

Kinangop Plateau Nature Reserve Management Plan

Zero Draft

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1. INFORMATION

1.1. Location & statutory information

1.1.1. Site location & relevant authorities

The location of the reserve is shown in Maps 1a-b and details of relevant authorities given in the table below.

Site name	Kinangop Plateau Nature Reserve
Area (acres)	95
Grid ref (centre of reserves)	Centre of Plateau 36° 34' East 0° 42' South
District	Nyandurua
County Council	Nyandarua County Council
District Council	N/A
Parliamentary Constituency	Kinangop
Administrative Regions	Central Province, Rift Valley Province
Local Agricultural and Livestock Agency office	Engineer Town

1.1.2. Aerial photographic coverage

Opportunity to collate photographs taken on recent flight over the plateau by Paul Matiku and Enock Kanyanya

Details of aerial photographic coverage are given below.

Date	Cover	Details	Location of copies
N/A			

1.1.3. Designations

Location and boundaries of Kinangop Grasslands IBA is shown on Map 2

Designation	All or part of site?	Name & other details
IBA	All	KE 004 Kinangop Grasslands IBA Category A1, A2
EBA	All	109 Kenya Mountains
Archaeological site		
Finds		

1.1.4. Tenure

Tenure of the site is shown in Map 3. Land or rights let out by NK are shown in Section 1.1.4.b and on Map 4.

a) Land / Rights held by NK

i) Freehold:

Deed ref No.	Agreement date	Vendor	Area (acres)	Comments
Nyandarua/Ol'aragwai/611 & 612 Nyandarua/Ol'aragwai/410	14 th October 2004	Gabeli Farm Ltd Gabriel Mungai Kiarie	44.48 acres 4 acres	Compartment 1
Nyandarua/Ol'aragwai/506	8 th March 2005	Thuo Muhia	16.19 ha-40 acres	Compartment 2

ii) Leasehold:

Deed ref No.	Agreement date	Lessor	Area (acres)	Term & expiry date	Rent review dates & break-clauses
N/A					

iii) Management agreements, licences, consents & other rights:

eg

Deed ref No.	Management agreement /licence/ consent etc	Agreement date	Lessor	Area (acres)	Term & expiry date
Nyandarua/Ol'aragwai/611	Letter of consent	September 2004	Gabeli Farm Limited	5.84 ha.	Absolute
Nyandarua/Ol'aragwai/612	Letter of consent	September 2004		12.16 ha.	Absolute

b) Land/rights let by NK

i) Leases

Deed ref No.	Land/right	Date	Lessee	Area	Term & review/expiry date
N/A					

ii) Tenancies

Deed ref No.	Land/right	Date	Lessee	Area	Term & review/expiry date
N/A					

iii) Licences

e.g.

Deed ref No.	Land/right	Date	Licencee	Area	Term & review/expiry date
35	Fishing licence	1/6/93	Environment Agency	100m	Term: 3yrs Review date: 15/6/2005
	Seasonal Grazing		Various	10.4 ha	

1.1.5. Conditions of land purchase/management grants, gifts & corporate sponsorship

Provide details of any conditions of land purchase grants eg Biodiversity Conservation Programme, IUCN Netherlands, Aage Jensen Foundation Denmark, Danish International Development Agency (DANIDA), RSPB, Birdlife International, WWF, gifts or corporate sponsorship in a table as shown below.

eg

Conditions of land purchase/management grants, gifts and corporate sponsorship are given in the following table.

Grant	Conditions
IUCN Land purchase Netherlands	
The Aage V Jensen Charity Foundation	Six monthly & financial reports to be submitted on October 2006 & April 2007 Final technical report & financial report to be submitted by October 2007

1.1.6. Planning permissions, statutory consents & statutory licences

Provide details of all planning permissions, statutory consents and statutory licences, including those for engineering and building works, in a table as shown below. Show the location of these in Map 5.

E.g. for construction of the Resource Centre and Kikuyu-style bandas

Planning permissions, statutory consents and statutory licences are shown in the table below.

Planning permissions

Planning Consent Ref. No.	Date	Subject	Type of consent	Expiry date	Comments

Statutory consents & statutory licences

Provide details of any statutory consents and licences e.g. discharge consents, abstraction licences etc in the table as shown below.

Deed Ref No.	Date	Owner	Comments

1.1.7. Public access

Provide details and a map (Map 6) of public access from the main road through Murungaru, recreation, car parking and should include routes of all public and permitted rights of way, e.g. footpaths/nature trails

1.1.8. Main fixed assets

Details of all fixed assets are given in the tables below, and their locations shown in Map 7a-b.

Buildings & other residential accommodation

Ref. No.	Name	Insured by policy?	Comments
1	Resource Centre		Reserve office, demonstration, training and education facility
2	Kikuyu-style Bandas and associated facilities		Eco-tourism accommodation

Timber buildings & miscellaneous other structures

Ref. No.	Name	Insured by policy?	Comments
3	Birdwatching shelter		Recreational stand
4	Nature trail and information signs		Trails used by visitors, information notices
5	Car-parks		Parking bay for visitors
6	Boundary fence including gates		Act as a security fence for the reserve and boundary for reserve

1.2. Environmental information

1.2.1. Geology & soils

The Plateau lies between 2400 and 2700m asl and is bounded by the Aberdare Mountains to the east and a steep scarp dropping into the Rift valley to the west (see map 8).

Geologically recent tectonic events created the Great Rift Valley and associated high mountains of Mount Kenya and The Aberdares. The Kinangop is one of the remnant peneplained plateaux, which features horst blocks and trough valleys, characterised by differing forms of savannahs depending on rainfall, relief, edaphic conditions and topography. The soils are a complex of ando-luvic phaeozems and verto-luvic phaeozems.

1.2.2. Hydrology

Rainfall averages around 1000mm per year and peaks during April–May and October but the southern part of the plateau is wetter than the north, which lies in the rain shadow of the Aberdares. The landscape is generally flat and rises gently to the base of the mountains in the east. The area is bisected by valleys bearing streams, which flow into the Malewa and Karati Rivers which then flow into Lake Naivasha.

There are no artificial drainage features on the reserve. Compartment 1 falls gently to the north where there are two small excavated pools holding permanent water and, beyond the reserve boundary, a more extensive area of flooded grassland. Compartment 2 is predominantly flat to the north with a moderate, stepped southerly slope. This then gives way to a steep slope and cliff down the permanent River Turacha, flow varies greatly depending on rainfall.

The installation of a weather station will provide valuable information and consideration should be given to mapping (Map 9) and/or recording some of the following features, where appropriate:

- *Monthly and annual rainfall*
- *Any different hydrological units on the reserve*
- *Main inputs and outputs of waters*
- *Main directions of flow (indicate these on a map). Indicate if these directions are different in different seasons*
- *Presences of water control structures. Dams, pipes etc. Describe the type and size of the structures and the height of water retention/base of pipe*
- *Storage capacities of pools and if relevant, quantities of water abstracted, flow rates in key watercourses (mean and low flows)*
- *Typical variations in water levels throughout the year in different hydrological units. Ideally, present this information in graphs. Show the actual and ideal regimes if they differ significantly*
- *A summary of any other water quality data*
- *Any relevant topographic information*

Also include on the map the location of any gauge-boards and water sampling points.

1.2.3. Threats

Until the 1960s, most of the montane grasslands on the Kinangop Plateau were in a largely natural state and contained large areas of wet tussock grassland, which is favoured by the near-endemic Sharpe's Longclaw. However, grassland habitat has been greatly modified within the last 40 years as a result of changes in land tenure and agricultural practices including the following:

- There has been extensive planting of woodlots containing fast-growing exotic trees such as Eucalyptus for poles and firewood. This has resulted in the direct loss of much grassland but the trees also dry out the adjacent ground and render it more suitable for cultivation.
- There has been a shift away from extensive dairy farming, which is compatible with grassland retention, to cash crops (such as wheat) and food crops (such as potatoes, cabbages and peas), largely as a result of changing economic factors (making milk production less financially secure) and climatic changes (a reduction in frost and flooding, making other crops more viable).
- Much grassland has been ploughed up for the production of wheat, which is grown to diversify the income of farmers. The crops require intensive input of fertilisers and pesticides, which then run off into adjacent wetlands. There is anecdotal evidence that there has been a catastrophic reduction in amphibians within the last 20 years. Much of the wheat farming is conducted by contractors who pay for the rent of land up-front with a cash incentive prior to cropping for 2-3 years. Decline in soil structure and fertility resulting from cropping renders the land unusable until it has been left fallow for 2-3 years.
- Farm sizes are declining from continued sub-division as result of land being divided between family members. Smaller fields and fragmented habitats are less suitable to grassland specialist species, particularly when ringed by hedges of trees.
- More intensive grazing of small fields particularly by sheep can render the grassland unsuitable for specialist grassland birds, which prefer longer grass.
- As tussock grass is unpalatable to livestock (and can harbour ticks), there is an increasing tendency to burn, dig out or plough-up/re-seed tussock grassland.

1.3. Biological information

1.3.1. Recording areas

Include a map of recording areas. This should show general recording areas for birds and other taxa, and will become increasingly important if they change over time as the reserve expands (Map 10a). Wetland bird recording sectors (include the number of the sector) (Map 10b), grassland breeding bird transects (Map 10c), locations of point counts (Map 10d), butterfly transects (Map 10e) and any other recording areas (Map 10f).

1.3.2. Data sources & under-recorded groups

Record in a table all the sources of data on habitats and species, other than those from anecdotal records and general reserve recording e.g. when specialists come to survey aspects of the reserve's ecology and subsequently present a report

Also, list in a table any under-recorded groups that are likely to be of particular conservation importance on the reserve, and the habitats that are the highest priority to survey them in. In the third column of the table categorise the current level of recording as one of the following:

- *No knowledge*
- *A few anecdotal records*
- *Partial survey*

Under 'Comments' describe briefly why you consider the groups might prove to be of particular conservation importance, and mention any ways that management might potentially affect them. If necessary, seek advice from the non-avian specialist at the Museum regarding whether particular habitats at the reserve are likely to be of special importance for invertebrates.

Specific data sources are listed below.

Group	Source(s)
Grassland birds	Bowler and Robson April 2006 (see Appendix 1)
Riverine/scrub birds	Bowler and Robson April 2006 (see Appendix 1)
Wetland birds	Bowler and Robson April 2006 (see Appendix 1)

Under-recorded groups

Group(s)	Habitat	Current level of recording	Comments
Flowering plant species	Montane grassland and riparian scrub	A few anecdotal records	An important biodiversity feature and for apiary. Grazing levels for longclaws likely to benefit flowering plants
Reptiles	Montane grassland	No knowledge	Kenya Horned Viper is endemic to the Kenyan Highlands and likely to occur on the reserve
Amphibians	Pools	No knowledge	Two important biodiversity frog species occur on the plateau: <i>Hyperolius montanus</i> and <i>Phrynobatrachus kinangopensis</i>
Grassland invertebrates	Montane grassland	No knowledge	Potentially important biodiversity feature and food source for key grassland bird species
Aquatic invertebrates	Pools	No knowledge	Potentially important biodiversity and visitor interest feature
Aquatic plants	Pools	No knowledge	Potentially important biodiversity and visitor interest feature
Mammals	All	A few anecdotal records	Potentially important biodiversity and visitor interest feature

1.3.3. Habitats

Originally, the entire plateau was covered with almost treeless, tussocky grassland, including many tussock bogs in swampy valleys.

Include a map of the main habitats on the reserve (Map 11a) it might be useful to distinguish between former areas of cultivation and unimproved grassland.

Habitat		Status	Area (acres)	Comments
Grassland	(i) montane, natural, unimproved	Key reserve feature		Key habitat for Sharpe's Longclaw
	(ii) montane, semi-natural improved			Secondary habitats for grassland birds, monitor use by breeding bird species
	(iii) montane, cultivated, recovering			
Riparian scrub	(i) dense, continuous (ii) scattered	Additional biodiversity and visitor interest feature		
Open water	(i) standing water, eutrophic (?), small ponds	Livestock water source, biodiversity and visitor interest feature.		
	(ii) running water, eutrophic (?), streams/rivers	biodiversity and visitor interest feature		
Total				

1.3.4. Vegetation communities

List in a table the total extent of the different vegetation communities present following a detailed botanical survey – seek assistance from Museum, opportunity to get a research student from Dept. of Botany to survey and map the reserve's vegetation in detail

1.3.5. Important plant & animal species

List in a table the following categories of plant and animal species found on the reserve. Include locations of any important plant or breeding bird species if relevant (Map 12). Also include any important potential colonists at the site, if their potential presence is likely to influence management of the site during the period covered by the management plan.

Plants

Species	Popn. size	Status	Comments
Montane grassland			
<i>Andropogon amethystinus</i> <i>Cymbopogon nardus</i> <i>Digitaria diagonalis</i> <i>Eleusine jaegeri</i> <i>Eragrostis botruodes</i> <i>Hyparrhenia hirta</i>		unknown	These are the characteristic tussock grass species of the plateau and their status on the reserve should be established

<i>H.tamba</i> <i>Pennisetum hohenackeri</i>			
Riparian scrub			
Pools			

Breeding birds

Species	Popn. Size*	IUCN Red list Status	Comments
Montane grassland			
Sharpe's Longclaw	1 pair	Endangered	Also range restricted species
Jackson's Widowbird	Present nearby	Near threatened	
Long-tailed Widowbird	1 pair	Least concern	
Black-winged Plover	1 pair (?)	Not listed	Short montane grassland specialist
Wing-snapping Cisticola	≥2 pairs	Least concern	
Grassland Pipit	≥2 pairs	Not listed	Grassland specialist
Rufous-naped Lark	≥1 pair	Not listed	Grassland specialist
Riparian scrub			
Hunter's Cisticola	≥6 birds	Not listed	Restricted range species
Cinnamon-Chested Bee-eater	≥2 birds	Not listed	A3
Brown Woodland Warbler	≥1 bird	Not listed	A3
Northern Double-Collared Sunbird	≥1 pair	Not listed	A3
Bronze Sunbird	≥1 pair	Not listed	A3
Golden-Winged Sunbird	≥1 bird	Not listed	A3
Streaky Seedeater	≥2 pairs	Not listed	A3
Baglafaecht Weaver	≥12 birds	Not listed	A3

* Preliminary estimates only

Non-breeding birds

Species	Popn. Size	IUCN Red list Status	Comments
Montane grassland			
Pallid Harrier		Near threatened	Passage migrant
Lesser Kestrel		Vulnerable	Palaeartic migrant
Nyanza Swift		Least concern	Resident breeder on nearby cliffs

Other Fauna

Species	Popn. size	Status	Comments
<i>Mammals</i>			
Montane grassland			
Aardvark (?)			
Mole rats			
<i>Invertebrates</i>			
Montane grassland			
Butterflies/Moths			
Riparian scrub			
Butterflies/Moths			
Pools			
Dragonflies			
<i>Reptiles</i>			
Montane grassland			
Kenya Horned Viper <i>Bitis worthingtonii</i>		Kenyan Highland endemic	
<i>Amphibians</i>			
Pools			
<i>Hyperolius montanus</i>		Kenyan Highland endemic frog	Considered secure in 1980 this is a montane grassland species which may now be threatened
<i>Phrynobatrachus kinangopensis</i>		Kenyan Highland endemic frog	

1.4. Visitors & public affairs

1.4.1. Visitor potential

- There is great potential to develop the nature reserve for use by eco-tourists, bird tour groups and independent birders. The development of the Kikuyu-style bandas and associated facilities in Compartment 2 and the use of “Trees” guesthouse aims to bring people directly into contact with the project and spread important messages about the reserve, the Kinangop Grasslands IBA and issues concerning the management of the plateau.
- Tourists and birders already pass through the plateau en route to the Aberdares National Park. The reserve and especially the development of the Resource Centre in Compartment 1 will create opportunities to tap into this market.
- Large numbers of tourists use the existing facilities and attraction of Lake Naivasha and the route to Nakuru. There is an enormous opportunity to promote the reserve, Sharpe’s Longclaw conservation and sustainable, community-based projects to this large market.

1.4.2. Lifelong Learning

- There are 105 schools (X junior, X primary and X secondary) on the Kinangop Plateau with X within walking distance of the reserve
- There is an established schools outreach programme within FoKP and Wildlife Clubs of Kenya
- There is an embryonic Youth Group within FoKP
- There are opportunities and ideas for adult education and attracting back those who have dropped out of school
- In the short to medium term, links could be formed with the Elsamere Trust. At present, people from the plateau pay to travel to and be trained at the Trust; there is an opportunity to reverse this process. The Trust could use the Reserve facilities to run training courses and teach about sustainable grassland management, the ecology and conservation of Sharpe’s Longclaw and best practice in developing community-based, biodiversity management projects. This link will allow time for the future development of an independent lifelong learning programme
- There will be a well stocked Resource Centre including age-related teaching materials, a library, video facilities and internet access which will be a focus for environmental learning and community projects with the ability to connect to similar projects nationally and internationally to share experiences and ideas
- There are existing well established links with National Museums of Kenya and the Department of Ornithology in particular allowing the continued use of the grasslands as a study area for students in higher and further education

1.4.3. Advocacy

- The reserve aims to demonstrate all aspects of sustainable grassland management and income generation in order to influence practices across the Kinangop Grasslands IBA and consequently preserve the habitat of the Sharpe’s Longclaw and other species that rely on montane grassland
- The key audiences are: farmers, neighbours, land managers, policy makers, statutory agencies and funders
- The demonstration aspects will include:
 1. Best practice grassland management for Sharpe’s Longclaw and associated key grassland bird species
 2. Community-based projects to support the economic security of grassland management, most importantly the dairy industry; to include a working dairy co-operative and cooler plant (information in Resource Centre, cooler plant established on main road near Murungaru)

3. Additional projects to encourage maintenance of permanent pasture to include: organic kitchen gardening (vegetables, fruit and stock fodder), wool spinning, bee-keeping and honey-production etc.
4. Further income-generating projects including: sustainable eco-tourism, sale of arts/crafts including locally-produced woven goods, honey and items made from recycled polythene bags.

1.4.4. Accessibility

There are issues of access to be considered and developed, most notably consideration of providing transport between the Resource Centre and Murungaru and potentially further a field. The funding of such a facility would need to build in the on-going costs of fuel, maintenance and repair.

Provision of signs to both compartments from the main road, ideally including a Sharpe's Longclaw logo, and availability of local maps are essential to the development of the project.

The establishment of access gates, tracks and parking facilities in both compartments is in hand. There will be a requirement to build a hard standing for turning at Compartment 2 in particular where soft ground and slope would soon deteriorate with use.

1.4.5. Local community

- Excellent relationships with the local community and most notably the Friends of Kinangop Plateau (FoKP) Site Support Group, which has active branches at Murungaru, Engineer, Njabini and Magumu-Nyakio.
- Majority of FoKP members are farmers
- Local councilors and the District Sub-Chief have visited the site and given verbal commitments to the support the development of the reserve
- Ministry of Agriculture officer is aware of the project and given verbal commitments to support the maintenance of permanent pasture rather than cultivation
- Existing excellent relationship between FoKP, school patrons and teachers. Some visits have already taken place to look at aquatic plants at Compartment 1 and there is strong support for the reserve and the development of the project

Key issues

- Neighbouring farmers are the likely source of livestock for the reserve's grazing regime and stand to benefit from access to additional grass
- Development of eco-tourism on the plateau will benefit the local economy, provide a potential outlet for locally produced arts, crafts and sustainably farmed produce
- Continued development of the schools outreach, adult and further education and training programs will be a great benefit to the community as a whole

County council involvement

- FoKP in particular, Nyandarua County Council and several other stakeholders were involved in the consultation process for the reserve management plan.

1.4.6. Fulfilment

Who are your key funders, partners and stakeholders e.g. landowners, neighbours, Govt dept. ? What do they need from your reserve to meet their needs? Are they fulfilled? How do you know?

Key stakeholders – FoKP, neighbours, Nyandarua County Council, Regional authorities, statutory agencies, Schools and F&H Education, land-owners and tenants

Funders and sponsors - BCP, IUCN Netherlands, Aage Jensen Foundation Denmark, DANIDA, RSPB, Birdlife International

Existing funders and grant aiders

Are you in receipt of any grants? Are there any contractual obligations which might affect the future of the reserve?

1.4.7. Income generation

There is potential to generate income from the following sources:

Eco-tourist accommodation and associated facilities in Compartment 2

“Trees” guesthouse

Guiding

Training and education programme

Retail sales – arts/crafts, kitchen garden organic produce, honey, royal jelly, woolen products, jam etc.

Catering sales – drinks, local food etc.

Donations

Sponsorships

Local, regional, national and international grants

Grazing/farming

Sales of produce

1.4.8. Promotion

How do you promote your reserve to your target audiences? Are you successful? What could you do better? Have you got the pricing right?

This will be a key element to the success of the project and the eco-tourism business in particular. There is a need to develop links with existing tourism providers in Naivasha and the Aberdares, as well as to promote the high-quality “Trees” guesthouse and banda accommodation to potential visiting eco-tourists, including independent travellers as well as tour groups. Appropriate promotion and pricing is critical and would benefit from a detailed Marketing Strategy. Links to existing websites, such as the Nature Kenya site, other tourist organisations based in the region, Govt. tourism promotion sites and international wildlife tourist company’s sites etc., would be very beneficial.

1.4.9. Key messages

What are the key messages you are presently promoting to your various audiences.?

How are they being delivered? How do you interpret your reserve to visitors?

- The status of Sharpe’s Longclaw and the importance of its conservation
- Sustainable montane grassland management
- The threats of cultivation, subdivision, tree-planting and over-stocking
- The longer term social and economic impacts of the demise of dairying

- The short-term gain from wheat planting has a long term cost in terms of soil structure, nutrient levels and the need for leaving the ground fallow afterwards, as well as in terms of loss of biodiversity
- The importance of leaving corridors of intact grassland alongside streams and rivers to protect the water catchment
- The financial and biodiversity benefits of grassland retention
- The financial and social benefits to the community of the project

Is there evidence that they are working? If not, what can you do to be more effective? Have you got a full communication plan?

1.4.10. Brand

What are the key elements contributing to the Nature Kenya brand?

1.5. History of recent management

Include annotated maps showing:

- Maintenance management since establishment e.g. completion of fencing, provision of access, position of Resource Centre etc. (Map 13a).*
- Any special management projects – e.g. plans for the Kikuyu-style bandas and associated facilities in Compartment 2 . (Map 13b)*

2. EVALUATION & RATIONALE FOR MANAGEMENT

2a. Conservation

2a.1. Current issues and constraints

Current issues and constraints are shown on Map 14.

- a) Disputed boundary in Compartment 1 adjacent to Resource Centre
- b) Overall reserve area is small and divided into two widely separated compartments
- c) Distance of Resource Centre from Murungaru and other centres
- d) Managing the desire to have sufficient space to develop demonstration plots in Compartment 1 whilst maintaining maximum area of tussock grassland for breeding Sharpe's Longclaw
- e) Low profile in the existing tourist market
- f) Appropriateness and feasibility of development of trout fishery in River Turacha

2a.2. Identification of the Features Influencing Management of the site

Features Influencing Management.

** = Features which are the prime reason for maintaining the reserve and which will drive its management.

* = other important conservation Features whose requirements we need to take into account when deciding upon management of the site.

V = Features of particular importance to visitors.

a) Montane grassland

Important feature	Influencing management?	Why?
Montane grassland habitat	**	Key habitat for priority bird species
Sharpe's Longclaw	**	IUCN Red listed species Endangered
Breeding grassland bird species	*V	Including IBA cited species
Non-breeding bird species	*V	Including IBA cited species
Flowering plant species	V	Biodiversity feature and aspect of apiary
Kenya Horned Viper	*V	Biodiversity feature
Grassland invertebrates	*V	Biodiversity feature

b) Pools

Important feature	Influencing management?	Why?
Pools	*	Water source for livestock
Wetland birds	V	Attractive species
Amphibians	*	Potentially holds endemic frog species
Aquatic invertebrates	V	Attractive species/educational resource
Aquatic plants	V	Educational resource

c) Riparian scrub

Important feature	Influencing management?	Why?
Scrub and riparian birds	*V	Attractive species
Flowering plants	*	Biodiversity feature and aspect of apiary

2a.3. Condition of the Features Influencing Management & the Main Factors affecting them

The following tables identify the target condition of the Features Influencing Management and the Main Factors influencing whether these target conditions are attained.

a) Montane grassland

Feature	Attribute(s)	Current figure for attribute	Target for attribute	Main factor(s)	Target for main factor(s)	Comments
Montane grassland habitat	Extent	95 acres (minus infrastructure, pool and scrub areas)	No change	Scrub encroachment	No increase in extent	
Breeding Sharpe's Longclaw	No. of breeding pairs	0prs	Breeding in both compartments	Grass height and tussock cover Grazing regime	G2 T2 (see fact sheet) Cattle (some sheep)	Medium grass height, tussock density ca30% cover grazing dates and densities to be determined by habitat monitoring
Breeding grassland bird species	Assemblage of breeding species	Jackson's Widowbird Long-tailed Widowbird Black-winged Plover Wing-snapping Cisticola Grassland Pipit Rufous-naped Lark	Breeding in both compartments	Grass height Grazing regime	Mosaic of varying sward heights Cattle (some sheep)	(see above)
Non-breeding grassland bird species	Assemblage of species	Pallid Harrier Lesser Kestrel Nyanza Swift	Presence	Continued presence of montane grassland	Maintain extent	

Flowering plant species	Assemblage of native nectar-producing species	Data deficient	Compile species list and status	Continued presence of montane grassland Grazing	Maintain extent No under or over grazing	Flowering plants important biodiversity feature and for apiary. Grazing levels for longclaws likely to benefit flowering plants
Kenya Horned Viper	Presence	Data deficient	Establish status	Continued presence of montane grassland	Maintain extent	
Grassland invertebrates	Presence	Data deficient	Compile species list and establish status	Continued presence of montane grassland	Maintain extent	

Resolution of potential conflicts/overcoming of potential constraints

There are potential conflicts between maintaining appropriate sward-height for both Sharpe's Longclaw and Black-Winged Plover, since the latter species prefers short-grass swards. Management priorities favour the conservation of the longclaw.

b) Pools


Feature	Attribute(s)	Current	Target attribute for	Main factor(s)	Target for main factor(s)	Comments
Pools	Water source			Climate, hydrology and abstraction		Important water source for livestock
Wetland birds	Assemblage of species			Presence of wetland habitat	Maintain wetland	Attractive feature for visitor experience
Amphibians	Assemblage of species	Data deficient		Presence of wetland habitat	Maintain wetland	Important biodiversity feature
Aquatic invertebrates	Assemblage of species	Data deficient		Presence of wetland habitat	Maintain wetland	
Aquatic plants	Assemblage of species	Data deficient		Presence of wetland habitat	Maintain wetland	

c) Riparian scrub

Feature	Attribute	Current	Target(s) for attribute	Main factor(s)	Target for main factor(s)	Comments
Scrub and riparian birds	Species assemblage	32 species recorded to date		Presence of scrub habitat	Maintain extent of scrub	Scrub is on steep slope and is not reducing longclaw habitat
Flowering plants	Species assemblage	Data deficient		Grazing	No under or overgrazing	Livestock will only be able to access small area of scrub, grazing likely to diversify structure

2b Visitors & public affairs

2b.1 Site constraints and opportunities analysis

 Matrix of constraints and opportunities <i>for assessing the suitability of reserves for visitors</i>				
Kinangop	Minimal	Low	Medium	High
Legal ability to develop/access,				Land purchased by Nature Kenya
Physical access - getting to		Access tracks from road are unsealed and in poor condition especially after rain		
Physical access - getting around		Steep slope lacking clear paths Riparian scrub	Good surfaces, modest or even slopes Grassland	
Robustness of habitat/species		Sensitive – care needed Grassland		Generally robust Riparian scrub
Bird spectacle			Good range of birds including localised species	
Countryside experience				Very scenic
Visitor history/present use	Odd passing birdwatchers			
Visitor ‘pool’				
<ul style="list-style-type: none"> - resident - (within 30 mins) 				Two schools within walking distance, 105 schools on Kinangop Plateau, high density of interested farmers
<ul style="list-style-type: none"> - seasonal 			Rural tourism particularly during dry season	

2b.2. Audience analysis

Existing and potential

Kinangop reserve	
Audience	Comment
Key stakeholders	Friends of Kinangop Plateau (FoKP)
Visiting eco-tourists	Close to tourist sites of Naivasha and the Aberdares. Needs detailed work on audiences
Birders	Opportunities for visiting specialist groups
Land owners and tenants	Grazing lets to be agreed
Legal rights users	None
Neighbours	Generally good relationships but need to continue liaison.
Other farmers and land managers and advisors	Real opportunity to see reserve as a model of sustainable montane grassland management – an important Nature Kenya resource
Local decision-makers	Presently contact through regular liaison with Nyandarua County Council
Regional decision-makers	Existing contact with regional authority
Country decision-makers	No information
Funders and sponsors (NB - including donors/givers of land)	BCP, IUCN Netherlands, Jenson Foundation Denmark, DANIDA (sp.), RSPB, Birdlife International.....
Statutory agencies	Contact and support established with Ministry of Agriculture, Ministry of Livestock, Forestry Department and Dept.of Fisheries (?)
Alternative attractions & service providers	En route to the internationally renowned Aberdares National Park and close to tourist facilities at Lake Naivasha
Media	Continue to expand relationships with key media contacts nationally and in local area
Volunteers	Large pool of existing, knowledgeable local volunteers based in the four branches of FoKP: Murungaru, Engineer, Njabini and Magumu-Nyakio
Schools and F&H Education	Existing outreach programme with schools in the immediate area, large potential to increase these links and expand to include all 105 schools on the Kinangop Plateau currently extra-curricular though desire to link directly into curriculum. Strong existing links with the Ornithology Department of National Museums of Kenya. Strong desire to further develop adult educational opportunities High priority.

2b.3. SWOT Analysis

Kinangop	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Attractive endemic bird species Sharpe's Longclaw • Diverse range of other bird species • Landscape including rolling grasslands and river gorge vista • Enthusiastic and well established Site Support Group • Site is on a connecting route between two major tourist attractions • Idyllic "Trees" guesthouse with fantastic Rift Valley views and array of attractive species to be seen • Visitor infrastructure can be established with minimal environmental impact • Potential to significantly influence the 	<ul style="list-style-type: none"> • Sharpe's Longclaw currently not breeding on reserve, although nearby on unprotected sites • Reserve divided into two widely separated compartments • Overall reserve area small (95 acres) • Unsealed access roads very poor in wet conditions • Current lack of signage or reserve location map • Both reserves recovering from heavy overgrazing prior to establishing boundaries • Low profile with existing tourist market • Lack of big game in a Kenyan context • Disputed reserve boundary adjacent to Resource Centre

<p>management of the IBA</p> <ul style="list-style-type: none"> • High potential to demonstrate environmentally sustainable economic opportunities from montane grassland • New Resource Centre including classroom & meeting facilities 	
Opportunities	Threats
<ul style="list-style-type: none"> • Develop Sharpe's Longclaw as an iconic species and marketing brand • To research the recovery of habitats and key bird species from formerly overgrazed and cultivated tussock grassland • Demonstration site to act as a model for sustainable grassland management and regeneration • To develop sustainable ecotourism and highlight the plight of the threats to the Kinangop Grasslands IBA • Develop a circular nature trail in Compartment 2 • Potential to develop area immediately adjacent to Resource Centre for demonstration of sustainable economic activities • Potential for income generation to fund reserve operations • Several schools within walking distance • County Council proposal to upgrade existing access 	<ul style="list-style-type: none"> • Continuing loss of grassland could result in the loss of Sharpe's Longclaw from source area in adjacent, unprotected land • Unauthorised stock incursions • Change in economic climate affecting farming profitability • Reduction in existing excellent local support

2b.4. Rationale

Kinangop grassland reserve

The Kinangop grassland reserve consists of two widely separated compartments comprising a total of 95 acres of predominantly montane grassland habitat. Compartment 1 consists of 45 acres of mostly unimproved montane grassland but including a small area of previously cultivated land in its South West corner and two small dammed pools of permanent water near the northern boundary. This compartment slopes gently to the NE affording attractive views across a rolling landscape of grassland with cultivation, plus an attractive area of flooded grassland just across the northern boundary, which adds considerably to the visitor experience. Compartment 2 consists of 40 acres of mostly unimproved montane grassland including a level northern end and a moderately stepped southerly slope. This then gives way to a steep slope and cliff cloaked in riparian scrub down to a permanent river Turacha. The views down the valley are particularly striking, whilst the riparian scrub adds considerably to the interest of the site. There is some potential for recreational trout-fishing in the river. A well-equipped Resource Centre is located in the SW corner of Compartment 1, including educational materials, interpretation for visitors as well as external practical demonstration units of sustainable economic activities. A public bird-watching shelter overlooks the pools and the adjacent wetland area. Compartment 2 contains five bandas and associated facilities to accommodate visiting eco-tourist, whilst a nature trail affords views across the grassland and through the riparian scrub to the attractive river. "Trees" guesthouse is in an idyllic setting with breath-taking views over the Rift Valley. Black and White Colobus Monkeys frequent the remaining forest in front of the house whilst Bush (Grey) Duiker, Bushbuck, Tree Hyrax and Scrub Hare can also be seen. The immediate area has a wealth of attractive bird species including both Sharpe's Longclaw and Jackson's Widowbird with an additional c100 species recorded in a week (see Appendix 2).

This site provides an exceptional opportunity to demonstrate to a large and diverse regional audience, the biodiversity value of the Kinangop plateau and the role of sustainable economic activities in the management of montane grassland. It is recommended that the majority of demonstration and educational resources are concentrated in the formerly cultivated SW corner of Compartment 1, whilst Compartment 2 remains a peaceful haven for eco-tourism.

The montane grassland, with its endemic and localised bird species, reserve management and successful business practice provides a model of sustainable grassland farming practice. There is an excellent opportunity to promote the site to local farmers, agricultural advisors and policy makers, and is also suitable for a wide variety of educational activities and eco-tourism.

The **Riparian scrub** is a robust area incorporating a nature trail, which is enjoyed by the more active visitor. This needs to be established and maintained in good condition. Planting of indigenous flowering species around the Bandas will add structure to the accommodation area and attract in a variety of sunbirds and other wildlife. Careful construction of a natural-looking dam in the River Turacha, using local boulders to slow the flow will create a deep pool, attractive to wildlife in the dry season and potentially provide trout-angling opportunities.

The **Pools** add a further dimension to the reserve by attracting a range of wetland species of interest to eco-tourists and provide an additional education resource.

2b.5 Reserve visitor profile



Reserve Visitor Profile – Kinangop

Access

Car access via unsealed roads – currently no public transport from Murungaru.

Access to Compartment 1 via gate in the SW corner and to Compartment 2 via gate in the NE corner. Small car parks are provided adjacent to the Resource Centre in Compartment 1 and close to the bandas in Compartment 2. Access to “Trees” guesthouse c2.5km from Kimuri junction along unsealed track. Most of the paths are on level ground, although the nature trail in Compartment 2 is steep and rugged in parts. Access to the grassland habitat is restricted to reduce disturbance to ground-nesting birds, however there are excellent viewing opportunities from the reserve fringes.

Constraints

The site is small limiting the area available for demonstration units without impinging on the grassland habitat.

Access difficult particularly in wet season.

Limited birding spectacle and current absence of breeding Sharpe’s Longclaw

Potential use/ Opportunities

High number of local residents with a vested interest in the success of the project including >200 members of site support group (FoKP) but low tourist numbers.

The widely separated nature of the compartments enables the division of demonstration facilities from the peaceful eco-tourism accommodation

Very high standard of accommodation at “Trees” guesthouse will attract higher paying visitors

Potential to attract both day-visiting birders/bird tour companies and longer staying eco-tourists

Provision of simple viewing facilities in Compartment 1 will enhance the visitor experience and raise the profile of the site with tour groups

Develop ways to show people birds and explain the wider conservation issues facing the Kinangop Grasslands IBA.

Enormous opportunities to demonstrate good farming practice and influence the management of the whole IBA

Great potential to build on the existing schools outreach/adult education programmes and develop training opportunities for all stakeholders

Quality of experience

Although the reserve is small and separated into two widely separated compartments it is scenically attractive and hosts a suite of localised, grassland species as well as a variety of other wildlife. The importance of the Resource Centre, educational, training and demonstration activities cannot be overstated. The sale of local art, crafts and produce in the centre is an important outlet for the community and an asset for visitors. “Trees” guesthouse offers an inimitable experience of high standard accommodation in a beautiful setting, affording breath-taking views and surrounded by wildlife whilst contributing to the running of the NK nature reserve. The Kikuyu-style Bandas and

provision of local dishes at Compartment 2 will provide a unique visitor experience whilst enabling visitors to learn about the importance of the Kinangop Grasslands Project and contribute to the development of the local economy.

2b.6 Identification of actions needed to achieve visitor and public affairs objectives

1. Actions needed to build and retain support from key stakeholders

Target audience (attribute)	Prescription (what we want to achieve)	Projects (what we will do to achieve the prescription)	Targets (SMART)
Friends of Kinangop Plateau	Create a shared vision for the reserve	<ul style="list-style-type: none"> Agree Memorandum of Understanding with FoKP Agree implementation of the Management Plan 	<ul style="list-style-type: none"> MoU agreed by end 2006 Management Plan implemented by end 2006
Eco-tourists	Develop a thriving eco-tourism business	<ul style="list-style-type: none"> Develop and implement marketing strategy Market "Trees" guesthouse to an international audience via websites, tour companies, specialist magazines etc. Provide infrastructure (Kikuyu-style Bandas, upgraded access, nature trail, information leaflet, signage, bird viewing shelter, safety rail) Improve habitat structure of Compartment 2 by planting around Bandas and creating boulder pool Provide training in all aspects of guiding and tourist provision 	<ul style="list-style-type: none"> Strategy implemented end 2006 See above Infrastructure installed end 2006. Habitat improved end 2006 Training programme initiated by end 2006
Birders	Establish links with bird tour companies and independent birders	<ul style="list-style-type: none"> Research current use of Kinangop Grasslands IBA by birders Market reserve and birding opportunities Provision of fully trained guides 	<ul style="list-style-type: none"> Report by end 2006. See above See above
Grazing tenants	Establish grazing lets	<ul style="list-style-type: none"> Research grazing needs Appoint appropriate grazing tenants Agree formal grazing lets. 	<ul style="list-style-type: none"> Grazing needs established end 2007 On completion of above On completion of above
Neighbours	Continue liaison and good relationships	<ul style="list-style-type: none"> Regular contact and develop closer links with and interest in the project Aim to influence management of adjacent land 	<ul style="list-style-type: none"> Ongoing Ongoing

2. Actions needed to promote opportunities for lifelong learning and advocacy

Target audience (attribute)	Prescription (what we want to achieve)	Projects (what we will do to achieve the prescription)	Targets (SMART)
Other farmers/land managers and advisors	To demonstrate and influence grassland management/restoration techniques	<ul style="list-style-type: none"> • Prepare a Demonstration Plan including events and workshops • Respond to requests • Establish process of outreach to promote sustainable grassland management 	<ul style="list-style-type: none"> • Plan produced and programme established end 2006
Local decision makers	To raise awareness of the project and influence key contacts within the local authorities	<ul style="list-style-type: none"> • Maintain regular contact and arrange reserve visits and events • Pursue commitment to upgrade access routes 	<ul style="list-style-type: none"> • Minimum of one visit per year • Contact Councillor by end 2006
Regional decision makers	To raise awareness of the project and influence key contacts	<ul style="list-style-type: none"> • Maintain regular contact and arrange reserve visits and events 	<ul style="list-style-type: none"> • Minimum of one visit per year
Statutory agencies	To influence policy and decision making	<ul style="list-style-type: none"> • Lobby for policies which favour maintenance of grassland habitat rather than cultivation • Lobby for support of dairy and sheep farming • Lobby for enforcement of legislation which protects habitats within Xm of watercourses 	<ul style="list-style-type: none"> • NKHQ to pursue issues at a national level
Schools and F&H education	To expand existing outreach education programme	<ul style="list-style-type: none"> • Develop age-related education programmes and materials (library, video screenings, mini-museum, monitoring equipment, games/sports, HIV/Aids information) • Maintain existing excellent links with Ornithological Department of National Museums of Kenya • Further develop existing adult education and training programme 	<ul style="list-style-type: none"> • Schools programme extended to all 105 Plateau schools • Environmental education part of core curriculum by end 2006 • Include flyer about project to all schools on KP in NK teaching booklet. • Identify further needs and implement training and educational programme by end 2006
Volunteers	To support and develop existing FoKP and other potential volunteers	<ul style="list-style-type: none"> • Formalise volunteering structure and develop clear lines of communication with Site Conservation Officer • Identify and implement training needs • Identify equipment requirements and explore funding mechanisms 	<ul style="list-style-type: none"> • See MoU above • Carry out training and equipment

			audits and implement by end 2007
Media	To maximise media opportunities	<ul style="list-style-type: none"> Develop good media contacts in order to publicise the aims and successes of the project 	<ul style="list-style-type: none"> Put out X No. of press releases per year and follow up subsequent media interest

4. Actions needed to maximise income and funding

Funding stream	Prescription	Projects	Targets
Eco-tourism	<p>Maximise income generation from "Trees" guesthouse and Kikuyu-style Bandas</p> <p>Maximise income generation from day visitors (birders/tour companies etc.)</p>	<ul style="list-style-type: none"> Deliver high standard of accommodation and local cuisine Deliver a high quality visitor experience Investigate appropriate prices for accommodation and other tourist services Explore opportunities for income generation through angling whilst taking into account conservation objectives Develop and implement marketing strategy 	<ul style="list-style-type: none"> X% of bed-nights filled per annum Competitive rates established for tourist services Trained staff in visitor services and guiding Analysis complete by end 2006 Strategy implemented by end 2006
Sponsors	Maximise fund raising opportunities	<ul style="list-style-type: none"> Identify funding requirements and target key sponsors Develop fundraising strategy to ensure long-term financial security of project 	<ul style="list-style-type: none"> Requirements identified by end 2006 and review periodically Strategy completed by end 2006
Donations	Maximise donations on reserve	<ul style="list-style-type: none"> Obtain collecting boxes 	<ul style="list-style-type: none"> Obtain boxes for reserve opening KSX/- in first year
Corporate	Create opportunities to support and promote corporate partners and supporters	<ul style="list-style-type: none"> Bring corporate sponsors to see reserve facilities and project development 	<ul style="list-style-type: none"> 2 events per year
Retail	Maximise retail income generation on reserve	<ul style="list-style-type: none"> Develop sale of local arts/crafts and produce Agree division of profits between producers and reserve 	<ul style="list-style-type: none"> Range of appropriate products for sale by reserve opening See MoU
Farm	Maximise profitability whilst achieving conservation	<ul style="list-style-type: none"> Manage grazing lets Market reserve produce (organic kitchen garden produce and honey) 	<ul style="list-style-type: none"> Generate moderate income whilst delivering

	objectives		conservation objectives
Training	Maximise income from training programme	<ul style="list-style-type: none"> Develop high quality and competitively-priced training programme of regional renown (tour guiding, field teaching, visitor services, cultural history etc.) 	<ul style="list-style-type: none"> Training programme established by end 2007

2c. Demonstration use

2c.1. Identification of Key Demonstration Reserves

There is significant potential to use the reserve to demonstrate conservation management. The overall aim for using Nature Kenya Reserves as demonstration sites is to bring about changes in land management away from Nature Kenya Reserves to benefit priority species and habitats. This can be achieved by:

- disseminating NK's experience of conservation management to land managers, those who influence them and decision-makers;
- demonstrating proven best practice,
- demonstrating trial management,
- inspiring land managers and those who influence them to take action for priority species and habitats.
- raising the profile of NK as a conservation land manager with other land managers, those who influence them and decision-makers.

A proportion of NK reserves will be suitable for national demonstration use. If you believe that your site has the potential for this (i.e. become a Key Demonstration Reserve), evaluate it against the following criteria:

Criteria	Evaluation
<p>Does the reserve management address a priority conservation issue and the management activities on the reserve either:</p> <ul style="list-style-type: none"> • have proven benefits for target species or habitats or, • are being trailed, and the reasoning behind them can be explained and discussed? This will also allow an exchange of ideas about the trial management. <p>It should be clearly identified whether the management is proven or trial, and whether there is adequate monitoring in place to prove the effect of trial management.</p>	<p>Reserve management addresses current deteriorating state of the Kinangop Grasslands IBA and consequent declines in populations of priority bird species. There is potential to investigate grassland regeneration on formerly cultivated land, optimal grazing regimes to benefit Sharpe's Longclaw and establish an appropriate monitoring system.</p>
<p>Is the reserve better placed to demonstrate the management practice than a private land holding? We may also wish to establish a working relationship with a complementary holding, demonstrating e.g. good practice in a commercial context.</p>	<p>Reserve enables complete grazing control and a free hand to trial all appropriate management options. Close links exist with farmers who are positively predisposed to the success of the project</p>
<p>Is there a target audience to whom the management practice will be demonstrated and the site is appropriate to that audience? Does the site show:</p> <ul style="list-style-type: none"> • the management on an appropriate scale • the management in an appropriate economic context • the ideal end result of management? 	<p>There is a huge potential to have a positive influence on farming practices across the whole IBA. Reserve is similar size to some land holdings and management will exist within the local economic framework.</p>
<p>Is the reserve accessible to the target audience?</p>	<p>Reserve is situated within the target audience area</p>

Are there adequate resources available to deliver the demonstration use of the reserve, including staff with the necessary skills and experience? These staff may not have to be on-site, but could be available to assist with events if required.	Site Conservation Officer established within local community and receiving additional training when necessary. Experienced NKHQ staff available to assist with events and offer advice. There is a wealth of knowledgeable and experienced volunteer help available locally. Some funding secured though further sources required
Does the reserve have adequate facilities for its use as a demonstration site? Does it have: <ul style="list-style-type: none"> • appropriate access routes. • adequate catering and toilet facilities – either on-site or nearby. • a suitable in-door venue – either on site or nearby? 	Commitment given by County Council to upgrade access routes. Toilet facilities to be established at Resource Centre which also provides suitable meeting venue
Is the reserve likely to provide inspiration to the target audience, eg. through providing an appropriate wildlife/landscape spectacle?	Target audience likely to be motivated by income generation projects which enable retention of grassland
Can demonstration use of the site be managed in a way that will not have a significant adverse effect on the conservation interest of the site? ie <ul style="list-style-type: none"> • increased human disturbance will not have a significant adverse effect on key breeding species. • increased trampling will not have a significant adverse impact on key habitats? 	Reserve can be used without compromising conservation objectives. Demonstration infrastructure confined to formerly cultivated corner of one compartment.

2c.2. Demonstration activities at Kinangop Plateau Nature Reserve

Issue to be demonstrated	Method of demonstration	Events / activities
Best practice grassland management for Sharpe's Longclaw and other grassland birds	Guided tour highlighting top quality tussock grassland with breeding Sharpe's Longclaws and the management that achieved this (timing and density of cattle grazing) Leaflet and/or display board detailing grassland management including photos of top-quality tussock grassland with longclaws	Tours led by Site Conservation Officer or knowledgeable FoKP members for all visitors but particularly local residents, land managers, decision makers and school-groups. Timing –all months for groups, that have booked in advance and particularly once tussock grassland established. Organise special events/ workshops and invite key target audiences. Leaflets/display boards to be available for all visitors to view in the Resource Centre.
Trial management to return areas of former cultivation and improved grassland to top quality tussock grassland	As above	As above
Community-based projects to support the economic security of dairy-farming and hence of grassland retention	Information on dairy co-operative, insemination, cattle health, milk collection, cooler plant and prices available at the Resource Centre – through part	Tours / discussion led by Site Conservation Officer or knowledgeable FoKP members for all visitors but particularly land managers. Leaflets

	of guided tour to relevant groups, discussion with site staff and/or leaflets	available re: cattle health/insemination. Timing –all months but particularly once dairy cooperative established and new cooler established close to the main road
Projects that encourage retention of permanent pasture: Wool-spinning Bee-keeping Honey- production Organic kitchen gardening	Demonstrate yarn-spinning next to Resource Centre. Products for sale in Resource Centre Demonstrate bee-keeping through use of active bee-hives close to Resource Centre Demonstrate method of obtaining and purifying honey. Honey on sale in Resource Centre Small organic kitchen garden plot (growing vegetables, fruit and stock fodder) next to Resource Centre, including use of cattle manure as compost.	All to be conducted by knowledgeable members of FoKP with assistance/advice from NK. Timing: activities (looms, bee-hives, kitchen garden) could be on permanent display with active demonstrations of activities for groups that have booked in advance or have been invited to organised workshops.
Additional income-generating projects	Guided tour/talk to inform of other income-generating projects such as eco-tourism and rabbit-rearing(?). Local arts and crafts on sale in Resource Centre including items made from recycled plastic bags.	Tours / talks led by Site Conservation Officer or knowledgeable FoKP members for all visitors but particularly land managers. Timing: tours/talks to be arranged in advance and/or key audiences invited to workshops.

3. VISION & MANAGEMENT OBJECTIVES

3.1. Long-term vision

The Kinangop reserve lies in the northern part of the Kinangop Plateau. Covering some 77,000ha, the latter is one of the largest areas of montane grassland remaining in Kenya, and is of international importance for its assemblage of grassland birds, the whole area being designated as an IBA and part of the wider Kenya Mountains EBA. The grasslands are believed to be the world stronghold of Sharpe's Longclaw, a species that is endemic to the Kenyan Highlands and adjacent areas.

Internationally important in its own right, Kinangop is arguably one of the most important sites for montane grassland biodiversity in Kenya. Nature Kenya purchased 95 acres of grassland at two locations near Murungaru in 2005. At this time, the pressure of agricultural change from traditional dairy cattle farming to cereals and of sub-division of plots was threatening the future of the breeding grassland birds and other biodiversity of Kinangop. The aim of acquisition, extension (?) and management of the reserve is to play a major role in halting and reversing the decline in breeding and wintering bird interests and maintaining the condition of the remaining grassland flora and fauna.

Throughout the next 20 years, the reserve will continue to be an important montane grassland site on Kinangop managed in close cooperation with the local site support group, the Friends of Kinangop Plateau (FoKP). It will hold vital breeding populations of key grassland bird species including Sharpe's Longclaw, acting as a reservoir for re-colonisation of adjacent areas of formerly cultivated fields. The reserve will demonstrate optimal grassland management for Sharpe's Longclaw primarily through dairy-cattle farming and will highlight the economic benefits of grassland retention to a diverse audience including farmers, school-children, school patrons, eco-tourists, funding agencies and local decision-makers. As a result of this demonstration and advocacy work, the decline in the numbers and distribution of grassland birds will be halted on the entire plateau. Grazing will be conducted by cattle belonging to the local community on grazing lets designed by Nature Kenya. The viability of this farming system will be supported by the development of niche food and other agricultural product markets associated with high environmental quality and sustainability. The reserve will become the focus for visiting birders wishing to see the special grassland birds of Kinangop. A thriving eco-tourism business involving high standard accommodation at "Trees" guesthouse and in traditional bandas providing local cuisine will help support the local economy and provide money for running the reserve. The maturing riparian scrub will continue to support a diverse and increasing bird population. This will complement the biodiversity to be seen at "Trees", the pools and the montane grassland in providing a stunning natural history experience for visitors. Life long learning will have been enhanced with a continually evolving schools outreach and adult/further educational programme including a regular series of events and workshops for adults and children from the local and regional area with many opportunities for local, direct involvement in planning, organising and running the programme.

Through its close collaboration with the site-support group Friends of Kinangop Plateau, Nature Kenya will be viewed as an important local employer and contributor to the health of the local rural economy through both tourism and land management, and its work will be understood and supported by the majority of the local population. This highly positive message will spread throughout Kenya.

3.2. Objectives & management

Conservation Objectives

1. To maintain 95 acres (minus infrastructure, pool and scrub areas) of montane grassland in favourable condition for breeding Sharpe's Longclaw, other breeding grassland bird species, wintering bird species and other grassland biodiversity.

Species targets/ prescriptions:

- The 5-year mean no. of breeding Sharpe's Longclaws increases from 0 to > 1 pair
- Four additional key grassland-nesting bird species (Jackson's Widowbird, Long-tailed Widowbird, Black-winged Plover, Wing-snapping Cisticola) to be breeding in both compartments by 2010
- Three key non-breeding bird species (Pallid Harrier, Lesser Kestrel, Nyanza Swift) continue to be recorded each year

Habitat targets/ prescriptions:

- The extent of montane grassland remains at > 90 acres
- The extent of grass tussock cover increases to up to 30% (T2)
- A mosaic of grass heights predominantly H2 (moderate height) but with some short grass patches
- No increase in extent of scrub
- No change in hydrology (no new drainage, bore-holes etc)

Summary management:

- Establish appropriate grazing regime using predominantly cattle but also trialling sheep to create optimal breeding habitat for Sharpe's Longclaw
- Review potential to introduce tussocks in 2008 (should tussock recovery be slow)
- Ensure livestock have access to drinking water in Compartment 2, however may need to consider likelihood of escape and/or stock incursion during drier periods
- Ensure that boundary fences are sheep-proof
- Maintain boundary fence and install access gates
- Establish fences to isolate the Resource Centre, demonstration plots and the bandas from livestock

Summary monitoring:

- Monitor breeding birds by walkthrough method and plotting all birds seen per visit on map (see Lens et al 2001). Walkthroughs to be conducted every two weeks during dry weather and possibly weekly during peak breeding periods.
- Monitor non-breeding birds in the course of monitoring breeding birds.
- Monitor grassland recovery including sward height, tussock density and grass species composition. Samples to be taken monthly using existing methodology (see Lens et al 2001).
- Establish list and status of flowering plant species
- Establish status of Kenya Horned Viper
- Establish list and status of grassland invertebrates. Consider use of sweep-netting to assess invertebrate biomass in relation to changes in sward structure (see Dr Muchai for methodology).
- Maintain species lists for other taxa
- Patrol reserve boundaries to check for livestock incursions

2. To maintain permanent freshwater pools to retain a water source for livestock, an assemblage of wetland birds and other aquatic wildlife.

Species targets/ prescriptions:

- Maintain current assemblage of wetland bird species
- Maintain current assemblage of aquatic wildlife

Habitat targets prescriptions:

- Maintain presence of two permanent freshwater pools

Summary management:

- Maintain fence to isolate lower pool from livestock (as this serves as a water source for the local community in dry conditions)
- Consider re-sculpting margins of upper pool in order to attract more wetland birds (this should not impact on the grassland habitat)

Summary monitoring:

- Monitor wetland bird numbers by monthly counts
- Establish status of amphibians, aquatic invertebrates and aquatic plants

3. To maintain extent and structure of the riparian scrub to retain assemblage of bird species.

Species targets/ prescriptions:

- Retain assemblage of scrub and riparian bird species (38 species recorded in 2 hours on 06.04.2006).
- Retain diversity of plant species

Habitat targets/CMS prescriptions:

- The extent of riparian scrub to remain at x acres
- To retain the integrity of the scrub

Summary management:

- Requirement to maintain access to drinking water for livestock likely to result in localised grazing of scrub in the less steeply sloping SW corner
- Patrol to ensure no stock incursion or illegal collection of firewood

Summary monitoring:

- Establish list and status of breeding and non-breeding bird species
- Establish list and status of plant species
- Establish list and status of invertebrates, especially butterflies/moths

Other research, survey & monitoring objectives

4. To inform our management of the site and contribute to other recording schemes, surveys and research projects.

Summary monitoring:

- Establish weather station at Resource Centre and maintain records
- Survey under-recorded groups (especially butterflies, dragonflies, grasshoppers, reptiles, amphibians and mammals)
- Establish regular water bird counts of wetland adjacent to Compartment 1

5. To build and retain the support of key stakeholders

People targets/prescriptions:

- Create shared vision for the reserve
- Agree Memorandum of Understanding with FoKP
- Agree implementation of the Management Plan
- Develop a thriving eco-tourism enterprise
- Establish links with bird tour companies and independent birders
- Establish and maintain good working relationships with neighbours and grazing tenants

Summary management:

- Develop and implement marketing strategy
- Market "Trees" guesthouse to an international audience
- Improve habitat structure of Compartment 2 by planting around bandas and creating boulder pool
- Provide infrastructure to facilitate a thriving eco-tourism enterprise including upgraded access and signage to both compartments; bird viewing shelter (simple bench with four posts around it supporting a roof – ideally thatched, to provide shade) in Compartment 1 and Kikuyu-style Bandas, nature trail, information leaflet and safety rail in Compartment 2
- Provide interpretation in the Resource Centre, bandas and along the nature trail in Compartment 2 to inform visitors about the reserve, the importance of the Kinangop Grasslands IBA and the project as a whole
- Provide training in all aspects of guiding and tourist provision
- Appoint appropriate grazing tenants and agree formal grazing lets
- Aim to influence management of adjacent land by regular contact with neighbours

6. To promote opportunities for lifelong learning and advocacy

People targets/prescriptions:

- Demonstrate and influence grassland management/restoration techniques to other farmers, land managers and advisors
- To raise awareness of the project and influence key contacts within the local authorities
- To raise awareness of the project and influence key contacts amongst regional decision makers
- To influence policy and decision-making amongst statutory agencies
- To expand existing outreach education programme including schools and F&H education
- To utilise the research potential of the recovering grassland and development of the reserve
- To train and develop existing FoKP and other potential volunteers
- To raise awareness amongst wider audiences through the media

Summary management:

- Prepare demonstration plan (incl. events and workshops), establish outreach process and respond to requests to promote sustainable grassland management
- Maintain regular contact with local and regional authorities and pursue commitment to upgrade access routes
- Lobby for policies which favour maintenance of grassland habitat rather than cultivation, including support of dairy and sheep farming and enforcement of legislation to protect habitats within Xm of watercourses
- Develop age-related education programmes and materials (library, video screenings, mini-museum, monitoring equipment, games), extend to all 105 schools on the Plateau and lobby for inclusion of environmental education as part of core curriculum.

- Develop a research programme to maximise the opportunity to record habitat changes and responses of key species to grassland management – this could involve Dept of Ornithology at the Museums of Kenya as well as local school-children.
- Identify further needs and implement training and educational programme
- Formalise volunteering structure and develop clear lines of communication with Site Conservation Officer
- Identify equipment requirements and explore funding mechanisms
- Develop good media contacts in order to publicise the aims and successes of the project by distributing X No.of press releases per year

7. To maximise income and funding to support the reserve

People targets/prescriptions:

- Maximise income generation from accommodation provision in Bandas, day visitors including independent birders/tour companies etc.
- Maximise fund-raising opportunities
- Maximise donations on reserve
- Maximise corporate sponsorship of reserve
- Maximise retail income generation on reserve including sale of produce from the organic kitchen garden and honey from bee-hives on the reserve
- **Generate moderate income from grazing lets**
- **Maximise income from training programme**

Summary management:

- Develop and implement a targeted marketing strategy
- Deliver high standard accommodation and local cuisine at competitive rates, ensuring a unique, high quality visitor experience.
- Explore opportunities for income generation through angling whilst taking into account conservation objectives
- Identify funding requirements and target key sponsors
- Develop fundraising strategy to ensure long-term financial security of project
- Obtain and install collecting boxes for donations
- Bring corporate sponsors to see reserve facilities and project development at least twice a year
- Develop range of appropriate locally-produced products for sale at the Resource Centre including artwork, mats/bags made from recycled polythene, items of clothing and other woven goods made from Kinangop yarn, jars of honey, fresh fruit and vegetables from the organic kitchen garden, as well as considering the sale of refreshments such as fruit juices
- Agree division of profits from retail sales between producers and reserve in the MoU with FoKP
- Generate moderate income from grazing lets whilst delivering conservation objectives
- Develop high quality and competitively-priced training programme of regional renown including tour guiding, field teaching, visitor services, cultural history etc. Significant savings made by training in-house as opposed to training courses elsewhere.

Demonstration objectives

8. To demonstrate the sustainable management and income-generating opportunities of montane grassland to neighbours, farmers, agricultural advisers, local and regional authorities and policy makers.

People targets/ prescriptions:

- Demonstrate best practice in grassland management to residents, decision makers and agricultural advisers throughout the Kinangop grasslands IBA

- Demonstrate a range of sustainable income-generating activities to residents, decision makers and agricultural advisers throughout the Kinangop grasslands IBA
- Monitor and evaluate the effectiveness of the demonstration use of the reserve

Summary management:

- Invite residents, decision makers and agricultural advisers to events and workshops
- Establish and demonstrate a range of sustainable income-generating activities either adjacent to the Resource Centre in Compartment 1, on FoKP shambas and hold workshops elsewhere on the Kinangop plateau. These may involve some/all of the following: dairy farming including milk and other dairy products; sheep-farming including mutton, yarn production, wool-spinning and weaving; organic kitchen gardening including vegetables, herbs, flowers, fruits, jam-making and use of manure; bee-keeping including honey production and processing, royal jelly (?), bee venom(?); rabbit-rearing (?) Mushroom gathering (?)
- Use questionnaire to evaluate usefulness of visits
- Visitor book for comments

Include a map of the proposed habitats on the reserve at the end of the life of the management plan (Map 15).

4. SUPPORT SERVICES

Section 4 outlines aspects of responsibilities with regard to Health and Safety issues concerning staff, volunteers, visitors, workers and anyone else who comes onto property owned or managed by Nature Kenya. This is enshrined in European and UK legislation and increasingly dictates how we operate on and offsite within RSPB. Although legislation may be different in Kenya and much of it may not be appropriate for use on the existing reserve the following can be used as a template or guide thinking with regard to the health and safety of all those who use the Kinangop Plateau Nature Reserve

4.1 Health and Safety evaluation checklist

Please use the list of legal and NK requirements below to help you evaluate what items are needed on your site. Keep this table on file. Your Safety Co-ordinator is available to help.

Legal & NK requirements	Needed at this site?
Emergency procedures: Liaison with emergency services Fire Risk Assessment Lost child procedure Security procedures, including staff and buildings Lone field work procedure <u>Other:</u>	
Health and welfare procedures First aid - Assessment of needs Employers liability insurance display Accident book <u>Other:</u>	
Visitor safety procedures Hazard Map, including suitable means to warn visitors of hazards Inspection procedure for safety of bandas Inspection procedure for safety of timber structures such as the safety rail in Compartment 2 Inspection procedure for the nature trail and other possible hazards to visitors <u>Other:</u>	
Safety notes for storage and working procedures Machinery/equipment safety inspection procedures Safe food storage and handling provision <u>Other:</u>	
Equipment inspections Electrical safety - annual inspections Gas appliances - annual inspections Fire extinguishers (for bandas and Resource Centre) – annual inspections Other equipment - annual inspection <u>Other:</u>	

Legal & NK requirements	Needed at this site?
<p>Risk assessments COSHH assessments and records Accommodation Assessment (Bandas) Personal risk assessments PPE assessments - Relevant equipment for staff and volunteers Risk assessments for manual tasks Display screen equipment risk assessment Noise assessments Health and Safety file <u>Other:</u></p>	
<p>Training Safety training for staff Safety training for Volunteers <u>Other:</u></p>	

4.2 Health and Safety rationale

*It is important that any **Special Risks** that might be encountered on the site by either staff or visitors are noted here and maintained in this file as part of any audit trail that may be required in future.*

*A short statement needs to be made for visitors, specifying the level of safety cover that the reserve may provide, using different zones if necessary. **Keep this statement on file***

Special risks:

The site uses some machinery (e.g. yarn-spinning and honey-production equipment) - all staff will need familiarity with the machinery.

Visitor safety:

The nature trail is on a steep slope and runs adjacent to high cliff. The rocks in the river are slippery after rain. Maintenance of the trail and safety rail in good condition is essential however some means of properly informing visitors of the dangers of the hazards on the nature trail is required (via the Trail guide?) as no safety support is provided directly.

The Banda accommodation will need to be maintained in safe, clean condition. Fire fighting apparatus – either fire extinguishers or sand bucket and beaters – are recommended for both the bandas and the Resource Centre.

4.3 Objectives, prescriptions, projects

1. To ensure a safe and well maintained work environment

Prescription	Possible requirements
Carry out all required safety checks and inspections	Emergency procedures: Liaison with emergency services Fire Risk Assessment Lost child procedure Security procedures, including staff and building Lone field work procedure
	Health and welfare procedures First aid - Assessment of needs Employers liability insurance display Accident book
	Visitor safety procedures Hazard Map, including suitable means to warn visitors of hazards Inspection procedure for safety of timber structures Inspection procedure for other possible hazards to visitors
	Safety notes for storage and working procedures Machinery safety inspection procedures
	Equipment inspections Electrical safety Annual inspections Gas appliances Annual inspections Other:
	Risk assessments COSHH assessments and records Accommodation Assessment Personal risk assessments Personal Protective Equipment Relevant equipment for staff and volunteers Risk assessments for manual tasks Display screen equipment risk assessment Noise assessments

Prescription	Possible requirements
Carry out all required safety checks and inspections	Training Safety training for staff Safety training for Volunteers
Maintain all buildings and structures	Ensure maintenance of; Bandas Resource Centre Workshops Office?
	Ensure maintenance of : Bird viewing shelter
Maintain other reserve infra- structure	Ensure maintenance of: ? km of track
	Ensure maintenance of : Fences and gates
	Ensure maintenance of : Safety rail
Maintain reserve vehicle/machinery/equipment.	Service and maintain Yarn-spinning apparatus Honey-making machinery Etc
	Acquire; Vehicle?
	Service and maintain Winches Power tools etc
	Acquire
	Service and maintain General tools
	Train staff; In use and maintenance of equipment above.

2. To manage the reserve administration systems efficiently and on a sound legal basis whereby the site integrity is maintained and NK protocols and reporting needs are delivered on time and in a suitable form

Prescription	Projects
Maintain records & produce reports	Maintain and prepare reports for managers as necessary, including Annual report
	Maintain finance reports and supply as necessary
	Maintain figures for visitor numbers and recruitment and supply as necessary
	Prepare and maintain rolling grazing plan for the reserve, with regular reviews
Administer general office requirements	Reply to correspondence
	Keep records of all admin and correspondence
Ensure all legal obligations fulfilled and reserve assets protected	Monthly boundary check to ensure no encroachment by others
	Agree annual grazing lets with NK and local graziers and ensure financial arrangements delivered
	Negotiate for new areas to manage as necessary
Manage Staff team	Carry our regular appraisals and define work plans with team members
	Supervise contractors
	Identify and provide personal development training for staff and volunteers
	Employ additional contract staff and part-time staff

5. PROJECT REGISTER

The following section sets out the projects and actions which will take place in order to implement the Kinangop Nature Reserve Management Plan. The codes are unique to each project and can be used to report against at the end of the year in order to monitor work achieved against the objectives and the progress of the plan. The production of this Annual Report is usually the responsibility of the Site Conservation Officer in co-operation with the Conservation Programme Manager

5.1 Conservation Objectives

1. To maintain 95 acres (minus infrastructure, pool and scrub areas) of montane grassland in favourable condition for breeding Sharpe's Longclaw, other breeding grassland bird species, wintering bird species and other grassland biodiversity.

Projects:

MH10.01 Manage habitat, grassland by controlled grazing

Graze 90 acres of unimproved montane grassland to promote c30% tussock cover and predominantly medium grass height (T2 H2) for the benefit of breeding Sharpe's Longclaw and other breeding grassland bird species. Grazing by cattle (dates and densities to be established following monitoring of tussock formation from existing level)

MH13.01 Manage habitat, grassland by tussock planting

Should tussock recovery be poor, review potential to introduce tussocks of grass species known to be used for nesting by Sharpe's Longclaw in 2008

ME01.01 Manage estate, boundary structures

Maintain Xm of sheep-proof boundary fences, install access gates and isolate Resource centre, demonstration plots and bandas from livestock

RA13.01 Collect data, birds, monitor

Monitor breeding and non-breeding birds by walkthrough method and plotting all birds seen per visit on map (see Lens et al 2001). Walkthroughs to be conducted every two weeks during dry weather and possibly weekly during peak breeding periods.

RA16.01 Collect data, birds, list species

Record occurrence and counts of all bird species on a casual, daily basis. Maintain file of records (see Appendix 1 and 2 for base-line lists).

RF03.01 Collect data, vegetation, monitor

Monitor grassland recovery including sward height, tussock density and grass species composition. Samples to be taken monthly using existing methodology (see Lens et al 2001).

RF06.01 Collect data, vegetation, list species

Establish list and status of flowering plant species

RA22.01 Collect data, reptiles, survey species

Establish status of Kenya Horned Viper and collate list of all other species recorded, best achieved by use of specialist surveyors

RA82.01 Collect data, invertebrates, survey species

Establish list and status of grassland invertebrates. Consider use of sweep-netting to assess invertebrate biomass in relation to changes in sward structure (see Dr Muchai for methodology).

RB06.01 Collect data, other taxa, list species

Maintain species lists of other groups

MP00.01 Protect site/species by patrol

Regular patrol of reserve boundaries and infrastructure to ensure integrity

2. To maintain permanent freshwater pools to retain a water source for livestock, an assemblage of wetland birds and other aquatic wildlife.

Projects:

ME01.02 Manage estate, boundary structures

Maintain stock-proof boundary fence of lower pool in Compartment 1 to ensure water supply and quality for local community

MH61.01 Manage habitat, open water by excavation

Consider re-sculpting margins of upper pool in order to attract more wetland birds (this should not impact on the grassland habitat)

RA13.02 Collect data, birds, monitor

Collect data on wetland bird numbers and species by monthly counts in co-ordination with regional/national schemes where possible

RA22.02 Collect data, herptiles, survey species

Collect data on status of amphibians (targeting endemic frog species in particular) and collate list of all other species recorded, best achieved by use of specialist surveyors

RF06.02 Collect data, vegetation, list species

Establish list and status of aquatic plant species, best achieved by use of specialist surveyors

RA82.02 Collect data, invertebrates, survey species

Establish list and status of aquatic invertebrates, best achieved by use of specialist surveyors

3. To maintain extent and structure of the riparian scrub to retain assemblage of bird species.

Projects:

MP00.02 Protect site/species by patrol

Regular patrol of scrub in Compartment 2 to ensure stock incursion limited to SW corner for access to drinking water and no illegal collection of firewood

RA13.03 Collect data, birds, list

Establish list and status of breeding and non-breeding bird species (see Appendix 1 for base-line list).

RF06.03 Collect data, vegetation, list species

Establish list and status of plant species, best achieved by use of specialist surveyors

RA82.02 Collect data, invertebrates, survey species

Establish list and status of invertebrates, best achieved by use of specialist surveyors

5.1.a Other research, survey & monitoring objectives

4. To inform our management of the site and contribute to other recording schemes, surveys and research projects.

Projects:

RP03.01 Collect data, climatological, monitor

Establish weather station at Resource Centre and maintain records

RP13.01 Collect data, hydrological, monitor

Establish water quality, water level and river flow rate data collection and maintain records

RA13.04 Collect data, birds, list

Establish monthly wetland bird counts offsite on wetland adjacent to Compartment 1 in co-ordination with regional/national schemes where possible and record ad hoc bird sightings for the benefit of visiting birders/eco-tourists and in order to inform the management of the site.

5.2. Visitor and public affairs objectives

5. To build and retain the support of key stakeholders

Projects:

AF00.01 Finance, general

Develop and implement marketing strategy to include the regional, national and international promotion of the Project and "Trees" guesthouse and banda accommodation in particular

MH13.02 Manage habitat, grassland by planting

Improve habitat structure of Compartment 2 by planting around Bandas to diversify structure and attract scrub bird species close to facilities

MH60.01 Manage habitat, open water by water-level control

Consider benefits of creating boulder pools in the River Turacha at Compartment 2 for the benefit of native species during the dry season and potentially trout fishing

ME40.01 Manage estate, paths/roads

Establish and maintain access tracks/roads onsite including hard-standing car-park adjacent to bandas in Compartment 2

ME40.02 Manage estate, paths

Establish nature trail and safety rail through scrub to river in Compartment 2

ME11.01 Manage estate, buildings construct

Construct bird viewing shelter (simple bench with four posts around it supporting a roof – ideally thatched, to provide shade) and Resource Centre in Compartment 1 and 5 Kikuyu-style Bandas and associated facilities in Compartment 2

ME12.01 Manage estate, buildings maintain

Maintain existing “Trees” guesthouse, Resource Centre, bird watching shelter and accommodation facilities

MI50.01 Provide interpretative material

Provide interpretation in the Resource Centre, bandas and along the nature trail in Compartment 2

AT30.01 Train staff/volunteers

Provide training in all aspects of guiding and tourist provision

AT60.01 Liaise/supervise volunteers/other working groups

Formalise volunteering structure and develop clear lines of communication with Site Conservation Officer

ML80.01 Liaise graziers

Appoint appropriate grazing tenants, agree formal lets and liaise over livestock management

6. To promote opportunities for lifelong learning and advocacy

Projects:

AP21.01 Prepare plan

Prepare demonstration plan (incl. events and workshops), establish outreach process respond to requests to promote sustainable grassland management

ML40.01 Liaise local, regional and national authorities

Maintain regular contact with local and regional authorities and pursue commitment to upgrade access routes to the two reserve Compartments

ML40.02 Liaise statutory agencies

Lobby for policies which, favour maintenance of grassland habitat rather than cultivation, including support of dairy and sheep farming and enforcement of legislation to protect habitats within Xm of watercourses

MI20.01 Inform visitors, education

Develop age-related education programmes and materials (library, video screenings, mini-museum, monitoring equipment, games), extend to all 105 schools on the Plateau and lobby for inclusion of environmental education as part of core curriculum.

MI20.02 Inform visitors, education

Develop a research programme to maximise the opportunity to record habitat changes and responses of key species to grassland management – this could involve Dept of Ornithology at the Museums of Kenya as well as local school-children

AT30.02 Train staff/volunteers

Identify and implement further training needs

ML70.01 Liaise Media

Develop good media contacts in order to publicise the aims and successes of the project by distributing X press releases per year

AA10.01 Acquire site, extension

Investigate opportunities to extend the site by acquisition, lease or agreement potentially by offering to manage publicly owned land on behalf of local/regional authorities. Consider offering to manage land in public ownership within Xm of waterways across the plateau.

7. To maximise income and funding to support the reserve

Projects:

AE00.01 Employ staff, general

Many of the duties identified in this management plan already fall within the job description of the Site Conservation Officer. However, with the development of the reserve and the eco-tourism initiative in particular, further staff are likely to be required.

The eco-tourist accommodation and catering facilities in Compartment 2 will require at least two appropriately trained employees in order to welcome guests, prepare and serve food and carryout domestic duties. It is anticipated that management of the operation, including "Trees" guesthouse could be administered through the Resource Centre where an experienced centre manager would be essential to the success of the project.

MA00.01 Manage accommodation and associated facilities

Deliver high standard accommodation and local cuisine at competitive rates, ensuring a unique, high quality visitor experience.

MA00.02 Manage accommodation and associated facilities

Explore opportunities for income generation through angling whilst taking into account conservation objectives

AF00.02 Prepare financial plan

Develop and implement targeted fundraising strategy to identify requirements and target key sponsors to ensure the long-term financial security of the project

AF02.01 Fundraising and donations

Obtain and install collecting boxes for donations

AF02.02 Fundraising and donations

Bring corporate sponsors to see reserve facilities and project development at least twice a year

AF02.03 Fundraising and donations

Develop range of appropriate local products for sale at the Resource Centre including artwork, mats/bags made from recycled polythene, items of clothing and other woven goods made from Kinangop yarn, jars of honey, fresh fruit and vegetables from the organic kitchen garden, as well as considering the sale of refreshments such as fruit juices

ML50.01 Liaise local community/groups

Agree division of profits from retail sales between producers and reserve in the MoU with FoKP

AF02.04 Fundraising and donations

Generate moderate income from grazing lets whilst delivering conservation objectives

AF02.05 Fundraising and donations

Develop high quality and competitively-priced training programme of regional renown including tour guiding, field teaching, visitor services, cultural history etc. Significant savings made by training in-house as opposed to training courses elsewhere.

5.3. Demonstration objectives

8. To demonstrate the sustainable management and income-generating opportunities of montane grassland to neighbours, farmers, agricultural advisers, local and regional authorities and policy makers.

Projects:

MI30.01 Inform visitors, specialists

Invite residents, decision makers and agricultural advisers to events and workshops

MI30.02 Inform visitors, specialists

Establish and demonstrate a range of sustainable income-generating activities either adjacent to the Resource Centre in Compartment 1, on FoKP shambas and hold workshops elsewhere on the Kinangop plateau.

MI30.03 Inform visitors, specialists

Use questionnaire to evaluate usefulness of demonstration visits, plus visitor book for comments.

6. FINANCIAL PLAN

6.1. Prepare 5-year indicative budget

7. REFERENCES

Bennun, L. and Njoroge, P. 1999. "Important Bird Areas in Kenya" East Africa Natural History Society, Nairobi

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Ndang'ang'a, P.K. (unpublished 2001) "A landscape model of grassland decline in Kinangop Plateau, Kenya: Implications for conservation of Sharpe's Longclaw *Macronyx sharpei*"

Ndang'ang'a, P.K., du Plessis, M.A., Ryan, P.G. and Bennun, L.A. 2002."Grassland decline in Kinangop Plateau, Kenya: implications for conservation of Sharpe's Longclaw (*Macronyx sharpei*)" Biological Conservation 107 341 – 350

8. MAPS

1.a. Location of Kinangop Plateau within Kenya

1.b. Location of NK Kinangop Plateau Nature Reserve

2. Statutory, planning & other designations – location and boundaries of Kinangop Grasslands IBA
3. Land/rights held by NK
4. Land/rights let out by NK
5. Planning permissions, statutory licences & statutory consents
6. Public access
7. Main fixed assets
 - 7.a. Compartment 1 including Resource Centre, bird-watching shelter etc.
 - 7.b. Compartment 2 including bandas, nature trail etc.
8. Geology & soils
9. Hydrology
 - 10a. Reserve recording areas
 - 10b. Wetland bird count sectors
 - 10c. Grassland breeding bird transects
 - 10d. Locations of point counts
 - 10e. Butterfly transect(s)
 - 10f. Other recording areas
- 11a. Habitats on the reserve in (*add in year*)
12. Location of important species
- 13a-b. Maintenance management over the period (*add in years*)
14. Current issues and constraints
15. Proposed habitats on the reserve in (*add in year*)

9. APPENDICES

Appendix 1: Bird species recorded on the reserve in April 2006

Common name	Latin name	Compt. 1	Compt. 2
a) Grassland birds			
Sharpe's Longclaw	<i>Macronyx sharpei</i>	1 pair at end of month	Prior to April 2006
Long-tailed Widowbird	<i>Euplectes progne</i>	2	
Rufous-naped Lark	<i>Miafra africana</i>	Min of 2	
Northern Anteater Chat	<i>Myrmecocichla aethiops</i>	1 pair	1 pair
Wing-snapping Cisticola	<i>Cisticola ayresii</i>		2+ pairs
Black-winged Plover	<i>Vanellus melanopterus</i>		1
Hadada Ibis	<i>Bostrychia hagedash</i>		4
Grassland Pipit	<i>Anthus cinnamomeus</i>		4
Common Stonechat	<i>Saxicola torquatus</i>		6
Common Fiscal	<i>Lanius collaris</i>	2	4+
Common Waxbill	<i>Estrilda astrild</i>		6+
Pied Wheatear	<i>Oenanthe pleschanka</i>	1	
Kestrel sp	<i>Falco sp</i>	1	2
Augur Buzzard	<i>Buteo augur</i>	1	
b) Riverine/Scrub birds			
Hunter's Cisticola	<i>Cisticola hunteri</i>		6+
Speke's Weaver	<i>Ploceus spekei</i>	1 large colony	8+
Baglafaecht's Weaver	<i>Ploceus baglafaecht</i>		12+
Superb Starling	<i>Lamprotornis superbus</i>	2	
Yellow-crowned Canary	<i>Serinus canicollis</i>		2
Brimstone Canary	<i>Serinus sulphuratus</i>		2
Rufous Sparrow	<i>Passer rufocinctus</i>		4+
Yellow Bishop	<i>Euplectes capensis</i>		2
Red-billed Quelea	<i>Quelea quelea</i>		5+
Pin-tailed Whydah	<i>Vidua macroura</i>		2
Red-headed Weaver	<i>Anaplectes rubriceps</i>		1
Streaky Seedeater	<i>Serinus striolatus</i>		4+
Olive Thrush	<i>Turdus olivaceus</i>		4
Cape Robin-chat	<i>Cossypha caffra</i>		2
Common Bulbul	<i>Pyconotus barbatus</i>		5+
Blue-eared Starling	<i>Lamprotornis chalybaeus</i>		2
Yellow White-eye	<i>Zosterops senegalensis</i>		4
Tropical Boubou	<i>Laniarus aethiopicus</i>		2
Red-backed Shrike	<i>Lanius collurio</i>		1
Lesser Grey Shrike	<i>Lanius minor</i>		1
Tawny-flanked Prinia	<i>Prinia subflava</i>		4
Yellow-breasted Apalis	<i>Apalis flavida</i>		4
Brown Woodland Warbler	<i>Phylloscopus umbrovirens</i>		1
African Paradise Flycatcher	<i>Tersiphone viridis</i>		1

Cinnamon-chested Bee-eater	<i>Merops oreobates</i>		2
Golden-winged Sunbird	<i>Nectarinia reichenowi</i>		1
Bronze Sunbird	<i>Nectarinia kilimensis</i>		1 pair
Northern Double-collared Sunbird	<i>Nectarinia preussi</i>		1 pair
Rock Martin	<i>Hirundo fuligula</i>		6
Plain Martin	<i>Riparia paludicola</i>		2
Red-rumped Swallow	<i>Hirundo daurica</i>		2
Nyanza Swift (?)	<i>Apus niansae</i>		1
c) Wetland birds			
Yellow-billed Duck	<i>Anas undulata</i>	2 (6 nearby)	
Pied Kingfisher	<i>Ceryle rudis</i>	1	
Little Grebe	<i>Tachybaptus ruficollis</i>	2 on adjacent marsh	
Grey Heron	<i>Ardea cinerea</i>		1 (over)
African Spoonbill	<i>Platalea alba</i>	1 on adjacent marsh	
Intermediate Egret	<i>Mesophoyx intermedia</i>	1 on adjacent marsh	
Red-knobbed Coot	<i>Fulica cristata</i>	4 on adjacent marsh	
Blacksmith Plover	<i>Vanellus armatus</i>	6 on adjacent marsh	
Wood Sandpiper	<i>Tringa glareola</i>	6 on adjacent marsh	
Curlew Sandpiper	<i>Calidris ferruginea</i>	1 on adjacent marsh	

Appendix 2: Bird species recorded around Trees guesthouse April 4th – 11th 2006

Common name	Latin name	Comments
Cattle Egret	<i>Bubulcus ibis</i>	
Black-headed Heron	<i>Ardea melanocephala</i>	
Hamerkop	<i>Scopus umbretta</i>	
Abdim's Stork	<i>Ciconia abdimii</i>	
Marabou stork	<i>Leptoptilus crumeniferus</i>	
Sacred Ibis	<i>Threskiornis aethiopicus</i>	
Hadada Ibis	<i>Bostrychia hagedash</i>	
Black-shouldered Kite	<i>Elanus caeruleus</i>	
Black-chested Snake Eagle	<i>Circaetus pectoralis</i>	
African Goshawk	<i>Accipiter tachiro</i>	
Augur Buzzard	<i>Buteo augur</i>	
Tawny Eagle	<i>Aquila rapax</i>	
Lanner Falcon	<i>Falco biarmicus</i>	
Peregrine Falcon	<i>F.peregrinus</i>	
Eurasian Hobby	<i>F.subbuteo</i>	
Lesser Kestrel	<i>F.naumanni</i>	
Common Kestrel	<i>F.tinnunculus</i>	
Common Quail	<i>Coturnix coturnix</i>	
Scaly Francolin	<i>Francolinus squamatus</i>	
Black-winged Plover	<i>Vanellus melanopterus</i>	
Crowned Lapwing	<i>V.coronatus</i>	
African Green Pigeon	<i>Treron calva</i>	
Olive Pigeon	<i>Columba arquatrix</i>	

Speckled Pigeon	<i>C.guinea</i>	
Red-eyed Dove	<i>Streptopelia semitorquata</i>	
Ring-necked Dove	<i>S.capicola</i>	
Dusky Turtle Dove	<i>S.lugens</i>	
Hartlaub's Turaco	<i>Tauracohartlaubi</i>	
Levaillant's Cuckoo	<i>Oxylophus levaillantii</i>	
Klaas's Cuckoo	<i>Cuculus klaas</i>	
Montane (Abyssinian) Nightjar	<i>Caprimulgus poliocephalus</i>	
Nyanza Swift	<i>Apus niansae</i>	Breeding on cliffs to north
Little Swift	<i>A.affinis</i>	
Speckled Mousebird	<i>Colius striatus</i>	
European Bee-eater	<i>Merops apiaster</i>	
Moustached Green Tinkerbird	<i>Pogoniulus leucomystax</i>	
Yellow-rumped Tinkerbird	<i>P.bilineatus</i>	
Red-throated Wryneck	<i>Jynx ruficollis</i>	
Rufous-naped Lark	<i>Miafra africana</i>	
Plain Martin	<i>Riparia paludicola</i>	
Sand Martin	<i>R.riparia</i>	
Red-rumped Swallow	<i>Hirundo daurica</i>	
Mosque Swallow	<i>H.senegalensis</i>	
Rock Martin	<i>H.fuligula</i>	
House Martin	<i>Delichon urbica</i>	
Black Saw-wing	<i>Psalidoprocne holomelas</i>	
Grassland Pipit	<i>Anthus cinnamomeus</i>	
Long-billed Pipit	<i>A.similis</i>	
Plain-backed Pipit	<i>A.leucophrys</i>	
Tree Pipit	<i>A.trivialis</i>	
Red-throated Pipit	<i>A.cervinus</i>	
Sharpe's Longclaw	<i>Macronyx sharpei</i>	Min. of 4 in tussock-grass field near entrance 10th
Common Bulbul	<i>Pyconotus barbatus</i>	
Black-lored Babbler	<i>Turdoides sharpei</i>	
Cape Robin-chat	<i>Cossypha caffra</i>	
Common (African) Stonechat	<i>Saxicola torquatus</i>	
Northern Anteater Chat	<i>Myrmecocichla aethiops</i>	
Olive Thrush	<i>Turdus olivaceus</i>	
Spotted Flycatcher	<i>Muscicapa striata</i>	
African Dusky Flycatcher	<i>M.adusta</i>	
White-eyed Slaty Flycatcher	<i>Melaenornis fischeri</i>	
Garden Warbler	<i>Sylvia borin</i>	
Willow Warbler	<i>Phylloscopus trochilus</i>	
Brown Woodland Warbler	<i>Phylloscopus umbrovirens</i>	
Hunter's Cisticola	<i>Cisticola hunteri</i>	

Levaillant's Cisticola	<i>C.tinniens</i>	
Tawny-flanked Prinia	<i>Prinia subflava</i>	
Grey-backed Camaroptera	<i>Camaroptera brachyura</i>	
Yellow-breasted Apalis	<i>Apalis flavida</i>	
Red-faced Crombec	<i>Sylvietta whytti</i>	
Brown Parisoma	<i>Parisoma lugens</i>	
Yellow White-eye	<i>Zosterops senegalensis</i>	
African Paradise Flycatcher	<i>Tersiphone viridis</i>	
Chin-spot Batis	<i>Batis molitor</i>	
Black-throated Wattle-eye	<i>Platysteira peltata</i>	
Red-backed Shrike	<i>Lanius collurio</i>	
Lesser Grey Shrike	<i>L.minor</i>	
Common Fiscal	<i>L.collaris</i>	
Tropical Boubou	<i>Laniarus aethiopicus</i>	
Black-backed Puffback	<i>Dryoscopus cubla</i>	
White-naped Raven	<i>Corvus albicollis</i>	
Cape Rook	<i>C.capensis</i>	
Red-winged Starling	<i>Onychognathus morio</i>	
Superb Starling	<i>Lamprotornis superbus</i>	
Northern Double-collared Sunbird	<i>Nectarinia preussi</i>	
Tacazze Sunbird	<i>N.tacazze</i>	
Bronze Sunbird	<i>N.kilimensis</i>	
Golden-winged Sunbird	<i>N.reichenowi</i>	
Malachite Sunbird	<i>N.famosa</i>	
House Sparrow	<i>Passer domesticus</i>	
Rufous Sparrow	<i>P.rufocinctus</i>	
Baglafaecht Weaver	<i>Ploceus baglafaecht</i>	
Speke's Weaver	<i>P.spekei</i>	
Red-billed Quelea	<i>Quelea quelea</i>	
Yellow Bishop	<i>Euplectes capensis</i>	
Long-tailed Widowbird	<i>Euplectes progne</i>	Displaying daily in tussock-grass field
Jackson's Widowbird	<i>E.jacksoni</i>	Two males displaying in tussock-grass field near entrance 10th
Abyssinian Crimsonwing	<i>Cryptospiza salvadorii</i>	
African Firefinch	<i>Lagonosticta rubricata</i>	
Yellow-bellied Waxbill	<i>Estrilda quartinia</i>	
Common Waxbill	<i>E.astrild</i>	
Purple Grenadier	<i>Uraeginthus ianthinogaster</i>	
Pin-tailed Whydah	<i>Vidua macroura</i>	
Yellow-crowned Canary	<i>Serinus canicollis</i>	
Brimstone Canary	<i>S.sulphuratus</i>	
Streaky Seedeater	<i>S.striolatus</i>	

Appendix 3: Mammal species recorded around Trees guesthouse April 4th – 11th 2006

Common name	Latin name	Comments
Guereza Colobus	<i>Colobus guereza</i>	Up to 5 in trees in front of guesthouse daily
Scrub Hare	<i>Lepus saxatilis</i>	Seen in garden and nearby track
Mongoose spp.	<i>Herpestid spp.</i>	Tracks in mud along entrance way believed to be a mongoose
Aardvark	<i>Orycterops afer</i>	Warrens and excavations common in fields adjacent to guesthouse
Tree Hyrax spp.	<i>Dendrohyrax spp.</i>	Heard each morning giving unearthly screams from nearby bush
Bushbuck	<i>Tragelaphus scriptus</i>	Known to be present in scarp scrub
Bush(Grey) Duiker	<i>Sylvicapra grimmia</i>	Seen frequently around edge of garden or in adjacent bush

In addition, with the aid of a telescope, the following species were seen around the grasslands of L.Naivasha from the garden: Common Zebra *Equus quagga*, Giraffe *Giraffa camelopardalis*, African Buffalo *Syncerus caffer* as well as many unidentified antelopes