



Sala Namobi
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Extracts from the Nakuru Rhino Sanctuary Management Plan

By Peter Jenkins

Introduction

Lake Nakuru is a typical example of the chain of alkaline lakes which occur along the length of the Rift Valley. However, it stands apart from the others because not only is it one of the world's greatest bird spectacles but it is the first and only national park in Africa which has been created especially as a sanctuary for the concentrations of flamingos.

Apart from the abundance and variety of birdlife which makes this park unique, the surrounding land contains substantial acacia forests and thickets which are interspersed with open grasslands supporting over twelve different species of ungulates.

Being easily accessible this park provides unusual opportunities for visitors to appreciate a great wildlife and bird spectacle.

Although only two rhino remain in the park today, there are records from the early part of this century which indicate that this animal was once extremely numerous throughout the area.

Nakuru Park is ideally situated for a special rhino sanctuary. It contains prime rhino habitat and has the potential to support a substantial population, and it could become the most important rhino conservation area in the country.

Planning considerations

The development planning for the Nakuru Rhino Sanctuary hinges on three main objectives:

i. to create the necessary infrastructure needed for a rhino sanctuary;

ii. to develop the support factors needed for the future management of a sizeable rhino population;

iii. to effect efficient translocation of 30-40 rhino.

The fulfillment of these objectives will be a prerequisite and will have a direct bearing on the successful conservation of a viable rhino population in the Nakuru Park for the future.

This project is probably the most ambitious yet undertaken in Africa to save this species. The purpose of this plan is to identify and outline in brief the development projects which will be needed for the Nakuru Rhino Sanctuary and whilst these are specifically for the purpose of rhino management they will also have a profound effect on the successful conservation of the other wildlife species in the park.

Successful implementation of Objectives i, ii and iii will require a co-ordinated programme supported by adequate resources in the form of both equipment and funds.

Development plan

The following development projects will be required for the successful management of the Nakuru Rhino Sanctuary. The different elements which are to be effected by either the Wildlife Conservation and Management Department (WCMD), or a contractor, are identified.

Fence—total length approximately 85 km. The entire park boundary must be properly fenced and this *must* include electrification on both the inside—to prevent rhino and

other wildlife breaking out—and on the outside as a deterrent against intruders. This is an essential prerequisite for rhino management. The existing chain link fence (approx. 79 km.) will have to be repaired and upgraded *before* any form of electrification can be installed.

The following need attention:

i. large sections of fence are completely overgrown with bush. These sections must be cleared before any of the necessary repairs can be effected.

ii. Some posts have been destroyed by fire, or are sub-standard, and will have to be replaced.

iii. There are no corner or strainer posts in the entire fence line. These will be required at approximately every 350-500 m, depending on terrain.

iv. The chain link will have to be supported and reinforced with 2 high tensile steel wires to give it the desired strength.

v. The Sewage Farm and Lanet Quarry will have to be isolated from the sanctuary by separate fence lines. This will consist of four 'live' wires and one earth wire.

Therefore, there are *five different elements* which will require planning consideration for the fencing of the Nakuru Rhino Sanctuary. These are:

a) *Clearing*—approx. 35 km.

WCMD to effect.

b) *Repairs/Up-grading* to existing fence—approx. 79 km.

Contractor to effect while installing electrification.

c) *Cap 6.5 km*—along western boundary to be closed.

WCMD to effect.

d) *Excisions*—i. Sewage Farm, ii. Lanet Quarry.

e) *Electrification & installation of monitoring units to the entire fence*—approx. 85 km. Contractor to effect.

Specifications for Electrification of Fence—approximately 85 km.

In the light of experience from two other rhino sanctuaries (Solio and Ngare Sirigon) and after consultations with various electronic and fencing experts, the following specifications have been drawn up for the electrification of the Nakuru Rhino Sanctuary fence: 9 S.P. 50 Gallagher energisers with 32 watt solar panels.

9 mini MEPS fence monitor units.

9 heavy duty batteries — 150 amp. hr. loss. 18 lightning divertors.

63 earth pipes — 3 per energiser; 4 per lightning divertor.

334 Gallagher spring steel outriggers per km. on every 4th post.

4 'live' wires of 12/14 swg oval wire—break strain approx. 500 kgs.

6 double metal gates x 7' x 6' each.

2 earth pipes every km.

Under gate wire for 6 gates.

Under gate plastic conduiting for 6 gates.

Under gate wire for joining electric wire in series—approx. 20m per km.

Line clamps for electric joints—approx. 10 per km.

Warning signs x 5 per km.

Dangling chain assemblies for 4 river crossings.

Insulators—white porcelain type on strainer/ corner posts

black polypropylene on outriggers.

Spares element —

1 module per energiser

2 mini MEPS monitor units

Outriggers

Insulators

Fence Boundary Road/Firebreak

The existing boundary road is in poor condition and in some sections does not exist at all. Certain sections of the fence are completely overgrown with thick bush, which prohibits maintenance. A boundary road will have to be constructed following the inside of the entire fence in order to provide:

i: access for construction purposes;

ii. access for routine maintenance & daily inspection;

iii. to act as a firebreak.

This boundary road *must* be maintained to a high standard.

Total distance—approx. 85 km.

Security

Maintenance Posts

The reason the Nakuru Park fence is in such poor condition is undoubtedly due to the fact that funds for its regular maintenance have been totally inadequate. Any fence which is constructed will ONLY be as effective as its maintenance—and this is particularly true of electric fencing. From experience at Solio and Ngare Sirigon it has been found that every yard of electric fence must be inspected *every single day of the year*. This is a commitment which cannot be avoided with electric fencing and the success of the Nakuru Rhino Sanctuary will be dependent on effective and efficient maintenance. This

fact cannot be stressed too strongly.

With this in mind the entire perimeter fence would be divided into nine sections. Each section would be powered by its own energiser, with its own monitor unit (mini MEPS) with a maintenance team responsible for each section. Maintenance posts would be situated to cover these sections with the appropriate staff. This routine patrolling of the fence would also provide an extra security measure.

Location of Maintenance Posts:

i. Main Gate—Nakuru entrance—new post.

ii. West Post—new post.

iii. Nganyoi Post—exists.

iv. Nderit Post—new post.

v. Lanet Post—exists.

Holding pens

It is suggested that a complex of four holding pens, each 30m x 30m. and interconnected, be constructed 2 km. north of Naishi on the edge of the acacia forest. Rhino would be held in these pens for a short

period after translocation in order to allow them to settle down before release. The movement and distribution pattern of the release rhino should be carefully monitored, as depending on this it might be necessary to release some animals in the eastern and western areas in order to avoid overcrowding. If this is considered desirable two additional holding complexes of two pens each could be constructed in these areas later on.

Integrated development programme and costing

Work programme phasing and funding

This final section attempts to tie together the various development projects presented in this report into a working schedule, and to list the resources needed for implementation and cost estimates. Some of the latter are only approximate at this stage. The actual commencement of the main objective—rhino translocation—will depend entirely on the successful completion of the fence.

Breakdown cost of fencing elements

	K.£
<i>Clearing overgrown sections</i> x 35 km.	2,500
<i>Repairs, upgrading of existing fence</i> approx. 79 km.	
Contractors costs, supervision & transport 4800.00 per km.	18,960
Gap of 6.5 km. to be closed — additional materials	1,758
<i>Excisions</i> — approx. 5000 m. 35.00 per m.	8,750
<i>Electrical components</i>	94,588
<i>Installation costs -</i>	
Contractors supervision, transport, accommodation	
5775.00 per km. x 85 km.	24,544
	TOTAL COST
	K. £ 151,100
Contingencies say	K. £ 155,000

