

Violence in Mali threatening survival of endangered elephants

December 12 2012

University of British Columbia and Oxford University researchers have revealed the secrets of survival of an endangered population of African elephant in the unforgiving Sahara desert, and suggest that recent violence in Mali may be putting the animals at risk.

A two-year study, to appear in January's edition of [Biological Conservation](#), tracked the elephants' migration with [Global Positioning System](#) (GPS) collars. Its findings advance conservation efforts for the animals, which are facing increased [armed conflict](#) in Mali between government forces and Touareg rebels.

"In recent years, the Mali elephants have largely managed to maintain their numbers in extreme natural conditions of heat and drought," says lead researcher Jake Wall, a UBC Dept. of Geography PhD candidate, whose study received support from Save The Elephants, a Kenya-based conservation group. "The uprising occurring in northern Mali puts them at greater risk, as does increasing [human settlement](#) in their traditional territory and the growing risk of ivory poaching."

The study focused on the Gourma elephants of Mali's northern region, which are arguably the world's toughest elephants. The desert-adapted species frequently endure sand storms, water shortages, and temperatures over 50 degrees Celsius (122 Fahrenheit). Hunting, drought and climate changes have reduced their population to an estimated 350 elephants.

The study reveals the elephants travel more than 32,000 square kilometers annually in search of food and water – the largest area ever recorded for any elephant species.

The elephants spend concentrated periods in several key areas and rely on a network of pathways, including a critical sandstone passage known as "la Porte des Elephants." The study identifies 10 "hot spots" essential for their survival that should be protected for conservation purposes.

Backgrounder: Ivory poaching

Gourma elephants have largely been spared from the ivory poaching crisis ravaging elephant populations across Africa, but at least three have been killed this year. Profits from the illegal ivory trade are believed to fuel terrorist groups like Al-Shabaab, the Janjaweed and the Lord's Resistance Army, experts say.

An anti-poaching initiative by the International Conservation Fund of Canada and the WILD Foundation is engaging local communities and national foresters in defense of elephants, says co-author Iain Douglas-Hamilton, an Oxford University zoology researcher and founder of Save the Elephants.

Backgrounder: Gourma elephants

Gourma elephants are believed to be the northernmost population of elephants in the world. They have historically enjoyed relatively peaceful coexistence with the local Touareg, Fuhlani and Dogon peoples, but conflict between humans and elephants over space and resources are increasing as local peoples shift from pastoralism to agriculture settlements.

A surprise study finding is that male and female elephants share only a quarter of their ranges. "We think the difference is partly because of their tolerances towards people," Wall says. "Bulls generally take more risks and occupy areas that have higher human densities. They also have varying food strategies and we think that differences in the areas they occupy might be because of different vegetation types in those areas."

Although Gourma elephants walk similar linear distances to their East and Southern African relatives, their movements are spread out over an area 150 per cent larger than those reported in Namibia, and 29 per cent larger than [elephants](#) in Botswana. Researchers believe their epic migration is due to the scarcity of food and water in the region, and suggest it may be forced to expand further as resources become scarcer.

Provided by University of British Columbia

Citation: Violence in Mali threatening survival of endangered elephants (2012, December 12) retrieved 27 April 2024 from

<https://phys.org/news/2012-12-violence-mali-threatening-survival-endangered.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--