



## Rugged pursuit

*Accepting an invitation to join the KWS Capture Unit as volunteers on a rhino translocation exercise in the Nairobi National Park, **Paolo Torchio** and **Magali Manconi** very nearly get a lot more (of a jolt) than they had bargained for...*



Photographs: © **PAOLO TORCHIO**

**T**hese are tense moments. Before us: 'Emma', a female Black Rhinoceros, lies on her side on the awkwardly sloping ground amid some low, stunted bushes partially splayed and flattened by her fall. Over her eyes there is a blindfold of heavy green cloth. Around her legs, above the ankles, thick ropes have been looped and tied.

Crouched over to one side, meanwhile, just metres away, in a hushed arc of anticipation, we are watching, all of us, anxiously waiting for her to move...

The late morning sun beats down. Nothing stirs. We are conscious only of the buzzing of a few persistent flies – and the faint sound of the rhino's breathing: slow, regular. The blindfold, we notice, has slipped – just enough to reveal one of the sedated pachyderm's eyes. Still, there is no movement. At length a ranger, stepping forward with the reassuring nonchalance of someone who has clearly seen all this before, pulls the blindfold back into position over both the rhino's eyes.

No sooner is this done, than chaos erupts. The rhino bursts into life, shaking her massive form before rolling over with a snort and staggering to her feet, wrenching and tugging violently on the restraining tangle of ropes, which shear off and come adrift. Now what? Faced suddenly with a hulking tonne, or more, of raw danger, we turn tail and scamper up the rock-strewn slope, leaping and scrambling blindly over and through intervening thorn bushes, until at last – back on the ridge top, badly shaken and out of breath – we reach the safety of our vehicles...

Re-grouping here, we are relieved to establish, first, that – mercifully – nobody has been injured, either by the rampaging rhinoceros, or during the frantic getaway. Emma, perhaps a little groggy still from the lingering effects of the anaesthetic, has (as it turns out) veered off and gone charging down the side of the ridge, disappearing from view in a cloud of dust.

The two of us had never imagined, even in our worst nightmares, having to flee on foot from an enraged rhinoceros. So, for us, having both enthusiastically accepted a special invitation as volunteers to witness a rhino translocation for the first time, the events of Tuesday, 20 July 2004



in Kenya's Nairobi National Park could hardly have got off to a more dramatic and hair-raising start!

We had earlier looked on from afar, as Emma was darted from a helicopter. She was to have been the first of six Black Rhino 'captures' lined up for the week, all destined for translocation from the Nairobi National Park to Mugie Ranch near Maralal in Laikipia District, a drive of at least six hours from here.

Emma, though, had not succumbed very readily to the anaesthetic. Instead, she had gone bounding off down the side of that ridge, before eventually coming to rest at the spot where we, as 'guest observers' with the Kenya Wildlife Service (KWS) Capture Unit on the ground, had caught up with her. We had watched her being blindfolded and having her 'foot-ropes' secured by Park rangers. Then we had seen the antidote (administered to revive the sedated animal) injected by a senior KWS veterinarian.

The idea, when Emma came round, was to try – by pulling on the ropes before she could regain full strength – to coax her out of this 30-metre dip and back up on to level ground, where she could be crated and loaded on to a waiting truck. In breaking free, Emma had made a complete mockery of this ambitious plan, which is perhaps just as well, although such an operation might have presented quite a spectacle!

Back on the ridge, we are still counting our blessings when the sight – buzzing overhead – of the KWS 'spotter' aircraft reminds us that there is still work to be done. Emma, dear runaway Emma, is soon forgotten – brushed aside in the phrase "capture aborted" – amid consultation anew (and much crackly staccato over the VHF radio) of "pushing on" with the day's next rhino capture...

So successful a breeding ground for Black Rhinos is the Nairobi National Park today that periodic captures and translocations – such as we are witnessing – have become essential, if overcrowding is to be avoided. As Paul Gathitu, then the Senior Warden for Nairobi Park, had explained to us at the outset: "As of now, the rhino population here numbers 76 animals, all living within an area – of about 100 km<sup>2</sup> – that our management studies have shown to be capable of supporting a population of, at most, around 45 head!"

"The problem with having so many rhinos in the Park," Gathitu [who now heads the KWS Community Wildlife

Program] had told us, "is that, in fighting to carve out individual territories, the animals that lose out are naturally forced to move away – in search of new territories. And this," he had added, "often forces such animals to venture outside the protected confines of the Park, thus putting their security at risk; which is unacceptable, given their endangered status."

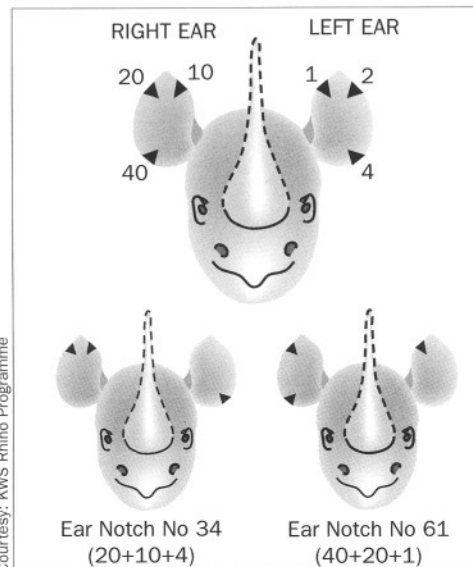
"One of the priorities, then, for us – working in conjunction with our colleagues on the KWS Rhino Programme, is to capture and translocate the surplus rhinos, so that we can use these animals to boost Black Rhino numbers on safe, yet underpopulated habitats elsewhere in the country – in this case on the Mugie Ranch in North Laikipia."

On we go then to the next "operational zone". The veterinarians in our convoy await advice by radio from the aircrews. By

team has shifted the rhino into the lying position ideal for breathing. It is promptly blindfolded and 'leg-roped'. Its skin is moistened; its wounds disinfected; its parasites removed, and its body temperature and heartbeat both closely monitored.

Unlike Emma, this (male) rhino has succumbed quickly, coming down on flat, accessible terrain. It, then, will receive the full treatment...

First, the vets make incisions in the sedated rhino's ears, which – from this point on – will reveal this animal's identity with the precision of a bar code (see accompanying Diagram). A small field generator, meanwhile, is set down beside the rhino's head, together with a drill and a hand saw. With a marking pen, a vet draws some reference lines on the rhino's horn, the tip of which he now saws off. A ranger drills a broad cavity into the side of the horn, at a



now, even we can tell – from the manoeuvres of both spotter plane and helicopter – when a fresh darting attempt is imminent. The aircraft banks away. The helicopter swoops. Then, straightening, it hovers – only metres off the ground. From where we are, we cannot see the targeted animal, over the grass and the thorn scrub.

Instructions blare from the radio, as the helicopter swings round and follows a slow, low, direct course. The dart, we know, has struck home, and the pilot is shadowing the fleeing beast, as – little by little – it succumbs to the effects of the tranquilizing cocktail of drugs.

With the ground crew, we are at the sedated rhino's side within a minute, no more, of its going down. The animal's immediate safety is of primary concern. To this end, the KWS veterinary unit gets to work with the efficiency of a Formula One pit-stop team! Within seconds, the bustling

point near its base. Then, using a long, thin point, he drills another hole down through the middle of the horn from the centre of the severed tip into the initial cavity.

Into this cavity, after some further excavation and padding, a radio transmitter is placed, the antenna's projecting up through the thin vertical hole within the body of the horn. As a wholly insensate appendage, a rhino's horn is the perfect receptacle for a sophisticated location-transmitting device, and – as such – precludes the need for the heavier and much less comfortable alternatives such as collar transmitters.

The embedded transmitter is pre-programmed to emit signals on a frequency of its own at specified time intervals. This ensures that the individual rhino can be recognised immediately and unerringly from anywhere within a radius of seven kilometers under most conditions, allowing its movements to be tracked. The radio

transmitters measure 8 cm x 8 cm x 2 cm, and have an active service expectancy of about two years.

A strong smell of resin assails the nostrils as the vets apply the finishing touches and then painstakingly seal the openings in the horn. Done! The operation, timed from the moment the dart struck, has so far taken just 35 minutes.

Now, it is the turn of 'Hannibal' – that most powerful of off-road trucks and one, moreover, that is custom-built for translocation work – to approach. With a gigantic mechanical arm, Hannibal proceeds to unload a huge wooden crate, depositing it near the head end of the still-sedated rhino. Additional long 'guide' ropes, tied at one end around the rhino's head and legs, are threaded – at the other – through holes in the far end of the crate. The crew gets into position, ready for the tug-of-war that is about to start. We, for our part, look on

vets pronounce themselves satisfied that everything is under control – a signal, this, that the operation can proceed normally. It is with some apprehension that we now follow, with our eyes, the huge truck as it bears away the crated rhino, which is still lying dazed on the floor within. Seen from afar, rhinos seem so indestructibly robust that we tend to forget – unless, or until, we see them in a situation like this, subdued and groaning with terror – just how delicate and sensitive they really are...

The Capture Unit succeeds, before the day is done, in crating another two Black Rhinos. Come evening, all three animals are ready for translocation – and the long haul to Mugie Ranch, only a few kilometers shy of Maralal: a distance of more than 300 km! Exhausted and covered in dust, we simply cannot summon the extra energy to join today's departing convoy, on what – in the dark – will be a long and tiring journey.

our vehicle, another rhino appears. This is 'Nairobi', an imposing male with a pair of very impressive horns who of late has been Emma's constant companion. He soon smells us downwind, however, and slowly disappears into the tall grass.

The helicopter, by now, is pursuing another rhino, which has just been darted. We can see, however, even before receiving confirmation over the radio, that something is not going according to plan. For the helicopter is following, and following... Clearly, the darted beast is not responding to the sedative. Nearly an hour later, the radio message comes through: "Capture aborted".

The escapee turns out to be none other than that wily old acquaintance: Emma! This time she has taken *two* tranquilizing darts, and yet she is still able to withstand the effects of the drugs. There is nothing for it, but simply to accept: that Emma – a tough mama, if ever there was one – will now be left in peace at her home in Nairobi Park. Our hearts go out to you, girl!



anxiously, hoping that another Emma-style breakaway can be avoided this time. Now, the vet injects the antidote into the beast's shoulder...

We shall have, at most, a few minutes in which to pull the rhino into the crate. The antidote takes effect with remarkable speed, and – in next to no time, it seems – the tug-of-war is enjoined. And the revived pachyderm is bundled into the crate, whose door is hurriedly slammed shut behind it by the rangers. Robust bars, inserted from above, seal the prison cell. The barging rhino unleashes its fury on these structures, loosening a few of the boards, but otherwise the sturdy crate holds firm.

Stress now overtakes the rhino, which collapses on the prison's wooden floor. Through small openings in the sides of the crate, the vets administer 'calming' injections. There is a lengthy pause, before the

Watching Hannibal and the rest of the convoy set out, we are both filled with admiration for the KWS crews, for whose members, sleep or no sleep, the operation is still far from over.

Two days later the KWS crews are back, and – soon after dawn on Friday, 23 July 2004 – we link up with them again in the Nairobi Park for Part Two of the translocation exercise, involving the capture of a second trio of rhinos. This time, however, knowing what to expect, we have arranged to leave early and will be driving to Mugie in advance of the main convoy, so as to be there when the precious rhinos arrive.

For the first of the day's new 'captures', we return to the northern part of the Park, some distance from any of the signposted tracks, to where we hope – again – to locate Emma. We are watching the circling spotter plane for clues when suddenly, close to

Come 5:00 p.m., soon after the second capture of the day, we leave as planned for Mugie. Again, we are dead tired. However, this time we are determined to make the journey and to see at first hand what awaits these rhinos at their destination. And besides, we have the reassuring presence in our vehicle of a KWS ranger escort.

It is dark before we reach Nyahururu, and over the last section of the journey – on the dirt track leading north from Rumuruti and crossing a succession of dry riverbeds – our view, under the night sky's magnificent starry vault, is confined to the narrow, bouncing arcs of our headlights. After so many hours on the road, it is a relief to see, appearing in front of us as if in a dream, the faint lights marking the entrance to Mugie Ranch, although it is another hour before we get to sleep, having pitched our tent just a short distance from the rhino enclosure.

In the silence, as sleep begins to overtake us, we can hear only the sounds of nocturnal animals, and – every so often – of one, or other, of the penned rhinos showing against the walls of the *boma*. It is past 3:00 a.m. when the main convoy finally arrives. The booming engines of the trucks are soon switched off, and the exhausted ground crews, piling out, waste no time in heading for their waiting tents to get some well-earned rest.

The three newly arrived rhinos, all in good fettle we are relieved to hear, will remain in their transit crates until dawn.

By 6:00 a.m. on Saturday, 24 July 2004, before the sun is even up, the first of the crates, hoisted aloft by Hannibal's mechanical arm, is lowered into position facing the gate of the Mugie enclosure. Each newcomer will remain under close veterinary scrutiny for the first week, by which time each should have calmed down and have taken to eating normally. Already, we are astonished to see how relaxed and approachable one or two of the first trio of rhinos captured during the current exercise have become – just three days after their capture. One female, in particular, is already eating out of people's hands!

Understandably, the new arrivals are in a rather different mood, and no sooner are they out of their transit crates, than they start barging into and battering the walls of the new enclosure, as if testing its solidity.

There is just time, before we pack our things and head back for Nairobi, for a brief chat with Claus Mortensen, manager of Mugie Ranch, who is on hand to welcome this latest consignment of rhinos. "Within a matter of days," he says, "with specialized help, these rhinos will be released one by one, and will be free to choose their own territories.

"Initially, to help them on their way," Mortensen explains, "traces of the excreta of each individual, collected from inside the holding pens, will be sprinkled at intervals along the ground in the immediate vicinity of that particular animal's release, creating a track that it will be able to follow easily by smelling, and that will lead the animal for the first time to water. From then on, however, each of the newcomers will be wholly independent."

It is time to go. And in the daylight, as we drive across the ranchland on our way back to Nairobi, the beasts' new home looks especially beautiful, with low acacias extending on every side to the horizon, and several large waterholes: a vast wilderness shielded from human conflict behind the protective barrier of a strong electrified perimeter fence, where – hopefully – these rhinos will be able to rediscover the peace that we had earlier, for their own good, helped to deprive them of back at the Nairobi National Park.

Leaving the ranch, we notice two male giraffes near the gate – one inside the fence, the other outside – locked in a futile battle for supremacy over a territory that, because of the dividing fence, neither can ultimately claim: a sad reflection of the times, but one that gets us thinking all the same. 🦒

## A balancing act

The six rhinos translocated from the Nairobi National Park on 21 and 24 July this year (*main article*) have since been joined at their new home on Mugie Ranch in Kenya's northern Laikipia District by another 14 black Rhinos – ten from the Lake Nakuru National Park, and four from the Rhino Sanctuary at Solio, another Laikipia ranch.

This brings to 20 the number of Black Rhinos now living on the 18,000-hectare Mugie ranch, which in the process has become the thirteenth designated Rhino Sanctuary in Kenya.

The establishment of well-managed Rhino Sanctuaries on private land that can absorb the surplus animals from thriving Kenyan populations in protected areas (or in other designated sanctuaries) is central to the conservation strategy being followed by the Kenya Wildlife Service (KWS) Rhino Programme, whose operations are co-ordinated by Martin Mulama.

"When building up a new Black Rhino population [such as the one at Mugie], particular care is taken," Mulama stresses, "over selecting which animals to bring in. As far as possible, we try to replicate the natural make-up of a successful wild population. So, to begin with, we bring in equal numbers of males and females. We also make sure always to include a well-balanced 'mix' – of older animals, youngsters, mothers with calves, and so on – that corresponds in every way to the composition of a typical wild population."

Particular care is also taken over monitoring existing Black Rhino populations. "We now know, in very precise terms," Mulama says, "what the territorial needs of rhinos are, and at exactly what point, for example, their numbers begin to exceed the carrying capacity of a particular habitat. So, when this happens, we have to intervene, lest the population as a whole starts to go into decline – through the loss, say, of healthy grown animals that, in seeking new territories, may be forced to venture out into unprotected areas, where their safety may be at risk.

"The situation becomes even more critical within fenced-in habitats," he adds, "where of course the surplus animals *cannot* wander, and so may turn on one another – again to the detriment of the overall population."

As secure breeding grounds, both the Nairobi and the Lake Nakuru National Parks have been central to the increase over recent years of Black Rhino numbers in Kenya – and to the need for additional sanctuaries. In all, there have now been five major translocations of Black Rhinos from the Nairobi National Park,

beginning in 1993, when eight animals were moved to Tsavo West. In 1996, 10 animals were moved, again to Tsavo West, and 13 were moved in 1999 (11 to Tsavo East, and two to the Ol Jogi Sanctuary in Laikipia).



The July 2004 operations, sponsored (to the tune of some KSh 5-million, the equivalent of US\$ 62,500) by the World Wildlife Fund and other global agencies, have seen the number of Black Rhinos in the Nairobi National Park reduced to 70 animals – down from a high of 76. As the Park's carrying capacity for rhinos is put at between 40 and 50 animals, further translocations from the Park are expected in the coming months. Indeed, preparations are already under way for the next major translocations – to the Meru National Park – of yet more of Nairobi Park's 'surplus' rhinos.

In the course of carrying out such translocations, the KWS Capture Unit, 20-strong and now under the command of Capt John Kanyingi, has accumulated a wealth of experience – and a track record unequalled anywhere in the world. The expertise gained along the way by the KWS veterinary team under seasoned practitioners, Dr Elizabeth Wambwa, Isaac Lekool and Francis Gakuya, is also widely respected as being second to none.