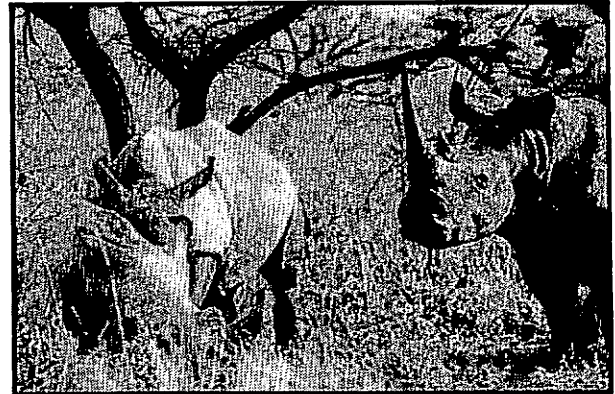
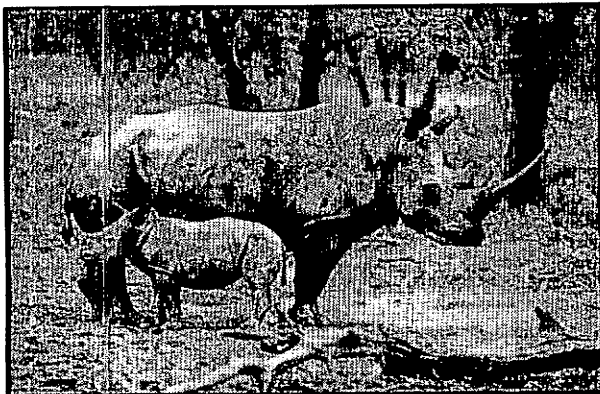


# Monitoring The Movements of Umfolozi's White Rhinos

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In 1897, the last few white rhinos in Africa were discovered living between the white and black Umfolozi Rivers, in what is now the Umfolozi Game Reserve. In an attempt to save these last few individuals, the area was made into one of Africa's first game reserves and today, an estimated 2 000 white rhinos live in the Hluhluwe-Umfolozi Park.

White rhinos can have a massive impact on their environment through overgrazing. It is thus imperative that the rhino population be kept at a level where they will not have a detrimental impact on the reserve. In 1986 the Natal Parks Board implemented a management policy to deal with the rapidly increasing white rhino population. This policy, called the sink management policy, utilizes the white rhinos' natural tendency to disperse from areas of high rhino density to areas of low rhino density. Areas of low rhino density, known as sinks, were established in the outer sections of the reserve by removing white rhinos from these areas and selling them to other reserves and zoos. A central source area, which contains large numbers of rhinos, was left untouched - rhinos are able to move freely between this source and the surrounding sinks. Rhinos that have moved from the source into any of the sink areas are removed and sold in the annual auction, in order to keep the population size constant.



The management staff of Umfolozi need to know how the white rhinos are using the sinks and where they are moving in the reserve. This knowledge is important in allowing the staff to evaluate the management plan. In order to answer these questions, a study on the white rhinos of Umfolozi has been established. The movement patterns of the rhinos in the sinks and the influence that different densities have on these movements are being monitored in study areas each measuring 55 square kilometres that are located in two of the sinks. In one study area, the white rhino density was reduced to less than one rhino per square kilometre while the other was left with a density higher than one rhino per square kilometre. Transects were established in both areas and are walked throughout the year to monitor any changes in the density of the white rhino population. The rhinos' use of the sink areas is being related to both the habitat quality and annual changes in habitat quality of the study areas.

The Rhino & Elephant Foundation's support has been extremely helpful in covering many of the financial requirements of this project. The processing of photographs used for the identification of individual rhinos, and travel expenses, are just two things that the contribution made by the Foundation to this project is helping to cover.

The information gathered in this study will help us to understand the rhinos' movement patterns in the sinks, and the factors that are influencing these movements. The results of this study will help the staff of Umfolozi and the Natal Parks Board to make confident management decisions for the continued preservation of the white rhino. Without the support of organisations like the Rhino & Elephant Foundation, research projects such as this one could not be conducted.