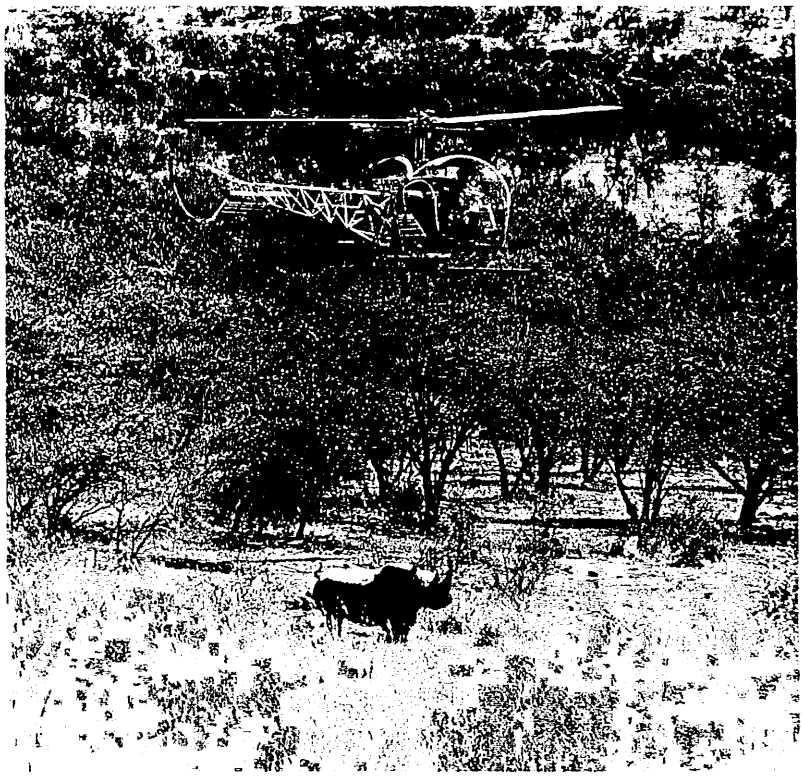
The Black Rhinos of the Pilanesberg: Part II

by Hans Hansen and Hanne Lindemann

1990 was the second year of the Pilanesberg Black Rhino monitoring project. During July and August, 27 individual Black Rhino were identified, of which 22 were among the 26 previously recorded. The additional five animals bring the total number of Black Rhino in the identikit file to 31. As the maximum population is estimated to be 34, only a couple of individuals are still eluding detection.



This, and the fact that it has been possible to identify all the females and most of the males from the founders of the originally introduced population make the Black Rhino in Pilanesberg unique. Knowledge of the life history for the individuals in the population provides an excellent opportunity to study the important parameters for achieving maximum breeding.

The number of Black Rhino on the African continent continues to decline. A recent survey from the African Elephant and Rhino Specialist Group indicates that there are probably only 3 000 today compared with 3 800 in 1987. Fortunately it seems that the loss is slowing down considerably: this is of course partly due to the law of diminishing returns, but there are also indications that protective measures are working in Kenya and southern Africa.

Most of Kenya's remaining (about 400) Black Rhino are now living in fenced and guarded areas. The population in Zimbabwe is still being attacked by poachers. Namibia at least manages to maintain *status quo* and in South Africa we have an increasing population. This leaves the two countries as the only region with an increasing number of Black Rhino. Of these most are living in their natural environment, which stresses the importance of the efforts being made here to achieve maximum increase for the populations.

Bophuthatswana National Parks is making an important contribution to the targets stipulated in the conservation plan for the Black Rhino in the region. For two years now the population in Pilanesberg has been monitored intensively. An identikit file for 31 of the estimated maximum 34 individuals has been collected, and this gives a good picture about the life history of the animals. Supplemented with information collected during the project, such as sex ratio, group size, local movements, locations and physical condition, the file has provided knowledge about the development of the population and indicated which parameters are important to achieve a maximum increase.

In 1990 the programme was divided in an extensive ground exercise and an intense aerial survey, the latter conducted in combination with the yearly game census in Pilanesberg. The object of the ground work was to reveal which parts of the park's beautiful rolling landscape was most frequented by the Black Rhino. During the last fortnight of July and the beginning of August we walked about 300 km accompanied by Game Scout George Phiri. Besides giving a sound foundation for the later aerial programme, this part of the project also provided good exercise, improved our tree climbing techniques and created memorable incidents.

The Black Rhino in Pilanesberg belong to the subspecies *minor*: but when you are facing them on equal ground there is nothing small about them. It is not really amusing, at least not until afterwards, to stand about 20 metres from one of these reputedly aggressive pachyderms with only one tree of the type with thick trunk and no lower branches in the vicinity. This is especially true when one is carrying two heavy cameras and a pair of binoculars.

No. 2 Sept (99)

This is Condat matt 115 gsm available from Spicers.

not to mention the fact that the tree is already occupied. Luckily this rhino did not follow its species' usually inquisitive and quickly approaching manner but just kept munching its daily diet of dry twigs before wandering slowly off.

It can be difficult from the ground to get a good look at all the markings necessary for proper identification. But that time it was not difficult to establish that the crunching sounds came from an old, wellknown, even tempered friend with a beautiful set of horns. Quite different in temperament to the one we call Van Gogh due to a missing ear. Rhino have a peculiar way of appearing out of the blue. You round a patch of bush and they suddenly materialise, hopefully a short distance away. This is exactly what happened with Van Gogh late one afternoon. Slightly dozy after a long walk we managed to piece together his identity from our observation in the many long seconds before we scattered to the safety of nearby trees, while he to our relief crashed off in the thorny thicket. Now, we barely recognised him in the failing light, despite the severe wear and tear, the missing ear and a newly broken back horn, that makes this old brute so easily identifiable. This demonstrates the importance of clear characteristics.

To establish the identity in the field when on foot is not always an easy task as one often needs observations from several angles. But it still seemed like the ideal situation when we came across one that was fast asleep: snoring away loudly he took no notice of the shrill alarm from the oxpeckers that tried to warn him about our presence. We had plenty of time to confirm from a tear in his ear that this was an individual we had not previously encountered. Quite excited about this we did not take notice of the faint changing wind: in a split second he was on his feet. The snoring

Our companion while walking some 300 km through the park in search of Black Rhinos– Sergeant (Game Scout) George Phiri.

changed to snorting as he headed straight in our direction. But a combination of our jumping for the trees and his changing direction turned the situation into just another exciting incident.

Basically, the reputation of the Black Rhino as an aggressive animal is exaggerated. This should not encourage anybody to take chances with them, but mostly they will try to get away from one. Unfortunately, this sometimes involves a detour in the intruder's direction.

During the ground work we did not get pictures fit for identification purposes; but the file was quickly supplemented and brought up to date when we became airborne. Thanks to George Gravett of Canovid, who put an auto-focus Canon camera at our disposal, the task of getting detailed and sharp pictures was made easier. It was a great relief being able to focus on the important markings on the rhinos instead of having to concentrate on the focusing screen.

One would think that it is a relatively easy task finding Black Rhino from a helicopter, but they have a way of lying low. Most of them are not particularly perturbed by the noisy thing flying around above, and therefore just stand still in the shadow of a tree with a dense canopy. It actually took us several days to find the 'new' rhino, which we had seen when on foot as mentioned above. We flew over the spot many times until late one afternoon he was there, standing under the same euphorbia where we had seen him sleeping. Having finished taking pictures of him from all angles we were about to head for home, when Vere van Heerden with his usual eagle eyesight spotted another Black Rhino nearby, a young female. Speeding the film a couple of F-stops we just got her fit for the file before the sun disappeared.

Black Rhino generally move a great deal in their home range utilising the potential resources. By nature they are unpredictable, which of course adds to the difficulties, when you have to find them: but we now have a pretty good picture of their movements.

It seems that especially the males have favourite spots, where they spend part of the day sleeping. Travelling to the different areas of the park in the helicopter, we often saw males lying under their preferred tree. The movement pattern of females is more confusing. They stay in the same place for some time, and then disappear, only to turn up in a completely different area days later.

The information collected for the identikit file has made it possible to provide a good estimate of the maximum population in Pilanesberg National Park. As can be seen from Table A, it includes a separation on age classes. The figures agree with the actual observations except for the two groups, calves and young of year. This indicates that either the calving interval has

increased in recent years or calf mortality has occurred.

Despite the expensive helicopter hours required for this intensive monitoring programme it seems to be cost effective when one considers the amount of information collected in a relatively short period. It is the intention of Bophuthatswana National Parks to continue the project. The aim is to make it a permanent year round exercise, where the identikit and the individual life histories are regularly updated with data based on daily field observations by the game scouts. To achieve this target it is important that the Black Rhino are easily and unmistakably identifiable. Presently we can recognise each individual from scars, sex, tail, hornshape, group association or location. But admittedly the subadults can be difficult to identify. It is therefore intended in 1991 to mark this group with ear notches according to the regional numbering system.

The price of rhino horn on the Asian market continues to rise and demand is still at a level that stimulates poaching. Vigilance in national parks in the southern African region must therefore be maintained. An intensive monitoring system like the one set up by Bophuthatswana National Parks can also be an important tool in anti-poaching. This supplemented with support and acceptance from the local people could give both Black Rhino and the multiple other wildlife species of the rich African fauna a future, which is also part of our common future.

We are grateful to Bophuthatswana National Parks Board for inviting us to continue the identification project and for financial support. We are grateful to Jules Turnbull-Kemp and his staff at the Pilanesberg National Park for their help and hospitality. We would also like to thank the Endangered Wildlife Trust for awarding us a grant, Mazda Wildlife Fund for the use of their 4x4 vehicle, and George Gravett, Canovid, for the use of a Canon EOS camera with 100-300 autofocus zoom lens.

Authors' address: Hans Hansen and Hanne Lindemann are freelance wildlife consultants, writers and specialist tour guides based in Copenhagen, Denmark. Send correspondence c/o Endangered Wildlife Trust, Private Bag X11, Parkview, 2122.

TABLE A

ESTIMATED BLACK RHINO POPULATION IN PILANESBERG NATIONAL PARK

Assumptions

Age at first calving: 7 years – adult female
Calving interval: 3 years (0.33 calf/year/adult female)
Even sex ratio at birth
No calf mortality
Subadult age class 3 – 6 years
Actual adult mortality considered

Population development since introduction in 1982/83

	82	83	84	85	86	87	88	89	90
Adult males	5+1*	11	11	11	10	9	8	9	9
Adult females	4+1*	8	8	8	8	7	6	6	7
M calves/year	1	1	1.3	1.3	1.3	1.2	1	1	1.2
F calves/year		1	1.3	1.3	1.3	1.2	1	1	1.2
Age class 1990		Adults		Subadults		Calves		YY	

*1 Subadult in each sex-class

Estimated population in 1990		Identified in 1989 + 1990
Adult males	9	9
Adult females	7	7
Subadult males	5	5
Subadult females	5 + 2 introduced	5 + 2 introduced
Calves males	2	1
Calves females	2	1
Young of year, Males + females	2	1
Total	32 + 2 = 34	29 + 2 = 31

Total Population

Identified	31– including 2 introduced 1989
Estimated, max.	34– including 2 introduced 1989

The winner of the **Spirit of the Wilderness competition**, which is a trip to Bazaruto Island, is Mrs Olga van Randwÿck of Darling in the Cape Province

Notice

In Endangered Wildlife magazine No 6 we published 9 photographs of our EWT Corporate Awards function on page 29. Due to an oversight we did not thank George Allen for donating these pictures to us. We are most grateful to George for his kind assistance.