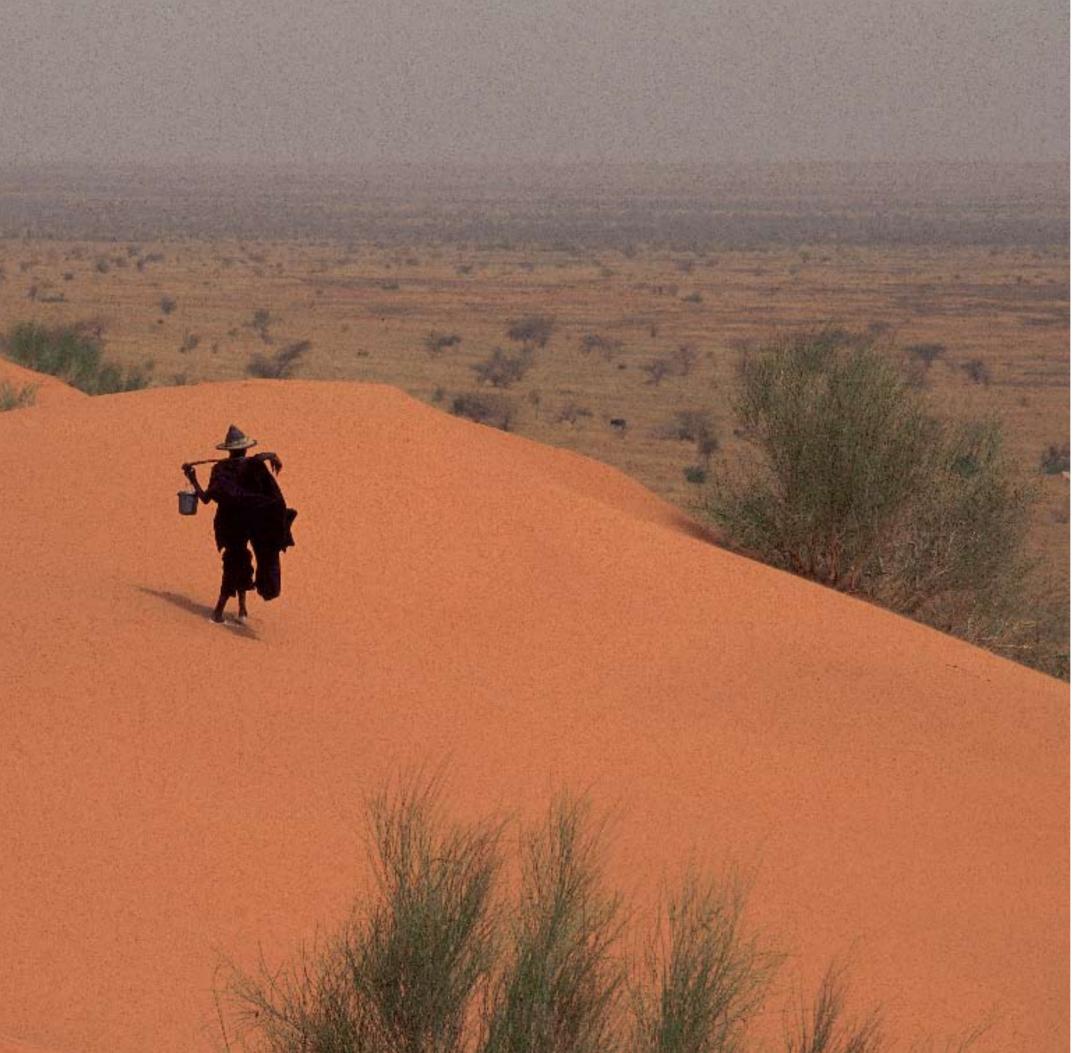


Afew hours south of Timbuktu, below a bend in the Niger River, lies an oasis called Banzena. Every year during the dry season, it forms the gathering point for the Sahel's last remaining elephants, which travel up to 500 kilometres to get there. As the

limited resources of the Sahel come under pressure from increasingly sedentary nomads, the elephants' connection to this life-giving land is becoming tenuous. Photographer **Carlton Ward Jr** accompanied a team of researchers who are working to strengthen it.

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and hung in the air like a fog, obscuring the sun, and behind me the small Touareg camp where I had slept for the previous week was hidden from view. A hundred-strong herd of elephants glided like a ghost train across the horizon and, mesmerised by this first fleeting glance, I stood alone on the sand, facing the wall of giants. Moments passed, punctuated by the click of my shutter, then the herd vanished as quickly as it had appeared.

The Sahel in May was the hottest place I had ever been. It hadn't rained in months, temperatures hit 48 degrees Celsius in the shade, goats and cattle were dying daily and Mali's last remaining elephants were emerging from the desert to gather here, at an oasis called Banzena. At the peak of the dry season, it is the only standing body of water in the region. The elephants that survive here are sometimes called 'the elephants of Timbuktu', and they are every bit as mysterious as the centuries-old mosques perched on the edge of the Sahara.

Banzena is an expansive marsh located roughly halfway between Douentza and Timbuktu in the Gourma region, about 12 hours north-east of the country's capital, Bamako. I had travelled there three years ago with a research team from Save the Elephants and The WILD Foundation, which is working to understand and protect the Sahel's only elephant population. In the past, elephants were found throughout Mali, but today those that cling to life are on a constant search for food and water. To survive, they undertake a yearly migration of almost 500 kilometres, the longest annual migration of elephants ever recorded.

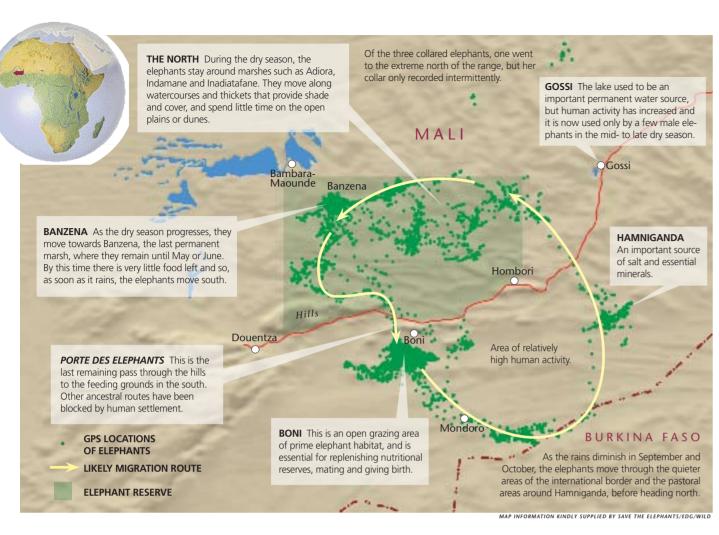
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and they are every bit as mysterious as the centuries-old mosques perched on the edge of the Sahara

ABOVE At the peak of the dry season, shimmering Lake Banzena forms the only body of water for many kilometres in Mali's Gourma region. On a clear day, you can see to the Douentza escarpment, which rises between the lake and the elephants' feeding grounds in the south. The porte des elephants at Boni, 70 kilometres to the south-east of Banzena, is the only break in this otherwise solid barrier.

LEFT A Fulani herdsman crosses the Norahe Dune, following the same path used by the elephants, which had embarked on the southward leg of their migration.

PREVIOUS SPREAD Barely half an hour after rain signals the end of the dry season, elephants begin their trek to feeding grounds in the south.



This map shows the GPS coordinates of three elephants over a period of 18 months between February 2000 and July 2001. Based on this data and photographic evidence, it would appear that the elephants move swiftly along 'corridors' to places of relative sanctuary, food and water, where they spend most of their time. This is the Sahel's only remaining elephant population and blocking any part of this 500-kilometre migration route could have disastrous consequences.

OPPOSITE A mature cow wallows in the mud in a depression west of Inadiatafane. As the marshes of the north dry up, the elephants head west to the permanent lake at Banzena. where they remain until the rains come in May or June.

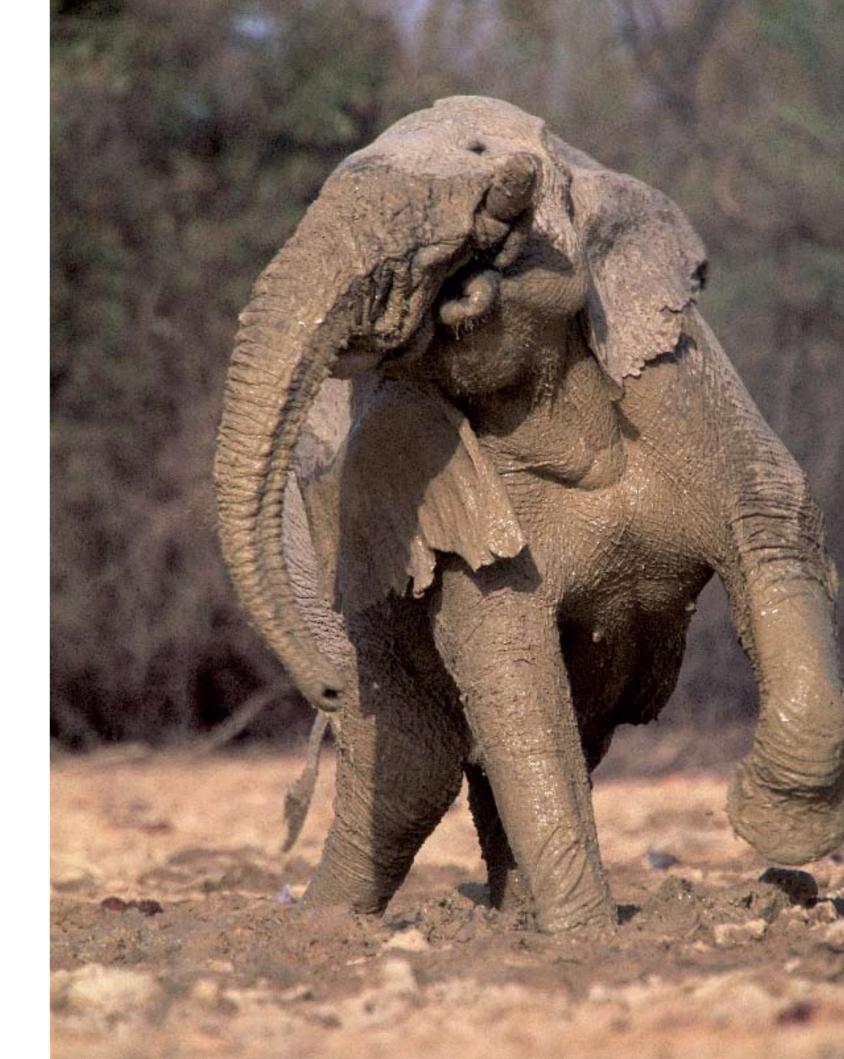
Back in February 2000, Save the most accurate population estimate to Elephants provided GPS tracking collars on three elephants for 18 months to determine their migration route. The results showed that the elephants make a remarkable circular journey each year, avoiding the towns and villages of the busy central area and moving rapidly along 'corridors' between critical areas for food and water. Although they spend a very small amount of time in these corridor areas, blocking any one of them could have disastrous consequences.

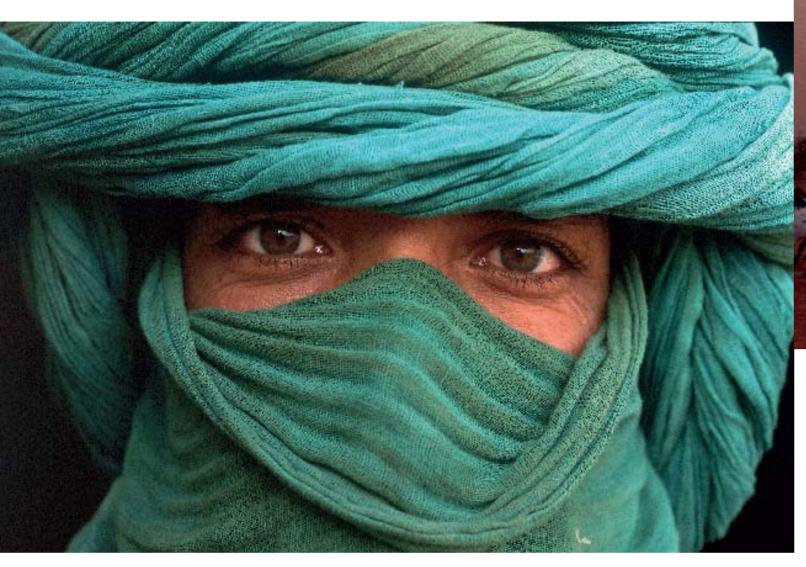
I joined the research team at the peak of the dry season in April 2004 and spent seven weeks pursuing photographs of elephants with Hemma Emmanuel, a remarkable elephant ecologist from Burkina Faso who would lead the photo-ID fieldwork during the next two years. I helped Emmanuel to learn the nuances of his new digital camera and also contributed 3 000 of my own pictures to the identification project. Between 2004 and 2006, the research focused on identifying individual elephants using photographs of their ears. The digital images were analysed by a team led by well-known zoologist Iain Douglas-Hamilton in Kenya, and resulted in the

date – nearly 500.

onflict between humans and elephants in the Gourma region was not an issue before the late 1980s. Most of the Touareg and Fulani who lived there were nomadic and, like the elephants, moved continually to take advantage of seasonally abundant resources. At that time, elephants were able to fulfil their needs without coming into conflict with humans.

The studies to date, however, indicate that we are at a critical point in elephant conservation. The drying climate and a landscape degraded by growing numbers of livestock, coupled with interventions to speed up economic recovery after the drought of the 1980s and the Touareg rebellion of the early '90s, have led to increasing human settlement and agriculture along the paths used by elephants. The creation of artificial water sources is also supporting activity in formerly waterless areas, and there is growing pressure on the woodlands and lakes on which the elephants rely during the eight-month dry season.





The key to the successful conservation of these elephants now lies in continuing to educate and inspire the people of Mali

The research has identified 'squeeze points' and locations along the elephants' migration path where human activity, if allowed to continue unchecked, threatens to block the route entirely. If this happens, we can expect the incidences of conflict to rise sharply.

The good news is that there is still time to act. Human-elephant conflict in the Gourma region is much lower than in other parts of Africa, and the formerly nomadic people still respect the elephants with which they have shared the Sahel for centuries. The two often moved through the landscape together – elephants knew when there was water in distant marshes and people followed them. The elephants also led people to high-quality forage for their

The Touareg chief of the settlement in Banzena told me how the elephants had once saved them during an intense drought, 'Many of the livestock were dying,' he explained, 'but the elephants came and shook the high branches of

the trees so the leaves fell to the ground, allowing the other animals to survive.'

There is still an opportunity for a win-win situation in the Sahel, where protecting the migration route for the elephants will also sustain and restore the integrity of the ecosystem for the people. The current phase of research focuses on land-use planning to ensure that elephants have access to water, forage and unimpeded migration, as well as public awareness and education at both national and local levels.

Research results have been shared with Malian institutions, and the deployment of 10 new GPS tracking collars is planned. The information they gather is intended to guide the GEF-World Bank-French Government Projet pour la Conservation et Valorisation de la Biodiversité du Gourma et les Éléphants (PCVBG-E), which supports the establishment of conservation areas and community-based mechanisms for their management. Save the Elephants and The WILD Foundation

are partnering with the local NGO Sahel ECO, which is working with pastoralists towards community-based strategies for sustainable livelihoods. The NGOs are also working with Friends of the Elephants Association, which has branches in 26 villages dedicated to raising awareness about elephantfriendly behaviour.

The key to the successful conservation of these elephants now lies in continuing to educate and inspire the people of Mali. Posters of elephants and their migration routes will be sent to the government, brochures about the elephants will be distributed throughout the country, elephant education will become part of the school curriculum and Tinariwen, Mali's premier Touareg music group, has agreed to write a song about the elephants. The communications campaigns combined with continued funding for Malian organisations offer great hope for saving the elephants of the Sahel.

ack in Banzena, I was reaching the end of my journey and everything had changed dramatically. The first major rain since the previous summer had started to fall and, after help wondering how many elephants spending time with the local people, who were hurrying to secure their huts
It all depends on that 500-kilometre and protect their children, I turned to migration route - and the efforts of the bush where I had photographed those organisations and people working elephants earlier that morning.

It had been raining for less than 20 minutes when I came across tracks To find out more, visit www.wild.org and heading south, away from the lake. The www.savetheelephants.org



start of the rains had triggered a nearinstant response and all of the elephants, now free from their dependence on the marsh, were leaving. We packed our bags and set up an outpost on a high dune looking south. Before the sun had set, more than 100 elephants had passed before us, heading back to the vast desert. Banzena is still one of the wildest places on earth, but I couldn't would return in the coming years. to keep it open.

ABOVE Camera-trap images reveal how elephants move to water sources at night to avoid contact with herdsmen and livestock.

TOP A Touareg herdsman drives his goats towards a boma as a dust storm preceding the first rains races in from

OPPOSITE A Touareg herdsman in an encampment near Banzena. For centuries, the Toureg and Fulani nomads of the Sahel have lived alongside elephants, but as more people settle and raise livestock, the potential for conflict increases.

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