

# Hot dogs: Is climate change impacting populations of African wild dogs?

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Climate change may be harming the future of African wild dogs (*Lycaon pictus*) by impacting the survival rates of pups, according to one of the first studies on how shifting temperatures are impacting tropical species.

Led by scientists from ZSL (Zoological Society of London) and published in the *Journal of Animal Ecology*, the study highlights how African [wild dogs](#) - already classified as Endangered by the IUCN Red List - raise fewer pups at high temperatures.

Three concurrent studies, undertaken by ZSL, the Botswana Predator Conservation Trust, and the African Wildlife Conservation Fund, monitored a total of 73 wild dog packs at sites in Kenya, Botswana and Zimbabwe, over a combined 42 years of study.

Tracking with high-tech collars showed that wild dog packs spent less time hunting on hot days. When packs tried to raise pups in hot weather, more of the pups died, potentially because they received less food from individuals returning from hunts.

At the Botswana site, temperatures increased steadily over 24 years of monitoring. The average daily maximum temperature during the pup-rearing period was roughly 1°C higher in the first 12 years of monitoring than in the second 12 years, and over the same period the average number of pups surviving per pack per year fell from five to three.

The study's lead author, Professor Rosie Woodroffe of ZSL's Institute of

Zoology, said: "Our study shows the truly global impact of [climate change](#). When most people think about wildlife in a changing climate, they think of polar bears clinging to melting ice, but even species who have adapted to tropical weather are being impacted by the changes to their environment.

"Worryingly, this new threat may be affecting wild [dogs](#) deep inside wildlife areas where we would expect them to be protected from human impacts. With habitat fragmented and destroyed in cooler areas, wild dogs have literally nowhere to go. Sadly, climate change may bring extinction a step closer for this amazing species.

"Now our team at ZSL is focused on identifying conservation actions which might reduce these climate impacts on wild dogs, and working out where they are most needed."

African wild dogs are one of the world's most endangered carnivores and their populations are in decline, with estimates suggesting that fewer than 700 packs currently remain in the wild.

Although considered one of the most successful predators on Earth due to the high kill-rate their cooperative hunting achieves, African wild dog populations are declining due to pressures including habitat loss and human-wildlife conflict.

Building on this study's findings, ZSL is conducting further research to explore whether and how [climate change](#) impacts on wild dogs might be mitigated. Find out more about ZSL's conservation efforts for African wild dogs at <http://www.zsl.org/cheetahandwilddog>.

**More information:** *Journal of Animal Ecology* (2017). [DOI: 10.1111/1365-2656.12719](https://doi.org/10.1111/1365-2656.12719)

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