
Black Rhino Monitoring in the Umfolozi/Hluhluwe Complex

TM Yule

Introduction

Since it began in 1988, the black rhino monitoring programme in the Umfolozi/Hluhluwe complex has made outstanding progress; it has provided many facts that now comprise a computer database. The information that can be derived from the data-base helps managers to be more productive and more accurate in decisions on black rhino management such as off-take figures.

A black rhino sighting return form is submitted monthly by each of the six Section Rangers in the complex. This data is then entered into the computer at the research centre in Hluhluwe Game Reserve. Master files containing the history record sheets, calving records, mortalities, re-sightings, distribution maps and data from animals captured for relocation are kept at the relevant Section Rangers' outposts, the bases where the Section Rangers reside and from which they operate. Copies of these files are kept at the research centre and updated monthly in case of accidental destruction of a master file.

Methods

Accurate data to enter into the files and onto computer come from a number of sources, namely:

1. Opportunistic sightings - rhinos seen by chance, e.g. whilst driving in a vehicle.
2. Game guard reports - rhinos sighted by game guards out on patrol.
3. Biological patrols by a Section Ranger - a Section Ranger on patrol with his guards sights and records a rhino. (Such occasions also provide an opportunity for training and evaluating guards.)

4. Observation posts - game guards equipped with binoculars and a radios are placed on vantage points such as hills. When a rhino is sighted, the Section Ranger is guided by radio to the animal.
5. Helicopter and fixed wing monitoring - a helicopter (Bell 47) with two crew members is directed to rhinos by a fixed wing spotter aircraft (Cessna 182). The helicopter crew members alight at a distance and are then guided to the animal by the fixed wing.
6. Helicopter and fixed wing monitoring and notching - a helicopter (Bell Jet Ranger) with a Section Ranger and a veterinarian aboard are directed to rhinos by a fixed wing aircraft. After the Section Ranger has confirmed that the animal has no distinguishable marks, such as scars, ear notches, missing tail, etc., and if the animal is not on dangerous ground such as near a ravine, it is darted with M99. Once the animal is down, the helicopter crew land and notch the ears according to the national strategy numbering system. If from the air the animal is seen to be marked, it is photographed and the sex, age, group composition and location recorded.

Training

Over the past three years I have been involved with the training of game guards to monitor black rhinos accurately and effectively. APP of the Picket Indunas, the rank given to game guards in charge of a patrol area within a section, are now at a standard where their data can be entered onto the master files and the data-base. All sightings made by the Indunas are quality controlled by the Section Ranger. Through training the amount of accurate data has increased four-fold.

Results of the 1989 black rhino survey.		Results of the 1990 black rhino monitoring/notching programme.	
Helicopter hours: (Bell 47)	20	Helicopter hours: (Bell Jet Ranger)	30
Fixed wing hours: (Cessna 182)	40	Fixed wing hours: (Cessna 182)	37
Number of rhinos sighted	135	Number of rhinos sighted	40
Number of known animals sighted	57	Number of rhinos notched	36