

## Reptiles at risk: Why does we need to talk about it?



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### *Abstract*

In recent decades, many species have shifted their geographic ranges, seasonal activities, migration patterns, abundances and interactions in response to changes in the world's climatic system. Projections of future climate change are uncertain, but the Earth's warming is likely to exceed 4.8°C by the end of 21st century. Predicting the potential future risks to biodiversity caused by climate change has become an extremely active field of research, and several studies in the last two decades had focused on determining the negative impacts of climate change on reptiles at global, regional and local level. But why reptiles are so vulnerable to climate change? What is the importance of these animals and why should we preserve them? Here we aim to describe the main factors contributing to the vulnerability of lizards and snakes to climate change and their role on the ecosystems they are inserted. We also highlight the importance of an integrative approach including biological, bioclimatic and environmental variables to buffer the

climate change effects on this group through the application of consistent and truly effective strategies for species conservation. Finally, we indicate areas with high spatial diversity of vulnerable species around the globe, indicating targets for conservation at a larger scale and helping to determine conservation areas at a small scale.

### *Biography*

Luisa Maria Diele-Viegas has completed her PhD in Ecology and Evolution at the age of 27 years from Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brazil, in 2019. She is a post-doctoral associated at the department of Biology of the University of Maryland, College Park, MD, United States. Her research has been focused on the impacts of climate change on tropical environments, biodiversity conservation and scientific communication. She has published several papers in reputed journals and has been given presentations regarding this topic in several conferences and events around the world.