Impact of climate change on mammals and birds 'greatly under-estimated'
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Mountain gorillas are among the many species the authors found are already impacted by climate change. Credit: Liana Joseph

An international study published today involving University of Queensland research has found large numbers of threatened species have already been impacted by climate change.

Associate Professor James Watson of UQ’s School of Earth and Environmental Sciences and the Wildlife Conservation Society said alarmingly, the team of international researchers found evidence of observed responses to recent climate changes in almost 700 birds and mammal species.

"There has been a massive under-reporting of these impacts," he said.

"Only seven per cent of mammals and four per cent of birds that showed a negative response to climate change are currently considered ‘threatened by climate change and severe weather’ by the International Union for the Conservation of Nature Red List of Threatened Species."

Associate Professor Watson said the study reviewed the observed impacts of climate change on birds and mammals using a total of 130 studies, making it the most comprehensive assessment to date on how climate change has affected our most well studied species.

"The results suggested it is likely that around half the threatened mammals (out of 873 species) and 23 per cent of threatened birds (out of 1272 species) have already responded negatively to climate change," he said.

Lead author Michela Pacifici of the Global Mammal Assessment Program at Sapienza University of Rome said this implied that, in the presence of adverse environmental conditions, populations of these species had a high probability of also being negatively impacted by future climatic changes.

Associate Professor Watson said the study clearly showed that the impact of climate change on mammals and birds to date has been greatly under estimated and reported on.

"This under-reporting is also very likely in less studied species groups. We need to greatly improve assessments of the impacts of climate change on all species right now," he said.

"We need to communicate the impacts of climate change to the wider public and we need to ensure key decision makers know significant change needs to happen now to stop species going extinct.

"Climate change is not a future threat anymore."

The paper was published in the journal Nature Climate Change.

More information: Species' traits influenced their response to recent climate change, Nature Climate Change, nature.com/articles/doi:10.1038/nclimate3223