species included in Appendix II. The enforcement officers who encounter specimens of CITES-listed species are unlikely to be able to distinguish between them. Because of the species' similar size, colors, and morphology all species in the genera should be included in Appendix II for look-alike reasons.

Additionally, the wild populations of several species have naturally restricted ranges, and most of the species included in this proposal are currently threatened by habitat fragmentation. Like other frog species throughout the world, many species of the family *Centrolenidae* are also threatened by chytridiomycosis and climate change.

Due to their unique appearance (transparent abdominal skin through which their internal organs are visible) and other biological characteristics glass frogs have become popular in the international pet trade and are traded in live specimens. However, many specimens in trade are obtained from illegal sources. The United States is a major importer, and the main exporter to the United States is Panama with 1,023 specimens, followed by Costa Rica with 518 specimens, and Suriname with 167 specimens during the period of reference. Further, the United States database, LEMIS, had records of captive-bred specimens sourced from outside the species' range (91 from Canada, 68 from the United States, and 4 from Germany, and also from Costa Rica, Ecuador, and Panama (one specimen from each country)). Additionally, in Europe, glass frogs are regularly sold online and at reptile and amphibian fairs. Traders involved are from six European States.

**Illegal Trade:** The majority of countries in which glass frogs occur prohibit the trade of specimens of all species. In some countries trade is permitted provided the appropriate permits are obtained. In light of a number of smuggling incidents, and the information shown in online advertising, it is evident that an unknown number of specimens were obtained in violation of domestic laws in the range States. Listing on Appendix II would require that exporting countries make legal acquisition findings and non-detriment findings, adding enforcement expectations that could act to curb the illegal trade in these species.



Photo: Zhou, Jiajun

## Chinhai Spiny Newt & Mountain Spiny Crocodile Newt

(*Echinotriton chinhaiensis*) & (*Echinotriton maxiquadratus*)

**Position:** ADOPT

**Proponents:** China

Both *Echinotriton chinhaiensis* and *Echinotriton maxiquadratus* biologically qualify to be included in Appendix II because they satisfy criterion B in Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). It is known, or can be inferred or projected, that regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. Both species of newts are critically endangered with extremely narrow distribution, low population sizes, and highly fragmented habitats. Adults are mainly terrestrial, nocturnal, and very slow moving and so are easy poaching targets. These two species are late-maturing and long-lived, reproduce once every year, and the hatching rate of eggs and the survival rate of larvae are low. Wild females have strict and special requirement of spawning microhabitat. *E. maxiquadratus* are incredibly vulnerable to targeted poaching and natural disasters.

Both the Chinhai spiny newt and the Mountain spiny crocodile newt are endemic to China, and Chinhai spiny newts are listed on the IUCN Red List as critically endangered with a decreasing population trend and high vulnerability to weather disasters. *E. chinhaiensis* larvae and live adults are suspected to be part of the international pet trade. *E. maxiquadratus* was discovered in 2014, but eggs, larvae, and adults are believed to be collected for the pet trade. Despite national domestic legislation in China preventing the hunting, collecting, killing, buying, selling and utilization of any specimens of the species, the species is still illegally traded. Illegal pet trade in Chinhai spiny newts has been found in Hong Kong SAR and Japan. Although trade has not been documented for the newly discovered mountain spiny crocodile newt, the possibility of illegal hunting and trade is high. In addition to the pet trade, the biggest threat to both species is habitat destruction.

Although few illegal trade records could be found for *E. chinhaiensis*, internet research shows that there is demand for the newts in the United States and European Union exotic pet markets. The species has been found illegally in Hong Kong SAR and Japan. *Echinotriton* spp. resemble *Tylototriton* spp., which is driving further demand in the United States market.



Photo: Firedreams

## Asian Warty Newts

(*Paramesotriton* spp.)

**Position:** ADOPT

**Proponents:** China and European Union

Asian warty newts meet biological criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). Criterion A because trade in the species *P. caudopunctatus*, *P. fuzhongensis* and *P. guangxiensis* must be regulated to prevent them from becoming eligible for listing in Appendix I in the near future. Criterion B because to ensure that the harvest of wild individuals of the species *P. labiatus* and *P. yunwuensis* is not reducing the wild population to a level at which their survival might be threatened. Further, Asian warty newts meet criterion A of Annex 2b of Res. Conf. 9.24 (Rev. CoP17) because individuals of the species *P. aurantius*, *P. caudopunctatus*, *P. fuzhongensis*, *P. guangxiensis*, *P. labiatus*, *P. maolanensis*, *P. yunwuensis*, *P. zhijinensis* are commercially exploited and eligible to be listed in Appendix II. These species resemble those species of the remaining *Paramesotriton* spp. already included in Appendix II and it is unlikely that government officers responsible for trade monitoring will be able to distinguish between them. Due to morphological similarities between *P. hongkongensis* and most of the other *Paramesotriton* spp., the necessity to regulate the harvest and trade in some species the whole genus is eligible for listing. Specimens traded for traditional medicine are often dried, making taxonomical identification impossible.

Throughout the distribution range of the Asian warty newts, over-harvesting has been identified as the most significant threat to the genus. Animals can be easily captured with the use of nets, baited fishing line, and electrofishing equipment. Asian warty newts are harvested for human consumption, traditional medicine and to supply the national and international pet trade. Demand for live specimens of Asian newts in the Europe and American pet markets continues to grow, and due to the genus morphological similarities, identification between species is difficult.





Photo: Panida Wijitpanya

## Crocodile Newts (*Tylostotriton* spp.)

**Position:** ADOPT

**Proponents:** China and European Union

The genus meets criteria A and B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17). The genus meets criterion A because trade in the species of fourteen species of *Tylostotriton* spp. must be regulated to prevent those species from becoming eligible for inclusion in Appendix I in the near future. The genus meets criterion B because the regulation of the harvest of wild individuals of three species is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. *Tylostotriton* genus also meets criterion A of Annex 2b of Resolution Conf. 9.24 (Rev. CoP17) because individuals from seventeen species of *Tylostotriton* resemble specimens of species proposed to be included in Appendix II. It is unlikely that government officers responsible for monitoring trade will be able to distinguish between them. The genus *Tylostotriton* mainly comprises small ranged species that consist of few and small populations. Habitats are fragmented and steadily shrinking. Declines have been observed in the extent and quality of habitats, as well as in the number of individuals.

The species has a restricted distribution range in the countries of China, Viet Nam, Laos, Thailand, Myanmar, India, Nepal, and Bhutan. *Tylostotriton* spp. is currently represented by twenty-five species, but there has been a high rate of species discoveries in the past ten years, so there may be more unknown species. Currently, only half of the species have been evaluated by the IUCN; of those, ten species are listed in the Red List in categories from near threatened to endangered.

Besides the threat of habitat loss, species are harvested from the wild as a food source, for use in traditional medicine, and to supply the international pet trade. The usually predictable high concentration of individuals in small breeding sites during the reproductive season makes most crocodile newt species especially vulnerable to over-harvesting at known localities. At least twelve species are recorded in the international trade and are mainly exported to the European, North American, and Japanese markets, even though they are protected under domestic legislation.

Current trade demands for Asian newts in the pet market are extremely high in Europe, Asia and the Americas. Germany, Austria, the Netherlands, United Kingdom, Poland, Italy, Spain, and France are the main importers. Hong Kong SAR, Japan, Malaysia, Viet Nam, USA, and Canada are also involved in the trade.



Photo: Michael McDonald

## Ornamental Spiders (*Poecilotheria* spp.)

**Position:** ADOPT

**Proponents:** Sri Lanka and United States of America

*Poecilotheria* spp. meets criterion B of Annex 2a of Resolution Conf. 9.24 (Rev. CoP17) because it is known, or can be inferred or projected, that regulation of trade in eight species of *Poecilotheria* is required to ensure that the harvest of specimens from the wild is not reducing the wild population to a level at which its survival might be threatened by continued harvesting or other influences. The additional seven species of *Poecilotheria* meet criterion A of Annex 2b of Res. Conf. 9.24 (Rev. Cop17) because those species resemble specimens of the species being proposed for inclusion in Appendix II. Enforcement officers who encounter specimens of CITES-listed species are unlikely to be able to distinguish between them. Additionally, the species in the genus are reported to have low reproductive rates, and short life spans and high mortality rates prior to maturity, making them (especially females) particularly vulnerable to commercial exploitation.

The ornamental spider genus is proposed for inclusion in Appendix II by Sri Lanka and the United States. Eight species are endemic to India, five are endemic to Sri Lanka, and two species have been found in both countries. The IUCN Red List categorizes two *Poecilotheria* species as critically endangered, three as endangered, one species as vulnerable, one species as least concern, and one species as data deficient; the remaining seven species have not been assessed.

Because of their coloration and size the genus is very popular in the international pet trade, and though captive breeding occurs, live specimens are often sourced from the wild due to low reproductive rates and the limited gene pool of the captive population. Collection from the wild to supply the international pet trade is known to occur in both range countries and could have significant negative impacts. Spiders from National Parks and other protected areas are known to be illegally collected and sold on the international market. One such incident was recorded in 2002 when Europeans smuggled several *P. metallica* specimens out of India and advertised them for sale online. There are indications that illegal smuggling from Sri Lanka occurs for introduction into the pet trade, but few detailed accounts are available.

Due to the patchy distributions and poor dispersal of *Poecilotheria* species, collection of even a few individuals at a single location could impact the genetic viability, population demographics, and ultimately survival of a species. In the IUCN Red List assessment, it was recommended that all *Poecilotheria* species from India and Sri Lanka be included under the CITES Appendix II to safeguard them from trade.

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**Photo right:** Indian star tortoises are in demand as pets due to the beauty of the star pattern on their shells.



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