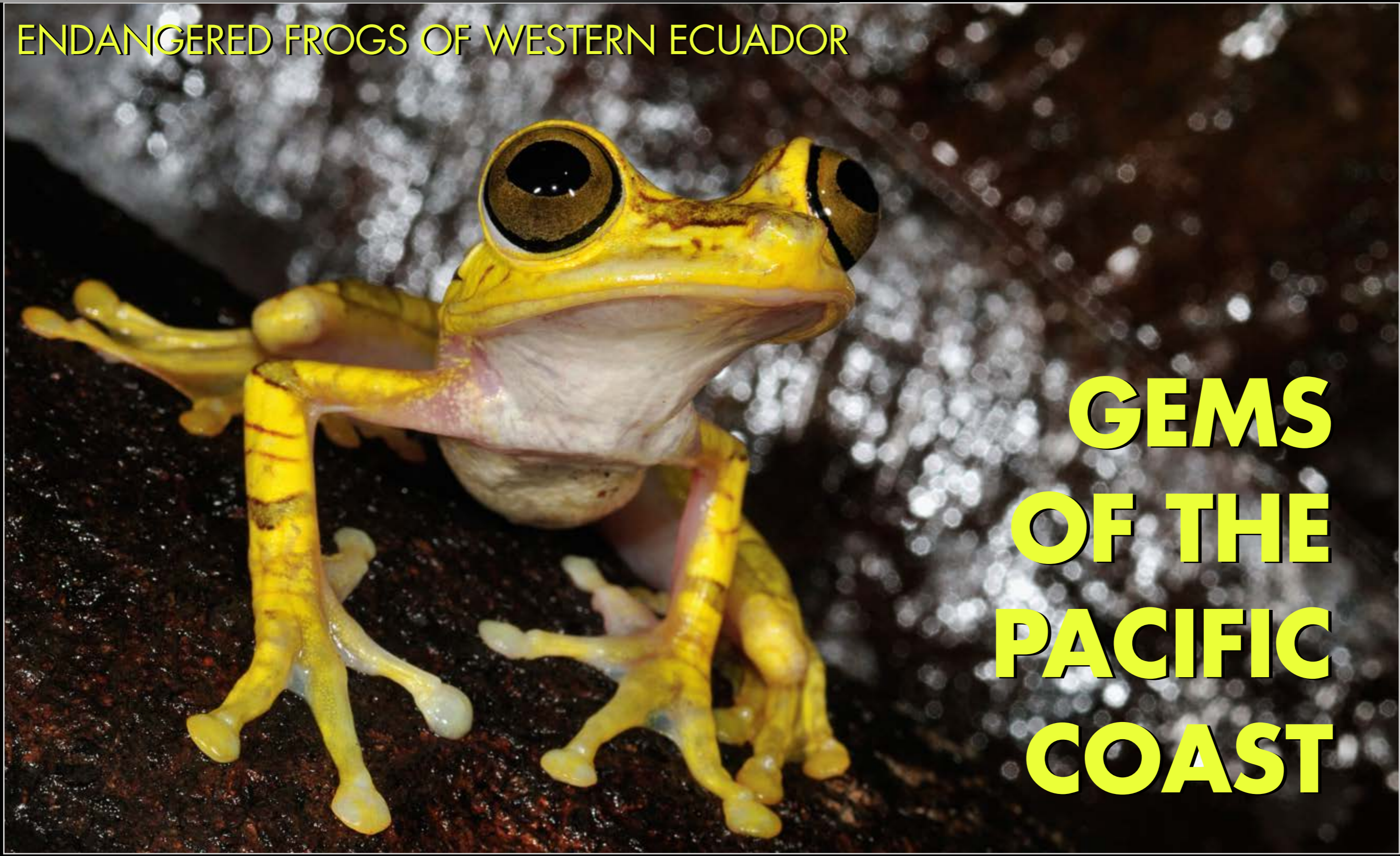


Beauty of the Beast

ENDANGERED FROGS OF WESTERN ECUADOR



**GEMS
OF THE
PACIFIC
COAST**

Often dangerously poisonous, usually very tiny, almost always exceptionally colorful, the frogs of the Ecuadorian Pacific Coast are all severely threatened



Agalychnis spurrelli

The Gliding tree frog *Agalychnis spurrelli* is a species of frog in Hylidae family. It is found in Colombia, Costa Rica, Ecuador, and Panama. Other common names are the Gliding leaf frog and Spurrell's leaf frog. On the title page, Imbabura tree frog *Hypsiboas picturatus*, a species in the Hylidae family found in the Pacific lowlands of western Colombia and northwestern Ecuador.

TEXT BY LUCAS M. BUSTAMANTE - TROPICAL HERPING
PHOTOS BY ANDREA & ANTONELLA FERRARI



Ceratophrys stolzmanni

The Pacific horned frog is a highly cryptic species in the *Ceratophryidae* family found in Ecuador and Peru.

The tropical regions hold the vast majority of biodiversity on Earth. Among all tropical countries, one of the jewels is Ecuador. Smaller than Arizona state, this tiny country holds the main ecosystems that we can find in South America, such as the Amazon, Andes, Pacific Coast, Galápagos. This, in addition with its eternal spring weather, makes easy to find tons of animal species all over the country. Among vertebrates, the most threatened group is the amphibians: climate change, emerging diseases, pollution, habitat loss are the most important factors for their decline. Inside Ecuador, we have two of the best places in the world to find the best of the best in amphibian diversity. One of them is the famous Yasuni National Park, arguably the most biodiverse area on Earth, and the other is Ecuadorian Pacific Coast, with the Chocó-Magdalena region, one of 25 global hotspots. This means that in addition to the massive number of species (many of them endemics), we have almost the same number of threats: in this case, oil palm crops, logging and deforestation. Yasuni also has its threats for this insane biodiversity: oil exploitation, wildlife trafficking, deforestation and colonization. It is easy to recognize the richness and biodiversity in tropical countries, but it is not as common to associate this biodiversity with their threats. If we don't do this, people will think that all is perfect with conservation and we don't need to care or raise awareness about its problems. Ecuador not only boasts almost 8% of all amphibian diversity, but is also number 1 in the list of countries with most endangered species, the vast majority of them, amphibians. Ironically! With this quick intro, I want to introduce you to some of the magical frogs of the Ecuadorian pacific coast forests, of which less than 5% remain intact. Can you imagine those forests without all these colorful critters jumping all over? I really cannot. It would not be a loss for Ecuadorians only, but for all mankind. But we can always find a light at the end of the tunnel: some conservation organizations, universities, and NGOs, are doing their best to preserve what we left. www.savethechoco.org, www.fjocotoco.org, www.otonga.org, www.anfibioswebecuador.ec are the most renowned in the fight by now. But conservation is not just an organizations deal, it can start with each of us: taking a look where the wood for our furniture came from, not purchasing exotic animals coming from the pet trade, trying to avoid products with palm oil, educating the new generations about the importance of these forests, are some of the ideas that come to my mind now. Small things that can create huge differences, making us actors of the conservation of tropical areas. We have to act now; we are already late... but still with just enough time to change the course of what we have left!



Oophaga sylvatica

Oophaga sylvatica, sometimes known by its Spanish name *diablito*, is a species of frog in the Dendrobatidae family found in southwestern Colombia and northwestern Ecuador. Its natural habitat is lowland and submontane rainforest; however, it can survive in moderately degraded areas, at least in the more humid parts of its range.



Agalychnis spurelli

The natural habitats of this species are subtropical or tropical moist lowland forests and intermittent freshwater marshes. It is threatened by habitat loss.



Hypsiboas picturatus

The natural habitats of this stunning species are humid tropical and premontane forests, including secondary forests with a closed canopy. It lives on vegetation close to streams.



Oophaga sylvatica

Like many dendrobatid frogs, *Oophaga sylvatica* is toxic, and this toxicity is advertised by bright warning coloration. Populations of this tiny but visually striking frog are highly polymorphic in coloration, ranging from dull brown to bright red to orange with spots of yellow.



Epipedobates sp.

Epipedobates is a genus of poison dart frogs native to northern South America (Colombia and Ecuador) west of the Andes, including the western slopes.



Oophaga sylvatica

A very common frog in Colombia but has disappeared from much of its Ecuadorian range. It is threatened by habitat loss (deforestation) and agricultural pollution.



Oophaga sylvatica

This is a large poison frog, with some adults reaching 35mm in length. Like many *Oophaga*, it exhibits a high variability of color and pattern phenotypes among populations. Patterns of spotting, marbling, and reticulation, as well as solid body color, are all present. These patterns are seen in combinations of white, yellow, orange, red, bronze, black and light blue.



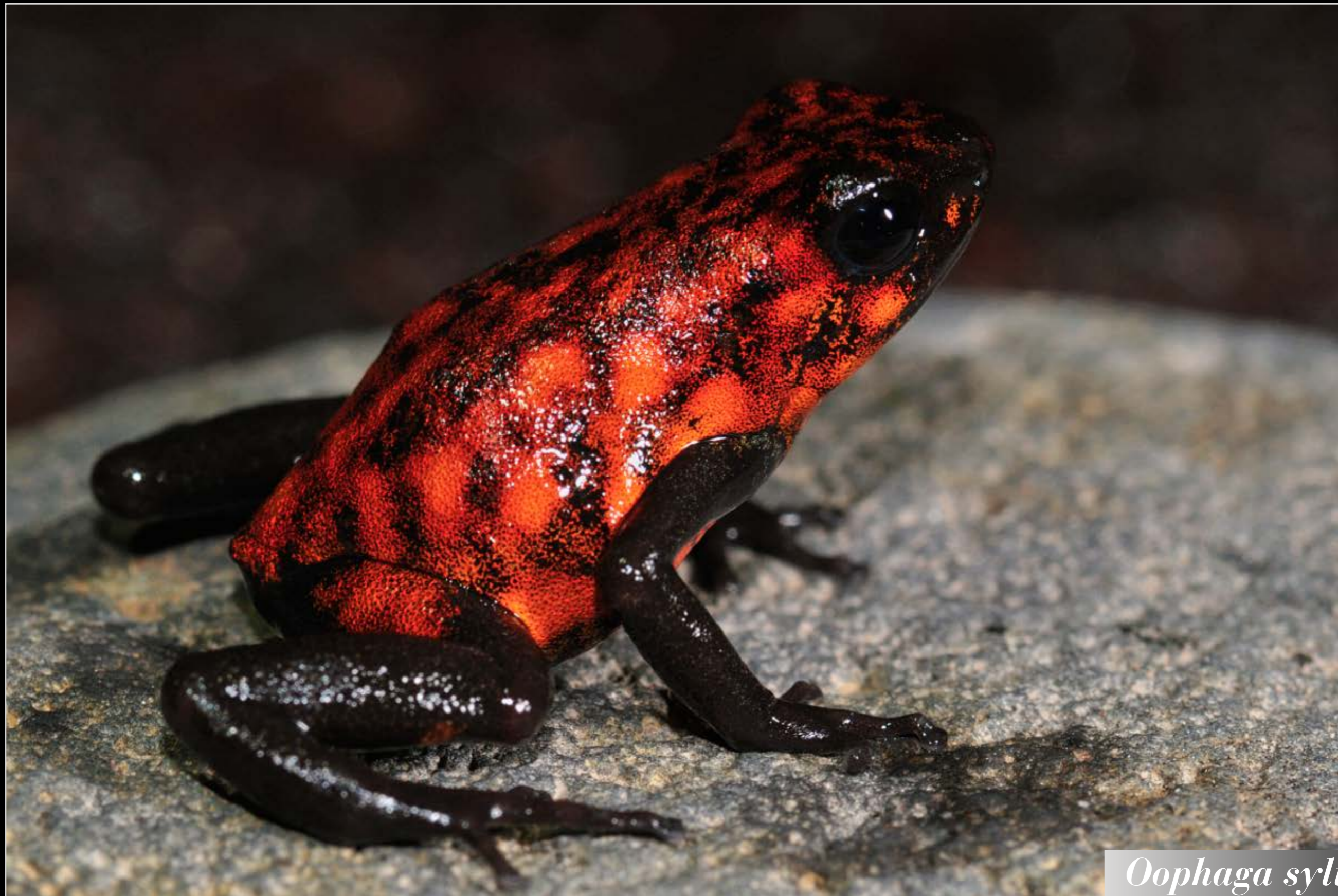
Ceratophrys stolzmanni

The habitat where some individuals of the Pacific horned frog have been collected can be described as tropical scrub, which is usually fairly open with a few trees, but remains green for about half the year. Other specimens have been collected in an open and sandy desert, with scattered, low, desert vegetation, and trees that are absent except in or near temporary streambeds.



Agalychnis spurelli

The Gliding tree frog grows to a snout to vent length of 48 to 56 mm (1.9 to 2.2 in) for males and 60 to 72 mm (2.4 to 2.8 in) for females. The head is broad and the eyes are large, with reticulated lower eyelids. The body is slim with smooth skin on the dorsal surface and limbs and granular skin on the belly. The limbs are slim and the fingers and toes have adhesive discs.



Oophaga sylvatica

Oophaga, Greek for "egg eater", describes the tadpoles' diet. The tadpoles feed on unfertilized eggs supplied as food by the mother. After a parent transports newly-hatched tadpoles to a tiny water reservoir (often a bromeliad), the mother returns periodically and lays unfertilized eggs, on which the tadpoles feed until they are ready to metamorphose and leave the water.



Oophaga sylvatica

Because of their rearing behavior, some of the *Oophaga* species are among the most difficult poison dart frogs to breed successfully in captivity. As a result, they are not widely available, and those which are available may be of questionable origins. Captive bred froglets are occasionally available to very experienced keepers.



Hypsiboas picturatus

An uncommon species. Threats to it likely include habitat loss from agricultural development (including illegal crops, logging, and human settlement) and pollution.



Oophaga sylvatica

Illegal collection & exportation of these frogs has decimated the wild population. *O. sylvatica* is listed on the IUCN redlist as NT Near Threatened due to deforestation.



Ceratophrys stolzmanni

The beautiful green morph of the Pacific horned frog. This is a very rare species, but it has been recorded in the last few years in Ecuador. There is no information on its population status in Peru. The major threat is habitat loss due to agriculture (especially cattle ranching), logging, and human settlement. Soil pollution, due to agrochemicals, also represents a threat.



Oophaga sylvatica

O. sylvatica is primarily found in very humid rainforest habitats and mostly encountered on the forest floor in thick leaf litter. It needs water-containing plants such as bromeliads for successful breeding and these are sometimes found meters above the forest floor. They regularly hunt in between the large fallen leaves where they find ants, termites, small beetles and other small arthropods.



Hypsiboas picturatus

Males measure 46–53 mm (1.8–2.1 in) and females 62–69 mm (2.4–2.7 in). Eyes are extremely large with yellow iris. Snout is truncated. The skin on the back is smooth and belly is slightly granular. Dorsal colouration is variable but generally with a reddish brown background with round yellow marks. Some individuals have dark brown back with brown markings.