

## The status of the black rhinos in Nairobi National Park

by Frederick Waweru

In the early 1960s, there were only six black rhino in Nairobi National Park; by last year there were at least thirty. In a study funded by the East African Wild Life Society, a post-graduate student at the University of Nairobi looked at the implications of this success story.

Nairobi National Park covers an area of over 100 sq km and is situated 8 km south of the city of Nairobi. The park is fenced on all sides except for the 22 km of the southern boundary which is formed by the Embakasi River. The river is fordable in many places allowing free movement of animals to and

from the adjoining Kitengela Conservation Area and the Athi-Kapiti plains. The western portion of the park is covered in forest while the rest consists of open grassland plains transversed by strips of riverine forest. Most of the common plains game are to be found within the park, with their attendant predators.

The majority of black rhinos in Nairobi National Park were translocated there from other areas. Between June 1963 and December 1964 twelve rhinos were released into the park either by professional trappers or the Game Capture Unit (GCU). Of these one bull died and a cow and calf, who had come from Kitengela on the southern boundary of the park, returned there across the Athi River. The other nine animals are thought to have remained in the park, joining the six rhinos who were already there—and who are thus the park's only truly indigenous rhino.

A serious translocation exercise was started in November 1966 by the GCU. By the

end of 1968, a total of 22 rhino had been released into the park. A study by P.H. Hamilton and J.M. King revealed that some of the animals counted in the 1967 census were not observed in the 1968 census. This could have been because the animals had died, had moved out of the park or had stayed deep in the forest during the day and had thus escaped detection.

Mortality rates among the black rhino in the park are not high: two collisions with vehicles have been reported and only one serious conflict between a newcomer and a resident rhino. Kes Hillman while working in the park observed a badly-wounded newcomer, which was later found dead outside the park after breaking through the fence. The wounds were attributed to fighting with resident rhino. It is common, however, to see in the park groups of two to five rhino in one place showing no aggression towards one another.

Cases of poaching are unheard of among the park's rhino because there is tight security within the park: every day between dusk and dawn a vehicle patrols the park and there are ranger's posts and staff housing in the park and near several of the gates.

By the end of my study in June 1985 I had observed and individually identified a total of 30 black rhinos in the park. (This figure, of course, must be the minimum number to be found there.) Among these, fourteen were bulls, nine were cows and seven were calves; of all the adult cows only two did not have calves; among the calves four were males. one was female and two were unsexed.

The calving interval for rhinos is 27 months and the maturation period is five to seven years. This indicates that within another five years all the present calves will be adults and the females among them will be ready to calve. By that time today's nine adult females will have calved once bringing the total rhino population to at least 39. The nine females can be expected to calve again together with the present calves after five years. The result will be at least another ten calves, bringing the total rhino population to 49, and so on. These figures assume that none of the present individuals will have died.

At this rate the park will be overpopulated in another 15 years. There will not be enough food to support the increasing numbers of black rhino so either the food supply will have to be supplemented or the rhino population controlled. As the park is not a zoo, the authorities have no plans to supplement the rhino's feed. The only alternative will be to translocate the rhinos to the other rhino sanctuaries which are now being established.

The present status of rhinos in Nairobi National Park indicates that the translocations have been a great success. This augurs well for the Kenya government's policy to translocate endangered rhinos to special sanctuaries until it is possible once more to release them safely into the wild.

Frederick K. Waweru graduated from the University of Nairobi with a degree in zoology. The study on which this article is based formed part of his MSc course in the biology of conservation. He is now working as a biologist with the Kenya Rangeland Ecological Monitoring Unit.