


Conservation Strategy


A Rocha Dakatcha Nature Reserve

Creating a safe haven for five Red Listed species
in the Dakatcha Key Biodiversity Area, Kenya




Organisation - A Rocha Kenya

 **A ROCHA KENYA**, Kenyan Registered NGO (reg. no. OP.218/051/9949/1274)

 PO Box 383, Watamu 80202 Kenya

 www.arocha.or.ke

 DR. COLIN JACKSON, Director, A Rocha Kenya, colin.jackson@arocha.org



A well-established local organisation

A Rocha Kenya (ARK) is a well-established Christian environmental NGO registered in Kenya and **committed to practical biodiversity conservation** through scientific research, environmental education and sustainable community-based conservation programmes.

Since 1999, we have been working closely with local authorities, communities and conservation organisations to **restore threatened habitats and protect endangered species** within two landscapes: Arabuko-Sokoke Forest (ASF) and Dakatcha Woodlands (DW); and two coastal seascales: Mida Creek and the Watamu Marine National Park.



A proven track-record in project management

Our technical, managerial and financial experience in initiating and managing projects is demonstrated through our projects including:

- Implementing the [Arabuko-Sokoke Schools and Eco-Tourism Scheme](#) (ASSETS), which uses eco-tourism funds to provide eco-bursaries to children living around the forest. Over 660 students have been funded through secondary school and their families engaged in practical conservation activities.
- Setting up long-term bird monitoring schemes: locally by running regular waterbird counts and bird ringing studies; nationally by being the lead partner in implementing the citizen science [Kenya Bird Map](#) in 2013; and internationally by scaling up the atlas to the African Bird Atlas Project.
- Publishing digitized datasets for Arabuko-Sokoke Forest (ASF) biodiversity on the [Global Biodiversity Information Facility](#) to inform management decision-making, using funding from the European Union Biodiversity Information for Development programme. ARK is one of only four GBIF publishers in Kenya.
- Contributing to the governance of the Watamu Marine National Park through the Global Challenges Research Fund project "Community Capabilities and Marine Protected Area Governance" in collaboration with the University of St Andrews, UK.
- Effectively engaging with local communities to help improve livelihoods and increase their understanding of caring for the environment through sustainable living with a focus on restorative farming methods.



A solid field understanding of the Dakatcha Woodlands (DW)

ARK has been working in DW for 20 years. Our **scientific monitoring** has confirmed the **importance of this woodland for endangered and endemic species** such as Sokoke Scops Owl (*Otus ireneae*), Clarke's Weaver¹ (*Ploceus golandi*) and Golden-rumped Elephant-shrew (*Rhynchocyon chrysopygus*), species which are found almost nowhere else in the world.

We started land acquisition in 2014 in response to the rapid habitat loss observed, and have already acquired 1 517 acres of forest from willing sellers, of a planned 10 500 acres reserve, the A Rocha Dakatcha Nature Reserve (ARDNR). We are working with local churches, farmers and schools around the reserve to engage them in habitat protection and restoration, and provide sustainable income-generating activities. Our **track record of trusted relationships with communities, solid knowledge of the natural environment, and successful land purchase in the area** puts us in a vantage position to establish the necessary protected area.



A broad network of expertise

ARK is part of the international A Rocha network, which is a member of the International Union for the Conservation of Nature (IUCN). The ARDNR is part of in A Rocha's [African Tropical Forest Programme](#), through which four African A Rocha organisations share resources, networks and expertise on forest and protected area management with close support from A Rocha International.

Wider landscape and project area

Wider landscape

Dakatcha Woodland (DW) is located about 150 km north of Mombasa and 25-50 km inland from the coast. It covers an area of **465 070 acres**, of which 32% is forest, 17% is woodland, and 50% has been converted to farming or open grazing land². DW lies within the **Northern Zanzibar-Inhambane Coastal Forest Mosaic ecoregion and East African Coastal Forest Hotspot**, characterized by a complex mix of moist and drier forest with coastal thicket, savanna woodlands and swamps³. DW itself is a diverse mosaic of different forest types, savannah and seasonal wetlands.

Of the remaining 617 765 acres of coastal forest in this ecoregion, ASF protects 91 430 acres and Shimba Hills protects 47 445 acres, though the latter lacks most of the key threatened species. DW is therefore of **critical importance to the conservation of a number of coastal endemic species** but it is largely unprotected having only two small private reserves: ARK's 1 517 acres, and Nature Kenya's (NK) 800 acres reserve for the Clarke's Weaver breeding habitat; and eight Community Conserved Areas (CCAs) covering 19 770 acres, though with very limited protection.

A Rocha Dakatcha Nature Reserve

ARK has focused on an area of DW that contains the only significant remaining areas of *Cynometra webberi* forest remaining, which is the preferred habitat of the Endangered Sokoke Scops Owl. In addition, stands of *Brachystegia spiciformis* and small seasonal rivers and wetlands provide the correct breeding habitat for Clarke's Weaver (EN). The area also includes forest dominated by *Diospyros cornii* and *Newtonia hildebrandtii* on gently undulating land which also houses the Sokoke Scops Owl and Golden-rumped Elephant-shrew, interspersed with grassland and meadows, and abandoned farms. Some areas have already been heavily impacted by charcoal burning.

A detailed map of the Dakatcha KBA can be found in Annex 1.



A Rocha Dakatcha Nature Reserve

📍 -2.928, 39.809

Biodiversity value

East African Coastal Forests have some of the **highest densities of endemic species in the world**⁴. DW meets **Important Bird Area (IBA)** and **Key Biodiversity Area (KBA)** criteria and is part of the Coastal Forests Global Hotspot. ARK surveys in the existing ARDNR have recorded:



Mammals

15 species of mammals, including the globally Endangered and endemic **Golden-rumped Elephant-shrew**, whose existence north of Sabaki River was confirmed only recently by our camera trapping work.



Birds

the globally Endangered **Sokoke Scops Owl** (found only in DW, ASF and the East Usambaras) and **Sokoke Pipit *Anthus sokokensis***, both endemic to coastal forest; and the Near-Threatened **Southern-Banded Snake Eagle *Circaetus fasciolatus***.



Insects

several butterfly species which are represented by only two or three specimens in the National Museum of Kenya collection of over 30 million specimens, and a specimen in the *Embiopteron* family (Insecta), which was the first for Kenya.



Flora

two globally Vulnerable tree species: ***Warbugia stuhlmannii*** and ***Cynometra webberi***

Main threats

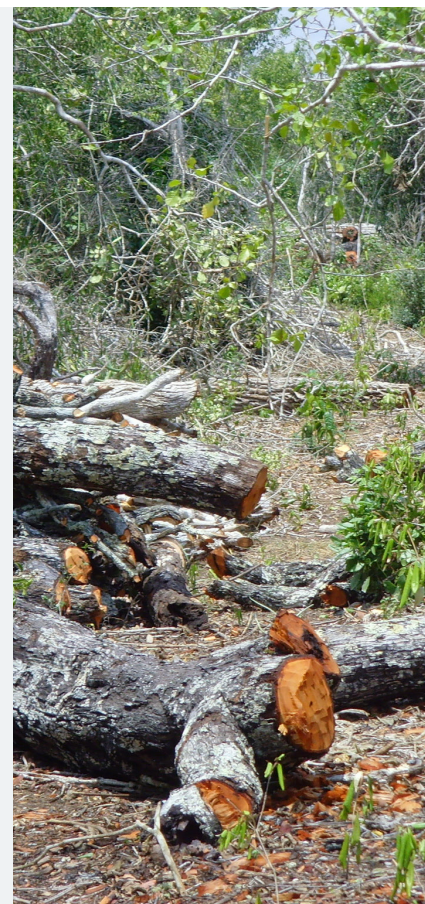
The fragmented Coastal Forests of Eastern Africa are **among the ten most threatened forest hot-spots in the world**⁵, and the Dakatcha IBA is listed as an **IBA in Danger**, with a **very high threat score** and a **low action score**⁶. At a regional level, the **pressure on land is expected to intensify** as population increases, small holders and industrial agricultural expand, and coastal urban developments multiply.

The growing local population depends on the forest resources for their energy (wood), construction needs (wood), food (mammals) and livelihoods (sale of charcoal, timber, meat). As a result, **deforestation and poaching of wildlife, including the Golden-rumped Elephant-shrew, are rife**. *Brachylaena huillensis* trees have almost disappeared due to selective harvesting for the wood carving industry, and the timber from large hardwood trees (e.g. *Newtonia hildebrandtii*) has been sold in coastal towns.

Agriculture is the main economic activity for local communities, making land their most valuable asset. Pineapples have become an important source of income for local farmers because they grow particularly well on the red soils. Local regulations give little consideration to the immense pressure placed on the forest, and poor farming methods leave the soil exposed for erosion.

The **pressure on the land was compounded by the start of land adjudication** in the area in September 2020. This has set off an unprecedented rush of people land purchasing for farms closely linked to charcoal burning that is **decimating the forest and destroying the home of the rare and endangered wildlife**. The easy availability of power saws to cut trees for charcoal and motorbikes to transport charcoal to Malindi has exasperated the situation further.

At site level, **agricultural expansion**, unregulated logging, charcoal burning and the expansion of commercial pineapple plantations are rapidly destroying and degrading what is left of the unique forest habitat around ARDNR.



Sokoke Scops Owl *Otus ireneae*

Why land purchase?

The competition to acquire land in DW is intensifying: **commercial interest is high**, both from large companies and charcoal burners. If we do not secure the land soon this internationally important forest will disappear in the next few years.

Our approach is defined by 20 years of experience in this landscape and comes as a realistic response to the threats faced. As the forest is increasingly fragmented, there is an **urgent need to secure a core reserve** in the landscape that is under unambiguous conservation management.

While we saw clear benefits with NK's Conservation Community Areas, we also recognised the difficulties of this approach in maintaining 'conservation agreements' amongst a multi-stakeholder group. Local land ownership is complex with many family members involved so it has proven difficult to secure a positive conservation consensus.

It may be possible that the government will pursue formal gazettelement of the forest in the future, but we know this strategy to have failed in Madunguni adjacent to ASF in the recent past, and given the lengthy process, by then the forest will be gone.

There is simply **too much urgency for us to wait**. We therefore concluded that it was most effective to buy land and create a conservation area while working alongside our neighbours on sustainable development and education activities. This approach is working: our current existing reserve is well-respected and intact. The standing forest offers a sharp contrast to the surrounding areas. In 2019, NK followed our lead and started to acquire land in DW too.

Area to acquire

With the rapid rate of forest destruction, we urgently need to extend the secured area to a core of approximately 5 000 acres of an eventual 10 500 acres, in order to maintain viable populations of Sokoke Scops Owl and Golden-rumped Elephant-shrew. We are therefore focussing on securing land parcels that our field surveys have confirmed hold populations of at least one of the **three Endangered species**: Sokoke Scops Owl, Golden-rumped Elephant-shrew and Sokoke Pipit. Our strategy is to **connect all the land parcels we currently own to create a single continuous reserve**, facilitating both connectivity for dispersal and reserve management.

The land is community-owned, with ownership identified with families or individual farmers. Several **families have already been approached by ARK and are willing to sell land parcels**. Others will be approached as we secure funding to acquire more land and many have called us to request we buy their land. When compensated appropriately, most farmers are willing to sell some of their land. We always ensure they retain sufficient land to sustain their subsistence farming.

Land purchase

To date, ARK has acquired land following local customary purchase procedures. This involves the Public Administration Office, Chief, Sub-chief, and village Elders together with the land owner, their relatives, and the owners of the neighbouring land to reach full agreement on the position of boundary lines. The government has started to adjudicate the land in the area and ARK will soon be issued with a letter of allotment. Once this happens ARK can acquire a title deed for the land.

Restoration activities

We are drafting a **Land Management Plan** for activities in the reserve and to restore degraded habitats. This will include an assessment of habitat damage and natural regeneration, as well as the creation of permanent plots to measure habitat change and monitor biodiversity. We plan to **restore destroyed areas** through managed natural regeneration and the removal of invasive species. Through all these activities, we will **actively involve local communities** in the protection of the forest.

ARK is already helping to preserve this landscape through **scientific research and environmental education** in local schools and churches, and by engaging community members in sustainable farming practices. We will also implement **sustainable income-generating activities**, encouraging local communities to do butterfly farming, bee-keeping and tree planting in the reserve.

Partners

| | | |
|--------------|--|--------------|
| STAKEHOLDERS | <p>Local communities. Farmers, Churches, Charcoal producers, Wood carvers, Private sector, the Dakatcha Woodland Conservation Group</p> <p>Authorities. Kenya Forest Service, Kenya Wildlife Service, Kilifi County</p> <p>NGOs. Action Aid, Anglican Development Services, Ministry of Education, Nature Kenya, World Vision</p> | OTHER DONORS |
| | <p>Bob Scott Foundation</p> <p>A.G. Leventis Foundation</p> <p>Eden Wildlife Trust</p> <p>Individual donors</p> <p>Lordship Africa</p> <p>Cassinia Environmental</p> | |
| | | |

Sustainable Development Goals

The purchase of land and restoration activities in Dakatcha contribute to 10 of the 17 Sustainable Development Goals:



References

Dr. John Fanshawe

Senior Strategy Adviser
BirdLife International

Email: john.fanshawe@birdlife.org

Phone: +44 (0)797 655 5092

Dr. Paul Matiku

Executive Director
Nature Kenya

Email: matiku@naturekenya.org

Phone: +254 (0)714 741 849

Dr. Peter Njoroge

Head, Ornithology Section
National Museums of Kenya

Email: pnjoroge@museums.or.ke

Phone: +254 (0)724 521 770

Credits



Bibliography

1. Jackson, C. H., Ng'weno, F., Mwambire, J., Mwachongo, J., Baya, A., Changawa, P., ... & Thuva, K. (2015). First recorded breeding of Clarke's Weaver *Ploceus golandi*. *Scopus: Journal of East African Ornithology*, 35(1), 1-10.
2. Nature Kenya, Participatory Management Plan for Dakatcha Woodland 2015-2019
3. World Wildlife Fund (2020) Eastern Africa: Coastal areas of Kenya, Somalia, and Tanzania. Retrieved from www.worldwildlife.org/ecoregions/at0125 on 30/04/2020
4. Myers, N., Mittermeier, R. A., Mittermeier, C. G., Da Fonseca, G. A., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. *Nature*, 403(6772), 853.
5. African Conservation (2011) Conservation International Highlights Forest Ecosystems on the Edge of Collapse Retrieved from <https://african-conservation.org/conservation-international-highlights-forest-ecosystems-on-the-edge-of-collapse-5/> on 26/04/2020
6. BirdLife International (2020) Important Bird Areas factsheet: Dakatcha Woodland. Downloaded from <http://www.birdlife.org> on 26/04/2020.

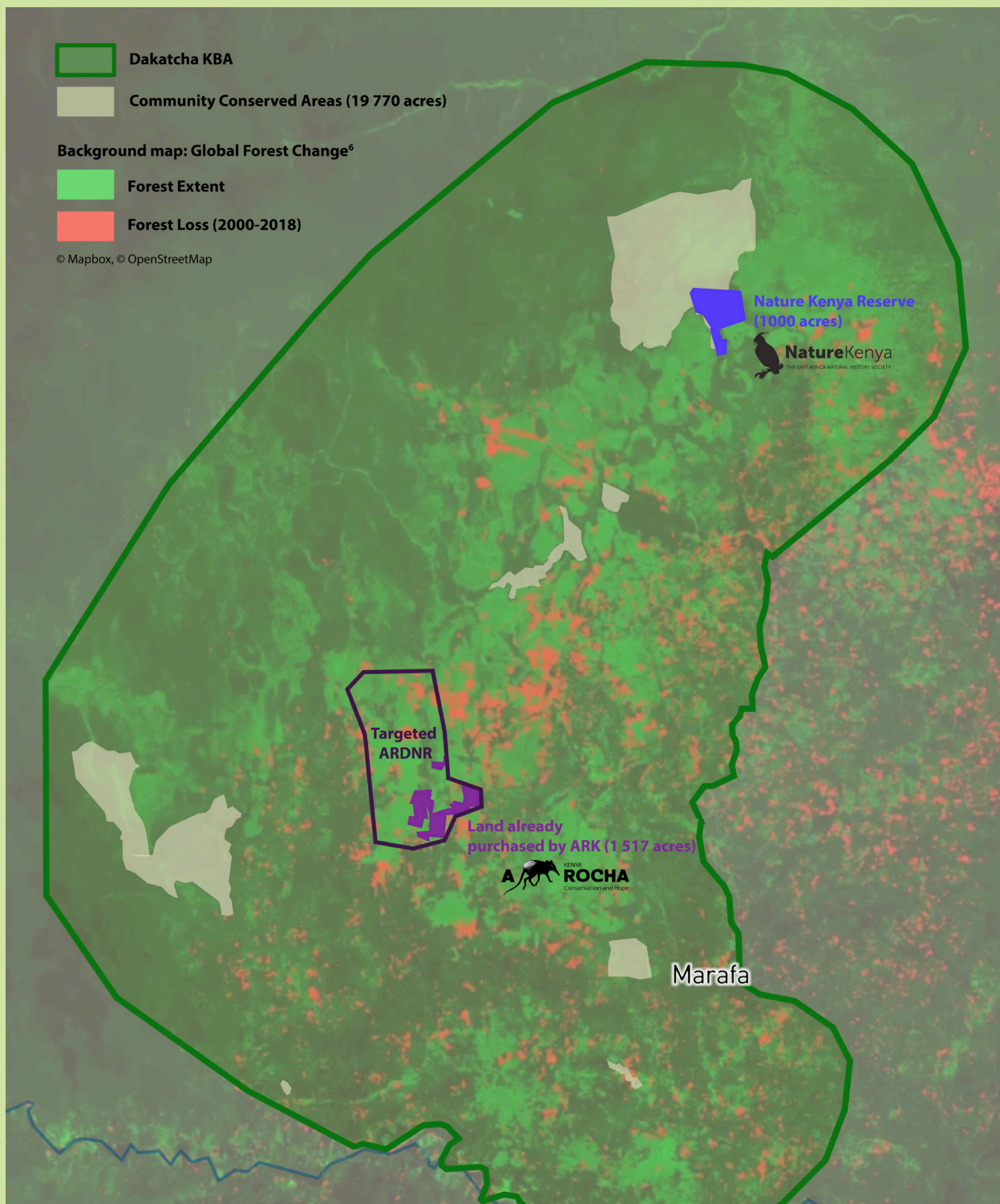


Photo Credits

1. Sarah Young, A Rocha International, ARDNR
 2. A Rocha Kenya, Illegal Logging in ARDNR
 3. Mustafa Adamjee, Sokoke Scops Owl
 4. A Rocha Kenya, Biodiversity Survey in ARDNR
 5. Lars Petersson, Golden-rumped Elephant-shrew
 6. Raphaël Nussbaumer, Citrus Swallowtail
 7. A Rocha Kenya, *Brachystegia spiciformis*
-

Annex 1:

Map of the project area



Dakatcha IBA / KBA

BirdLife International (2020) Important Bird Areas factsheet: Dakatcha Woodland. Downloaded from <http://www.birdlife.org> on 26/04/2020. (Updated boundaries)



Global Forest Change

Hansen et al. (2013) High-Resolution Global Maps of 21st-Century Forest Cover Change, Nature, Vol 324

Annex 2:

Biodiversity Lists for A Rocha Dakatcha Nature Reserve



LIST OF BIRD SPECIES

Occurrence is based on 177 full protocols submitted on [Kenya Bird Map](#)



| | | | | | |
|-----|---|-----|-----|--|-----|
| 001 | Helmeted Guineafowl <i>Numida meleagris</i> | ++ | 020 | Black Cuckoo <i>Cuculus clamosus</i> | + |
| 002 | Crested Guineafowl <i>Guttera edouardi</i> | + | 021 | African Cuckoo <i>Cuculus gularis</i> | + |
| 003 | Coqui Francolin <i>Peliperdix coqui</i> | ++ | 022 | Common Cuckoo <i>Cuculus canorus</i> | + |
| 004 | Crested Francolin <i>Dendroperdix sephaena</i> | +++ | 023 | Red-eyed Dove <i>Streptopelia semitorquata</i> | +++ |
| 005 | White-faced Duck <i>Dendrocygna viduata</i> | + | 024 | Ring-necked Dove <i>Streptopelia capicola</i> | +++ |
| 006 | Knob-billed Duck <i>Sarkidiornis melanotos</i> | + | 025 | Emerald-spotted Wood-dove <i>Turtur chalcospilos</i> | +++ |
| 007 | European Nightjar <i>Caprimulgus europaeus</i> | + | 026 | Tambourine Dove <i>Turtur tympanistria</i> | ++ |
| 008 | Fiery-necked Nightjar <i>Caprimulgus pectoralis</i> | ++ | 027 | Namaqua Dove <i>Oena capensis</i> | + |
| 009 | Mottled Spinetail <i>Telacanthura ussheri</i> | + | 028 | African Green-pigeon <i>Treron calvus</i> | ++ |
| 010 | African Palm-swift <i>Cypsiurus parvus</i> | ++ | 029 | Black Crake <i>Amaurornis flavirostris</i> | + |
| 011 | Little Swift <i>Apus affinis</i> | ++ | 030 | Allen's Gallinule <i>Porphyrio alleni</i> | + |
| 012 | Fischer's Turaco <i>Tauraco fischeri</i> | ++ | 031 | Common Moorhen <i>Gallinula chloropus</i> | + |
| 013 | White-browed Coucal <i>Centropus superciliosus</i> | +++ | 032 | Red-knobbed Coot <i>Fulica cristata</i> | + |
| 014 | Green Malkoha <i>Ceuthmochoares australis</i> | ++ | 033 | Black-headed Lapwing <i>Vanellus tectus</i> | + |
| 015 | Levaillant's Cuckoo <i>Clamator levaillantii</i> | + | 034 | Senegal Lapwing <i>Vanellus lugubris</i> | ++ |
| 016 | Jacobin Cuckoo <i>Clamator jacobinus</i> | ++ | 035 | African Jacana <i>Actophilornis africanus</i> | ++ |
| 017 | Thick-billed Cuckoo <i>Pachycoccyx audeberti</i> | + | 036 | Green Sandpiper <i>Tringa ochropus</i> | + |
| 018 | Diderick Cuckoo <i>Chrysococcyx caprius</i> | + | 037 | Common Greenshank <i>Tringa nebularia</i> | + |
| 019 | Klaas's Cuckoo <i>Chrysococcyx klaas</i> | ++ | 038 | Madagascar Pratincole <i>Glareola ocularis</i> | + |



| | | | | | | | |
|-----|--|------|-----|-----|---|------|-----|
| 039 | Yellow-billed Stork <i>Mycteria ibis</i> | | + | 063 | Black Sparrowhawk <i>Accipiter melanoleucus</i> | | + |
| 040 | African Openbill <i>Anastomus lamelligerus</i> | | + | 064 | Black Kite <i>Milvus migrans</i> | | + |
| 041 | Woolly-necked Stork <i>Ciconia episcopus</i> | <VU> | + | 065 | Yellow-billed Kite <i>Milvus aegyptius</i> | | + |
| 042 | Saddle-billed Stork <i>Ephippiorhynchus senegalensis</i> | | + | 066 | Sokoke Scops-owl <i>Otus ireneae</i> | <EN> | ++ |
| 043 | Reed Cormorant <i>Phalacrocorax africanus</i> | | + | 067 | African Wood-owl <i>Strix woodfordii</i> | | ++ |
| 044 | Hadedda Ibis <i>Bostrychia hagedash</i> | | ++ | 068 | Pearl-spotted Owlet <i>Glaucidium perlatum</i> | | + |
| 045 | Glossy Ibis <i>Plegadis falcinellus</i> | | + | 069 | African Barred Owlet <i>Glaucidium capense</i> | | ++ |
| 046 | African Spoonbill <i>Platalea alba</i> | | + | 070 | Speckled Mousebird <i>Colius striatus</i> | | ++ |
| 047 | Black-headed Heron <i>Ardea melanocephala</i> | | + | 071 | Blue-naped Mousebird <i>Urocolius macrourus</i> | | + |
| 048 | Great Egret <i>Egretta alba</i> | | + | 072 | Narina Trogon <i>Apaloderma narina</i> | | ++ |
| 049 | Black-shouldered Kite <i>Elanus caeruleus</i> | | ++ | 073 | Eurasian Hoopoe <i>Upupa epops</i> | | ++ |
| 050 | African Harrier-Hawk <i>Polyboroides typus</i> | | + | 074 | African Hoopoe <i>Upupa africana</i> | | + |
| 051 | European Honey-buzzard <i>Pernis apivorus</i> | | + | 075 | Green Wood-hoopoe <i>Phoeniculus purpureus</i> | | +++ |
| 052 | African Cuckoo Hawk <i>Aviceda cuculoides</i> | | + | 076 | Common Scimitarbill <i>Rhinopomastus cyanomelas</i> | | +++ |
| 053 | Black-chested Snake-eagle <i>Circaetus pectoralis</i> | | + | 077 | Von der Decken's Hornbill <i>Tockus deckeni</i> | | ++ |
| 054 | Brown Snake-eagle <i>Circaetus cinereus</i> | | + | 078 | Crowned Hornbill <i>Tockus alboterminatus</i> | | +++ |
| 055 | Southern Banded Snake-eagle <i>Circaetus fasciolatus</i> | <NT> | ++ | 079 | African Grey Hornbill <i>Tockus nasutus</i> | | ++ |
| 056 | Bateleur Bateleur <i>Terathopius ecaudatus</i> | <NT> | + | 080 | Trumpeter Hornbill <i>Bycanistes bucinator</i> | | ++ |
| 057 | Martial Eagle <i>Polemaetus bellicosus</i> | <VU> | + | 081 | Silvery-cheeked Hornbill <i>Bycanistes brevis</i> | | + |
| 058 | Wahlberg's Eagle <i>Aquila wahlbergi</i> | | + | 082 | Lilac-breasted Roller <i>Coracias caudatus</i> | | +++ |
| 059 | Lizard Buzzard <i>Kaupifalco monogrammicus</i> | | +++ | 083 | European Roller <i>Coracias garrulus</i> | | ++ |
| 060 | Eastern Chanting-goshawk <i>Melierax poliopterus</i> | | + | 084 | Broad-billed Roller <i>Eurystomus glaucurus</i> | | ++ |
| 061 | African Goshawk <i>Accipiter tachiro</i> | | ++ | 085 | Grey-headed Kingfisher <i>Halcyon leucocephala</i> | | ++ |
| 062 | Little Sparrowhawk <i>Accipiter minullus</i> | | ++ | 086 | Striped Kingfisher <i>Halcyon chelicuti</i> | | +++ |

| | | | | | |
|-----|--|-----|-----|--|-----|
| 087 | Malachite Kingfisher <i>Alcedo cristata</i> | + | 111 | Black-crowned Tchagra <i>Tchagra senegalus</i> | +++ |
| 088 | Little Bee-eater <i>Merops pusillus</i> | ++ | 112 | Black-backed Puffback <i>Dryoscopus cubla</i> | ++ |
| 089 | White-fronted Bee-eater <i>Merops bullockoides</i> | + | 113 | Slate-colored Boubou <i>Laniarius funebris</i> | ++ |
| 090 | White-throated Bee-eater <i>Merops albicollis</i> | ++ | 114 | East Coast Boubou <i>Laniarius sublacteus</i> | + |
| 091 | Madagascar Bee-eater <i>Merops superciliosus</i> | ++ | 115 | White-crested Helmet-shrike <i>Prionops plumatus</i> | + |
| 092 | European Bee-eater <i>Merops apiaster</i> | + | 116 | Retz's Helmet-shrike <i>Prionops retzii</i> | +++ |
| 093 | Northern Carmine Bee-eater <i>Merops nubicus</i> | ++ | 117 | Chestnut-fronted Helmet-shrike <i>Prionops scopifrons</i> | ++ |
| 094 | Red-fronted Tinkerbird <i>Pogoniulus pusillus</i> | +++ | 118 | Black Cuckoo-shrike <i>Campephaga flava</i> | ++ |
| 095 | Black-collared Barbet <i>Lybius torquatus</i> | ++ | 119 | White-rumped (Northern White-crowned) Shrike <i>Eurocephalus rueppelli</i> | +++ |
| 096 | Brown-breasted Barbet <i>Lybius melanopterus</i> | ++ | 120 | Red-backed Shrike <i>Lanius collurio</i> | ++ |
| 097 | Red-and-yellow Barbet <i>Trachyphonus erythrocephalus</i> | ++ | 121 | Red- (Rufous-) tailed (Isabelline) Shrike <i>Lanius isabellinus</i> | + |
| 098 | Pallid Honeyguide <i>Indicator meliphilus</i> | + | 122 | Long-tailed Fiscal <i>Lanius cabanisi</i> | ++ |
| 099 | Lesser Honeyguide <i>Indicator minor</i> | ++ | 123 | Black-headed Oriole <i>Oriolus larvatus</i> | +++ |
| 100 | Scaly-throated Honeyguide <i>Indicator variegatus</i> | ++ | 124 | African Golden Oriole <i>Oriolus auratus</i> | ++ |
| 101 | Greater Honeyguide <i>Indicator indicator</i> | + | 125 | Eurasian Golden Oriole <i>Oriolus oriolus</i> | ++ |
| 102 | Nubian Woodpecker <i>Campethera nubica</i> | ++ | 126 | Fork-tailed Drongo <i>Dicrurus adsimilis</i> | +++ |
| 103 | Mombasa Woodpecker <i>Campethera mombassica</i> | ++ | 127 | African Paradise-flycatcher <i>Terpsiphone viridis</i> | ++ |
| 104 | Green-backed Woodpecker <i>Campethera cailliautii</i> | + | 128 | House Crow <i>Corvus splendens</i> | ++ |
| 105 | Cardinal Woodpecker <i>Dendropicos fuscescens</i> | + | 129 | Pied Crow <i>Corvus albus</i> | + |
| 106 | Brown-headed Parrot <i>Poicephalus cryptoxanthus</i> | ++ | 130 | Eastern Nicator <i>Nicator gularis</i> | +++ |
| 107 | Pale Batis <i>Batis soror</i> | ++ | 131 | Flappet Lark <i>Mirafraga rufocinnamomea</i> | +++ |
| 108 | (Eastern) Black-headed Batis <i>Batis minor</i> | + | 132 | Dodson's Bulbul <i>Pycnonotus dodsoni</i> | + |
| 109 | Grey-headed Bush-shrike <i>Malaconotus blanchoti</i> | +++ | 133 | Zanzibar Sombre Greenbul <i>Andropadus importunus insularis</i> | +++ |
| 110 | Orange-breasted Bush-shrike <i>Telophorus sulfureopectus</i> | ++ | 134 | Yellow-bellied Greenbul <i>Chlorocichla flaviventris</i> | +++ |

| | | | | | |
|-----|--|-----|-----|---|-----|
| 135 | Northern Brownbul <i>Phyllastrephus strepitans</i> | +++ | 159 | Spotted Flycatcher <i>Muscicapa striata</i> | ++ |
| 136 | Barn Swallow <i>Hirundo rustica</i> | +++ | 160 | White-browed Robin-chat <i>Cossypha heuglini</i> | ++ |
| 137 | Lesser Striped Swallow <i>Hirundo abyssinica</i> | + | 161 | Red-capped Robin-chat <i>Cossypha natalensis</i> | ++ |
| 138 | Mosque Swallow <i>Hirundo senegalensis</i> | + | 162 | Collared Sunbird <i>Hedydipna collaris</i> | +++ |
| 139 | Northern Crombec <i>Sylvietta brachyura</i> | + | 163 | Olive Sunbird <i>Cyanomitra olivacea</i> | ++ |
| 140 | Lesser Swamp-warbler <i>Acrocephalus gracilirostris</i> | + | 164 | Grey Sunbird <i>Cyanomitra veroxii</i> | ++ |
| 141 | Sedge Warbler <i>Acrocephalus schoenobaenus</i> | + | 165 | Amethyst Sunbird <i>Chalcomitra amethystina</i> | +++ |
| 142 | Rattling Cisticola <i>Cisticola chiniana</i> | + | 166 | House Sparrow <i>Passer domesticus</i> | + |
| 143 | Short-winged Cisticola <i>Cisticola brachypterus</i> | ++ | 167 | Parrot-billed Sparrow <i>Passer gongonensis</i> | + |
| 144 | Tawny-flanked Prinia <i>Prinia subflava</i> | +++ | 168 | Yellow-spotted Petronia <i>Petronia pyrgita</i> | ++ |
| 145 | Black-headed Apalis <i>Apalis melanocephala</i> | ++ | 169 | Red-billed Buffalo-weaver <i>Bubalornis niger</i> | ++ |
| 146 | Grey-backed Camaroptera <i>Camaroptera brevicaudata</i> | +++ | 170 | White-headed Buffalo-weaver <i>Dinemellia dinemelli</i> | + |
| 147 | Chatterer Rufous <i>Turdoides rubiginosa</i> | ++ | 171 | Grey-headed Social-weaver <i>Pseudonigrita arnaudi</i> | + |
| 148 | Scaly Babbler <i>Turdoides squamulata</i> | ++ | 172 | Thick-billed Weaver <i>Amblyospiza albifrons</i> | ++ |
| 149 | Wattled Starling <i>Creatophora cinerea</i> | ++ | 173 | Yellow Weaver <i>Ploceus subaureus</i> | + |
| 150 | Black-bellied Starling <i>Lamprotornis corruscus</i> | +++ | 174 | Golden Palm Weaver <i>Ploceus bojeri</i> | + |
| 151 | Greater Blue-eared Starling <i>Lamprotornis chalybaeus</i> | +++ | 175 | Lesser Masked-weaver <i>Ploceus intermedius</i> | + |
| 152 | Violet-backed Starling <i>Cinnyricinclus leucogaster</i> | ++ | 176 | Village Weaver <i>Ploceus cucullatus</i> | +++ |
| 153 | Magpie Starling <i>Speculipastor bicolor</i> | + | 177 | Clarke's Weaver <i>Ploceus golandi</i> | + |
| 154 | Red-billed Oxpecker <i>Buphagus erythrorhynchus</i> | ++ | 178 | Chestnut Weaver <i>Ploceus rubiginosus</i> | + |
| 155 | Red-tailed Ant-thrush <i>Neocossyphus rufus</i> | + | 179 | Red-headed Weaver <i>Anaplectes rubriceps</i> | + |
| 156 | Bare-eyed Thrush <i>Turdus tephronotus</i> | ++ | 180 | Red-headed Quelea <i>Quelea erythroptus</i> | + |
| 157 | Bearded Scrub-robin <i>Cercotrichas quadrivirgata</i> | +++ | 181 | Red-billed Quelea <i>Quelea quelea</i> | ++ |
| 158 | Pale Flycatcher <i>Bradornis pallidus</i> | +++ | 182 | Fan-tailed Widowbird <i>Euplectes axillaris</i> | + |



| | | | | | |
|-----|---|-----|-----|---|----------------------------|
| 183 | Green-winged Pytilia <i>Pytilia melba</i> | + | 192 | African Pied Wagtail <i>Motacilla aguimp</i> | ++ |
| 184 | Cut-throat Finch <i>Amadina fasciata</i> | + | 193 | Golden Pipit <i>Tmetothylacus tenellus</i> | + |
| 185 | Red-billed Firefinch <i>Lagonosticta senegala</i> | + | 194 | Yellow-throated Longclaw <i>Macronyx croceus</i> | + |
| 186 | Red-cheeked Cordonbleu <i>Uraeginthus bengalus</i> | +++ | 195 | Pangani Longclaw <i>Macronyx aurantiigula</i> | + |
| 187 | Common Waxbill <i>Estrilda astrild</i> | ++ | 196 | African Pipit <i>Anthus cinnamomeus</i> | + |
| 188 | Bronze Mannikin <i>Spermestes cucullatus</i> | ++ | 197 | Sokoke Pipit <i>Anthus sokokensis</i> | ++ <EN> |
| 189 | Red-backed Mannikin <i>Spermestes nigriceps</i> | + | 198 | Malindi Pipit <i>Anthus melindae</i> | + |
| 190 | Pin-tailed Whydah <i>Vidua macroura</i> | ++ | 199 | Yellow-fronted Canary <i>Crithagra mozambicus</i> | ++ |
| 191 | Long-tailed Paradise-whydah <i>Vidua paradisaea</i> | + | | | |



LIST OF MAMMALS

African Civet
Civettictis civetta

Harvey's Duiker
Cephalophus harveyi

Yellow Baboon
Papio cynocephalus

Bushbuck
Tragelaphus scriptus

Honey Badger
Mellivora capensis

Red Duiker
Cephalophus natalensis

BushPig
Potamochoerus larvatus

Large-spotted Genet
Genetta maculata

Spotted Hyena
Crocuta crocuta

Caracal
Caracal caracal

Suni
Neotragus moschatus

African Savanna Hare
Lepus victoriae

Crested Porcupine
Hystrix cristata

Sykes' Monkey
Cercopithecus albogularis

Common Dwarf Mongoose
Helogale parvula

Four-toed Elephant-Shrew
Petrodromus tetradactylus

Unidentified squirrel

Leopard
Panthera pardus <VU>

Gambian Pouched Rat
Cricetomys gambianus

Vervet Monkey
Chlorocebus pygerythrus

Serval
Leptailurus serval

Golden-rumped Elephant-Shrew
Rhynchocyon chrysopygus <EN>

White-tailed Mongoose
Ichneumia albicauda

Golden-rumped Elephant-shrews
Rhynchocyon chrysopygus





| | | | | | |
|-----|--|-----|--|-----|-------------------------------------|
| 001 | <i>Coeliades anchises anchises</i> | 025 | <i>Melanitis leda leda</i> | 049 | <i>Catopsilia florella</i> |
| 002 | <i>Deudorix antalus</i> | 026 | <i>Bicyclus safitza safitza</i> | 050 | <i>Colotis amatus amatus</i> |
| 003 | <i>Euchrysops osiris</i> | 027 | <i>Physcaeneura leda</i> | 051 | <i>Colotis antecippe zera</i> |
| 004 | <i>Hypolycaena philippus philippus</i> | 028 | <i>Ypthima condamini condamini</i> | 052 | <i>Colotis auxo incretus</i> |
| 005 | <i>Iolaus pallene</i> | 029 | <i>Acraea anemosa</i> | 053 | <i>Colotis calais calais</i> |
| 006 | <i>Iolaus (Stugeta) bowkeri mombasae</i> | 030 | <i>Acraea braesia</i> | 054 | <i>Colotis daira jacksoni</i> |
| 007 | <i>Lampides boeticus</i> | 031 | <i>Acraea chilo chilo</i> | 055 | <i>Colotis danae eupompe</i> |
| 008 | <i>Leptomyrina hirundo</i> | 032 | <i>Acraea neobule neobule</i> | 056 | <i>Colotis eris eris</i> |
| 009 | <i>Leptotes sp.</i> | 033 | <i>Byblia anvatarata acheloia</i> | 057 | <i>Colotis euipe omphale</i> |
| 010 | <i>Pentila tropicalis mombasae</i> | 034 | <i>Eurytela dryope angulata</i> | 058 | <i>Colotis evagore antigone</i> |
| 011 | <i>Acraea pseudolyca astrigera</i> | 035 | <i>Phalanta phalantha aethiopica</i> | 059 | <i>Colotis hetaera hetaera</i> |
| 012 | <i>Charaxes brutus alcyone</i> | 036 | <i>Telchinia serena</i> | 060 | <i>Colotis ione</i> |
| 013 | <i>Charaxes jahlusa kenyensis</i> | 037 | <i>Ypthima sp.</i> | 061 | <i>Colotis protomedia</i> |
| 014 | <i>Charaxes varanes vologeses</i> | 038 | <i>Graphium antheus</i> | 062 | <i>Dixeia charina liliana</i> |
| 015 | <i>Danaus chryssippus dorippus</i> | 039 | <i>Graphium colonna</i> | 063 | <i>Dixeia sp.</i> |
| 016 | <i>Byblia ilithyia</i> | 040 | <i>Graphium philonoe philonoe</i> | 064 | <i>Eronia dilatata</i> |
| 017 | <i>Euphaedra neophron littoralis</i> | 041 | <i>Papilio constantinus constantinus</i> | 065 | <i>Eurema brigitta brigitta</i> |
| 018 | <i>Hananumida deaedralus</i> | 042 | <i>Papilio dardanus tibullus</i> | 066 | <i>Eurema senegalensis</i> |
| 019 | <i>Hypolimnas misippus</i> | 043 | <i>Papilio demodocus demodocus</i> | 067 | <i>Eurema sp.</i> |
| 020 | <i>Hypolycaena pachalica</i> | 044 | <i>Papilio nireus lyaeus</i> | 068 | <i>Nepheronia buqueti buqueti</i> |
| 021 | <i>Junonia hierta cebrene</i> | 045 | <i>Belenois aurota</i> | 069 | <i>Plnacoptyx eriphia melenarge</i> |
| 022 | <i>Junonia natalica natalica</i> | 046 | <i>Belenois creona severina</i> | 070 | <i>Teracolus eris eris</i> |
| 023 | <i>Junonia oenone oenone</i> | 047 | <i>Belenois gidica abyssinica</i> | 071 | <i>Epiphora lugardi</i> |
| 024 | <i>Precis antilope</i> | 048 | <i>Belenois thysa thysa</i> | | |

Papilio demodocus



- | | | |
|--|--|--|
| 001 <i>Acacia polyacantha</i> | 025 <i>Erythrina webberi</i> | 049 <i>Manilkara sulcata</i> |
| 002 <i>Adansonia digitata</i> | 026 <i>Euclea natalensis</i> | 050 <i>Markhamia zanzibarica</i> |
| 003 <i>Adenium obesum</i> | 027 <i>Euphorbia candelabrum</i> | 051 <i>Monodora grandidieri</i> |
| 004 <i>Azelia quanzensis</i> | 028 <i>Euphorbia grandicornis</i> | 052 <i>Ochna mossambicensis</i> |
| 005 <i>Aloe volkensii</i> | 029 <i>Euphorbia tirucalli</i> | 053 <i>Ochna thomasiana</i> |
| 006 <i>Bombax rhodognaphalon</i> | 030 <i>Flueggea virosa</i> | 054 <i>Ozoroa obovata</i> |
| 007 <i>Bourreria petiolaris</i> | 031 <i>Garcinia livingstonei</i> | 055 <i>Pavetta crebrifolia</i> |
| 008 <i>Brachylaena huillensis</i> | 032 <i>Gardenia volkensii</i> | 056 <i>Premna chrysoclada</i> |
| 009 <i>Brachystegia spiciformis</i> | 033 <i>Gloriosa superba</i> | 057 <i>Psychotria punctata</i> |
| 010 <i>Canthium mombazense</i> | 034 <i>Grandidiera boivinii</i> | 058 <i>Salvadora persica</i> |
| 011 <i>Carissa tetramera</i> | 035 <i>Grewia sp.</i> | 059 <i>Securidaca longipedunculata</i> |
| 012 <i>Combretum collinum</i> | 036 <i>Grewia densa</i> | 060 <i>Sterculia africana</i> |
| 013 <i>Combretum illairii</i> | 037 <i>Grewia glandulosa</i> | 061 <i>Strychnos madagascariensis</i> |
| 014 <i>Combretum schumannii</i> | 038 <i>Grewia plagiophylla</i> | 062 <i>Terminalia spinosa</i> |
| 015 <i>Commiphora africana</i> | 039 <i>Haplocoelum inoploemum</i> | 063 <i>Thespesia danis</i> |
| 016 <i>Commiphora boiviniana</i> | 040 <i>Helmsia collina</i> | 064 <i>Uvaria acuminata</i> |
| 017 <i>Croton pseudopulchellus</i> | 041 <i>Hieracium salaudum</i> | 065 <i>Uvaria lucida</i> |
| 018 <i>Cynometra lukei</i> | 042 <i>Hoslundia opposita</i> | 066 <i>Vitex ferruginea</i> |
| 019 <i>Cynometra webberi</i> <vuv> | 043 <i>Julbernardia magnistipulata</i> | 067 <i>Volkameria inermis</i> |
| 020 <i>Dichrostachys cinerea</i> | 044 <i>Laccodiscus ferrugineus</i> | 068 <i>Warbugia stuhlmannii</i> <vuv> |
| 021 <i>Diospyros consolatae</i> | 045 <i>Lanea schweinfurthii</i> | 069 <i>Ximenia americana</i> |
| 022 <i>Dobera glabra</i> | 046 <i>Lecaniodiscus fraxinifolius</i> | 070 <i>Zanthoxylum chalybeum</i> |
| 023 <i>Drypetes natalensis</i> | 047 <i>Lonchocarpus bussei</i> | 071 <i>Zanthoxylum holtzianum</i> |
| 024 <i>Encephalartos hildebrandtii</i> | 048 <i>Manilkara sansibarensis</i> | 072 <i>Ziziphus pubescens</i> |

Mrihi *Brachystegia spiciformis*