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FIRST AID

J. H. B. Prole tells how he cut out Gertie's damaged eye with the bush for a theatre.



GERTIE IN HER PRIME, before she lost her fantastically long front horn and still owned two good eyes.

(Picture by: C. A. Spingie)

THIS is the story of what I believe is the first major operation to be performed on a wild animal in the bush.

The patient was Gertie, the world-famous female black rhinoceros of the world record horn, known for her mild disposition to thousands of visitors to Amboseli National Reserve.

Gertie is particularly valuable as we believe that she and Gladys, who was probably her mother and who was killed early this year by poachers, carry some genetic factor influencing horn growth.

An African Game Ranger was the first to report that Gertie appeared to be suffering from a severe eye injury. The news reached me by the roundabout manner, typical of Masai-land—from Ranger to Warden, Warden to District Commissioner, D.C. to the veterinary office and myself.

I reached Amboseli to find Gertie in a mud wallow, accompanied by her three-

year-old daughter, and saw at once that the eye was beyond repair. It hung from the damaged socket, and I could see how she had been rubbing it on the bank behind the wallow.

IT is interesting contemplating what would have happened had Gertie been left alone.

The eye would in time have been pecked out by the oxpeckers who were already giving attention to it. She would have been in considerable pain and would probably have retired to thick bush and charged anything that disturbed her.

The pain and possible infection from this injury would have caused weakness, and probably death, from a brain infection or from attacks by lion or hyena.

The eye socket would never have healed over properly as the mucous membrane remaining, together with the tear glands, would have prevented this.

We held a conference with the Park Warden, Bob Woodward, the Game Warden

of Kiboko, Nick Carter, and Game Warden of Kajiado, Denis Zaphiro, who had flown down to Ol Tukai in his aeroplane and who is in overall charge of the game at Amboseli.

Denis Zaphiro pioneered the use of light aircraft in game conservation in East Africa.

We agreed that something would have to be done if this famous and much photographed rhino was to be saved. Also, if we left her as she was, she would suffer considerable pain, and the sight of oxpeckers and flies feeding on her damaged eye and socket would have horrified all who saw it.

The operation carried considerable risks; she is an old animal (approximately 30 years) and could have died under the anaesthetic; the anaesthetic itself and human interference could well have turned her "rogue".

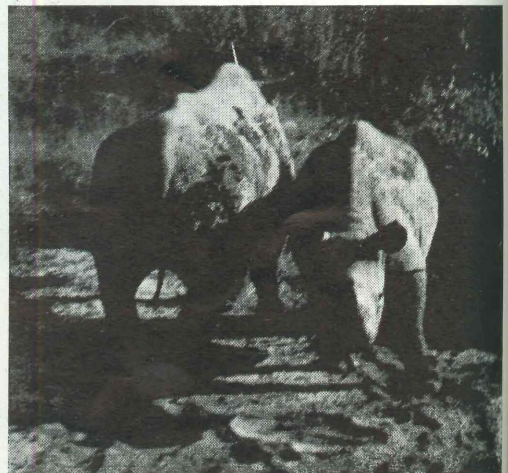
However, I felt that the factors in favour of attempting an operation outweighed those against and, on my advising Denis Zaphiro accordingly, he decided that the operation should go ahead.

TO allow for maximum daylight, we planned to set to work early the next day, and we found Gertie near the swamp, with her calf still in tow, plus an older cow, possibly one of her previous offspring.

We had hoped to drive Gertie further away from the swamp on to flatter and more hospitable country, but as she was in pain we could not risk losing her. We put guards on the swamp, and winches and ropes were readily available in case of accidents.

The anaesthetic to be used was Parke Davis' Sernyl injected intramuscularly into the buttock by means of a dart fired from a

WITH THE DART FIRMLY EMBEDDED IN HER, Gertie staggers off towards cover, whilst her calf turns to fight a rearguard action, if necessary.



NICK CARTER, GAME WARDEN OF KIBOKO, has had as much success drugging rhinos with cross-bow and Sernyl-filled dart, as anyone in East Africa. It was he who put down Gertie before the operation and this picture was taken moments before the successful shot.





DOWN FOR THE COUNT, the helping hands of a Park Ranger just visible in the left-hand corner, Gertie collapses in a heap as the veterinarian moves in to start operating.

crossbow, a method long practised by Nick Carter; an American invention with East African modifications.

Carter has found this anaesthetic particularly effective on black rhinos, as the dose is not critical, and too accurate an estimation of the weight of the animal is not necessary.

The dose for an adult rhino (3/8 gr.) is dissolved in about 1.5 c.c. of water, so that a relatively light dart may be used. A little hyal veronidase is also added, for quick absorption into the blood stream.

The dart itself has a special metal syringe with a barbed hypodermic needle on one end and feathered flights at the other. An automatic device causes the drug to be injected after impact.

Past experience has shown that the dart sometimes becomes deflected by tough skin or bone, or, on occasions, the hypodermic needle becomes clogged by a bit of hide. Any of these may result in insufficient quantities of the drug entering the blood stream, and a second shot may be needed.

WE shot the dart into Gertie at 8.30 in the morning, and she moved slowly away. For some reason the dart took no effect and we shot again at 9.15.

She then disappeared into the bush and was lost. The two young rhino left her after this second dart, which was lucky as we



A LOCAL ANAESTHETIC is injected into the area around the eye socket as Gertie, breathing oxygen through a nose pipe, lies dead to the world.

feared we might have to drug the calf as well, to keep it quiet whilst we dealt with the mother.

A long search followed over difficult country and through twelve-foot-high grass. Three of the vehicles stuck and there was a risk of being charged by Gertie or another rhino.

At one time Bob Woodward climbed a tree to get a better look, only to be "treed" by Gertie's daughters for some time.

We were particularly worried that she might make for the swamp where she could easily drown as the anaesthetic took effect.

After an hour of fruitless search, Denis Zaphiro spotted her from the air and directed the ground party to where she had fallen, on her left side, in some long grass. We roped her legs together and gave her oxygen via a plastic tube in her nostrils.

I cleaned up the eye and found that the damage, due to trauma, was such that she would never see out of it again. Under local anaesthetic the damaged eye was then removed together with the associated tear glands, conjunctive and lids. All blood vessels were twisted off and the eye socket was packed with sulphanilamide powder.

The wound was closed, using interrupted sutures, leaving an opening at the inner canthus to allow for drainage. While sewing up the socket I found that the skin below the eye was very thick and hard. The rest of



ASSISTED BY HIS MASAI TRAINEE, Joel Motero Ole Kaaka (left corner), and watched by Amboseli Warden, Bob Woodward, and Park Rangers, Prole works on Gertie's eye.

AN INNOVATION IN BUSH SURGERY. As Prole draws the damaged eye ball from its socket, Gertie breathes oxygen through a plastic nose tube, supplied from portable cylinders.

the skin around the eye was approximately as thick and hard as normal cow hide. Gr 25 terramycin were injected intramuscularly into the buttock to counter infection and assist healing, and we patched up some other minor wounds.

She struggled a bit during the operation, but was never really conscious. These struggles took the form of "paddling" movements with her legs and "horning" movements with her head. It was lucky that she only has a short front horn. Even so, it makes a pretty formidable weapon.

Most of the time she lay quite still and comfortably on her left side, breathing oxygen. The cutting of the optic nerve set her off but the local anaesthetic had completely desensitized the rest of the area.

The operation took about an hour, and then we splashed her with water.

She made several attempts to get up but flopped over, until at 12.30 she stood, albeit unsteadily. Three-quarters of an hour later she moved slowly away with two Rangers in attendance.

We looked at her again at about 4.30 p.m. and found her moving slowly about. The following morning she had gone back to her old area and was eating, accompanied again by her younger daughter.

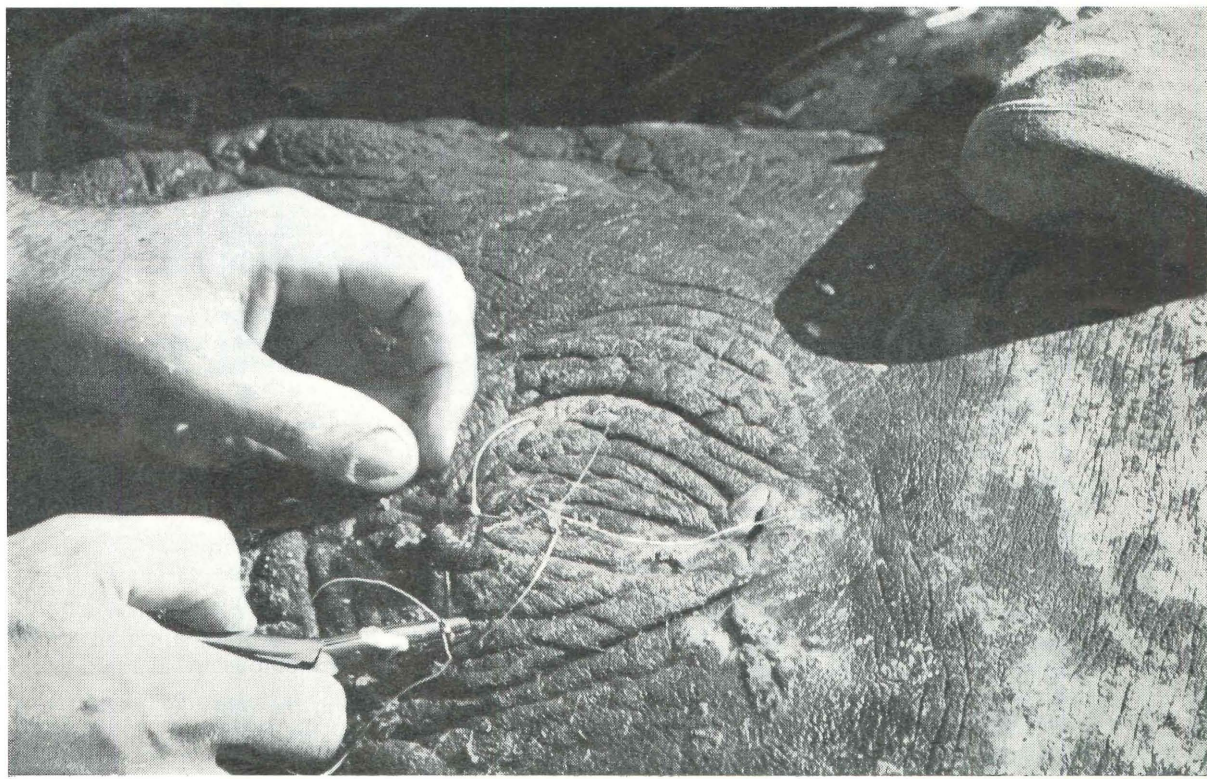
I VISITED her about three weeks after the operation and found her near the swamp in the company of the two youngsters. The wound looked healthy and there was no discharge. There seemed to have been some interference with the sutures either due to rubbing or oxpeckers, but the socket was practically closed.

It is difficult to see how this injury arose. The eye socket of the rhinoceros is three-

quarters surrounded by bone. The eye itself is small and seems to be well protected. There were two wounds behind the eye that may have had something to do with the injury, possibly following a fight.

A happy feature of the whole operation was the way Gertie's calf looked after her. She was always the first to look up when anyone approached, and was even seen to nudge her mother's head in the direction of an oncoming car.

A THEATRE ASSISTANT'S BOOT steadies the patient's head as Veterinary Officer J. H. B. Prole finishes off the last few stitches of a highly successful and humane case of surgery in the bush.



I think, in conclusion, that this operation emphasises how much we humans can do for wild animals, using modern drugs and techniques, and, by no means the least important, aeroplanes.

All photographs of the operation, and those leading up to it, were taken by S. Feinhandler, with the exception of top right-hand picture on this page which was taken by the author.