



*Elephants file into the pitch-dark depths of Kitum Cave, Mount Elgon National Park, Kenya to mine salt-rich rock. The cow keeps a matronly trunk on her calf to prevent it straying near a crevasse in the dark.*

## Underground elephants under attack

by Ian Redmond

*Unless more money is found now for the basic equipment needed by anti-poaching forces, over the next decade we can expect to lose more than half the elephants in the great national parks of East Africa.*

Rumours – particularly those concerning bad news – have a tendency to get worse at each telling. I was reflecting on this fact as I bumped and slewed along the muddy forest track in Mount Elgon National Park, Kenya, last July. It was two years since I had last visited my study site, to make further observations on the unique salt-mining elephants, and during that time I had heard several second- and third-hand reports of ivory poaching in the park (see 'Islands of elephants', *Swara*, March/April 1987). My natural optimism was hoping that these verbal accounts had been exaggerated, and I scanned the bushes for a sign of a reddish-brown, elephantine back or some fresh, football-sized droppings on the roadside.

Then the stench hit my nostrils. The sickening smell of rotting flesh hung heavily beneath the trees, clashing with the visual beauty of the sunlit forest. It grew stronger as I drove along, then faded, leaving a lingering taste in the back of my mouth. Near to the path up to Kitum Cave, the same thing happened again, but I put off the unpleasant task that lay in store. The sun was sinking fast behind the mountain and, alone, it could take some time to locate the decomposing animal. I shouldered my pack and walked up to the cave to

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settle in on the familiar rocky ledge before dark.

No elephants visited the cave that night, and there were no signs of fresh mining activity, so I took the opportunity to examine the cave interior. Little had changed since the 1982 roof fall, in which the back third of the 175-yard cave was blocked to elephant traffic. The muddy side-chamber was somewhat enlarged by tusking, and droppings showed that some adventurous elephants had clambered on to the new roof-fall, in total darkness, to find new mining sites. The lack of fresh dung seemed ominous, but on the other hand, once it has lain in the cave for a few days, it is difficult to tell whether it is a couple of weeks or a couple of months old.

The next morning I drove around the lower circuits of the park track and was relieved to find fresh droppings of the previous night. An adult elephant had been tusking the roadside cutting in search of salt, and a half-chewed branch had been dropped in the middle of the road. There were still some elephants left, thank goodness, but how many? I drove down to the park headquarters to meet Ben Amoko, the new warden.

The news was bad – almost as bad as the rumours. Since February 1986 there had been heavy poaching for ivory. Poachers apparently came from both sides of the Kenya-Uganda border (which crosses the summit of Mount Elgon), but it was clear that the sudden appearance of automatic weapons was a result of the troubles in Uganda. By June 1986, the situation became so serious that the warden felt obliged to close the park to the public and bring in reinforcements from the Kenyan army and police – even using helicopters on occasion. Mr Amoko told me that one of his bridges had been blown up by poachers, to hamper his movement of rangers, and I later heard unsubstantiated reports of poachers using anti-tank guns to kill elephants.

The park remained closed to the public for three months, but by the end of 1986 things were looking better. Occasional attacks on elephants still took place, but between January and March 1987, 11 poachers were captured and imprisoned. The warden has replaced delapidated log bridges and a ford with sturdy concrete bridges, and greatly improved some of the park roads with murrum. And the Kenyan Wildlife Conservation and Management Department (WCMD) has stationed a special anti-poaching unit in the park. But poaching attacks still take place, and the protection of the park and its elephants is hampered by a simple lack of funds for fuel, vehicle repairs and maintenance.

After hearing the warden's report, I went with one of the rangers to see the result of the latest attack. Leaving the car where the stench was greatest, we pushed through the undergrowth for 50 paces or so before finding the first carcass. A heaving mass of maggots spilled out from under the



Herd of cows and calves searching for salt with trunk tips at a salt lick on Mount Kenya.



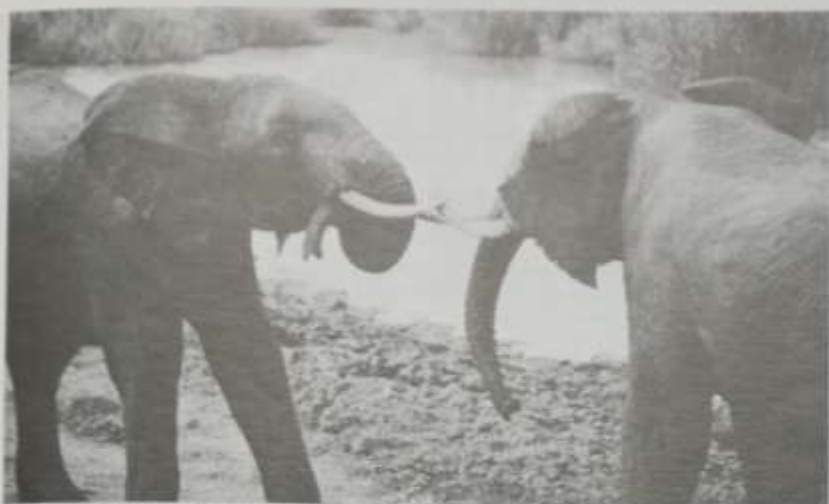
Carcass of a 12-year-old bull elephant, ambushed on its way into Kitum Cave.

thick brown skin, and bones were scattered randomly by the attentions of larger scavengers. Under a thicket I was surprised to see that the elephant's skull was not much bigger than a basketball – it was a calf of perhaps three and a half year of age. The tusks must barely have been the size of pencils – what a bloody waste.

The second body was bigger – a young male of about 15 years. The skull showed that his whole face had been cut off in a single plane, apparently confirming rumours that the poachers came equipped with chain saws for speedy removal of the tusks. It occurred to me that it could have been Charles – a tolerant young bull who had allowed me to photograph his tusking technique in a side chamber of Kitum in 1982. There was no way I could be sure, but the age was about right, and the mere possibility sent my mind racing. Standing beside the mutilated body, I felt the same surge of gut-wrenching sadness and anger that accompanied my discovery of Digit's body nearly 10 years before. Digit was the young silverback mountain gorillas whose death, at the hands of poachers, triggered the highly successful Mountain Gorilla Project

and Digit Fund, which together have ensured a future for what Dian Fossey called 'the greatest of the great apes'. Whether or not this was Charles rotting at my feet became immaterial. The fact was, someone had shot one of my study animals and sawn his face off. Why? To supply a mindless market among the wealthy for ivory trinkets and bangles. There had to be something I could do to help prevent this sort of carnage.

My guide, Corporal Peter Lumula, was picking empty brass cartridges out of the leaf litter. They were small calibre – ridiculous ammunition for the job; it had taken a lot of bullets to finally finish the elephant off. I asked Corporal Lumula how it had happened, and pieced together his information with that gleaned from other local sources. The attack had taken place in early July. A small herd of elephants was being tracked by the gang of poachers as they approached Kitum Cave for an evening of salt-mining. As the elephants circled the cave to climb the approach path, the poachers positioned themselves on the cliff top above the cave. Then, as the lead elephant was picking its way up the steep



One of the natural uses for ivory: two young bull elephants sparring.



This Hong Kong ivory factory sells legal ivory but highlights the elephant's plight.

entrance path, the poachers opened fire. There was no pretence at marksmanship, just bursts of rapid machine gun fire in the general direction of the elephants. Terrified and wounded, the herd scattered with the poachers in pursuit. But unbeknown to the hunters, a party of Kenyan women were sitting on the observation rock inside the cave mouth. It was an outing organised by the Kitale Museum to interest local people in their remarkable park. When the shooting started, they fled screaming all the way down to the warden's house some two miles away, but by the time the rangers were mobilised, the poachers had melted into the night, taking the ivory with them.

At the time of my visit, a total of 42 elephant carcasses had been found by park staff since the poaching began. But if the July attack was typical, the number of elephants wounded must be much higher. If they wander away to die days or weeks later, in Elgon's densely forested valleys, their bodies may never appear in the statistics. Because of the difficulties in counting elephants - dead or alive - in dense forest (aerial surveys are impossible) no accurate

figures exist for Elgon, but it is clear that there has been substantial decline. Few visitors to the park now see elephants and some local naturalists put the current figures as low as 50. This is only an educated guess, but we can be pretty sure that a population that was numbered in hundreds three years ago (500 was the usual guesstimate) is now numbered in tens.

The elephants of Mount Elgon are unique because of their subterranean habits, but their plight is typical of elephant populations in many parts of Africa. Elephant numbers have declined drastically in the past 10 years, but only recently have the members of the African Elephant and Rhino Specialist Group (AERSG) reached a consensus that the present rate of exploitation (legal and illegal) is unsustainable. Dr Iain Douglas-Hamilton, who has recently co-authored a major report for the United Nations Environment Programme (see the article by him on page 8 of this issue of *Swara*), points out that East Africa alone has lost 145,000 elephants in the past decade. 'There are now 109,000 left,' he told me, 'but if the "harvest" continues at the current level - 14,500 killed per year -

the East African elephants will be finished in eight years! In reality, though, we expect the decrease to level out once they reach very low numbers.'

This downward trend works out as -10.4 per cent per annum for Kenya, and -8.1 per cent for East Africa as a whole. For West Africa, the figure is -17.8 per cent but data is patchy. Only in Southern Africa, where ivory poaching is better controlled, is there a slight overall increase of 0.7 per cent per annum, but this masks problem areas such as Kaokoland, Namibia, which shows a decrease of -17 per cent, and the Luangwa Valley, Zambia, which is losing 5.2 per cent every year.

It is often easier to comprehend such trends when actual figures are known. Luangwa Valley, for example, had 56,000 elephants in 1973, 33,510 in 1979, and at the last count in 1987, they were down to only 21,900. Comparison of figures for protected and unprotected areas shows clearly that anti-poaching efforts in national parks and reserves are effective in slowing the decline, but frequently these efforts are hamstrung by the loss, or lack, of basic equipment. Again, Mount Elgon is a case in point.

The warden has a fleet of eight vehicles; six are off the road needing spare parts or new tyres. Mr Amoko told me, 'It would take my entire annual transport budget to get just one of these vehicles fully repaired and back into action.'\* According to the Kenya WCMD Senior Warden, Ted Goss, 'There is a desperate need for funds to keep the transport moving, both for repairs and operating costs. For the anti-poaching work on Elgon, minimum repairs would amount to US\$6,000 and maintenance costs for adequate patrolling of the park would be approximately \$23,000 per year.' Not an impossible sum, but of course this is just one park, and similar sums could be put to effective use in dozens of parks across Africa.

According to Iain Douglas-Hamilton, 'If the offtake of ivory is not drastically reduced, we can expect to lose all the major populations of elephants in the great national parks of East Africa, other than a small remnant.'

In recent years we have seen just such a catastrophic decline in black rhinoceros numbers, but only now is there a major concerted effort to protect this species. Are we prepared to sit back and watch the same thing happen to the African elephant?

The time for action is now, and action means money. The African Ele-Fund is an international appeal to raise funds for practical elephant conservation. It seems that a disaster is always needed to spur people into action; for me, that disaster is what is happening to my study animals on Mount Elgon, and the African Ele-Fund is a response. Every dollar donated will be spent in the field - the appeal is organised by volunteers, and administered for free by

\* Since this article was written, the East African Wild Life Society has spent over Ksh 120,000 in emergency funds to buy new parts for the Mount Elgon vehicles.

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existing conservation organisations. So where will your money be spent?

Initially, we will concentrate our efforts in East Africa; a local Steering Committee, comprising Daphne Sheldrick, Dr Iain Douglas-Hamilton and Nehemiah arap Rotich, Executive Director of the East African Wild Life Society, will pinpoint urgent needs by means of park profiles drawn up by fieldworkers and wardens. And one of the first priorities is the Mount Elgon National Park.

Dr Perez Olindo, Director of the Kenyan WCMD, told me, 'We consider the protection of the Mount Elgon National Park to be of the utmost importance. We are planning now to enlarge the park to encompass all the remaining forest and Afro-Alpine moorland on the mountain. But this will put even more strain on our limited resources.'

In Kenya, the conservation infrastructure exists, there are well trained anti-poaching units, all they need in this case is the equipment to operate effectively – and this is where your donation can help. Please make cheques payable to The African Ele-Fund and send them to your nearest address:

The International Wildlife Coalition, 1807 H Street NW, Washington DC 20006, USA, or IWC-UK, Care for the Wild, 26 North Street, Horsham, West Sussex RH12 1BN, UK, or East African Wild Life Society, P.O. Box 20110, Nairobi, Kenya.

Only with a concerted effort from all the conservation organisations, and the support of an elephant-loving public, can we prevent the African elephant from following the same disastrous path as the black rhino. And this must be done *before* numbers fall to a critical level. Action in Africa must also be coupled with publicity worldwide, to reduce the demand for ivory, which is fuelling the illegal slaughter. In this way, we can *all* help to Save the Elephant.



Iain Redmond is a wildlife biologist, photographer and writer. He has studied mountain gorillas in Rwanda and Zaire and the cave elephants in Kenya's Mount Elgon National Park (see *Swara*, July/August 1982). He broadcasts regularly for the BBC Natural History Unit, including his own radio series entitled *Bushy Tails*, and has advised on the making of several documentary programmes for American and British television. Iain is a graduate of Keele University and a Fellow of the Zoological Society of London.

## Why save Mount Elgon's elephants?

All over Africa elephant populations are becoming isolated from each other and surrounded by cultivation. Instead of a continent filled with elephants, with only a few scattered tribes of humans, the roles are fast being reversed. Now we have islands of elephants in a sea of humanity. And in many parts of Africa these islands are being wiped out by a wave of ivory poaching. If this is the case, why should we be particularly concerned about the elephants in the Mount Elgon National Park, Kenya rather than any other beleaguered population? The answer is that they are unique.

Anatomically, they are normal African elephants who, despite living in a montane forest habitat, are classed as bush elephants *Loxodonta africana africana*. But behaviourally they are unlike any other elephants known. Mount Elgon is home to the world's only underground elephants.

They do not live underground, but every two or three days they visit vast caves, venturing deep into the dark zone, to mine salt. Their diet of forest plants is deficient in certain minerals, and to make up the deficit they must find a salt-lick. On Mount Elgon, the only available salt is in the walls of caves, some of which extend, more or less horizontally into the mountain, for 160 metres. It is one of the most remarkable sights in nature to see a whole herd of elephants swallowed up by the blackness as they slowly feel their way, trunk to tail like circus performers, into the depths of the earth.

If we just sit back and let the ivory poachers finish their bloody work, it is not just another population of elephants we have lost. The whole spectacle of elephants in caves, which we have barely begun to understand, would disappear. Even if, at some future time, elephants were reintroduced to Elgon's forests, there would be no guarantee that they would enter the caves. A baby elephant learns from its parents and elders where to find food, drink, salt and other necessities. Knowledge is passed down from generation to generation, and each population has the accumulated experience and wisdom of its forebears as a kind of culture. The use of the caves is a feature of Elgon elephant culture, and as such would die with the last Elgon elephant.

It is not unusual for elephants – both African and Asian – to tusk at cliffs if the rock contains useful mineral salts. This activity sometimes creates overhangs and small caves, but in all known locations but Mount Elgon, these collapse before they get deep enough to develop a dark zone. On Elgon, the cave roof is capped by a layer of very hard basalt, an old lava flow, and any collapses of the softer volcanic agglomerate occur within the cave. The results of my research support the theory that the caves have thus been dug by the elephants, perhaps over thousands of years. And this explains why Elgon elephants do not just mine in the daylight zone in the cave mouth, where they can at least see what they are doing. The underground behaviour has evolved alongside the cave.

As the cliff became an overhang, and the overhang became a cave, which gradually grew deeper and deeper, no single generation of elephants would perceive the change. Each new calf would accompany its mother – as the few remaining ones do today – and would therefore consider it normal to enter as far as the cave went. And so it may be that the propensity to venture up to 160 metres in total darkness, underground, has resulted from an unbroken line of instruction dating back to the first cliff diggers.

The spectacle of the elephant caves, each with its huge rock arch and sunlit waterfall over the entrance, along with the fascination of elephants underground, has the potential to become a major tourist attraction. And tourist revenues would help to cover the cost of protecting the park in future, but unless urgent action is taken *now* to stop the killing, it will be too late. That is why the African Ele-Fund has made the Elgon elephants a top priority. Already, several thousand pounds (from public donations and a grant from the East African Wild Life Society) have been spent in making vehicles roadworthy for anti-poacher patrols on Mount Elgon. But that is only a start. More money will be needed to better equip the patrols and to improve radio communications both on Elgon and elsewhere. The African Ele-Fund is committed to improving practical conservation of elephants and their habitats wherever they are threatened. We can only do that if you care enough to help.

Please send your donations to one of the addresses at the end of this article. And if you would like to join the Ele-Fund-Raisers, please enclose a sae for details.

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Cover photo:

This elephant was killed by Sudanese soldiers in 1981 when they invaded Uganda's Kidepo National Park. In the ensuing gun battle, two Ugandan soldiers and a ranger were killed before the Sudanese were driven off. Here Ugandan soldiers and rangers cut off the tusks.

*W.E. Garrett*

The impala antelope is the symbol of the East African Wild Life Society. Swara (sometimes pronounced Swala) is the Swahili word for antelope.



# Swarara



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