

Lions in west and central africa apparently unique

August 12 2016

Lions in West and Central Africa form a unique group, only distantly related to lions in East and Southern Africa. Biologists at Leiden University confirm this in an article published in *Scientific Reports*.

Genetic data

In this study, the researchers gathered a genetic dataset of [lion populations](#) covering a total of 22 countries. This included samples from each remaining lion population in West and Central Africa, a region where lions and other wildlife are rapidly declining as a consequence of the increasing human population. The researchers managed to gather all the information by teaming up with other people in the field and local conservationists.

300,000 years ago

Based on the [genetic data](#), it was estimated that the split between the two major groups that can be identified in the lion must have occurred 300,000 years ago. To explain what happened in their evolution, the researchers made a reconstruction of African climatological history. It seems that periodic expansions of the rain forest and the desert drove lions into isolated pockets of suitable habitat, where the different genetic lineages originated that can still be observed today.

Other mammals

This influenced not only the patterns we observe in the lion, but also in other large mammals such as giraffe, buffalo, hartebeest, cheetah and spotted hyena. A general pattern is emerging that shows that many large African savannah mammals show very similar arrangements, with unique lineages in West and Central Africa.

Reason for concern

The strong declines in wildlife populations in large parts of West and Central Africa are therefore a reason for major concern. The fact that this region seems to harbour a lot of unique [genetic](#) lineages makes conservation in the area extremely important. A delegation from Leiden University will participate in the IUCN World Conservation Congress in September 2016, and will lead a Side Event that aims to establish a Species Action Plan for West and Central Africa. The researchers hope that this will facilitate coordination and funding of projects in the region.

More information: L.D. Bertola, H. Jongbloed, K.J. van der Gaag e.a. *Scientific Reports*, 4 August 2016

Provided by Leiden University

Citation: Lions in west and central africa apparently unique (2016, August 12) retrieved 10 April 2024 from <https://phys.org/news/2016-08-lions-west-central-africa-apparently.html>

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