# LEMUR LEAF FROG

Support Proposal to include *Agalychnis lemur* in Appendix II with a zero annual export quota for wild-taken specimens traded for commercial purposes

A galychnis lemur is a moderately sized tree-frog native to Colombia, Costa Rica, and Panama. It is classified as Critically Endangered, and its population has declined 80-95% since the turn of the century. The threats facing this species include habitat loss, chytridiomycosis, climate change, and international demand for the pet trade. At CITES CoP15, the five species recognized in the genus Agalychnis by the nomenclatural standard reference valid at the time were listed on Appendix II based on their taxonomic status and similarity of appearance. At that time, A. lemur belonged to the genus Hylomantis, therefore it was not included in the Appendix II listing. It now belongs to the genus Agalychnis.

## **Proponents of Listing**

Colombia, Costa Rica, European Union, and Panama.

#### **Distribution and Habitat**

The historical distribution of A. lemur spanned the Atlantic slopes of Northwest Costa Rica towards western Panama and across the border into Colombia. However, the species has disappeared from most of its range, surviving in only a handful of locations in Limón province, Costa Rica and a few sites in west and central Panama. In 2020, the IUCN SSC Amphibian Specialist Group described the species' population as "severely fragmented." A. lemur occupies habitat near rivers in humid lowlands and primary montane forest. While it prefers undisturbed primary forest, it has also been infrequently observed in secondary forest or at forest edges.



SPECIES: Agalychnis lemur

**GENUS**: Agalychnis FAMILY: Hylidae

IUCN STATUS: Critically Endangered

MAJOR THREATS: Habitat degradation,

chytridiomycosis

ADDITIONAL THREATS: International trade, climate

RANGE: Colombia, Costa Rica, Panama

#### At Risk of Extinction in the Wild

The IUCN classifies A. lemur as "Critically Endangered." It is threatened by widespread habitat loss and fragmentation, mainly from deforestation and illegal mining. It is also threatened by the fungal disease chytridiomycosis caused by Batrachochytrium dendrobatidis (Bd). The international demand for the pet trade and climate change have also contributed to the species' decline and continue to present risks to their survival. The combined impact of these threats, all of which continue to adversely impact the species, has caused A. *lemur* populations to plummet over the past two decades.

#### **International Pet Trade**

Due to the drastic population declines of A. lemur caused by habitat loss and chytridiomycosis, international trade is an important additional threat to this critically

















endangered species. While data on current trade in the species is lacking, international trade has negatively impacted *A. lemur* and is still occurring. Some of this international trade is reported to come from captive populations, but the true nature of the trade is not fully understood. As a result of the steep decline of *A. lemur* in the wild, and the current threats to wild populations, it is critical that all trade is proven to be non-detrimental to populations in the wild. In this context, every precaution must be taken to ensure that international demand does not contribute to or lead to the species extinction.

### **Habitat Loss and Fragmentation**

Habitat degradation presents a serious threat to this treefrog due to the species' preference for primary forest. Multiple anthropogenic factors have contributed to the degradation of *A. lemur* habitat, including deforestation, illegal mining, agriculture, and livestock ranching. Habitat is in decline across the species' range.

### Chytridiomycosis

Chytridiomycosis is another main threat to *A. lemur*. The disease, which infects amphibians through the skin and disrupts its functions (it allows frogs to breath and regulate moisture), can lead to cardiac arrest and death. It is a prominent threat to amphibians worldwide.

### **Climate Change**

The aforementioned threats to *A. lemur* species may be further aggravated by climate change. The exact mechanisms by which climate change will affect these populations remain unknown.

### **Support this Proposal**

A. lemur is threatened by habitat degradation, chytridiomycosis, international demand for the pet trade, and climate change. These compounding threats put the species at significant risk and have caused dramatic population declines over the past two decades. Due to its IUCN status of "Critically Endangered" and the significant population decrease it has experienced, a precautionary approach requires that this species be listed under CITES Appendix-II with a zero annual export quota for wild-taken specimens traded for commercial purposes.

#### References

This fact sheet is a summary of the proposal to include *A. lemur* under Appendix II of CITES. The full proposal can be found on the CITES webpage: <a href="https://cites.org/sites/default/files/eng/cop/19/prop/as-received/E-Agalychnis-lemur.pdf">https://cites.org/sites/default/files/eng/cop/19/prop/as-received/E-Agalychnis-lemur.pdf</a>

Gratwicke, B. (2018). *Agalychnis lemur* from ABG. <a href="https://www.flickr.com/photos/briangratwicke/41362">https://www.flickr.com/photos/briangratwicke/41362</a> 854065