

## Armed conflicts in Sahara and Sahel endangering wildlife in the region

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Research news

An international study, involving researchers from the University of Granada, has established that the escalation of armed conflicts in the Sahara-Sahel region is leading to a dramatic population decline of species such as the African elephant and dorcas gazelle. The research paper calls for greater emphasis on environmental factors in the peace process initiatives that aim to bring an end to the conflicts.

According to the study, led by the Research Centre in Biodiversity and Genetic Resources (CIBIO-InBIO) at the University of Porto, the increase in the number of armed conflicts and other factors in the Sahara-Sahel region in Africa is accelerating the population decline of endangered local animal species. Specifically, the rise in the number of firearms available, the over-exploitation of resources, and human intervention in previously remote areas have resulted in the extinction or near-extinction of 12 of the 14 species of large vertebrates in the region.



Hunting of wild gazelles in the Sahara

Published in the prestigious scientific journal Conservation Letters, the study involved the collaboration of 20 international academic institutions, including the UGR, represented by Juan M. Pleguezuelos Gómez, a professor at the Department of Zoology.

The Sahara-Sahel region is vast and stretches over several countries, among them Algeria, Burkina Faso, Chad, Egypt, Eritrea, Libya, Mali, Morocco, Mauritania, Nigeria, Senegal, Sudan and Tunisia. In order to obtain useful data, the scientists mapped the spatial and temporal occurrence of conflicts and other threats to local wildlife in the region, such as the exploitation of natural resources. Next, they contrasted these threat factors with the distribution and decline of large endangered animal species, including gazelles, addax, antelopes and African elephants.

The researchers warn that armed conflicts in the region, which have been escalating since 2011 and now represent 5 per cent of all conflicts in the world, are wiping out animal species such as the African elephant and dorcas gazelle at an alarming rate. “Likewise, oil drilling in the region has given rise to the progressive extinction of the addax, a type of antelope, underscoring a catastrophic decline in fauna in this part of Africa”, the team point out.

The data collected also supports the theory that illegal animal hunting is more common in regions already affected by human trafficking, terrorism and organised crime. “There’s a vicious circle connecting arms trafficking, conflicts, migration and the extinction of animal species”, they explain, also condemning the negative impact of EU and US military interventions in Libya.

## How do we stop the slaughter?



Gazelles grazing in grasslands in Chad following their release into the wild

The study concludes that local fauna can be protected by raising awareness about the situation, encouraging sustainable resource exploitation and by imposing sanctions on those who do not abide by the regulations designed to protect the wildlife. It warns, though, that these proposed measures must be implemented as a matter of urgency to prevent a major environmental disaster.

José Carlos Brito, the principal investigator of the project, points out that: “Areas where fauna is seriously endangered due to the rise in conflicts need to be identified, and effective policies need to be implemented in order to reduce the impact of these conflicts on biodiversity.”

In terms of immediate interventions which would help to achieve the necessary changes, the researchers call for “the introduction of environmental factors into peace strategies, the disarmament of civilians and extremist groups, and restrictions on the purchase of firearms and ammunition.” The most important message this study sends, however, is that the issue can only be tackled by achieving a greater balance between environmental preservation and socio-economic development.

**The full paper is available via this link:**

Brito JC, Durant SM, Pettorelli N, Newby J, Canney S, Algadafi W, Rabeil T, Crochet PA, Pleguezuelos JM et al. (2018) Armed conflicts and wildlife decline: Challenges and recommendations for effective conservation policy in the Sahara-Sahel. Conservation Letters. DOI: 10.1111/conl.12446



The UGR researcher Juan M. Pleguezuelos (first from left) in the Sahara with other members of the research team (Photo: Mónica Feriche)

**Contact information:**

Juan Manuel Pleguezuelos Gómez

<http://www.ugr.es/en>

Department of Zoology of the University of Granada

Phone: +34 958 243 082

Email: @email