Slithering towards extinction: Almost 1 in 5 reptiles are struggling to survive

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Nineteen percent of the world's reptiles are estimated to be threatened with extinction, states a paper published today by the Zoological Society of London (ZSL) in conjunction with experts from the IUCN Species Survival Commission (SSC).

The study, printed in the journal of Biological Conservation, is the first...
of its kind summarising the global conservation status of reptiles. More than 200 world renowned experts assessed the extinction risk of 1,500 randomly selected reptiles from across the globe.

Out of the estimated 19% of reptiles threatened with extinction, 12% classified as Critically Endangered, 41% Endangered and 47% Vulnerable.

Three Critically Endangered species were also highlighted as possibly extinct. One of these, a jungle runner lizard *Ameiva vittata*, has only ever been recorded in one part of Bolivia. Levels of threat remain particularly high in tropical regions, mainly as a result of habitat conversion for agriculture and logging. With the lizard's habitat virtually destroyed, two recent searches for the species have been unsuccessful.

Dr. Monika Böhm, lead author on the paper: "Reptiles are often associated with extreme habitats and tough environmental conditions, so it is easy to assume that they will be fine in our changing world.

"However, many species are very highly specialised in terms of habitat use and the climatic conditions they require for day to day functioning. This makes them particularly sensitive to environmental changes," Dr. Böhm added.

Extinction risk is not evenly spread throughout this highly diverse group: freshwater turtles are at particularly high risk, mirroring greater levels of threat in freshwater biodiversity around the world. Overall, this study estimated 30% of freshwater reptiles to be close to extinction, which rises to 50% when considering freshwater turtles alone, as they are also affected by national and international trade.

Although threat remains lower in terrestrial reptiles, the often restricted ranges, specific biological and environmental requirements, and low
mobility make them particularly susceptible to human pressures. In Haiti, six of the nine species of Anolis lizard included in this study have an elevated risk of extinction, due to extensive deforestation affecting the country.

Collectively referred to as 'reptiles', snakes, lizards, amphisbaenians (also known as worm lizards), crocodiles, and tuatars have had a long and complex evolutionary history, having first appeared on the planet around 300 million years ago. They play a number of vital roles in the proper functioning of the world's ecosystems, as predator as well as prey.

Head of ZSL's Indicators and Assessment Unit, Dr Ben Collen says: "Gaps in knowledge and shortcomings in effective conservation actions need to be addressed to ensure that reptiles continue to thrive around the world. These findings provide a shortcut to allow important conservation decisions to be made as soon as possible and firmly place reptiles on the conservation map,"

"This is a very important step towards assessing the conservation status of reptiles globally," says Philip Bowles, Coordinator of the Snake and Lizard Red List Authority of the IUCN Species Survival Commission. "The findings sound alarm bells about the state of these species and the growing threats that they face globally. Tackling the identified threats, which include habitat loss and harvesting, are key conservation priorities in order to reverse the declines in these reptiles."

The current study provides an indicator to assess conservation success, tracking trends in extinction risk over time and humanity's performance with regard to global biodiversity targets.

ZSL and IUCN will continue to work with collaborating organisations to ensure reptiles are considered in conservation planning alongside more
charismatic mammal species.

Provided by Zoological Society of London

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