

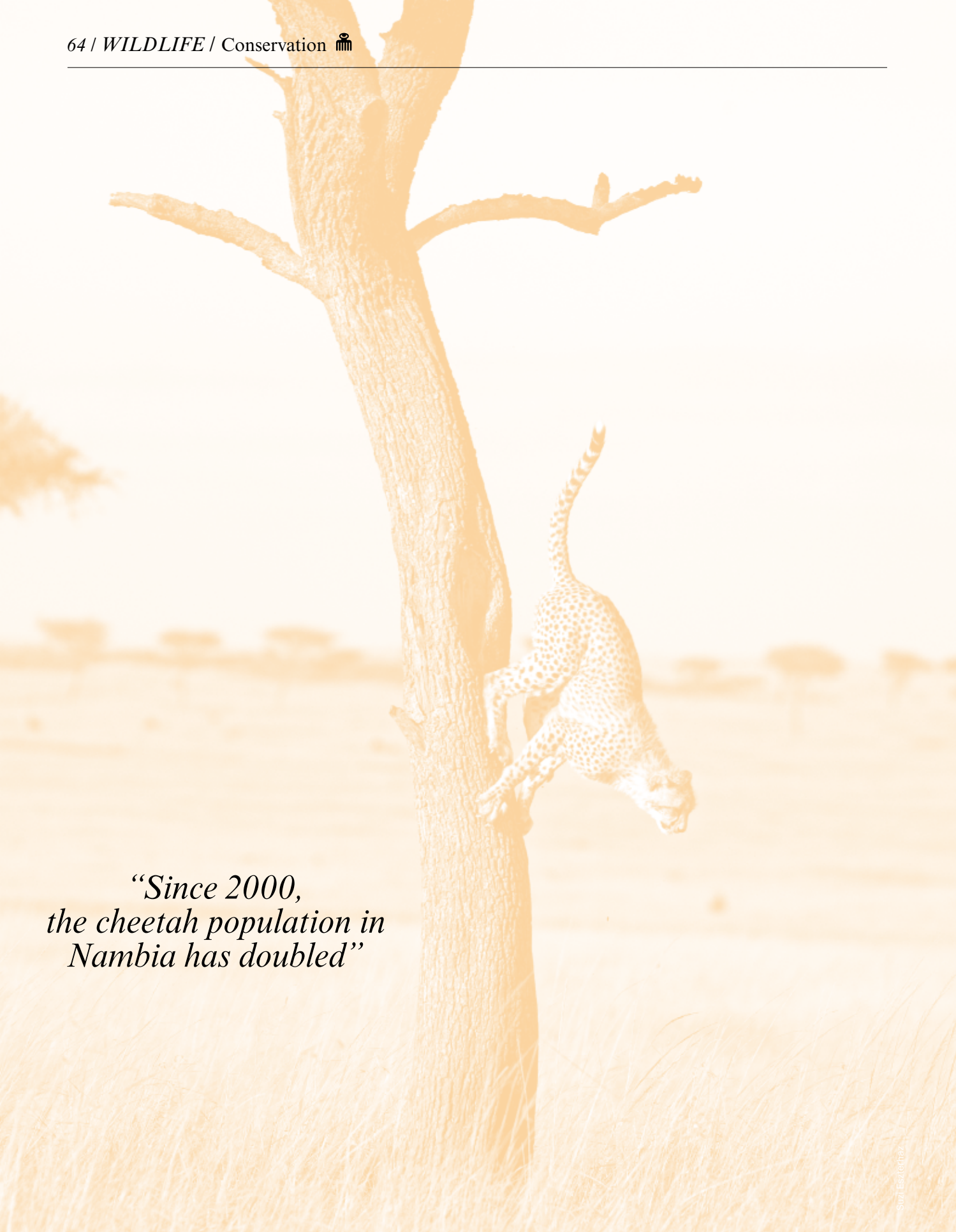
RACE TO SAFETY

With its population in free fall, the CHEETAH is facing an uncertain future. But HELP IS AT HAND in Africa.

text Ben Clark



Getty Images



*“Since 2000,
the cheetah population in
Namibia has doubled”*

Suzi Eszterhaz



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THE DECLINE of the cheetah is not a recent event. It began during the last Ice Age (12,000 years ago) when the cheetah was forced to migrate from North America to Asia and Africa with very few numbers, leaving the species genetically the same. With a 112 km/h top speed and average hunting speed of 64 km/h this cat is the fastest land animal. An ability to move quickly might explain why it's able to roam over vast areas – 1,500 sq km – to access more prey and thrive. The loss of genetic diversity and reduced habitat had a significant effect on the animal's wellbeing.

MODERN MEDICINE

The advancement of science and medicine has provided this insight, which is contributing to effective cheetah conservation efforts today, especially in Africa where the Cheetah Conservation Fund (CCF) – in Namibia – is leading the charge. Research published in journal *Genome Biology* two years ago found that the last Ice Age triggered a reduction in the cheetah's gene pool, mainly due to inbreeding. To make this discovery, a group of researchers at Saint Petersburg University in Russia (in a combined effort with the CCF) sequenced the

genome of a Namibian cheetah. A news release from Biomed Central explains that 18 cheetah genes showed mutations. One gene in particular, AKAP4, showed many mutations, which could harm sperm development and may explain why the cheetah has low reproductive success.

“The research myself and the CCF collaborators have been conducting for over 30 years has shown us the hurdles our conservation efforts need to surpass to save the cheetah,” says Dr Laurie Marker, Founder and Executive Director of the CCF.

“Mapping the cheetah genome increases our understanding of this species' problematic evolutionary path, which includes its lack of genetic diversity and population bottlenecks. With this insight, and the support of the governments and communities where cheetahs live, we can try to overcome these challenges and save the cheetah for future generations.”

HUMAN INTERFERENCE

This phenomenon is by no means isolated to a change in climate. Human influence is also partly to blame. In Ancient Egypt, cheetahs were tamed and used as pets for hunting by the

aristocracy. This reduced the wild population even further, as cheetahs do not breed well in captivity. Evidence of this taming is found in the Punt reliefs at the Dayr al-Bahri tombs near Thebes. According to Thomas T. Allsen in *Contact and Exchange in the Ancient World*, an expedition sent during the reign of the pharaoh queen Hatshepsut to the horn of Africa brought back cheetahs on leashes. Allsen goes on to explain their use as hunters. “In the era of the Umayyad (AD661-750) and Abbasid (AD750-1258) caliphates, hunting with cheetahs was a popular pastime for the political elite throughout the Middle East.” A burial mound discovered in India – dated 2300BC – contained further evidence. According to Jonathan Kingdon in *East African Mammals IIIA*, “A silver vase found at Maikop in the Caucasus is decorated with the representation of a cheetah wearing a collar.” Charity Big Cat Rescue explains that Akbar the Great of India (AD1555-1600) had a collection of an estimated 6,000 cheetahs, which only produced one litter each year.

It's difficult to know just how pervasive human interference was but this evidence suggests that it was >



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Piper Mackay

notable at certain times in human history. And given that the effect of confinement to fewer continents was already dire for the maintenance of this species, living in human compounds hardly improved the situation.

OLD HABITS DIE HARD

Modern industrialisation has led to a reclaiming of large areas of cheetah habitat for urbanisation and farming. Further human interference manifests here. Farmers shoot cheetahs to protect their livestock. “In Namibia during the 1970s and 1980s, farmers removed 800-900 cheetahs from the landscape per year, considering them to be ‘worthless vermin’ and a threat to livestock,” says Dr Marker.

This species has lost over 90 percent of its numbers in the last 100 years. Asian cheetahs have been mostly wiped out, while the African population of just over 7,000 – the main remaining cheetah population in the world – is dwindling.

A NEW HOPE

However, since establishing the CCF in 1990, Dr Marker has been developing strategies to stabilise cheetah numbers. From the 1970s to 1990 the population

halved. Since the CCF came to Namibia it has doubled – mainly from 2000-2017 – from 1,500 to 3,000. Now, via the Future Farmers of Africa programme, she’s teaching farmers techniques to manage their livestock on the lands they share with wildlife. Key to this is the Livestock Guarding Dog Programme, which uses special dog breeds to ward off cheetahs, saving them from a bullet. Farmers have reported an 80 percent drop in livestock losses. The programme is in high demand (there’s a two-year waiting list the CCF hopes to reduce) and it has already been established in South Africa, Botswana and Tanzania using dogs from the CCF. Remarkably, in Tanzania, one of Dr Marker’s former research assistants is using these dogs to protect livestock from lions (and other predators).

Dr Marker has also created a clinic and conservation genetics research lab, for on-site cheetah research. She shares these facilities with scientists from other conservation organisations studying many predator species, including researchers from Action for Cheetahs in Kenya (ACK), a sister charity she helped launch. Mary Wykstra, a long-time collaborator of Dr Marker’s, leads ACK

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and together they are developing new initiatives with a view to stabilising cheetah populations across the species range in Africa. In terms of spreading awareness and increasing funding, the CCF has long made its Field Research and Education Centre available to the public and has just opened an ecolodge for tourists.

REDOUBLING EFFORTS

These organisations’ dedication to saving the cheetah is not the end of the story. What they do requires outside help from individuals. Assisting with the cause in this respect is acclaimed actress and activist Gillian Anderson who has made a short film about the plight of the cheetah and what can be done to help the CCF (cheetah.org). “The race is on to save the cheetah and with your help we can win,” says Anderson.

As each species disappears, the chance of survival for the remainder is reduced. Taken to one extreme, a loss of 75 percent of the world’s species is enough to trigger a mass extinction. So it’s by no means impossible that if the cheetah becomes extinct, one day, so might we.

United for Wildlife

Kenya Airways was an active force in drawing up the United for Wildlife Transport Taskforce Declaration, focussed on illegal wildlife products. KQ signed the declaration, together with 40 other leaders in the transport and conservation sector in March 2016. Led by Prince William, the Duke of Cambridge, the initiative aims to support efforts to prevent the growing trade in illegal wildlife and products around the world.



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