

Plastic for Game Catching

Jan Oelofse

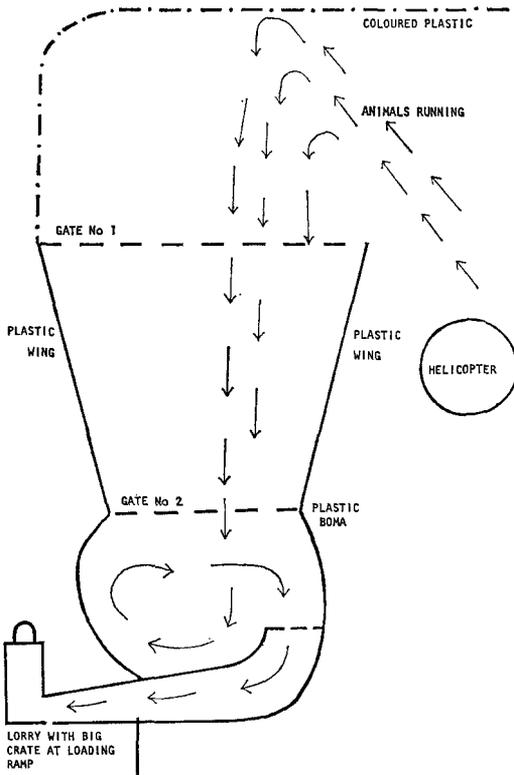
Faced with the problem of having to capture large numbers of game animals on difficult terrain and in a short time, the author, who is Senior Capture Officer of the Natal Parks Board in South Africa, hit on a remarkably simple and highly successful method. He found that large animals like antelopes will not attempt to go through or past plastic material, and by making a cheap and simple plastic 'curtain' he could drive them with a helicopter into waiting lorries. This way he captured 3500 animals in four months.

Game capture has become an essential tool in wildlife conservation especially in Africa, and conservation authorities have experimented with various methods, notably drugs. But such methods are not suitable for catching large numbers, and in South Africa particularly there is an ever increasing need to capture and translocate hundreds and even thousands of animals quickly.

In the confined areas of the Umfolozi and Hluhluwe Game Reserves here in Zululand vehicles cannot be used because of the disturbance they cause and also the rugged terrain, which is quite unlike the open plains of East Africa. Even where it is possible to use vehicles, only a small number of animals can be captured daily and then only at great risk to both animals and men. So I had to find an alternative. First I tried nets, using different techniques and types, but with only moderate success; although relatively large numbers of animals could be moved, quite a number were killed through hitting the nets or from injuries sustained in handling.

After many sleepless nights trying to think of a better method I decided to try a curtain-like material. The most suitable I could find was a woven plastic, and we tried this. The result was most rewarding. To the animals the plastic appears as a solid wall, which they do not run into as they had the nets, and I realised that, with this device, and using a helicopter to drive them, we could capture large numbers of animals in a comparatively short time. I designed a crush pen with loading ramp in such a way that up to four hundred large antelope or zebra could be loaded per day without handling, and the results have been remarkably successful.

The operation requires one capture officer, ten labourers and lorry drivers; 1600 yards of plastic material in 100-yard lengths 10 feet wide—colour optional, but I prefer a pale grey to harmonise with the surrounding bush and grass; 3200 yards of $\frac{1}{4}$ -in. steel cable in 100-yard lengths fitted with hooks and eyes to make joining easier, and a cable strainer; four sides of timber, 14 ft \times 8 ft for the crush pen, two 14 ft sides for the loading ramp; one 14 ft \times 4 ft floor board strong enough to carry the animals climbing into the lorries; eight 14 ft \times 3 in. poles to be planted in the ground to which the loading-pen partition and loading



ramp are tied to stabilise the loading unit; three strong transceiver sets, one in the helicopter and two with ground personnel; tying wires to tie plastic material to cables; lorries fitted with enough large crates to accommodate the animals to be moved; one small truck (essential for carting material around the capture site); an assortment of spanners and clamps, cane knives, saws, etc.

Method of Capture

Once the game to be captured has been located, a careful study is made of their movements and of the surrounding country. The selected capture site should be one to two miles from the animals so as to minimise disturbance when it is being prepared, and bush and trees to camouflage the plastic material are desirable. In open country the site should be behind a ridge or dunes, using poles instead of trees to keep the cables and plastic material in position. If possible the site should be up-wind of the animals to make the operating of the helicopter easier during capture.

To erect the plastic capture craal the top cable is strung from tree

to tree about eight feet from the ground in a rough V some three hundred yards deep, and two to three hundred yards wide at the mouth, with the capture craal and loading pens at the back. A second cable is strung on the ground directly below the first, and both strained tight with the cable strainer. The plastic material is tied to both cables with short pieces of bailing wire or clips. Only the gates are left open but short pieces of tying wire should be twisted around the cables at about three-foot intervals to enable the men at the gate to tie the plastic material to the cables as quickly as possible after the animals have entered.

The plastic material for closing the gates is folded on either side of the gate in such a way that it can be quickly and easily picked up and carried across the opening. Strips of bright coloured plastic (which make the animals stampede in the opposite direction), placed so as to divert them towards the capture craal are a tremendous help in the final stages of the drive.

The loading ramp, made from the prefabricated wooden sides and a strong wooden ramp, should be placed if possible in a depression in the ground to make it less steep for the animals. No vehicles or other equipment should be left where the animals can see them as they approach the gate. Four men stand on each side of gate no. 1, each group equipped with a radio transceiver, and two more at gate no. 2.

The helicopter approaches the animals from the opposite direction, and drives them slowly towards the capture site, the pilot taking care not to fly too close or to stampede them, and flying as low as possible, so that the animals know where it is, and move in the required direction away from it. The capture officer is in radio contact with the men at the gates keeping them informed as the operation progresses.

As soon as the animals come within two to three hundred yards of the gate the helicopter moves in close and stampedes them into the capture craal, and instructions are radioed to close the gate; the helicopter *must* remain in the air until the gate has been closed securely. The men now drive the game slowly into the capture craal at the back.

The animals to be loaded—usually about ten to a lorry (all of the same species) depending on the species and the size of lorry—are now driven in through gate no. 3, which is immediately closed behind them. Holding a short piece of plastic in front of them, the men now drive the animals slowly into the crush pen, and that door is immediately closed behind them. The animals will now enter the lorry up the loading ramp without much trouble. It took my experienced team an average of fifteen minutes to select and load a group of animals. The actual helicopter drives averaged fifteen to twenty minutes.

By these methods, we successfully captured 3,500 animals—wildebeest, zebra, nyala, impala, kudu, warthog and waterbuck—in four months in 1969. This year we have also captured buffalo.

I have kept full grown rhinos in capture craals like the one described for up to eighteen hours; they never attempted to escape, and I feel confident that plastic could be utilised in rhino capture operations.





Inside the enclosure Jan Oelofse separates a small number of
zebras for loading. Plate 9

The zebras accept the security of the plastic wall. Plate 10





Hesitation before entering the loading pen.

Plate 11

Suspicion overcome and into the trucks.

Plate 12





Plate 13

SPANISH LYNX. This splendid photograph was taken by Brian Hawkes in the Coto Donaña, now a national park, in southern Spain. Smaller than the typical European lynx, more heavily spotted and with shorter fur, the Spanish race, *Felis lynx pardina*, has now disappeared completely from the peninsula except in certain large controlled hunting areas, such as the Coto Donaña, in the south. The *Red Data Book*, describes it as rare and still decreasing.