

STANDING TALL

Zakouma National Park is home to half of the world's Kordofan giraffes

By DANIEL ALLEN

After years of conflict, Chad's revitalised Zakouma National Park is welcoming back elephants and a rare subspecies of giraffe

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Individuals tend to come and go from herds as they please



Both elephants and giraffes now enjoy peace within the national park

THEY SAY ELEPHANTS FORGIVE BUT NEVER FORGET. Those that approach Naftali Honig’s house to drink and bathe each day certainly display a humbling capacity to rekindle trust. Here, in Chad’s Zakouma National Park, the narrative is all about healing and human-wildlife coexistence after years of conflict and exploitation.

Between 2002 and 2010, poachers on horseback ransacked Zakouma, decimating its natural resources and striking fear into the heart of local communities. Honig, who works as general manager of the Greater Zakouma Ecosystem for African Parks (a non-profit organisation that operates 22 parks across the continent), points to what look like bullet holes in the ears of a big bull, showering himself nonchalantly nearby.

“For years, ongoing civil wars and regional instability in Chad allowed heavily armed groups to penetrate the park and wreak havoc on the animals,” explains the American. “Zakouma’s elephant population, for example, declined dramatically, from 22,000 in the 1970s to 4,500 in 2002. Then, over the next eight years, 95 per cent – almost 4,000 individuals – were killed.

ABOUT THE AUTHOR



Daniel Allen is a London-based award-winning journalist and photographer with a focus on conservation. He has written for *The Guardian*, *The Sunday Times* and *National Geographic*.

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Many of the elephants you see in the park experienced that slaughter first-hand. On some level, they remember what happened.”

In 2010, Zakouma’s fortunes took a massive turn for the better when the Chadian government invited African Parks to restore and manage the park on a long-term basis – before its wildlife was totally wiped out. The highly successful NGO began ramping up law enforcement, providing expert training and creating high-tech communications networks. Instances of poaching dropped rapidly and wildlife numbers started to bounce back.

Zakouma’s elephant population is now on the rise, with newborn calves observed for the first time in many years. While still occasionally nervous, the park’s pachyderms

are sufficiently at ease in the presence of humans to allow intimate glimpses into their world, as matriarch-led families shield young calves and solitary bulls wander the landscape in search of females.

And it’s not only elephants for which Zakouma is developing a growing reputation. Those that are lucky enough to visit the park today are all but guaranteed a sighting of majestic Kordofan giraffes – towering over shimmering plains, ears twitching to drive away the incessant clouds of tsetse flies, or drinking at one of Zakouma’s vibrant waterholes, heads down and front legs splayed as they take in litres of fluid at each vulnerable prostration.

“Zakouma’s giraffes suffered from poaching in the early 2000s, just like the



No two giraffes have the same coat pattern



Calves will suckle from their mothers during their first year



Waterholes are a great spot to observe Zakouma's diverse species

elephants, rhinos and other large species in the park did," says Chiara Fraticelli, who works for African Parks as the Greater Zakouma Ecosystem's research coordinator. "But since 2010 the population has been growing – the last census in the park in 2021 put the population at around 1,500 individuals. When you consider the entire Kordofan giraffe population is only estimated to be 2,500 animals, you can see why Zakouma is viewed as the animal's last stronghold. Along with elephants, they are now emblematic of the park's recovery."

IT'S ONE OF AFRICA'S MOST ICONIC wildlife species and the world's tallest mammal, yet the giraffe is in trouble. In 2016, the International Union for the Conservation of Nature (IUCN) completed the first detailed analysis of the animal's conservation status, revealing the continent's overall population to be in perilous condition, with only 117,000 left in the wild (compared to 155,000 in

"The Kordofan giraffe's range coincides with some of the most politically volatile parts of Africa"

1985). In 2018-19, this condition was further underlined when most populations of giraffe subspecies recognised by the IUCN were assessed as Critically Endangered.

While the decline of the giraffe is clearly worrying, it also throws up a rather confusing aspect of giraffe conservation – just how many different types of giraffe are there? The IUCN has long recognised one species (*Giraffa camelopardalis*) and nine subspecies. More recently, however, the Giraffe Conservation Foundation, together with the Senckenberg Biodiversity and Climate Research Centre, performed the first-ever comprehensive DNA sampling and analysis of all major African

giraffe populations. This revealed four distinct species: the Masai, southern, northern and reticulated giraffe, plus seven subspecies.

THE KORDOFAN GIRAFFE (*Giraffa camelopardalis antiquorum*), a subspecies of the northern giraffe, is characterised by its relatively small size and irregular spots on the inner legs. Their patches are pale and irregular compared to other subspecies and can sometimes cover their legs as well. Adult males can reach up to 5.5m in height, while females are slightly shorter.

"Kordofan giraffes are social animals that prefer areas of savannah, grassland and open woodland," explains Fraticelli. "They use their long prehensile tongue and the roof of their mouth to feed on leaves, stems, flowers, and fruits from more than 100 different plant species, with acacia trees a particular favourite. In Zakouma they typically live in unstable herds of between 10 to 20 animals, though you can sometimes see bigger groups of up to 50 individuals."

Unfortunately for the Kordofan giraffe, its range coincides with some of the most politically volatile and economically challenged parts of Africa: southern Chad, the Central African Republic, northern Cameroon and northern Democratic Republic of Congo. Conservation of threatened species is difficult at the best of times, but delivering effective protection in such unstable and disadvantaged areas is an even tougher proposition.

Kordofan is actually a region in central Sudan and there may be a few remaining



Sticking together helps keep giraffes safe from the predatory attacks of lions



A group wades across a wetland area (they are unable to swim)

“The entire Kordofan giraffe population has declined by more than 80 per cent over the past 35 years”

CHIARA FRATICELLI, AFRICAN PARKS

Kordofan giraffe in parts of Sudan today, but years of political violence have forced them into neighbouring countries. They face a range of threats pretty much everywhere they occur, including habitat loss, civil unrest and illegal hunting and poaching.

“These wide-ranging threats mean the entire Kordofan giraffe population has declined by more than 80 per cent over the past 35 years,” says Fraticelli. “Sadly, they are in danger of disappearing from a number of African national parks altogether.”

FROM THE AIR, THE SALAMAT River winds through the Zakouma landscape like an emerald ribbon, its banks lined with huge flocks of spur-winged geese and black crowned cranes. Groups of Nile crocodiles lie hauled up at the water’s

edge, warming their serrated bodies in the early morning sun. South African pilot Chris Whitfield banks the plane and soon the agile two-seater is flying low over a procession of Kordofan giraffe, kicking up dust as they gallop in slightly ungainly fashion across a pancake-flat, scrub-covered plain.

Sandwiched between the desiccated expanse of the Sahara Desert and Africa’s fertile rainforest belt, the 3,000km² Zakouma National Park is perfectly positioned as the primary safe haven for Central and West African wildlife. One of the most important protected areas in the whole of Africa, it is the closest ‘Big Five’ destination to Europe, with populations of lion, leopard, elephant, black rhino and buffalo, as well as cheetah, spotted and striped hyena, kudu, roan antelope, hartebeest, and an astonishing 388 species of birds. Wetland areas, such as the

spectacular Riguiek Pan, attract enormous congregations of pelicans, storks, geese and cranes, while northern carmine bee-eaters add an exotic splash of vermilion to many of the park’s sandbanks.

The Greater Zakouma Ecosystem, which encompasses the national park itself as well as other reserves and wildlife corridors, extends over a vast 30,000km² swathe of Sahelian vegetation. The landscape, which is primarily flat, is bisected by perennial river systems and their floodplains, and boasts patches of riparian forest, woodland, grassland and scrubby bush.

Just like most of Sub-Saharan Africa, Zakouma has a distinct wet and dry season. The ecosystem’s vast size and interlinked habitats mean that even at the height of the dry season, when temperatures can soar to more than 40°C, animals have places to



It's thought that the tongue is almost black to protect it from the sun

COOL SCIENCE

10 giraffe facts

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Giraffe are born with 'ossicones', which begin as skin-covered lumps of soft cartilage that lie flat on the head. As the giraffe grows older, they enlarge, ossify (become bone) and fuse with the skull.
- 2

A giraffe's lungs can hold about 70 litres of air
- 3

Giraffes have seven neck vertebrae, just like humans. But these vertebrae are bound together with ball-and-socket joints, allowing a huge range of motion. In addition, the joint between a giraffe's neck and its skull allows the animal to extend its head almost completely perpendicular to the ground.
- 4

A giraffe's prehensile tongue can be up to 50cm long
- 5

Giraffes get water from the leaves and plants, so they only need to drink a couple of times a week
- 6

Giraffes get by on only 30 minutes sleep (or less) a day
- 7

Giraffes have a specialised cardiovascular system to fight gravity, keep blood moving around their tall bodies, and prevent them blacking out when lowering their heads to drink water
- 8

To protect their young, female giraffes help each other out and form what are called nursery groups to take care of calves
- 9

Mature giraffe males leave the group they were born into and usually spend the rest of their lives alone, except when it is time to mate with a female
- 10

Giraffes communicate using snorts, sneezes, coughs, snores, hisses, bursts, moans, grunts, growls, and flute-like sounds

retreat to until the weather moderates, with a seasonal migration seeing many wildlife species return to the heart of the park when water grows scarce.

THE ONGOING RECOVERY OF wildlife in and around Zakouma National Park, which has been a target for poachers for centuries, has been underpinned by enhanced security. African Parks' first step was to recruit, train and equip an effective ranger team. Today, Zakouma employs more than 100 rangers, many of whom are from local communities. All undergo extensive training in a number of key skills, including shooting and arrest tactics, as well as **community sensitisation**. **Horse patrols are particularly well-suited to Zakouma during the wet season**, which stretches from May through to October.

"The efforts of our ranger teams, alongside strong community engagement, mean that poaching in Zakouma has thankfully all but come to an end," says Honig. "Kordofan giraffe and buffalo have experienced little to no poaching since 2010, and only 24 known elephants have been poached in the last decade."

As with other protected areas that African Parks manages, the aim at Zakouma is to ensure nature recovery benefits local communities, too. All profits from tourism are used to fund park management and to pay for various programmes, such as those that support school construction, teacher training, and the purchase of classroom materials. The Greater Zakouma Ecosystem is the largest employer in the region, while African Parks is also encouraging sustainable, nature-based economic production, involving everything from honey harvesting to shea butter production.


"More and more people are invested in the park and the wellbeing of wildlife and nature here," says Zakaria Hassane, who has worked as a park ranger in Zakouma for nearly 40 years. "This, combined with the deployment of well-trained ranger teams and the use of tracking collars and aerial surveillance aircraft, has made a massive contribution to the Zakouma success story."

In January 2019, the Giraffe Conservation Foundation, in partnership with the Kordofan Giraffe Project and African Parks, launched the first-ever giraffe GPS satellite-tagging programme in Chad. The aim of the programme, which saw a third group of nine

giraffe collared in March 2023, is to better understand the habitat giraffe use, their movements inside and outside Zakouma National Park, and the potential threats the animals face. The three male giraffe collared in this operation are the first-ever giraffe bulls to be remotely tracked in Zakouma. Tissue samples for future genetic analysis were also collected from all the tagged animals.

"Knowing where Kordofan giraffe move and how they use their habitat from season to season will help African Parks and the Chadian government better protect giraffe in this complex ecosystem," explains Stephanie Fennessy, executive director of the Giraffe Conservation Foundation. "Giraffe have been largely understudied in the past and it is only in recent years that we are learning more about these iconic animals throughout their African range."

While it was previously assumed that Kordofan giraffe stayed within the boundaries of Zakouma National Park, the Giraffe Conservation Foundation's programme has revealed that they regularly move beyond the park perimeter, often spending months at a time outside in communal areas. This information is helping to inform management decisions and partnerships are being forged with local communities living outside the park's perimeter.

"We need to give the Kordofan giraffe of Zakouma as much help as possible," says Fennessy. "They are critical to the survival of this majestic subspecies." 

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GIRAFFES ●

A giraffe's mouth has extra hairs as a defence against thorns and spines

