

Feedback on Mkomazi Rhino Sanctuary, Tanzania

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26 May 1998

This brief report is aimed at reviewing the progress of the Mkomazi Rhino Sanctuary in the light of initial recommendations made by Knight & Morkel (1994 - updated version). This later version included minor alterations and concerned:

- ✘ A lowering of the estimated maximum productivity carrying capacity from 27 to 20 rhinos.
- ✘ A confirmation of long-term government support for the sanctuary.

1. Fencing of small cliff on Hafino Hill.

This apparently has not been done as the area is relatively inaccessible and not considered an immediate threat. It should however be given consideration in the future.

2. Security and management aspects

All aspects initially suggested were attended to by the reserve management. The appearance is one of a well run and secure sanctuary patrolled by ex-military, armed guards, at densities that exceed many South African reserves.

3. Financial security and tenure

Tanzanian government support for the programme was confirmed in writing and in frequent discussions between the South African National Parks (SANP) and the Tanzanian authorities. Financial security is a recurrent problem for most African reserves, but the fact that the sanctuary is now functional, the impetus for continued support should be greater. It also makes the motivation for funding that much easier with a successful project up and running.

4. Socio-political aspects

The report recommended that contact and involvement of the local communities in the rhino programme should continue. It appears that this was done but that the rhino programme still came under pressure from a number of foreign NGO's furthering the rights of certain pastoralist groups. This aspect worried the SANP to such an extent, that confirmation of Tanzanian government support for the rhino programme was needed prior to the introduction.

5. Fencing, bomas and logistical support

Bomas and fences were constructed as planned, meeting and even exceeding what is normally recommended in South Africa. The success of the boma siting and construction was tested by the the exceptionally wet weather experienced after introduction. Any

further introductions of animals could go via the present bomas. The delivery of the animals directly into the reserve via aircraft proved the most successful option.

6. Vegetation & rhino 'carrying capacity'

Subsequent visits to the sanctuary and the actual introduction process of the animals, quelled any misgivings we initially had around the suitability of the vegetation to carry the revised estimated maximum productivity carrying capacity of 20 black rhino. The combination of high rainfall, split into two rainy seasons, a relatively short dry season, lack of frost, and good soils makes the vegetation most suitable for black rhino. Moreover, the fact that no other large browsing species besides rhinos will be allowed in the sanctuary reduces the chances of any form of competition with them.

Although the initial four founders is not ideal, more animals should be introduced in the future. The initial introduction was an fitting exercise for later introductions into the reserve and other areas in Tanzania. It should also give further impetus for later introductions to occur.

Future introductions should follow one or both of the following routes. Depending upon where the present animals settle down within the sanctuary, small unoccupied sections within the sanctuary could be temporarily fenced off with electrified cattle-type fencing, thus creating an introduction vacuum into which new animals could be introduced without interference from the established population. This would grant the newcomers the freedom to adapt to the environment, yet offer them some form of contact with the founder animals. Once settled the separating fence could be removed thus facilitating their introduction into the sanctuary. The SANP has successfully used this protocol in introducing new animals into established populations. The alternative option, that in fact could be done simultaneously with the above strategy, is to extend the sanctuary by building an extension into which new animals could also be introduced and later incorporated into the main area. Besides creating an introduction vacuum, it also extends the sanctuary. The northern and eastern boundaries of the sanctuary offer ideal prospects for expansion.

7. Availability of water

The major problem of a lack of natural and artificial water supplies within the sanctuary seems to have been successfully addressed by the construction of a whole suite of catchment dams within the sanctuary, as well as the construction of a reserve dam outside the fence from which water can be piped in if needed.

8. Disease

The possibility of Trypanosomiasis infection was reduced through the introduction of the animals during the late dry season when the fly challenge is less, and prior trapping of flies around the bomas.

Conclusion

The initial introduction phase of the four black rhinos into Mkomazi Game Reserve has proved a great success. The next phase remains the supplementation of the population with further animals. Besides the important reintroduction of an endangered species exterminated from the Mkomazi area, the whole operation was particularly significant in that it saw the formal establishment of the first dedicated rhino sanctuary within Tanzania. It also laid the foundation for further such introductions and greater regional and international cooperation in the conservation of this charismatic species. Although the sanctuary may play a relatively minor role in the greater rhino conservation strategy at present, it certainly has the capacity to expand to carry a much larger, more viable population in the future. But more importantly, it has the publicity function of advertising the establishment of a sanctuary in a country that almost lost its once huge rhino population. In addition, with rhino populations becoming more fragmented it also propagates the need for a metapopulation approach to the conservation of these relatively small populations. Knight, Morkel & Otto (1997) encouraged this approach to make the best of the small rhino populations scattered in northern Tanzania.

With some political problems still surrounding the Mkomazi Game Reserve, the challenge remains as to how the rhino in fact could be used as a means of advancing the stature, economic and aesthetic importance of the reserve and its wildlife to the surrounding communities. This is where the rhinos could be turned from a liability into an asset for the region.

The South African National Parks thus fully endorses the Mkomazi Rhino Sanctuary, and will within their means, support the project in the future as a way of furthering rhino conservation, and using wildlife to propagate international good-will.

References

Knight MH & P Morkel. 1994 updated version. Assessment of the proposed Mkomazi Rhino Sanctuary, Mkomazi Game Reserve, Tanzania. Internal report, South African National Parks, Kimberley, 13pp.

Knight MH, P Morkel & P Otto. 1997. Addo black rhino for the Serengeti National Park and Ngorongoro Conservation Area: A feasibility study. Internal report, South African National Parks, Kimberley, 12pp.