

Tanzania: Elephant

# GREEN Elephants

(PART ONE)

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*I was standing on the back of a Unimog as we bumped along a track through the bush. With one hand I held on, and with the other I grasped a double rifle. Looking behind, I saw three 4x4s following us in a cloud of dust, all loaded with people and equipment. I had to keep my eyes trained on the side of the track. Like my African assistants beside me, I was on the lookout for fresh elephant sign.*



## The Vet Shop Boys

After ten years in the Selous, Africa's largest game reserve, we had achieved most of our goals. The park was properly managed, and poaching was no longer a serious problem in an area of almost five million hectares. Outside the park, in the buffer zone that stretches over a million hectares, the village hunting cooperatives were becoming increasingly important. There were three hundred village game scouts who patrolled and kept poaching under control. Animal numbers were on the rise.

South of the Selous, in neighbouring Mozambique, there is another game reserve, Niassa, which was also being rehabilitated using our strategy. We had established close cooperation with our counterparts there, albeit on an informal basis. Elephant populations had been decimated during the long civil war, but were gradually recovering.

Wildlife knows no borders, and that is particularly true of elephants that can migrate long distances. It was imperative, therefore, to protect their migratory routes. To do this we had to make sure that the area that served as a corridor between the two reserves didn't lose its biological diversity. Unfortunately, that was precisely what was happening. Migrants were clearing more and more woodland, poaching was rife, illegal gold miners were poisoning the rivers with mercury, and seekers of precious stones were digging in the most remote corners.

How could the woodlands and wildlife in the corridor be better protected? After all, you can't place an entire country under a conservation order. As so often happens, we took our cue from the local communities. They were setting up their own hunting cooperatives in the face of strong resistance from corrupt senior wildlife officials, who saw a lucrative source of personal enrichment disappearing. "The wildlife belongs to us!" was their motto.

I decided to support them. I'd raise the necessary money somehow, but the first step was to collect the facts with which to convince potential donors. "You must prove that the elephants use the corridor



for their migration. People will only believe the results of your research if you have documented the exact movements of an animal by attaching a radio transmitter to it." My colleagues and I heard this advice many times during the preparations for our project.

Personally, I'm opposed to research that intrudes heavily on the lives of animals. Stress, cruelty and, all too often, dead animals are the outcome. The darker side of such research is often left unmentioned. Animal research in Africa must be very well-founded, and should directly serve the interests of practical conservation. Only then can the costs and risks to the wild animals be justified. We appraised the risks and possible benefits and drew up a research program that was awarded to the Leibniz Institute for Zoo and Wildlife Research in Berlin, following a tendering process. We were soon to discover that this was a stroke of luck, as we were able to engage some of the world's best and most highly-skilled craftsmen in the field of elephant research.

Our first task was to catch some elephants and fit them with radio-collars. This would allow us to track their migratory

routes through the corridor. For this purpose, a team of young scientists flew in from Berlin. Dr. Thomas Hildebrand, Dr. Frank Göritz, and Dr. Robert Hermes were professional veterinarians, as well as being thoroughly likeable fellows. We quickly established a mutual trust, which was soon to be put to the test in life-threatening situations.

We established our base camp at the community-based Conservation Training Centre in Likuyu Sekamaganga, which had earlier housed refugees from Mozambique. Our "Vet Shop Boys" as we called our researchers, borrowing from the pop scene, had already acquired enough practical experience with elephants to have no illusions about the risks involved. In South Africa's Kruger National Park, an elephant they had immobilized fell on a calf, which proceeded to squeal at the top of its lungs.

Searching for elephants involves a lot of time spent in a helicopter.



A mother elephant launched straight into an attack, and only at the very last moment did one of the rangers in the party manage to shoot her. “The dead elephant rolled over at our feet,” said Thomas.

At our camp we discussed and analyzed the fresh eyewitness account from a young German development volunteer who had taken part in a dilettante scheme to resettle elephants in Uganda, that had been funded by the European Union to the tune of over a million Euros. Eventually, two or three elephants found a new home, but twice that number died along the way. And to make matters worse, an elephant had killed a Ugandan vet while he was working on another sedated animal.

Consequently, we prepared our operation with military precision. The sedating and other work on the elephants was the responsibility of our veterinarians. Responsibility for the overall logistics and for the team’s safety fell to my German project colleagues and me. Staff members of the Tanzanian Game Department and the University of Morongo provided backup.

We spent hours deciding in detail what equipment to use, who was in charge of what, who was responsible for safety in each group, and how the chains of command should be structured. There was a ‘hunting team’ – Thomas and Frank were the vets, I was in charge of safety and bore overall responsibility. Additionally, there were two trackers and another armed hunter. For this latter job I chose Kaita, an old friend and colleague. In contrast to nearly all the senior officials of the game department, he not only had a great deal of hunting experience, but he was also a good shot. I knew from buffalo hunts we’d been on together that he had steady nerves, didn’t run away when problems arose, and was reliable. I decided not to include the Tanzanian scouts in the plans for group safety. I knew who was courageous and reliable and who could shoot well. However, this would have placed too much responsibility on the few who fit the bill.

**Above:** An immobilized elephant after its collar has been attached.

**Right:** Applied science. The Berlin scientists examine an immobilized elephant and collect sperm.

If an accident happened and the bureaucrats were looking for culprits, I might not be able to protect the scout and save him from unfair punishment. That was a risk I didn’t want to take. The vets would decide on all matters pertaining to sedation, and they could also specify the kind of elephant they wanted, for example a young bull or a sexually mature cow. Which animal was ultimately selected and how the team conducted itself in any given situation, was for me to decide.

Then there was the ‘working team’, as we called it. This consisted of more vets, Tanzanian scientists, and a large number of porters. This team was mobilized as soon as an elephant was recumbent and the work of measuring, serological sampling, ultrasonic testing, obtaining sperm, etc., could begin. They were heavily laden with medical equipment, which, depending on where the elephant was located, might have to be carried several kilometers. For their protection the working team was escorted by an armed ‘safety team’ led by Rudi Hahn.

### Hunting With a Dart Gun

We had been on the track of elephants for a couple of days, and I discovered that the rush of adrenalin from this bloodless form of hunting outstripped anything I’d ever experienced while stalking





elephants. On more than one occasion we got close to elephants but not within dart range, or the elephants were standing in brush. A fully-jacketed bullet would have found its way through, but not the syringe-dart.

At one point we caught sight of some elephants making their way briskly across a wooded incline. The wind was favorable and we managed to cut across their path. But as they approached there were more of them than we had realized. Soon some twenty were in front of us, many of them calves. They were nervous; maybe they had caught our scent. Some raised their trunks, rotating them in all directions to pick up more scent. The two vets and I crouched motionless on the ground. Two of the elephants were less than twenty meters away. When a cow senses danger at such close quarters there is the chance that she will launch a direct attack. With six people present and so many elephants, the situation was unmanageable. We hadn't

immobilized a single elephant yet, so there was pressure for results. For safety reasons I decided to abandon the attempt. We cautiously and slowly extricated ourselves from the situation.

The term "green hunting" has gained currency in Southern Africa, and means the pursuit of wildlife for sedation purposes. "Green" is used here in the politically correct sense, as if normal hunting, which is about killing the animal, is necessarily 'non-green', i.e. non-ecological. Green hunting in Africa is usually a source of funding for research work. If elephants or rhinos, mostly in fenced national parks, have to be examined or relocated, a wealthy hunter is found to operate the dart gun. If this is done professionally and ethically, it can certainly be a legitimate source of funds for wildlife conservation. However, the risk of abuse is high; it is said that there are rhino bulls in South Africa that have been immobilized more than twenty times.

During the night we heard the elephants near our camp, and in the morning a schoolboy we met along the way told us that they had gone past the school. We set off in pursuit and gradually closed in on them. Three hours later we were within sight. It was a group of three bulls, a larger bull with two smaller ones, known as 'askari', or lookouts. They were climbing a steep hillside and were close to some fields that were formerly part of a refugee camp. They crossed the road and we lost them. Perhaps an errant current of air had drifted up from the valley.

Breaking off our chase we started driving back to home base when we heard an elephant trumpeting loudly. We stopped, jumped out and followed the sound. A few minutes later we spotted the animal in thick underbrush. By kneeling and looking along the ground, I could see the feet at a distance of about fifteen meters. Higher up, the foliage kept me from seeing more than a couple of meters. Inevitably, the



elephant caught wind of us, and hurried off. We chased after him, and on several occasions I could have shot him easily with my rifle, but we weren't close enough for the dart gun.

As we returned to our vehicle, we came across a cow with two young ones. The chase began all over again. She ran in a circle, and unknown to us at the time, we ran right past the vehicles we had left on the road with our waiting colleagues. Laughing, they later recounted how three elephants had charged past at full tilt, followed by two veterinarians and a man armed with a rifle puffing and panting like a hippopotamus. That was me.

That evening we discussed our long-distance chases. The veterinarians were younger than I, and more importantly, fitter. One of them was a marathon runner and rock climber. We agreed that I would run as fast as I could. The others could run faster than I could if they chose, but then they would be responsible for their own

safety. No one ever ran ahead of me after that.

The following day, on the edge of a plain we'd christened 'Little Serengeti' because of a profusion of wildlife, we came across a bull elephant. It appeared to be about thirty years old. We approached from behind, to a distance of about twenty-five meters, but were unable to dart him because he turned and came directly toward us. To get the M99 anesthetic into his bloodstream quickly, we could have shot the dart low into his belly – if it weren't for the tall grass shielding it. The elephant suddenly got nervous and moved even closer, before suddenly launching into an attack.

We never discovered if the attack was serious or not, as my colleague who was providing reinforcement that day, shot into the air with his .375. The bull turned and Frank shot the dart at his buttocks, but we could see that the slow-moving dart missed its target. Fifty Euros worth of dart and drug ended up in the bush.

**Left:** The entire team has to work quickly to get everything done before the elephant wakes up.

**Above:** One last look before leaving the collared elephant.

An hour later we found the elephant standing on a slope in some *miombo* woods above us. He had seen us, but we were already close enough for a shot. The dart lodged high up in his back. He charged off. We found him again less than a quarter hour later standing on the other side of a small valley and looking unsteady on his feet. Finally, we watched him collapse. It was fortunate that we found him so quickly because he was laying in a stream. This was, on the one hand, a good thing because it kept him cool; on the other hand, his trunk was in the water and he was already making rattling noises because of inhaling water. He could have easily drowned.



**Top:** The author had an elephant hair bracelet made as a trophy from a sleeping elephant.

**Bottom:** Standing watch for other elephants was one of the author's many tasks.

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## Sperm Snatching

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We didn't have radio contact with the working team, so Rudi ran back to fetch them. All manner of samples were taken, and the radio-collar fitted. This meant that the animal could be located by satellite and at close range with a VHF receiver. Using an ultrasound scanner that they had developed themselves, the Berlin vets determined the elephant's reproductive status. He was developed normally, but wasn't currently potent. From that it could be deduced that there were socially dominant bulls in the vicinity who were suppressing him. If they were removed he would be able to reproduce within a matter of months.

The assertion by some scientists that the old bulls shouldn't be hunted because they are the only ones that reproduce is, in that sense, incorrect. The dominant old bulls don't allow the younger ones a chance. Removing the old bulls once they've passed their prime can actually improve the birth rate, since younger bulls have a higher reproductive success rate. In any case, in genetic terms, it makes no difference whether an elephant reproduces at thirty or fifty years, the genetic material he passes on is the same.

An hour or so later the whole thing was over and the pachyderm got his wake-up jab. Before that happened I cut off a few tail hairs for the scouts, who use them to weave traditional bracelets. From a distance we watched as within three minutes, the elephant got back to his feet. He made off as fast as he could, looking for all the world like an embarrassed teenager caught doing something he shouldn't have been doing.

The next day we succeeded in immobilizing another bull. This time it was a bull

that had been reproducing. Our Vet Shop Boys inserted an electro-ejaculator into the animal's rectum in the hope of obtaining sperm for their research. When their best efforts were to no avail – despite obvious emotional stirrings and agitated dreams manifested in the loud groans emitted by the sleeping elephant – an internal massage was tried. Eventually, it was Robert's turn, the youngest of the vets. He adopted an old-fashioned hands-on approach and obtained the requisite secretion, which was collected in a condom the size of a lady's stocking. I now understand why the vets were introduced on a television show as the "Elephant Masturbators of Berlin". The sperm from our Ruvuma elephant, incidentally, turned out to be far more potent than sperm from zoo elephants, and for the first time it proved possible to freeze elephant sperm and keep it fertile.

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## Close Combat

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The following days were spent in endless, fruitless stalking. One dart missed its target, another hit home but failed to release its load. Then we heard the familiar rumbling sound elephants make when they talk to each other, and we noticed a cow with two calves of differing ages coming toward us. We were standing on top of a long ridge, close to the edge. To our right there was a steep fifty-meter drop. Frank and I crouched against the trunk of a small tree and Thomas was a few meters behind. The cow strode quickly forward, making directly for us. The shot could only be fired when she was six meters away. The dart lodged in her shoulder and, to our relief, the cow and calves did an about-face and charged off. In less than a quarter hour she would be on her knees, but until then we had to track her closely in order to be on the spot immediately.

More elephants were immobilized in the following days without incident, and soon we had only one radio-collar left. We searched the area around Mlima Tembo, which means Elephant Hill, walking through a beautiful valley profusely thicketed on either side of a broad stream. After hours in the burning sun

we finally spotted a cow with two calves on the hillside across the valley, and made our way toward her.

She was standing in the shade of a tree, motionless except for fanning her ears. It was midday, there wasn't a breath of wind, and the heat hung in the valley. The grass was dry and chest-high, and it was impossible to move silently. So we weren't surprised when we found the spot under the tree empty and spotted the three exiting expediently in the other direction. They were already a hundred meters away.

The scout moved a few meters ahead to get a better view. Suddenly, he streaked past me, running as fast as his legs would carry him, and disappeared. The next thing I knew, an elephant cow with long slender tusks was attacking from a distance of twenty meters. I still maintain it was a feigned attack meant to drive us away. That was my gut feeling at least. Of course, I may have been wrong.

A moment later, Rudi, who was again providing reinforcement, shot into the air, convinced that the cow had launched a full attack. The shot caused her to engage her afterburners and charge even faster. This time she really did mean it. She raised her trunk in the air and let out an ear-piercing blast. I had her forehead in the silver sights of my .458. I decided to give her five more paces. If I didn't hit her brain, I'd have had it. With the double rifle I didn't have the luxury of a warning shot. Behind me, Kaita then shot into the air, and this time she turned.

We watched her from behind as she ran after the others, with that curious hopping gait elephants have. The whole thing was over in seconds. We looked at each other in relief. It was a close shave which could have gone badly wrong.

The next cow was immobilized without incident. She was down after a mere four hundred meters, and she submitted to the full program. At first, the other elephants with her wouldn't leave us alone, and I had to shoot into the air several times with my 9mm Parabellum before they reluctantly lumbered off.

To be continued ...