Catching and Carting White Rhino in Uganda

By J. M. Savidge

In 1961 the Uganda National Parks captured ten white (squarelipped) rhinoceros in West Madi district, west of the Albert Nile, where they were being poached out of existence, and transferred them to the Murchison Falls National Park. The operation was financed partly by Anglia Television and described by John Savidge in ORYX, September 1961, vol. VI, 5. Unfortunately the six animals released in the park included only two cows and no mature bull, and the chances of their reproducing were small. So in 1964 a second operation was mounted, financed by the World Wildlife Fund. In this article the author, then Scientific Warden of the Murchison Falls Park, describes this operation which captured and released another five rhino, four of them cows. This greatly improves the chances of breeding, and with freedom from poaching in the park, the rhino now have a reasonable chance of building up the herd.

WHEN it was decided in 1964 to capture some more white rhinoceros for transfer to the Murchison Falls National Park, I approached Major Grimwood, then Chief Game Warden of Kenya, who generously agreed to make Mr. B. Carter and his capture team available, and the East African Wildlife Society who generously loaned their plane. Mr. Carter had captured many black rhino using the drug Sernylan (Phensyclidine) in a dart incorporating an explosive charge, the dart being fired from a crossbow at short range either from on foot, from a landrover, or a helicopter, depending on the type of country and the wildness of the animals. The plane was essential for locating rhino quickly, and time was short, for it was urgent to get every single rhino out of the flat country where poaching was easy. At the end of May, we made preliminary reconnaissance to Lomunga camp and made arrangements for laying out an airfield and building the holding pens.

The Game Guards reported having seen four white rhinos in the area, one of which they knew from the spoor had only recently given birth to a calf. Nine rhino were reported in the Laufori area on higher ground to the north, and possibly another two at Polorinya, some ten miles away. We expected that the combination of the landrover and Cruiser aircraft would be adequate to locate and capture the rhinos in the thickets and open grasslands of the Lomunga Game Reserve, but those in the worst terrain of the Laufori area presented a different problem. Mr. Carter had been greatly assisted in Kenya by the helicopters of the 8th Independent Recce Flight of the Army Air Corps, so we decided to hire a helicopter for three days. After the necessary permission had been obtained (involving ultimately the War Office), we were honoured to receive the services of the Commanding Officer of the 8th Recce Flight, Major S. Whitehead, a "chopper" pilot of great experience and skill. The helicopter caused a great deal of press and film interest; once again Anglia Television filmed the operation.

The method of hunting was for the spotter aircraft to take off early in the morning and to quarter the area at a height varying from 100 to 500 feet. Having located the rhino, the aircraft then returned to R.V. with the vehicles, and dropped a message (a coloured streamer glued to a strong brown envelope weighted with a small stick) giving the numbers of rhino, and whether adult or young. The aircraft then returned to circle the rhino at such a height (700 to 1,000 ft.) that they were unaware of it, and thus unlikely to be frightened off. The landrover judged their position from the turning circle of the aircraft, for in the dense thorn thickets in which they rest during the day they can only be seen from the ground at close range.

Co-operation for Capture

Mr. Carter's method of hunting is to close with the rhino when the country permits, the landrover going in to point blank range, when the dart is fired. The landrover then falls back and tries to keep in touch with the animal until it becomes ataxic from the effects of the drug. With the aircraft in attendance the landrover can afford to lose touch with the darted animal completely, awaiting a message from the aircraft that the rhino is lying down ataxic, or standing quietly, depending on how much drug it has absorbed over the half-hour uptake period allowed. The aircraft is then free to land, or, if more than one rhino has been darted (indicated by coloured streamers flown from the vehicle), it follows the others. As soon as the rhino becomes ataxic the capture landrover calls up the collecting lorry by radio. The Kenya Game Department lorry, donated by the Shikar Safari Club of the USA, has been specially adapted for rhino work, and greatly simplifies the task of getting the rhino back to the pens with the minimum of distress to the animal and in the shortest time.

The rhino's legs are roped together and it is rolled on to a wooden 'tray' (a reinforced door) with a framework of rope loops to which nylon restraining ropes are lashed to restrict movement, particularly the head and neck. The tray is winched up steel roller-ladders on to the lorry. On arrival at the holding pen the lorry backs down into a rear-wheel pit previously dug to its measurements, so that the rear end is nearly at ground level. The tray carrying the rhino is then towed off with a steel cable using two landrovers in tandem, the cable passing between two logs of the boma wall opposite the off-loading gap. The latter is closed with upright logs wired together in the same way as the walls. There is thus no doorway left for the enclosed rhino to work on. From the time of being roped the rhino is given oxygen from a tube into the upper nostril. This assists recovery from Sernylan, which has no known antidote. Rectal temperatures are taken. If the day is hot and the animal has been struggling much, it sweats profusely. Spraying with water helps.

In the boma, the leg ropes are untied. Oxygen is continued until the animal shows signs of being able to rise. Most of the white rhinos were standing again within four hours of being first darted-slowness of recovery is a sign that all is not well-and recovered completely during the night. Human visitors must be kept to a minimum until the rhino has settled down, otherwise it may be become so traumatised that a breakout is invited. At first the animals remain standing and on the defensive, lunging aggressively at anyone moving near the pen, but they soon learn to relax and lie down; spraying with water from a pressure spray has a soothing effect. At first they drink but do not eat, and the quickest way to get them to resume eating is by throwing grass in front of them in small quantities. A short charge and horn thrust usually precedes the first proper mouthful of food taken. Difficult animals may have to be teased with food in this way for several days before they feed continuously without stimulus. The wildest animal was an old cow with a two-month old calf. Eventually she became so conditioned to feeding in response to a stimulus that she started to feed whenever she was provoked, but stopped when left alone. This behaviour is probably displacement activity similar to that described in other smaller animals by various observers.

In the Lomunga Game Reserve we captured all the eight white rhino, most of which proved to be cows, which was unexpected but extremely fortunate, since the Park population was deficient in females. The two pregnant cows died from effects of the drug and the very young calf died from pneumonia. Of the remainder within a week of their capture, all but one were feeding from the hand and quiet enough to crate, although an old cow who had been captured twice, took a fortnight to recover condition sufficiently to be moved to the Park.

Dangers After Capture

Rhino in a weakened condition, particularly when unable to select a slope or support for the head or shoulders when resting on the side, legs straight out, easily become 'cast' or unable to rise. The weight of the body rests on the shoulders and so prevents the underneath forelimb from being used as a cantilever in rising to stand. A strong rhino swings the head and neck over until the chin rests on the ground. This frees the underneath foreleg as the weight is momentarily taken on the jaw. With a weak animal or when the lie of the ground prevents it, the head cannot be swung into the upright position or the underneath limbs freed. Unless assisted to rise the animal remains cast, becames exhausted from struggling and ultimately dies from exposure, exhaustion, shock, and frequently, in heavy animals, pneumonia developing in the lower lung which is only partially inflated during respiration because the weight of the body inhibits it. Even during deep sleep in the small hours rhino change their position frequently from one side to the other and must not be prevented from doing so for more than a few hours. In the holding pens the danger of an animal becoming cast is increased, and if the rhino have long slender anterior horns as is the case with adult rhino cows from this area, the horn may become trapped between two vertical logs of the boma wall. This in fact happened with each of three cows captured, and reluctantly we had to cut off the greater part of the horn with a bushman's saw.

One incident shows the need for constant vigilance. The mother of the calf became 'cast', and as no responsible person was in the camp she was left struggling on her side for sixteen hours. When I returned it took seven men pushing on her backbone, shoulder and neck-hump to rock the animal into the brisket position from which she could rise after a rest. Using a sack filled with grass as a pillow to wedge under her shoulders, I found it possible to get her up single-handed when she was stronger and herself trying to get up. Although probably grateful for the assistance, she was not above assisting her helpers up the boma wall with a well-aimed thrust of the head as she got to her feet. The accompanying snorts have a galvanising effect which assists climbing, particularly in the dark, and when the poles are wet with rain. For the next two nights every two hours we had to roll her over by hand, and then keep her interested in staying active by throwing bunches of grass within muzzle reach before allowing her to rest again. On the third and fourth nights the sleep intervals were lengthened to three and four hours. This rhino recovered completely, and after release was seen in the park several times, but after this an all-night watch was kept-two guards and two vehicles.

Journey to the Park

The rhino were taken to the Murchison Falls National Park in a seven-ton Mercedes lorry which contained a fourteen-foot wooden crate with a reinforced drop door. The lorry was backed down into a rear-wheel pit and the boma fence opened sufficiently for the rhino to walk into the crate. There it was fed with grass for two days, after which it would enter and leave freely as soon as food was offered. The first safari took two immature cows in the crate together. There was sufficient room for both of them to turn round in the crate but they had to be heavily tranquillised to prevent them fighting. On the journey a rhino needs to be rested by stops of up to an hour every four hours, and given water in a kurai (wide tin bowl) let down on a string. It is also sprayed with water from a hand pump, kept shaded and given freshly cut grass at intervals.

The journey of 195 miles took up to 18 hours to accomplish. The first twelve miles were the worst, and on one occasion took seven hours. Excitements included towing with landrovers, restoring the capsized lorry to equilibrium with a 7-ton Tanganyika jack, and driving through the bush when the track was too greasy for vehicles to move. Once, the Game Department lorry following the rhino truck skidded on the muddy planks of a bridge and burst through the retaining iron rails with both front wheels—it is surprising what concentrated man-power can achieve in handling heavy vehicles!

On arrival at the Park, usually after dark, the rhino were rested until daylight, and given water and food in the crate. Even the strongest animals become torpid during prolonged road journeys, and their condition is the same as during sleep; exhalations for adults were recorded at a steady 13 to the minute. After the first two, none were tranquillised for the journey. They are unwilling to rouse themselves before they have fully recovered, and are much safer left in the crate for some hours-up to fifteen hours in the case of the old cow who was most tired by the journey. They easily become dehydrated, when the eyes sink in, but resume the normal appearance when the water deficit is made up. While in the crate, if quiet, they can be treated for any wounds. In the boma a Cetavlon solution applied with an insecticide crop sprayer was found useful for superficial cuts and abrasions-rhino have very tender outer skins. Deeper wounds, like holes resulting from the explosive charge in the darts, were syringed with hydrogen peroxide. Conditions in the release area of the National Park (Wandera) were optimum at the beginning of July, with short green grass following recent rain, although the rest of the Park at this season is covered with long rank grass.

The Two Groups Meet

The six white rhino released in 1961 were all seen within two miles of the off-loading ramp, so that it took only a few days for the two groups to meet up. A fortnight after their release my wife and I saw the two young cows in the company of two young bulls of the same age released in 1961. The amount of squealing and snorting suggested that the reunion had considerable social significance.

"Obongi" the tame five year old calf from Paraa (captured in the first operation) was released at the same time, but unfortunately refused to accompany any of the newcomers into the wild, although there were several opportunities for her to do so. She hung about near the offloading ramp for two weeks, weathering, with some scratches on the belly and hind quarters, an attack by a lion. When the wallows where she had been watering dried up, she followed the vehicle that brought her water straight back to the airfield buildings, which from then on she stubbornly refused to leave. Efforts are being continued to repatriate this difficult female to the wilds. All the animals released were seen later in the same area and are in good condition. The mature bull was seen, at dusk, to meet up with the old cow that had survived so many hardships. The time taken over the whole operation was five weeks, or an average of seven days per rhino safely moved.

The total number of rhino now in the Park is twelve, of which seven are females. Although four of the latter are immature, the composition of the group is such that breeding is now assured, and given freedom from poaching and predation, the species has a reasonable chance of survival in the new area.