

CoP18 Prop. 38

To include Glass Frogs of the genera *Hyalinobatrachium* spp., *Centrolene* spp., *Cochranella* spp. and *Sachatamia* spp.) on CITES Appendix II

Proposed by Costa Rica, El Salvador, and Honduras



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RECOMMEND: SUPPORT ADOPTION OF PROPOSAL

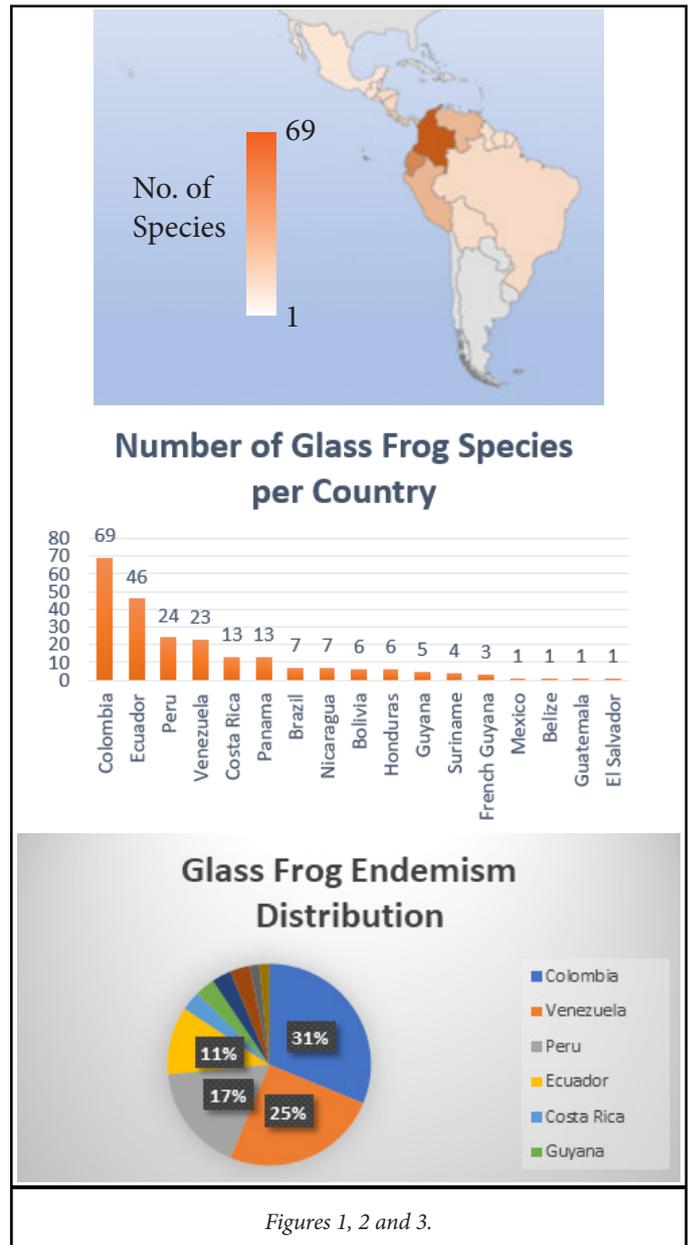
This listing is necessary as the wild populations of some glass frogs species have either very restricted areas of distribution or have experienced extreme habitat loss that has led to a marked population decline in the wild, and because the genera should be listed in their entirety in order to effectively counter the threats facing the four genera and the difficulty in identifying and regulating trade in particular species.

In addition, several species of glass frogs have been reported to be regularly traded into the United States and Europe over the last 10 years and, therefore, these genera clearly fulfill the requirement to be listed in Appendix II. Specifically, they warrant listing in accordance with Article II, Paragraph 2a of the Convention (including by satisfying criteria from Annex 2a, Paragraph B of Resolution Conf. 9.24 (Rev. CoP 17)) (see Annex 2 of the proposal for the list of species regularly traded) and in accordance with Article II, Paragraph 2b of the Convention, and Resolution Conf. 9.24 (Rev. CoP 17), Annex 2b, Paragraph A (see Annex 3 of the proposal for a list of species that fulfill this criterion).

Range and Distribution:

The species of the family Centrolenidae, also known as glass frogs, are nocturnal arboreal species endemic to Central and South America. The distribution range of the family extends from southern Mexico to northern Argentina, and through the Andes from Venezuela to Bolivia. They depend exclusively on permanent running water like streams or waterfalls and on riverine vegetation. Glass frogs are found in tropical moist lowland and montane forests, cloud forest and paramo habitats, with most species tolerating low levels of habitat disturbance.

Among the 104 species included in this proposal, four are classified by the IUCN Red List (2018)



as Critically Endangered, 12 as Endangered, 16 as Vulnerable and four as Near Threatened (Annex B Inf. doc). The remainder 68 species have unknown population trends.

Of the 104 species in Central and South America

combined, 64 are endemic to individual countries. Figures 1, 2 and 3 above show the distribution and range of glass frogs.

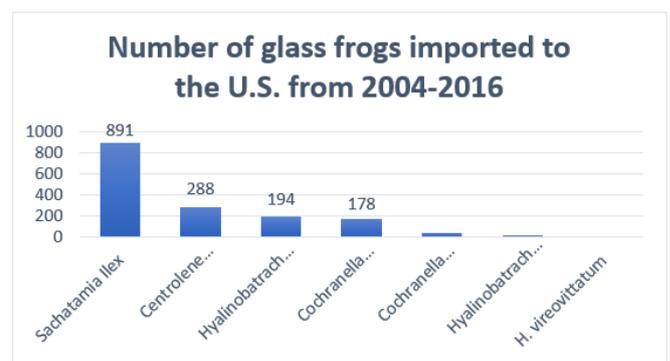
Threats:

The main threat to the persistence of glass frog populations is habitat loss and fragmentation due to the expansion of the agriculture frontier for small farms agro-industrial farming, cattle ranching or cultivation of illegal crops. Habitat loss is also caused by logging, mining, clearing for human settlement construction and flooding caused by hydroelectric dams (see e.g., Furlani et al., 2009; La Marca & Señaris, 2004a; Ortega-Andrade et al., 2013). Moreover, the recent increase in demand for these attractive and partially transparent frogs in the international pet trade is now further threatening these species.

Based on the reported status of the species of *Hyalinobatrachium* spp., *Centrolene* spp., *Cochranella* spp. and *Sachatamia* spp. in the IUCN red list, most of the species have unknown population trends, and 36 species are threatened at different levels of endangerment. Furthermore, specific estimates of past and/or projected decline are reported for very few of the species.

Demand and international trade:

As glass frogs are nationally protected in many of their range states, the legal origin of specimens in international trade is difficult to determine. Many specimens in trade originate from illegal sources (AFP, 2017; Fendt, 2014). The US LEMIS trade database reported a total of 2,138 individuals imported between 2004 and 2016 in the US: 891 *Sachatamia ilex*, 178 *Cochranella granulosa*, 288 *Centrolene prosoblepon*, 194 *Hyalinobatrachium fleischmanni*, 41 *Cochranella spinosa*, 16 *Hyalinobatrachium colymbiphylum* and eight *H. vireovittatum*. Additionally, there are some individuals reported that are not identified at the species level: 355 *Centrolene* spp., 222 *Hyalinobatrachium* spp., and 155 *Cochranella* spp. An analysis of LEMIS data reveals that imports of glass frogs peaked in 2011 with 374 individuals. The main exporter is Panamá with 1,023 individuals, followed by Costa Rica with 518 and Suriname with 167 individuals over the given period. Additionally, the US LEMIS registers individuals reportedly coming from captive breeding operations in countries outside of the species' range (91 from Canada, 68 from the US, and 4 from Germany) but also from Panamá,



Ecuador and Costa Rica (one individual from each country). Individuals of *H. valerioi* are sold in the US for about 150 USD per individual.

In Europe, glass frogs are regularly offered for sale via online advertisements at European reptile and amphibian trade shows, primarily at the Terraristika in Hamm (Germany), which takes place several times each year. Traders who participate in this event are from Austria, Czech Republic, Germany, Netherlands, Spain, and United Kingdom. Prices per glass frog vary from 45 to 175 Euro. For example, *Hyalinobatrachium valerioi* and *Cochranella pulverata* have been offered in November and December 2017, as well as in May and June of 2018. At the online platform www.terraristik.com glass frogs of the species *Hyalinobatrachium valerioi* were also offered in October 2017. As in Germany, this website is also used to offer specimens to be sold at future reptile and amphibian show in the Netherlands. Specimens of *Hyalinobatrachium fleischmanni* were offered for 45€ each at the Terraria fair in Houten, Netherlands (<http://vhm-events.nl/index.php/nl/terraria-2018/terraria-houten-september-2018>).

In 2014, a German citizen was captured in Costa Rica attempting to smuggle 438 specimens of frogs, lizards, and snakes into Germany, including 18 *Hyalinobatrachium valerioi* and 20 *Sachatamia ilex*. Costa Rican authorities called the case the “largest wildlife trafficking in 20 years” (Fendt, 2014). Only a few days before the seizure, the partner of the smuggler had advertised several glass frog species in the www.terraristik.com webpage to be sold during the Terraristika fair in Hamm, Germany.

While habitat degradation, climate change and the chytrid fungus are the main threats to glass frogs (von May et al., 2008; Mendoza & Arita, 2014), any unregulated offtakes increase the negative pressure on wild populations of glass frog species in Central and South America. In recent years, media articles portraying glass frogs as “kermit-looking” animals

(Martins, 2015) or “see-through frogs” (Owen, 2014; Tahir, 2018) have contributed to an increasing interest in the species by private collectors. In the face of serious glass frog habitat loss the recent increase in trade is alarming. While the IUCN does not include international trade as a threat to glass frogs in their species assessments, this is because most glass frog assessments are approximately 10 years old when trade in these species was much less common (e.g., Coloma et al., 2010; Guayasamin, 2010; Solis et al., 2010a, b). However, US import statistics and online advertisements in Europe indicate that glass frogs have become a target for the international exotic pet trade.

Because all 104 species of glass frog share similar physical appearances, protections that focus on only the species with known trade data would fail to provide sustainable protections for the four genera throughout Central and South America. Additionally, the regulation of only a select group of glass frog species, rather than all 104 species from the four genera, would be unsuccessful, as discerning between protected and unprotected species would be nearly impossible for border agents to accomplish due to their close resemblances. The listing of all 104 species in Appendix II ensures that the glass frog will receive the regulation it needs to combat its growing demand for the international pet trade.

Online trade:

Images of glass frogs trade sold in online platforms for national and international markets can be found in the Information document attached which provides additional support for the proposal.

Request for Support:

The governments of Costa Rica, El Salvador, and Honduras are committed to the conservation of amphibians and request the support of the proposal to include *Hyalinobatrachium* spp., *Centrolene* spp., *Cochranella* spp. and *Sachatamia* spp. in Appendix II of CITES in accordance with Article II 2a and II 2b of the Convention.

We would like to request you to support our efforts in the conservation of our species.



References:

- AFP. 2017. Selling US\$600 frogs – to save them from poachers. Article in New Straits Times, dated July 218. Available at <https://www.nst.com.my/world/2017/07/258493/selling-us600-frogs-%E2%80%93-save-them-poachers>
- Coloma, L. A., Ron, S. R., Wild, E., Cisneros-Heredia, D., Solís, F., Ibáñez, R., Santos-Barrera, G. & Kubicki, B. 2010. *Hyalinobatrachium fleischmanni*. The IUCN Red List of Threatened Species 2010: e.T55014A11238651.
- Fendt, L. 2014. Costa Rica deports a German caught smuggling over 400 frogs and reptiles in takeout containers. Article in PRI as of September 18. <https://www.pri.org/stories/2014-09-18/costa-rica-deports-german-caught-smuggling-over-400-frogs-and-reptiles-takeout>
- Furlani, D., Ficetola, G.F., Colombo, G., Ugurlucan, M. & de Bernardi, F. 2009. Deforestation and the structure of frog communities in the Humedale Terraba-Sierpe, Costa Rica. *Zoological Science* 26(3):197 – 202.
- Guayasamin, J. M. 2010. *Centrolene buckleyi*. The IUCN Red List of Threatened Species 2010: e.T54908A11220443.
- La Marca, E. & Señaris, C. 2004. *Hyalinobatrachium fragile*. The IUCN Red List of Threatened Species 2004: e.T55015A11239077.
- Martins, R. 2015. New Species of See-Through Frog Found, Looks Like Kermit. National Geographic, Article as of April 21. <https://news.nationalgeographic.com/2015/04/150421-glass-frog-kermit-discovery-animals-science-costa-rica/>
- Mendoza, A. M. & Arita, H. T. 2014. Priority setting by sites and by species using rarity, richness and phylogenetic diversity: The case of neotropical glassfrogs (Anura: Centrolenidae). *Biodiversity and Conservation*, 23 (2): 909 – 926.
- Ortega-Andrade, H. M., Rojas-Soto, O., & Paucar, C. 2013. Novel Data on the Ecology of *Cochranella mache* (Anura: Centrolenidae) and the Importance of Protected Areas for This Critically Endangered glass frog in the Neotropics. *PLoS ONE*, 8(12), e81837.
- Owen, J. 2014. See-Through Frogs With Green Bones Discovered in Peru. National Geographic, Article as of August 25. <https://blog.nationalgeographic.org/2014/08/25/see-through-frogs-with-green-bones-discovered-in-peru/>
- Solís, F., Ibáñez, R., Jaramillo, C., Chaves, G., Savage, J., Cruz, G., Wilson, L.D., Köhler, G., Kubicki, B. & Sunyer, J. 2010a. *Cochranella granulosa*. The IUCN Red List of Threatened Species 2010: e.T54964A11232691.
- Solís, F., Ibáñez, R., Chaves, G., Savage, J., Jaramillo, C., Fuenmayor, Q., Castro, F., Grant, T., Wild, E., Kubicki, B. & Köhler, G. 2010b. *Sachatamia ilex*. The IUCN Red List of Threatened Species 2010: e.T54920A11224601.
- Tahir, T. 2018. Glass hopper: Tiny frog is so SEE-THROUGH you can see eggs growing inside her. Article in Daily Mail, April 19. <http://www.dailymail.co.uk/news/article-5633773/Glass-hopper-Tiny-frog-eggs-growing-inside-her.html>
- Von May, R., Catenazzi, A., Angulo, A., Brown, J.L., Carrillo, J., Chávez, G., Córdova, J.H., Curo, A., Delgado, A., Enciso, M., Gutiérrez, R., Lehr, E., Martínez, J., Medina-Müller, M., Miranda, A., Neira, D., Ochoa, J., Quiroz, A., Rodríguez, D., Rodríguez, L., Salas, A., Seimon, T., Seimon, A., Siu-Ting, K., Suárez, J., Torres, C. & Twomey, E. 2008. Current state of conservation knowledge on threatened amphibian species in Peru. *Tropical Conservation Science*, 1: 376–396.