

# The Black Rhinos of the Pilanesberg

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Hanne Lindemann and Hans Hansen with Tony Ferrar and Steve Johnson from the Bophuthatswana National Parks Board.

**Having celebrated its tenth anniversary in December 1989, Pilanesberg National Park is a relatively new member in the network of African wildlife sanctuaries. It got off to a good start with "Operation Genesis": from 1979 about 6 000 mammals of 19 species were released in the 500 km<sup>2</sup> of beautiful rolling hills and broad valleys.**

Nineteen Black Rhinos, eight females and eleven males, were introduced in Natal between 1981 and 1983. Their establishment in the park was studied by Dr Kes Hillman, and since then the annual game-count has given an indication of how the Black Rhinos have fared.

With this prehistoric-looking animal climbing high on the list of endangered African species, the Bophuthatswana National Parks Board decided to set up an intensive monitoring and management programme for their Black Rhinos. An accurate census based on individual identification would be the foundation for this programme.

Twenty years ago there were about

65 000 Black Rhinos in Africa south of the Sahara. Today less than 3 500 remain. Most of these are found south of the Zambezi, and at present only the population south of the Limpopo is considered reasonably safe.

Recognising this, rhino specialists in southern Africa have prepared a national conservation plan for the region. One aim is to develop as rapidly as possible a genetically viable population of at least 2 000 Black Rhinos of the southern-central ecotype, *Diceros bicornis minor*, which now numbers around 600 in South Africa.

Every individual Black Rhino is important if this management programme is to succeed. But just to provide an accurate account of a population is no easy task, as we found out during a two-month study in 1989, supported by the Endangered Wildlife Trust and the Bophuthatswana National Parks Board.

It all started on a warm March morning in Pilanesberg. With Tony Ferrar, the chief ecologist, we had been walking across the veld for about an hour enjoying nature's small things: tiny acacia trees

breaking through the crusty soil, termites extending their towers and dung-beetles turning a rhino midden into neatly rounded small globes.

Passing through a clearing, we heard the characteristic rustling of rough skin against thorn-bushes. The next minute a Black Rhino appeared, and then another and another. We stood very still. In single file they advanced towards us, totally ignoring our presence.

Some nearby trees became very attractive. Tony kept his feet on terra firma. We tried to be calm too, but thorns or no thorns we climbed. Hanne got herself a front row seat, positioned on a branch three feet off the ground. The rhinos were drawn to a midden on the other side of her tree, and passed within ten feet of her.

Situations like this tend to be hysterically hilarious afterwards. But in this case the rhinos were so unperturbed by our presence that the experience was almost unreal. Hanne complained about running





out of film, and the tension was released with laughter and talk about how easy it would be to study such placid Black Rhinos!

To achieve the target set in the national conservation plan, populations of Black Rhino should be managed with the aim of getting a maximum increase. This requires long-term information on breeding performance such as calving intervals, age at first calving and calf survival. Ideally, all the individuals in a population and their history should be known.

As individual recognition is also important in Black Rhino census-work, Bophuthatswana National Parks Board decided to assemble an identikit for the Black Rhinos in Pilanesberg. The identikit was to include photos and drawings of each rhino's characteristics, such as horn shape, ear-notches and scars.

This reference file should ideally make identification possible for anybody observing Black Rhinos. It only requires a basic knowledge of what to look for in the field and a good view of the animal, as the characteristics can be difficult to make out. This is complicated by the fact that Black Rhinos spend much of their time in thick bush, making them hard to find, follow and observe both from the air and the ground.

But with our first Black Rhino encounter in Pilanesberg in mind, we began the task of assembling the identikit with confidence. This was in no way diminished when we saw three Black Rhinos from our EWT Landrover on our first day in the field, and another one the next day. We talked about what we would do when we had finished the project in a fortnight. We made little of the fact that the first group vanished into thin air before we could get close enough to get pictures showing the rhinos as more than tiny dots. Nor did we find it important that the next rhino crossed the road at dusk, which does not improve picture details, despite using fast film. We were confident that we would soon meet it again!

Two months later, with 26 individual Black Rhinos photographed and filed, we had to acknowledge that our results could not have been achieved without the assistance of Vere van Heerden and his costly Bell 47 helicopter. We could also report that not all of the Black Rhinos possessed the same good temper as the three we had met on that memorable March morning with Tony Ferrar!

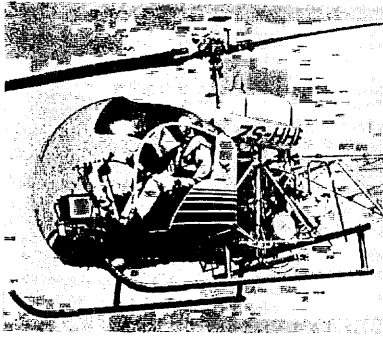
Our project started with the annual game count in August. At this time of the year most trees have shed

their leaves, and visibility from the air is optimal.

To get the pictures needed for the identikit, we went out with the helicopter each morning for one to two hours trying to locate the rhinos already seen by the team doing the census. If none had been observed, we searched areas known to have Black Rhinos. Vere van Heerden has eyesight like a hawk, and it was very satisfying when we could beat him on the odd occasion and find a Black Rhino before he did. Having spotted one, it was just a matter of getting some good photos, showing the characteristics of that particular individual.

Easier said than done! We could not always say beforehand which feature should be focused on. And just to focus is difficult when you sit in a shaking and moving helicopter trying to keep a running rhino in the view-finder. But thanks to Ilford, we had no shortage of film, and thanks to Van Heerden's aerobatic abilities we could in most cases get pictures from all angles. Back in the darkroom we could then choose the best shots for the identikit.

It is not surprising that to many people one grey Black Rhino looks like another. Often it is very small things that make the identification possible. It can be hairs on the



ears, small scars on the back or a kink in the tail which make it possible to separate individuals. Though horns are very characteristic for the species, they are rarely reliable when it comes to individual identification. Horn shapes look different to different observers, and even different to the same observer under different light conditions.

Most of the original released Black Rhinos had ear notches of some kind. Referring to a file made by Kes Hillman, some of these markings were still sufficient for identification, but others had been obscured by wear and tear. And, of course, the rhinos born in Pilanesberg had no markings, therefore we had to find other characteristics.

In some studies of Black Rhinos, the wrinkle contours on the snout have been used for identification. Especially in the fairly open East African landscape this has proved to be a reliable technique. But when it comes to dense bush, where the rhinos are mostly seen at a distance, it is another matter – particularly when identification is done by different people.

But you learn from experience and the ones you know well, you recognise without realising why.

When the aerial count was finished, we concentrated our efforts on getting supplementary pictures from the ground. This was not a very successful exercise. We were able to recognise the Black Rhinos we encountered, but only in a few

cases did we get pictures that would have been suitable for the identikit.

In the first place, Black Rhinos mostly stick to thick bush, and are therefore difficult to find. Secondly, having tracked one down, your problems are not over. Sometimes that is actually when the real problems begin!

Despite their size, rhinos have a way of disappearing into thin air. But this is only a minor problem. Though some move great distances you can usually find them again. It is when they do not disappear that you can get into real difficulties because, as mentioned, not all the Black Rhinos in Pilanesberg are as placid as the first ones we met with Tony Ferrar.

In addition to the identikit the project provided much valuable information, or due to its short duration maybe rather circumstantial evidence, about the Black Rhinos in Pilanesberg. This information would have taken years to collect on the ground.

Some rhinos move over long distances, while others can be found virtually under the same bush for several days. A female with a small calf moved at least 7 km in 24 hours, and two days

later she was back where she had first been seen.

Black Rhinos have a reputation for being solitary animals, which might be justified to a certain extent. But on two occasions Black Rhinos were found standing under a tree in the company of White Rhinos.

Black Rhinos are fascinating but confusing animals. Considering the Black Rhino studies conducted throughout Africa, from Goddard's in East Africa to Hitchins' in South Africa, it is surprising how little we actually know about this endangered animal. Hopefully the effort made in southern Africa to save the Black Rhino will make it possible to discover more about this excitable, but also exciting animal.

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