

SPECIAL MEASURES TO PROTECT THE KRUGER NATIONAL PARK RHINO POPULATION

K A R Maggs^a and J de V Greeff^b

INTRODUCTION

The tragic declines in the elephant (*Loxodonta africana*) and black rhino (*Diceros bicornis*) populations throughout their ranges has been graphically illustrated in various publications. The declines may invariably be ascribed to heavy poaching and have not only resulted in severely reduced densities of the species but also their extirpation over vast areas of their erstwhile range.

Conservation agencies have launched several attempts to curb the rate of poaching in several different countries. The success of these attempts are, however, subject to several complicating factors and have - with few exceptions - proved to be largely futile. This is largely due to the fact that the success of nature conservation programmes is closely correlated with stable government, community awareness and sound economics.

In the case of the Kruger National Park (KNP) sufficient evidence exists to indicate that intensified onslaught on the elephant and rhino populations is imminent. The high level government administration that exists, and the expectation that economic growth is in the offing, may contribute towards the degree of success that may be achieved in warding off the threat. In this respect, the management of the KNP has also established an anti-poaching unit and, though still in the initial stages, it has made several major advances in recent months towards securing its objectives.

Present situation

At present the KNP comprises 22 sections, each ca 80 000 to 100 000 ha in extent. Each section is managed by a Section Ranger along with at least 8 to 17 Rangers. These sections act basically as 22 front-line anti-poaching units in a decentralized system. This system is then backed up by a small intelligence gathering investigation team based in Skukuza. The Skukuza-based investigation team is in the process of developing a workable model for the efficient co-ordination and running of an efficient anti-poaching strategy for the KNP. This dynamic model will then form the basis for our rhino protection plan and no part thereof is more important than the other.

For the months January 1994 to July 1994 there was a total of 24 firearm-related incidents. 14 firearms (10 AK 47's and 4 other firearms) have been recovered within the KNP. There have been 4 armed contacts with poachers resulting in the deaths of two poachers and the wounding of another. Concern for the security of our rhino and elephant populations in the KNP has led to the preparation of an anti-poaching strategy and model. This model is presented here in its draft form and is likely to go through a process of change as more research is carried out.

^a Head, Anti-Poaching Unit, Kruger National Park, Private Bag X04, Skukuza, 1350, Rep. of South Africa

^b Ranger, Nwanetsi Section, Kruger National Park, Private Bag X402, Skukuza, 1350, Rep. of South Africa

Year *	Rhino Total	Number Shot	Total No Incidents	Firearms other	Firearms AK 47
1986	1061	2	91	2	0
1987	1017	1	15	5	4
1988	1229	0	115	3	1
1989	1284	27 **	122	3	6
1990	1381	1	163	2	7
1991	1564	2	162	12	4
1992	1803	10	189	13	10
1993	1871	9	186	10	8
1994	pending	1	pending	0	7

- * The year depicted above runs from April through to March of the following year.
- ** 27 rhino shot by Mr Ludwig Wagner over a number of years. They have all been recorded for the 1989 report year.

EIGHT-STEP COUNTER POACHING MODEL

(PRO-ACTIVE) CRIME PREVENTION

1. Criminal Information Intelligence

- (a) Informer network
- (b) Handling and payment of informers
- (c) Co-ordination of information
- (d) Analysis of patrol and research information
- (e) Communication and liaison with neighbouring communities
- (e) Working across international boundaries

The threat from within one's boundaries is as great as that from outside. With the high prices being paid by rhino poaching syndicates our own staff members become a very real potential target for these groups. To counter these known threats we are in the process of developing an intelligence gathering network both inside and outside the KNP. Any successful intelligence gathering process includes the establishment of an informer network. These informers are recruited within the potential threat areas surrounding the KNP as well as from ones own staff compliment within the KNP. Generally any information gathered forms part of a business arrangement between the organization and the informers and therefore adequate funds for this purpose should be made available. The handling and payment of informers should be on an organized basis and so designed so as to be freely available for audit.

All information gathered should preferably be centralized, evaluated and stored for dissemination purposes on a central computer. In the KNP the Head of the Anti-Poaching Unit based at Skukuza is responsible for the co-ordination of all information gathering and informer handling activities.

Liaison with the KNP Community Liaison Section is carried out on a regular basis to ensure the latest developments and feelings of the local people along the boundaries of the KNP.

The primary objective in this regard is to ensure local participation and input in all the phases of the model.

Analysis of all Ranger diaries, patrol reports and research reports is a very important means of information gathering and up-dating local knowledge and understanding.

Promote and maintain good relations and communication with all neighbouring countries. The KNP Anti-Poaching Unit has as one of its high priorities, the improvement of relations with neighbouring countries such as Mozambique and Zimbabwe. This will ensure a continuous flow of information supporting the anti-poaching efforts.

2. Threat analysis

- (a) "Know your Poacher"
- (b) De-briefing Informers
- (c) Analysis of Ranger Reports
- (d) Liaison with outside communities and organizations
- (e) Centralize Information

An extensive and reliable information gathering system will ensure that the potential threat is identified and evaluated. Without the first step of information gathering it is unlikely that any potential threat could be identified. It is very important to "know your poacher". The information gathering process should lead to improving your profile on the person or persons and their *modus operandi* and therefore place the anti-poaching operations in a strong position to act pro-actively.

The correct de-briefing of informers, analysis of patrol and research reports and the centralized storage and analysis of information will lead to a better overall picture of the threat. Liaison with relevant outside organizations, for example the SA Police Endangered Species Protection Unit, the SA Police Firearms Unit and other conservation bodies will ensure that an overall picture is formed of the National and local threats and that organizations are kept abreast of the latest information available.

All poaching information gathered in relation to the KNP is centralized at Skukuza. Here it is stored on computer, analyzed and disseminated to Rangers and outside organizations on a need-to-know basis. It is often found that a great deal of information is gathered and kept by the various persons and organizations active in this field. The process of co-operation and communication should at all times be promoted to ensure that relevant information is being gathered and passed around.

3. Operations security

- (a) Plan of action
- (b) Briefing "need-to-know" basis
- (c) Radio security
- (d) Essential Elements of Friendly information

It is important to develop a security "culture" amongst all personnel involved in the management of rhino.

For the successful running of any anti-poaching operational work a plan of action is required. This plan should be backed up by adequate co-operation, communication and extensive briefing sessions on a need-to-know basis. The use of good, secure radio communications is essential in any operation, be it in the Planning Training Phase or the final Action Phase.

It is very important to identify "friendly elements" within the local communities who will support you in supplying valuable operational information.

4. Animal security

- (a) Distribution (Concentrations)
- (b) Animal numbers
- (c) Water availability
- (d) Research
- (e) Animal translocation
- (f) Fencing
- (g) Ranger patrol reports

This model forms the basis for the security of rhino in the KNP. Therefore this section is vitally important and contributes greatly to the final insurance of the rhino populations. The distribution of rhino throughout the KNP is monitored by annual census and Section Ranger reporting. This monitoring is vital to ensure that the numbers and concentrations of rhino are known at all times. The availability of water which influences animal movement is also monitored on a regular basis by the Section Ranger and his staff.

Continued research on Rhino and their ecology is important in ensuring that Management and the Anti-Poaching Unit have all the latest information on rhino and their activities. This leads to better overall planning of any related strategies.

There has now developed an urgent need to look into the security of rhino during capture and translocation operations. During this period the rhino are exceptionally vulnerable to poaching. It is common practice, after capture, to house animals in bomas for crated translocation later. During this period a number of animals are confined to relatively small confined areas. Most of these operations are well publicised through the media and are known to the general public. Due to the escalating prices paid for rhino horn it is well worth the risk for any syndicate to take advantage of the situation and kill these rhino quickly and efficiently. All areas housing confined rhino should be out of bounds for personnel and persons not involved in their security or management.

Rhino are able to range over great distances and have no knowledge of the boundaries demarcated for their protection. It is therefore essential that adequate fencing is installed and monitored on a regular basis.

5. Physical security

- (a) Training
- (b) Equipment

A highly motivated, well-trained and equipped Ranger corps is strived for in the KNP. All personnel involved in the management and security of rhino are being continually trained using well-tested training techniques. In the KNP at present this is being carried out by personnel from within the ranks of the Ranger corps. An extensive and thorough curriculum is being followed to ensure that the highest standards are obtained. Liaison with other relevant organizations in respect to their training programmes ensures that an up-to-date programme is being followed on a national scale.

6. Authority/jurisdiction

- (a) "Shoot to kill" question
- (b) "Hot pursuit" operations
- (c) Ranger and the Law

All Rangers in the KNP have powers of arrest and are armed with R1 semi-automatic weapons for self-protection measures. They often find themselves in a position where arrests have to be made or the use of firearms is necessary in the performance of their duties. A policy of minimum force is followed in the KNP and firearms are used as a last

resort when life is in danger. The present law permits the Rangers to operate to within 1,6 km (likely to be changed to 10 km) from the KNP boundary on so-called "hot pursuit" operations. All these operations however are carried out in the company of SA Police personnel where possible.

No Ranger is above any law and is therefore accountable for any of his actions regarding arrests and the use of firearms. It is essential that Rangers have a thorough understanding of the law and use the utmost discretion at all times in the execution of their duties.

7. Planning crisis management

- (a) Local
- (b) National
- (c) International

In the KNP, planning for crisis management with respect to anti-poaching operations is based on three levels, namely Local, National and International. The planning required at the Local level involves all the steps mentioned above and involves the direct security of rhino in the KNP and any actions and follow-up actions necessary to secure their protection. This planning phase is the responsibility of the KNP management and research staff involved in rhino security. The personnel involved in operations should be well motivated, highly trained and equipped. Liaison, co-operation and inclusion of the neighbouring population forms an integral part of a sound local management strategy. At the National level the Government should be encouraged to commit themselves to supporting and to participating in rhino conservation. Communication and co-operation with outside organizations like the SA Police Endangered Species Protection Unit, SA Police Special Firearms Unit, the Wildlife Society of SA, Rhino and Elephant Foundation and other sister conservation organizations, leads to a wider planning forum to tackle the problem of rhino security from a National level. The involvement of the public sector is vital in creating an awareness to the problems. Communication and co-operation between South African governmental conservation organizations, non-governmental conservation organizations and other related bodies with their overseas counterparts is imperative if one is to have any effect on the International trade in rhino horn. The KNP will continue to assist and contribute towards International conservation of the rhino.

(REACTIVE) CRISIS MANAGEMENT

- (a) Immediate reaction and follow-up

Phases 1 to 7 are designed to provide a pro-active response to the rhino poaching threats. It is impossible to eradicate the threat entirely, however, and provision should be made to react quickly and effectively when an incident does occur. All investigations should be carried out thoroughly with speed and determination. Personnel reacting to an incident should be highly trained, motivated and adequately equipped. The investigation team based at Skukuza is responsible for any incident follow-up and in this regard they work closely with the SA Police Units. They are also responsible for assisting the SA Police and State Prosecutor with the compiling of the docket and any subsequent court case.