# Kenya's
## Important Bird Areas
# Status and Trends
# 2012 - 2013


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Cover photo: ***Papyrus Gonolek*****,** a near threatened papyrus endemic species.

Photo by **MARTIN ODINO**

Yala Swamp complex Important Bird Area (IBA) is a complex of wetlands in the delta of the Yala River, on the north-east shore of Lake Victoria. It's the largest papyrus swamp in the Kenyan sector of Lake Victoria. The complex is composed of the Yala swamp, Lake Kanyaboli and Lake Sare. The Yala River used to flow through the eastern swamp (now reclaimed) into Lake Kanyaboli, then into the main swamp, and finally into Lake Victoria via a small gulf. The Yala River flow is now diverted directly into the main swamp, and a silt-clay dike cuts off Lake Kanyaboli, which receives its water from the surrounding catchment and through back-seepage from the swamp.

The predominant vegetation is papyrus (*Cyperus papyrus)*, with the reed *Phragmites mauritianus* in shallower areas and swamp grasses around the periphery. A thick fringe of papyrus surrounds both Lake Kanyaboli and Lake Sare; in the case of Lake Sare, this merges with the main swamp.

The swamp acts as a natural filter for a variety of agricultural pollutants from the surrounding catchment, and also effectively removes silt before the water enters Lake Victoria.

Biodiversity – The Yala swamp complex is an important site for East Africa's papyrus endemics, including the Vulnerable Papyrus Yellow Warbler (*Chloropeta gracilirostris)* and the Near Threatened Papyrus Gonolek *(Laniarus mufumbiri)*. The site is also important for the Lake Victoria cichlids including the Tilapia (*Oreochromis esculentus)*. Lake Kanyaboli acts as a nursery and refuge for Lungfish (*Protopterus aethiopicus*) and Catfish (*Clarias mossambicus*). The Sitatunga antelope and Wild pigs do also reside there.

Threats – Drainage of the swamp due to demand for agricultural land driven by population increase is a major problem. Other threats include use of fertiliser and biocides inputs, and unsustainable exploitation of papyrus. Cutting of papyrus for mat making industry and burning while opening up land for cultivation are the other threats facing the complex.

Conservation Activities – There are various income generating activities for the communities such as: Weaving of trays, chairs and mats from papyrus strands, banana fibres and other wetland products; tour guiding; monitoring; horticulture and tree nurseries. The Site Support Group -Yala Wetland Environmental Volunteers (YAWEV) - the participates in commemorating international days like the World Wetlands Day and World Environment Day and participates in the annual waterfowl counts.

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# ACRONYMS

| | |
|---|---|
| **CBD** | Convention on Biological Diversity |
| **CBM** | Common Bird Monitoring |
| **CCAs** | Community Conserved Areas |
| **EIAs** | Enviromrntal Impact Assessments |
| **EMCA** | Environmental Management and Co-ordination Act |
| **GEF** | Global Environment Facility |
| **HWC** | Human Wildlife Conflict |
| **IBAs** | Important Bird Areas |
| **IUCN** | International Union for Conservation of Nature |
| **KEEP** | Kakamega Environmental Education Programme |
| **KFS** | Kenya Forest Service |
| **KWS** | Kenya Wildlife Service |
| **LAPSSET** | Lamu Port-South Sudan-Ethiopia Transport corridor |
| **NEMA** | National Environment Management Authority |
| **NGOs** | Non-Governmental Organisations |
| **NK** | Nature Kenya |
| **NLC** | National Liaison Committee |
| **SoE** | State of the Environment |
| **SONABIC** | South Nandi Biodiversity Conservation Group |
| **SSG** | Site Support Group |
| **UNDP** | United Nations Development Programme |
| **YAWEV** | Yala Wetland Environmental Volunteers |

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**Disclaimer**

The views and opinion in this report are not necessarily those of the donors who have given their financial support to produce this report.

# EXECUTIVE SUMMARY

Nature Kenya, in partnership with the National Museums of Kenya (NMK), Kenya Wildlife Service (KWS), Kenya Forest Service (KFS), National Environment Management Authority (NEMA) and other stakeholders, has been implementing a national Important Bird Areas (IBAs) programme in Kenya since 1995. This programme involves identification, profiling and monitoring of IBAs. So far sixty-two sites have been identified and described as IBAs and efforts are still being made to identify more.

This report is a summary of the status, pressure and response results as analyzed from standardized IBAs monitoring forms submitted by stakeholders who work at the various sites. Standardized basic monitoring forms are distributed to site managers and other trained professionals and volunteers who are conversant with the IBA sites. Monitoring is modelled to track the "Pressure" or "Threats" to an IBA, the "Status" or "Condition" of sites, and "Responses" or "Interventions" to address threats within an IBA, by measuring a set of parameters as indicators. The score the State (of habitat or trigger species) from 0 (very unfavourable condition) to 3 (very favourable), the Pressure (threats to habitat and/or trigger species) range from 0 (negligible) to 3 (Very High). Response (conservation actions to reduce pressure/threats) from 0 (none) to 3 (very high). Once basic monitoring forms are filled, they are submitted to Nature Kenya and the National Museums of Kenya for data capture and filling. These data are analysed to produce annual mean status, pressure (threat) and response scores, which are presented in this report. For sites where no data was received, data from previous years is used

This report also highlights the results of an ongoing Common Bird Monitoring (CBM) project that is being implemented by volunteers in different parts of the country and also reviews the status of endangered bird species in Kenya. We also highlight media coverage of various conservation issues in the Kenyan print media and describe Kwenia – the 62nd site, which was recognized as an IBA in 2012.

## State, Pressure and Responses

The state of Kenyan IBAs improved slightly in 2012 (mean score 1.26) but declined again in 2013 (mean score 1.21). However pressure (threats) facing the IBAs declined from a mean score of 2.23 in 2011 to 1.69 in 2012 and 2013. This decrease in the mean pressure score can be attributed to the various positive responses that were being initiated by the stakeholders who are managing the sites. Examples of such initiatives include the development of a Land Use Plan and Strategic Environmental Assessment for Tana Delta and the development of a management plan for Dakatcha Woodland. Other initiatives include implementation of a GEF/UNDP funded project that aims at strengthening the management of Afromontane forests in Western Kenya. This project is coordinated by Nature Kenya, but it brings together all government agencies and departments involved in environmental management, including Kenya Forest Service, Kenya Wildlife Service, National Museums of Kenya, Kenya Forestry Research

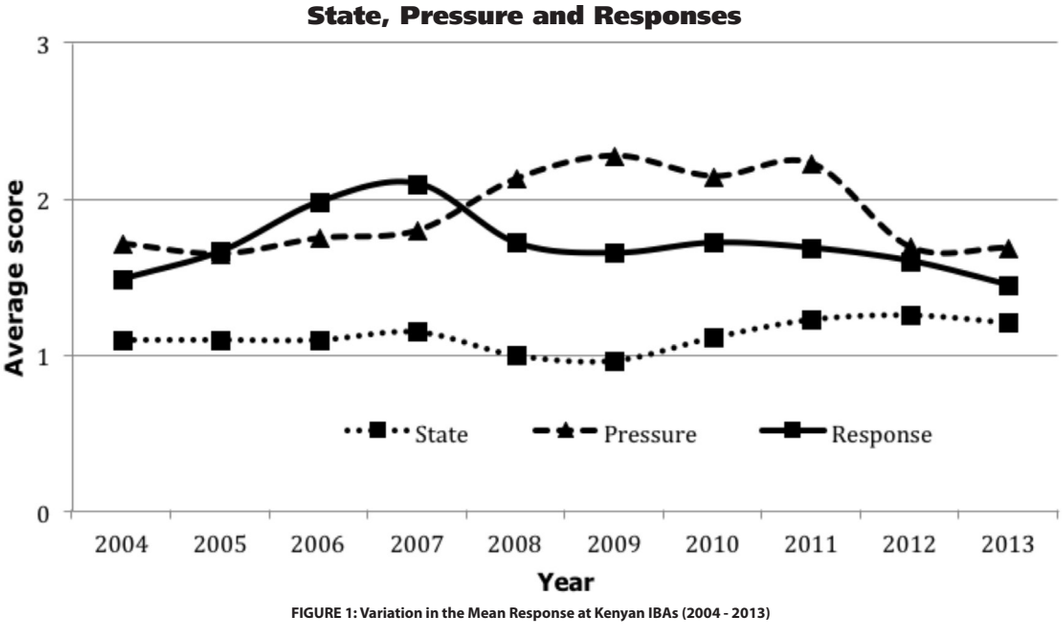



**FIGURE 1: Variation in the Mean Response at Kenyan IBAs (2004 - 2013)**

Institute and other players in the forests of Western Kenya. In spite of all these interventions, the mean response score were on the decline from 2011 to 2013 and this probably explains why they have not been enough to suppress pressure on IBAs. Consequently, the mean state score remain around 1 implying that most IBAs are unfavourable to trigger species and biodiversity conservation in general.

Some notable conservation interventions carried out by different stakeholders during this period include: listing of Tana River Delta as a Ramsar Site; confirmation of Kwenia as a new IBA; and the setting up of Community Conserved Areas (CCAs) in Dakatcha, Kakamega, South and North Nandi and Cherangani sites. The refusal by NEMA to approve an EIA for dam construction in the South Nandi forest, which was to destroy 1100 ha of indigenous forest cover, was a significant achievement for conservation. Another achievement was the launching of the Lake Naivasha Catchment Management Plan by the Ministry of Water in 2012. Other notable responses included the development of land use plans at several sites and tree planting: 1.3 million seedlings were planted at various IBAs in 2012 alone, and the KFS tree planting programme was launched at Mwatate and over million trees were planted. in spite of all these actions the mean response score declined slightly between 2011 and 2013.

## Recommendations

1. **Respond urgently to poaching of rhinos and elephants.** The Kenya government through KWS and with participation of local, national and international partners need to work harder to contain the high level of poaching particularly of rhinos and elephants. The judiciary need to take advantage of the stiff penalties in the new wildlife laws enacted in 2013. NGOs and the media need to explain to the buyers of ivory and rhino horn that they are the ones who are killing wildlife and promoting insecurity.
2. **Strategic Environmental Assessment (SEA) should be conducted for all major policies, vision 2030 and major development projects** e.g. Large scale irrigation, LAPSSET, Oil and Gas exploration and exploitation, Expansion of Geothermal and wind power generation and transmission among other activities.
3. **Mainstream environmental sustainability in large-scale agricultural and infrastructure projects.** As Kenya develops her infrastructure and expands food production through agricultural intensification and new areas of production, particularly using irrigation, environmental degradation is inevitable. The National Environment Management Authority (NEMA) and stakeholders in conservation need to proactively engage with developers and large scale farmers in order to ensure environmental sustainability is mainstreamed in project design and implementation.
4. **Require environmental sustainability in mining and drilling.** Exploration for minerals, oil and gas and the exploitation of the same will continue to be a major challenge to biodiversity conservation. Biodiversity conservation stakeholders need to proactively work with the government, the private sector and local communities in order to ensure sustainable environmental conservation.
5. **Promote training of County governments in environmental conservation.** Devolution has taken root in Kenya and County government have many responsibilities which touch on biodiversity conservation. It is therefore critical that the capacity of County governments including county assemblies and county executives be trained in biodiversity conservation and other relevant issues including climate change.
6. **Promote NGO (and Private sector)-Government Partnerships and collaboration in planning in delivery of programmes.**
7. **Identify and promote migratory bird sites as part of national tourism strategic plan in support of conservation and community livelihoods.**
8. **Encourage all partners to mainstream monitoring of Important Bird Areas as core activities in their institutions and prioritize site management planning.**

# INTRODUCTION

## Important Bird Areas (IBAs) Programme

Important Bird Areas (IBAs) are priority sites for conservation, identified using birds. A site qualifies as an IBA when it hosts: (i) globally threatened species – birds threatened with extinction (ii) restricted-range species – birds that have highly restricted distributions (iii) biome restricted species – a series of bird species characteristic of a particular biome (iv) exceptionally large numbers of congregatory (flocking) birds. An IBA may qualify using one or multiple criterion. Some Important Bird Areas are protected areas, while others are on private or community lands.

An IBA needs to be large enough to support self-sustaining populations of the bird species for which it was identified, or, in the case of migrants, fulfil their requirements for the duration of their presence. Although birds have been used to define IBAs, conservation of these sites contributes to continued survival of other forms of biodiversity.

The Kenyan IBA programme began in 1995, and has been coordinated by Nature Kenya in collaboration with National Museums of Kenya since then. The process of identifying IBAs, monitoring them, advocating for their conservation and working with local communities in capacity building, sustainable livelihoods, sound natural resource management and partnership building, has been supported by many partners and donors. The IBA programme partners are represented at the IBA National Liaison Committee (NLC), which brings together 27 governmental and non-governmental institutions and 19 Site Support Groups in Kenya. The NLC provides an important link between key actors in conservation and natural resource management in Kenya.

The identification of new potential IBA sites includes field surveys of potential sites, recommendation of the site at an IBA-NLC meeting, and confirmation (in consultation with BirdLife International) of these sites as IBAs using the criteria provided above, production of the site inventory and updating of the World Bird Data Base, that is maintained by BirdLife International. Once a site is officially recognized as an IBA, stakeholders initiate priority actions including biodiversity monitoring, advocacy and conservation education.

Currently, IBAs cover all the key habitats types for Kenya: 22 forests (20 of them protected areas); 19 wetlands (only 5 protected); 12 semi-arid and arid areas (7 are protected); 6 moist grasslands (3 are protected); and 3 other unprotected sites. Of the 62 sites that had been profiled by end of 2013, 48 shelter globally threatened bird species, 29 are home to range-restricted birds, 32 contain biome-restricted bird species, and 13 IBAs hold large congregations of birds.

Monitoring of sites is an important aspect of the IBA programme and has been ongoing since 2004. Monitoring findings have been published annually as the IBA Status and Trends reports. IBA monitoring is based on the State-Pressure-Response models adopted by the Convention on Biological Diversity (CBD) to which Kenya is a party. This makes it possible for results from IBA monitoring to contribute to CBD national reporting.

## Monitoring Methods

Each year, standardized basic monitoring forms are distributed to site managers and other trained professionals and volunteers who are conversant with the IBA sites. Monitoring is modelled to track the "Pressure" or "Threats" to an IBA, the "Status" or "Condition" of sites, and "Responses" or "Interventions" to address threats within an IBA, by measuring a set of parameters as indicators. State is scored from 0 (very unfavourable condition) to 3 (very favourable). Pressure ranges from 0 (negligible) to 3 (very high). Response ranges from 0 (none) to 3 (very high). Once basic monitoring forms are filled, they are submitted to Nature Kenya and the National Museums of Kenya for data entry and filling. These data are analysed to produce annual mean status, pressure (threat) and response scores, which are presented in this report. Additional data on the state, pressure and responses come from newspaper articles and announcements of environmental issues and meetings that took place during the reporting period. For sites where no data was received, data from previous years is used.

Birds occur in nearly all habitats, are sensitive to environmental change, have been well studied and have a cultural connection with people. This makes them useful indicators. Common birds are especially useful in showing change in the overall condition of ecosystems, which is difficult and expensive to measure directly. We may be facing declines of common bird populations without our knowledge, yet such declines would indicate a fundamental flaw in the way we treat our environment.

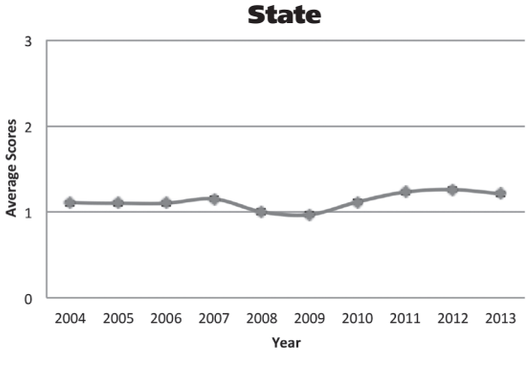
Since February 2011 Nature Kenya has been coordinating a Common Bird Monitoring (CBM) program with the aim of:

1. Providing information on changes in population levels for a wide range of birds across a variety of habitats, both within and outside Protected Areas.
2. Improving the understanding of the population biology of birds and in particular to focus on factors responsible for declines.
3. Promoting bird conservation through the involvement of large numbers of volunteer observers in the survey work.

# KEY RESULTS

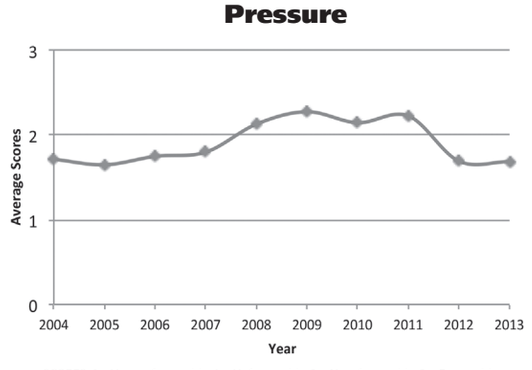
## Status of Habitats and Species

The mean state score improved slightly from 1.23 in 2011 to 1.25 in 2012 and but declined again to 1.20 in 2013 (Figure 2). In 2012, Dandora ponds, Dunga Swamp, Kianyaga Valleys, Lake Ol Bolossat, and Tana River Delta were reported to be in very unfavourable state and only Shimba Hills was reported to be in favourable state. Some of the IBAs in very unfavourable state in 2013 included Busia and Kinangop Grasslands while those in favourable conditions were Arabuko-Sokoke, Dzombo and Marenji forests.



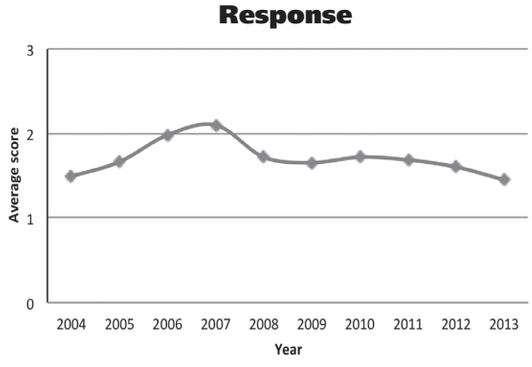

**SCORES:** 0 = Very unfavourable, 1 = Unfavourable, 2 = Near favourable, 3 = Favourable

**FIGURE 2: Variation in the Mean State at Kenyan IBAs (2004 - 2013)**




**SCORES:** 0 = Very unfavourable, 1 = Unfavourable, 2 = Near favourable, 3 = Favourable

**FIGURE 3: Variation in the Mean Pressure at Kenyan IBAs (2004 - 2013)**




**SCORES:** 0 = Very unfavourable, 1 = Unfavourable, 2 = Near favourable, 3 = Favourable

**FIGURE 4: Variation in the Mean Response at Kenyan IBAs (2004 - 2013)**

## Pressure: Threats to IBAs

There was a decrease in the pressures facing Kenyan IBAs in 2012 and 2013, Figure 2. The mean pressure score dropped from 2.2 in 2011 to 1.69 in both 2012 and 2013. Many sites had lower pressure scores in 2012 and 2013 compared to 2011. Examples are Arabuko-Sokoke Forest, Busia grasslands, Cherangani Hills, Kikuyu Escarpment forests and Lake Nakuru National Park which had pressure score of 3 (very high) in 2011 but 1 in 2012 and 2013. Other sites that had decreased scores were Sabaki River Mouth, Lake Elementaita and Lake Magadi, Tsavo East National Park, South Nandi Forest and Meru National Park. Lower Tana Forests and Marenji Forest were experiencing very high pressure in 2013. The major threats to IBAs included agricultural expansion and intensification, poaching, human-wildlife conflicts and infrastructural development. These are detailed in the next section.

### Agricultural Expansion

The need to produce more food to feed the expanding Kenyan population has led to agricultural expansion becoming a major challenge in many IBAs, particularly in unprotected ones. For example, a large part of Yala Swamp has been reclaimed and converted to large scale rice farms. The local community have also been encroaching on the swamp for food production. In its effort to provide food for its citizens, the Kenyan Government has plans to irrigate 1,000,000 hectares of land in Kilifi County. If this programme is actually implemented, it will have major negative impacts on biodiversity and aquatic ecosystems. Tana Delta and Tana River Forests have also been a target for agricultural expansion. Intensification of agricultural activities is particularly a major challenge in all grassland IBAs including Kinangop, Mau Narok/Molo and Busia. Agricultural practices also continue to be a challenge in Dakatcha Woodland with pineapple farming being the next major threat to the existence of the forest patches. Ongoing agricultural intensification has led to increased use of agrochemicals with serious negative impacts on biodiversity. This will eventually lead to decreased productivity among insect pollinated crops, among other impacts. A lot of agrochemicals find their way into aquatic systems, leading to eutrophication.

### Poaching

Poaching, particularly of elephants for their tusks and rhino for their horns, has been a major challenge in many IBAs during the reporting period. For example, 64 elephants were lost to poachers in Tsavo West National Park alone in 2012 (KWS, 2012). Although elephant poaching is a problem throughout their range in Kenya, Mount Kenya, Laikipia/Samburu and Tsavo regions are the most affected regions (Ouko, 2013). Poaching for bush meat both for subsistence and commercial

purposes was also a major threat during the period. Reports of poaching constituted 28% of newspaper articles on conservation in the Kenyan media in 2012 alone.

**Human-Wildlife Conflicts**
Local communities living next to conservation areas continue to incur losses due to crop destruction, livestock depredation, property damage and in some cases loss of human life or human injury. Human-wildlife conflicts lead to negative attitudes towards wildlife in general and to conservation. Retaliatory attacks on problem wild animals, particularly predators, have been a major issue in many parts of Kenya. In addition, predation on livestock has been named as the reason for widespread poisoning of predators and the unintended poisoning of many vultures in the region.

**Mining, Oil and Gas Exploration and Exploitation**
Mining has emerged as a major threat to biodiversity conservation Kenya. A case in point is Mrima Hill at the Kenyan Coast where proposed mining of Niobium and associated rare earth minerals using open cast method is likely to permanently destroy nearly the whole IBA. This IBA is gazetted as a cultural heritage site by the National Museums of Kenya. Another major threat is the ongoing exploration for oil and gas. Exploitable oil deposits have so far been discovered in Turkana area and exploration still goes on in the larger North Western parts of the country. Oil and gas have also been found on the Kenya coast off Lamu and the Kiunga Marine National Reserve IBA. Kenyan Laws (EMCA, Wildlife and Forest Acts) are not very clear on mining in relation to protected areas. There is need to mainstream ecological sustainability in exploration and exploitation of minerals including oil and gas in Kenya.

**Infrastructural Developments**
Many large scale infrastructural projects continue to pose conservation challenges. For instance the governments of Kenya, Uganda and Rwanda are partnering to construct a standard gauge railway from Mombasa, through Nairobi to Kigali (http://softkenya.com/kenya-news/mombasa-kampala-kigali-juba-standard-gauge-railway/). Such a project is expected to have immense environmental impacts during the construction and also during the operation phases. In Kenya, the railway will pass through the expansive Tsavo National Park and other conservation areas. It is not yet clear how wildlife corridors have been incorporated. More importantly, the project might even commence before an environmental impact assessment is carried out. Other projects that are of concern include the Lamu Port-South Sudan-Ethiopia Transport corridor (LAPSSET) project, and other large scale road projects. There is need to proactively engage with the government to ensure that these projects integrate principles of environmental sustainability.

**Other Threats to IBAs**
Invasive species continue to threaten many IBAs. The House Crow (*Corvus splendens*) is spreading along the coastal region, displacing native species. It has become an important urban pest, and a hazard at airports. This bird was reported in Voi town and at Makindu in 2013. Lakes Victoria and Naivasha continue to suffer from the water hyacinth (*Eichhornia crassipes)* problem. Nile perch (*Lates niloticus)* has greatly reduced the abundance of native cichlids in Lake Victoria. Other invasive species include *Prosopis spp*., Prickly pear (*Opuntia spp.*) and Lantana (*Lantana camara*).

Illegal logging was reported in many forest IBAs including Arabuko-Sokoke Forest, Dakatcha Woodland, and Shimba Hills. Illegal fishing methods were still being practiced in many wetland IBAs while overgrazing and illegal grazing were reported in many forest and savannah IBAs. Illegal agricultural encroachment into IBAs was reported at Cherangani and Kakamega forests. Encroachment of riparian zones was reported in wetland IBAs including Lakes Elementaita and Naivasha and Dunga Swamp. Fires were also reported in some IBAs including Aberdares and Mount Kenya.

## Response: Conservation Actions in IBAs

There was a slight decrease in the total conservation interventions from 2011 to 2013 (Figure 2). This in spite of the intensified conservation actions carried out in Kenyan IBAs by stakeholders including County and National Government departments and also local, national and international conservation NGOs. Some of the conservation actions carried out by different stakeholders during the reporting period are detailed in the next section.

**Tana River Delta added to the Ramsar List**
Perhaps one of the most significant conservation actions was the designation of Tana River Delta as a Wetland of International Importance (i.e., a Ramsar site) by the Government of Kenya in December 2012 (www.ramsar.org/cda/en/ramsar-news-archives-2012-kenya-tana/main/ramsar/). This Important Bird Area (IBA) is the second most critical estuarine and deltaic ecosystem in Eastern Africa. It is a complex ecosystem with diverse hydrological functions and a rich biodiversity heritage that include coastal and marine prawns, shrimps, bivalves and fish, five species of threatened marine turtles and IUCN red-listed African elephant (*Loxodonta africana*), Tana Mangabey (*Cercocebus galeritus*), Tana River Red Colobus (*Procolobus rufomitratus rufomitratus*) and White-collared Monkey (*Cercopithecus mitis albotorquatus*). Over 600 plant species have been identified there, including the endangered *Cynometra lukei* and *Gonatopus marattioides*. This site is an important feeding and wintering ground for several species of

migratory water birds. The designation of this site as Ramsar Site was the culmination of a long advocacy campaign that involved many stakeholders over a number of years. At the same time the Government of Kenya has been working with Nature Kenya and other stakeholders to develop a Land Use Plan for Tana River Delta and a Strategic Environmental Assessment. Other wetlands in Kenya designated as Ramsar sites are Lakes Nakuru, Naivasha, Bogoria, Baringo, and Elementaita.

**Kwenia – Kenya's 62nd IBA**

In 2012, Kwenia was qualified as a new IBA and is described in details in page 16.

**Environmental Education**

Many environmental education activities took place in 2012 and 2013. For example, Site Support Groups (SSGs) working at 18 IBAs reached 42,902 students including children from 235 and 156 schools in 2012 and 2013, respectively. The SSGs also reached 32,154 members of the local communities. Resource centres at various IBAs received a total of 3,676 visitors. At least 7,645 brochures with environmental education material were distributed.

**Community Conservancies**

The evolution of Community Conserved Areas Concept. The concept of Community Conserved Areas (CCAs) has taken root in many localities particularly pastoral communities who own land communally. The first community conservancies were formed mainly among the Samburu and Maasai pastoralists but other communities have taken it up. During the reporting period, local communities set aside 46 community conserved areas in and around IBAs. These include 6 CCAs in Dakatcha Woodland and 40 in Kakamega, Nandi and Cherengani areas.

**Management Planning Process**

Various IBAs either completed or were in the process of developing site management plans. For example, a management plan for Kinangop Grassland was completed in 2012. Strategic Forest management plans for Nandi North and Nandi South forests and Cherengani Hills were finalised by the end of 2013, only awaiting official approval. Draft participatory Forest Management plans were prepared for 2 forest stations in Kakamega (Kibiri and Bunyala) and Cherengani (Elgeyo and Kisup). In addition, the County State of Environment (SOE) report for Nandi and Cherengani Counties were prepared. This will guide the development of five-yea county environmnet action plans. At Tana River Delta, the lead agencies of the government of Kenya have been working with Nature Kenya and other stakeholders to develop a Land Use Plan and a Strategic Environmental Assessment. A total of 97 forests from ten conservancies have had their management plans either approved or launched by KFS between 2008-2013, and the implementation period ranges from 2013 to 2027.

KWS records indicate that fifty-five (80 %) of Kenya's 69 National Parks, National Reserves and National Sancturaies have management plans. Sites without management plans include Ol Donyo Sabuk NP, Arawale NR, Lake Kanyaboli NR, Losai NR, Marsabit NR, Ngai Ndethya NR, Nyambene , Rahole NR, South Kitui NR, Diani Chale NP, Lake Simbi , Maralal National Sanctuary, Naivasha National Sanctuary, Ondago Swamp National Sanctuary. Managements plans for Nakuru, Saiwa Swamp and Nairobi National Parks have expired and need to to be reviewed.

**Forest Restoration Exercises**

Many forest restoration activities took place from 2012 to 2013. For example in 2012 alone, about 1.3 million tree seedlings were planted at IBAs in which Nature Kenya worked with KFS and local communities. Most of these seedlings were planted in degraded areas of Kakamega, Cherangani, South Nandi and North Nandi forests.

**Building the Capacity of Site Support Groups**

In an effort to build the capacity of local community groups to deliver conservation actions, a lot of capacity building initiatives were carried out. For example, in Dakatcha Woodland 40 community scouts were commissioned to patrol and report illegal activities. Sixty community scouts were trained on forest patrols and law enforcement and are working in Cherangani, Nandi and Kakamega Forests. In addition, 20 community members from Lake Naivasha Conservation Group, 21 members from Taita Biodiversity Conservation Group, 25 members from Tana Delta Conservation Group, 44 members from Kakamega Environmental Education Programme (KEEP) and 30 members of South Nandi Biodiversity Conservation Group (SONABIC) were trained on IBA monitoring.

**Implementation of Integrated Development and Conservation Projects (ICDPs)**

Integrated Development and Conservation Projects (ICDPs) attempt to link conservation of biological diversity within a conservation area to social and economic development of the adjacent communities. Nature Kenya and other partners have been implementing various ICDP projects across the IBAs. For example, between 2009 and 2013:

- a total number of 8,418 bee hives were purchased for local communities and 1,608 people trained in apiculture. The amount of honey expected to be have been harvested over the 5 years is 1,683,600kg, earning an expected income of Kush 505,080,000.
- 1,975 farmers were trained and a total of 2,204,390 seedlings planted on people's farms between 2009 and 2013. This translates to 2,204.39 hectares

of woodlots and an expected income of Ksh 6,613,170,000
- 8,454,425 trees were planted translating to 8,454.425 hectares of woodlots and an expected income of Ksh 25,363,275,000
- 13, 305 tourists were received at various IBAs earning local communities Ksh 12,968, 276
- Ksh 385, 958 was earned from Equipment hire
- Ksh 2,678,274 was earned from Wool spinning at Kinangop Grassland IBA
- 1,087 households were installed with fireless cookers and 6,010 local community members trained. 1,188 fireless cookers were sold earning a total of Ksh 602,800

**Arabuko-Sokoke Forest Elephant Action Plan Launched**

Problems emanating from crop destruction by elephants and other wild animals residing in Arabuko-Sokoke Forest led to the erection of an electric fence all around the forest. The fence has helped stop elephants from raiding the farms around the forest but at the same time it has created an island in which elephants and other wild animals have no access to resources outside the forest. Since the forest has no permanent sources of water, elephants have to be artificially supplied with water at Arabuko Swamp during the dry season. This has proved to be an ecological nightmare due to habitat degradation by the increasing elephant population. At the same time poaching of elephants and other wild animals has become a major challenge all over Kenya. To solve elephant conservation challenges in Arabuko-Sokoke Forest, stakeholders met in February 2013 under the leadership of KWS with financial support from Nature Kenya and developed a site-based elephant conservation action plan for Arabuko-Sokoke Forest elephants. The action plan was launched in December 2013 and will provide a road map for conservation and management of elephants in Arabuko-Sokoke forest for the next 10 years.

**Actions Linked to the Discovery of Clarke's Weaver Breeding Site**

A lot of interest in Dakatcha Woodland has been generated by the discovery of Clarke's Weaver nesting site at a wetland in the Brachystegia forest in March 2013. Many media articles on Dakatcha Woodland have appeared in the local press and other media outlets.

**Media coverage of threats and responses in Kenyan IBAs**

A total of 2192 news items and announcements covering IBAs and general conservation issues appeared in local dailies (Daily Nation, The Standard, and The Star) and the weekly The East African newspaper during the period 2012-2013, with 44 of the 62 Kenyan IBAs appearing at least once. The East African newspaper, which is a weekly paper, only carried 4% of the items while the Daily Nation newspaper had 26 % of the items. The Star and Standard newspapers each contributed 35 % of the items. In terms of IBAs coverage, Masai Mara is the IBA which appeared most frequently in the dailies. Other IBAs which appeared in the local press frequently included Tana River Delta, Nairobi National Park, Mau Forest Complex, Lake Victoria, Lake Naivasha, Tsavo East National Park, Lake Nakuru National Park and Tsavo West National Park. Mt Kenya, Amboseli National Park, Lake Turkana, Aberdares Mountains, Shimba Hills, Samburu and Buffalo Spring National Reserves, Kakamega Forest, Taita Hill Forests, Meru National Park appeared at least 10 times in the local media.

Human-wildlife conflicts and poaching are the most reported threats in the IBAs accounting for 32% and 19% of the reports, respectively. Habitat degradation by people and encroachment into IBAs mainly for human settlement and cultivation constituted about 11 percent of the reports. Other threats reported by the media included: pollution, climate change, illegal logging/vegetation destruction, infrastructure development, wetland drainage/filling, invasive /exotic species, natural events, charcoal burning, overgrazing/ illegal grazing, wildlife population decline, destructive mining activities, diseases/toxins, illegal fishing methods/overfishing and fires. Further examination of the human-wildlife conflicts reports in the IBAs show that human death and injury, livestock depredation, and crop raiding were the most reported pressures in the IBAs (Figure 5). Responses reported in the Kenyan dailies included education and awareness campaigns, advertisements for EIA comments, arrests, advocacy and animal translocation (Table 1).

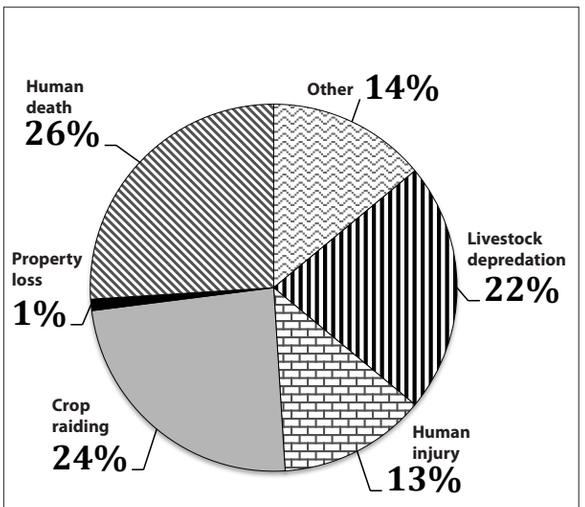



**FIGURE 5: Type of Human-Wildlife Conflicts Reported by Kenya Media**

**Table 1: Number of News Items on Responses/Interventions at IBAs Reported by Media**

| Types of Response | No. of news items |
|---|---|
| Education and awareness creation | 47 |
| Advertisements for Comments on E.I.A.s | 37 |
| Arrests | 36 |
| Advocacy | 36 |
| Management plan Launch or prep | 33 |
| Animal translocation | 20 |
| Income Generating Activity | 21 |
| NGO and CBOs efforts in support of conservation | 16 |
| Monitoring | 13 |
| Creation of conservation area | 7 |
| Policy review/formulation | 7 |
| Fencing | 5 |
| Patrols/security/enforcement | 6 |
| Prosecution | 3 |
| Fund raising | 4 |
| Compensation for HWC | 1 |
| Other | 56 |

# STATE OF KENYA'S BIRDS

## Globally Threatened Birds

There are 1100 bird species in Kenya. Of these, 35 are globally threatened (Table 2); their populations are on the decline due to habitat destruction from human activities. Two of the globally threatened bird species, Taita Apalis (*Apalis thoracica fuscigularis*) and Taita Thrush (*Turdus helleri*), are classified as **Critically Endangered (CR)**. These birds are endemic to Taita Hills and their populations have experienced rapid decline in the recent past mainly due to habitat fragmentation and consequent loss of ecological connectivity. Taita Apalis is one of the world's most endangered bird species with only 100-300 individuals remaining (http://www.birdlife.org/datazone/). The population of Taita Thrush is currently thought to be less than 1350 (http://www.birdlife.org/datazone/). Kenya boasts of 8 bird species that are endemic to the country. These include the two Taita endemics; the endangered Aberdare Cisticola (*Cisticola aberdare*), Sharpe's Longclaw (*Macronyx sharpei*), and Clarke's Weaver (*Ploceus golandi*); the Vulnerable Hinde's Babbler (*Turdoides hindei*); Jackson's Francolin (*Francolinus jacksoni)* and the data deficient Williams's Lark (*Mirafra williamsi*) and Tana River Cisticola (*Cisticola restrictus*).

Six out of the eight vulture species found in Kenya are globally threatened. These include the Endangered Egyptian Vulture (*Neophron percnopterus*), Hooded Vulture (*Necrosyrtes monachus*), White-backed Vulture (*Gyps africanus*), Rüppell's Vulture (*Gyps rueppellii*) and the Vulnerable Lappet-faced Vulture (*Torgos tracheliotos*), White-headed Vulture (*Trigonoceps occipitalis*). The major threat facing vultures is incidental poisoning as livestock farmers retaliate against livestock depredation mainly by hyenas, lions, leopards and wild dogs. Reduced herbivore populations have also led to reduced food supply for these carrion feeders. Other threats to vultures include collision with power distribution infrastructure and habitat destruction. For example, Rüppell's Vulture and White-backed Vulture are both threatened by the ongoing expansion of geothermal power generation at Hell's Gate National Park.

Sharpe's Longclaw (*Macronyx sharpei*) are fast losing most of their tussock grassland habitat due to agricultural expansion, subdivision of land, establishment of woodlots and overgrazing. Continued reclaiming of wetlands put the endangered wetland dependent species including Madagascar Pond Heron (*Ardeola idae*) and Basra Reed Warbler (*Acrocephalus griseldis*) at risk. Illegal and unsustainable extraction of *Brachylaena huillensis* for woodcarving and timber in Arabuko-Sokoke Forest and clearing of *Cynometra webberi* forest for pineapple plantations in Dakatcha Woodland are thought to have reduced the breeding success of Sokoke Scops Owl (*Otus ireneae*). Continued degradation of the two forests is also a threat to the endangered Clarke's Weaver (*Ploceus golandi*) and Sokoke Pipit (*Anthus sokokensis*).

Although most globally threatened species are experiencing declines in their populations, all is not lost. The new wildlife law now recognizes endangered species and protects them (Wildlife Act, 2013). Killing of any endangered wild animal is now a very serious crime in Kenya. This therefore protects all endangered birds in the country. Many other birds are legally recognized as vulnerable or protected from exploitation. However, some species listed as endangered under the IUCN Red list are missing in the national classification. Stakeholders need to take advantage of any emerging opportunity to review and reconcile the two lists. There is also need for intensified education and awareness campaigns to ensure that all stakeholders including law enforcers, site managers, local communities and the judiciary are conversant with the new wildlife laws.

## Data Deficient Species

Four species are classified as data deficient. These include Tana River Cisticola (*Cisticola restrictus*), Williams's Lark (*Mirafra williamsi*), Friedmann's Lark (*Mirafra pulpa*) and Matsudaira's Storm-petrel (*Oceanodroma matsudairae*). Tana River Cisticola might be extinct because it has not been sighted in its known range since 1972 (del Hoyo *et al.* 2006). Friedmann's Lark is very rare but has been recently seen in the Tsavo West area. Williams's Lark is locally common in Dida Galgalu Desert (north of Marsabit) and between Isiolo and Garba Tula (Keith *et al.* 1992). Very little is known about Matsudaira's Storm-petrel which is common in the Indian Ocean. It is important that stakeholders establish the population status of these species.

**Table 2: Globally and Nationally Threatened Birds in Kenya**

| Common Name | IUCN Red List Category | National Category (Wildlife Act, 2013) | World Population estimate (http://www.birdlife.org/datazone) |
|---|---|---|---|
| Taita Thrush | CR | CR | 1400 |
| Taita Apalis | CR | CR | 100-300 |
| Sokoke Scops Owl | EN | EN | 2,500 |
| Madagascar Pond Heron | EN | EN | 2,000-6,000 |
| Spotted Ground Thrush | EN | EN | 1,000-2,449 |
| Aberdare Cisticola | EN | EN | 50,000-99,999 |
| Basra Reed Warbler | EN | EN | 2,500-9,999 |
| Turner's Eremomela | EN | EN | 10,000-19,999 |
| Amani Sunbird | EN | EN | 25,00-9,999 |
| Sharpe's Longclaw | EN | EN | 6,000-15,000 |
| Sokoke Pipit | EN | EN | 10,000-19,999 |
| Clarke's Weaver | EN | EN | 3,000-6,000 |
| Egyptian Vulture | EN | EN | 9,900-15,500 |
| Hooded Vulture | EN | _ | 197,000 |
| White-backed Vulture | EN | NT | 270,000 |
| Rüppell's Vulture | EN | NT | _ |
| Grey Crowned Crane | EN | NT | 50,000-64,000 |
| Saker Falcon | EN | EN | 12,800-30,800 |
| Black Crowned Crane | VU | NT | 15,000 |
| Lappet-faced Vulture | VU | VU | 8,500 |
| White-headed Vulture | VU | VU | 10,000-20,000 |
| Greater Spotted Eagle | VU | VU | 2,430-3,300 |
| Eastern Imperial Eagle | VU | VU | 3,500-15,000 |
| Chapin's Flycatcher | VU | VU | 3,500-15,000 |
| Abbott's Starling | VU | VU | 3,500-15,000 |
| Blue Swallow | VU | VU | 1,500-4,000 |
| White-winged Apalis | VU | VU | 1,500-7,000 |
| Papyrus Yellow Warbler | VU | VU | 3,500-15,000 |
| Hinde's Babbler | VU | VU | 1,000-3,700 |
| Martial Eagle | VU | Protected | 10,000 |
| Secretarybird | VU | Protected | <100000 |
| Madagascar Pratincole | VU | VU | 3,300-6,700 |
| Southern Ground Hornbill | VU | _ | _ |
| Grey Parrot | VU | NT | 0.56-12.7 M |
| Karamoja Apalis | VU | VU | 6,000-15,000 |

**Conservation Status (IUCN Red List) CR** = Critically endangered, **EN** = Endangered, **NT** = Near threatened, **VU** – Vulnerable

## Status of Common Birds: Common Bird Monitoring (CBM) Programme

By February 2014, a total of 496 bird species with 21,522 individuals had been recorded. Common Bulbul was the most widespread bird species and was encountered in 80% transects. Other birds which were widely distributed and were recorded in at least 30 percent of the transects included Speckled Mousebird, Red-eyed Dove, Hadada Ibis, Ring-necked Dove, Grey-backed Camaroptera, Baglafecht Weaver, Variable Sunbird, African Paradise Flycatcher, African Pied Wagtail, Tropical Boubou, Bronze Sunbird, Cattle Egret, Pied Crow, Streaky Seedeater, White-eyed Slaty Flycatcher, and Augur Buzzard. The relatively high numbers of Baglafecht Weaver, Streaky Seedeater and Augur Buzzard indicates that many sites were in the highlands of Kenya. Thirty four percent (34%), 17% and 10% of the bird species were only recorded in one, two or three transects, respectively.

Globally threatened birds encountered during common bird monitoring included the Critically Endangered Taita Thrush (*Turdus helleri*), and the endangered Turner's Eremomela (*Eremomela turneri*), Hooded Vulture (*Necrosyrtes monachus*), and Grey Crowned Crane (*Balearica regulorum*). Turner's Eremomela were recorded in 6 transects located within Kakamega Forest and South Nandi Forest. Hooded Vultures were seen in Shimba Hills, while Grey Crowned Cranes were recorded in Cherengani, Kenana farm in Njoro area, Lake Kanyaboli in Yala Swamp and Sosion River in Eldoret area.

Red-billed Quelea was the most numerous bird species with 2117 individuals having been recorded in 7 transects. Other bird species encountered in large numbers included Common Bulbul, Bronze Mannikin, Speke's Weaver, Speckled Mousebird, Cattle Egret, Laughing Dove, Superb Starling, Pied Crow, Streaky Seedeater, Baglafecht Weaver, Black-and-white Casqued Hornbill, Great Cormorant, Ring-necked Dove, Yellow-whiskered Greenbul, Wire-tailed Swallow and Barn Swallow.

## Way Forward

Common bird monitoring is an easy and convenient way of monitoring birds as indicators of environmental health. The results so far are very informative and with time, population trends in common and globally threatened species will emerge. Common bird monitoring can provide warning of invasions of agricultural vermins such as quelea. We do welcome anyone who is willing to take part to contact us at office@naturekenya.org

**Table 3: Relative Numbers of Common Birds Counted**

| Bird species | Total number |
|---|---|
| Red-billed Quelea | 2,117 |
| Common Bulbul | 667 |
| Bronze Mannikin | 628 |
| Speke's Weaver | 624 |
| Speckled Mousebird | 535 |
| Cattle Egret | 393 |
| Laughing Dove | 383 |
| Superb Starling | 346 |
| Pied Crow | 309 |
| Streaky Seedeater | 273 |
| Baglafecht Weaver | 266 |
| Black-and-white Casqued Hornbill | 248 |
| Great Cormorant | 237 |
| Ring-necked Dove | 233 |
| Yellow-whiskered Greenbul | 222 |
| Wire-tailed Swallow | 220 |
| Barn Swallow | 204 |

**Table 4: Relative Frequency of Common Birds Counted**

| Bird species | Frequency |
|---|---|
| Common Bulbul | 42 |
| Speckled Mousebird | 28 |
| Red-eyed Dove | 23 |
| Hadada Ibis | 22 |
| Ring-necked Dove | 21 |
| Grey-backed Camaroptera | 21 |
| Baglafecht Weaver | 20 |
| Variable Sunbird | 20 |
| African Paradise Flycatcher | 20 |
| African Pied Wagtail | 20 |
| Tropical Boubou | 20 |
| Bronze Sunbird | 18 |
| Cattle Egret | 17 |
| Pied Crow | 17 |
| Streaky Seedeater | 16 |
| White-eyed Slaty Flycatcher | 16 |
| Augur Buzzard | 16 |
| Bronze Mannikin | 15 |
| Hamerkop | 15 |
| Black Saw-wing | 15 |

# Description of Kwenia, Kenya's 62nd Important Bird Area (IBA)

**Account**
**Administrative region:** Kajiado County, Kenya,
**Central coordinates:** 1°46'38.21" S and 36°31'5.24" E
**Area:** 2000ha
**Altitude:** 600m

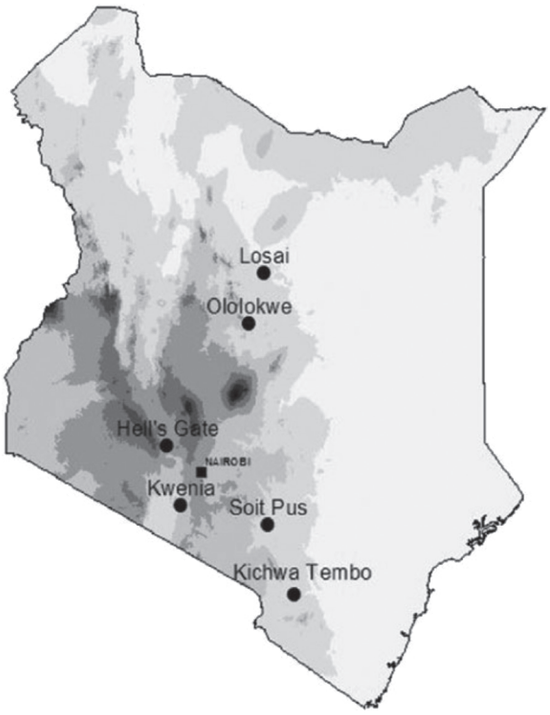



**Figure 6: Map of Kenya and position of Kwenia. Also shown are the known nesting sites (black circles) of Rüppell's Vultures in Kenya . ( Source: Virani *et al* 2012)**

**Site Description**
Kwenia is situated in Kajiado County, southern Kenya, approximately 80 km south of Nairobi. Most of Kajiado County is semi-arid. Soils are poorly developed and shallow (vertisols) with high clay content. Rainfall is bimodal with an annual average of 600 mm, increasing with elevation from 500 mm in the plains to 1,250 mm in the highlands. Temperatures also vary with altitude and range from a low of 12°C in the highlands to a high of 34°C in plains (Gichuki et al. 1998). The predominant land use in the area is pastoral herding of goats and cattle. The cliffs at Kwenia are west-facing and approximately 2 km in length and on average about140 m high.

**Habitats and Percentage Cover**
**Rocky areas/Cliffs:** 90%
**Wetland:** 10%

**Land-use and Percentage Cover**
**Rangeland/Pastureland**: 100%
Land ownership: single ownership (recently subdivided, formerly group ranch)

**Birds**
The threatened species recorded at Kwenia are in the table on page 16 with their threat categories (de Monte 2013).

Kwenia is probably the most important breeding location for the endangered Rüppell's Vulture (*Gyps rueppellii*) in southern Kenya (Lewis and Pomeroy 1989). The only other site in Kenya that has been systematically surveyed for this species is Hell's Gate National Park (about 150 km east of Kwenia). Rüppell's Vulture is distributed throughout Kenya, with breeding being restricted to a relatively small number of cliffs scattered in the southern and northern parts of the country. Considering the size of the Kwenia colony,

**Table 5: Globally Threatened Birds at Kwenia IBA**

| Common name | *Scientific name* | | IUCN red list status | Population trend |
|---|---|---|---|---|
| Secretary Bird | *Sagittarius* | *serpentarius* | Vulnerable | Decreasing |
| Egyptian Vulture | *Neophron* | *percnopterus* | Endangered | Decreasing |
| African White-backed Vulture | *Gyps* | *africanus* | Endangered | Decreasing |
| Rüppell's Griffon Vulture | *Gyps* | *rueppellii* | Endangered | Decreasing |
| Lappet-faced Vulture | *Torgos* | *tracheliotos* | Vulnerable | Decreasing |
| Pallid Harrier | *Circus* | *macrourus* | Near Threatened | Decreasing |
| Bateleur | *Terathopius* | *ecaudatus* | Near Threatened | Decreasing |
| Martial Eagle | *Polemaetus* | *bellicosus* | Vulnerable | Decreasing |
| Taita Falcon | *Falco* | *fasciinucha* | Near Threatened | Stable |
| Grey Crowned Crane | *Balearica* | *regulorum* | Endangered | Decreasing |
| European Roller | *Coracias* | *garrulus* | Near Threatened | Decreasing |

(since 2002 to 2009, around 150-200 adults have been reported to be present on each visit) the site may act as an important focal point for Rüppell's Vulture in Southern Kenya and Northern Tanzania. Kwenia also holds s a number of both Afrotropical and Palaearctic migrant species which include the following:

| Common Name | Scientific name |
|---|---|
| Yellow-billed Stork | *Mycteria ibis* |
| Glossy Ibis | *Plegadis falcinellus* |
| Red-knobbed Coot | *Fulica cristata* |
| Black-winged Stilt | *Himantopus himantopus* |
| Whiskered Tern | *Chlidonias hybrida* |
| Jacobin Cuckoo | *Clamator jacobinus* |
| Great Spotted Cuckoo | *Clamator glandarius* |
| Eurasian Nightjar | *Caprimulgus europaeus* |
| Lilac-breasted Roller | *Coracias caudatus* |
| Eurasian Roller | *Coracias garrulus* |
| Madagascar Bee-eater | *Merops superciliosus* |
| Great Reed Warbler | *Acrocephalus arundinaceus* |
| Chestnut Weaver | *Ploceus rubiginosus* |

**Conservation Issues**

1. Land subdivision and subsequent development under and around the cliff colony. Formerly a group ranch, the area was recently subdivided and the land is owned by individual title holders. Some plots have been sold to outside investors who have begun large-scale agricultural development in the lakebed directly beneath the breeding cliff (Kaai 2012).
2. Rapid and rampant tree cutting by the local community. The wood is sold either to schools or restaurants in form of charcoal or dead wood (firewood). This has greatly destroyed the ecosystem, which already had few trees or vegetation cover (Kaai 2012).
3. Overgrazing is a serious issue given the predominant land use is livestock rearing.

Current studies suggest declines in both the range and numbers of various vulture species is as a result of compound threats including poisoning (Otieno et al. 2010) and changes in land-use practices (Ogada and Keesing 2010, Virani *et al*. 2011, Ogada and Buij 2011). Despite the many threats – poisoning, reduced food availability, disturbance, and climate change – and the recent evidence that populations of Gyps and other vultures in the nearby Masai Mara ecosystem have declined by 52% in the last thirty years, which is likely to be the same population as the Rüppell's Vultures using Kwenia, based on findings from telemetry (C. Kendall and M. Virani unpubl. data), nesting activity at Kwenia has remained remarkably stable. Knowledge of the nesting activity of the other threatened species would assist in the development of a long-term conservation plan for Kwenia, which currently does not enjoy any legal protection.

Considering the size of the Kwenia colony, there's a suggestion to have Kwenia act as an important focal point for Rüppell's Vultures in southern Kenya and northern Tanzania.

Other key species of conservation concern include Lesser Kudu, Gerenuk, Wild Dogs, Cheetah and Hyena.

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# OVERALL RECOMMENDATIONS

## Devolution and IBA Conservation

Following the general elections of 2013, the implementation of the new Kenyan Constitution is in top gear and County governments are now in place. These governments have constitutional powers in sectors that have major impacts on biodiversity including agriculture, fisheries, forestry, soil and water conservation. County governments therefore have a major role in environmental conservation, yet they have limited capacity to fully engage. County assemblies have powers to make laws that can interfere with the conservation of IBAs in a county, but their capacity to engage in contemporary conservation issues is inadequate. County based civil society forums and networks that would advocate for environmental conservation are either weak or lacking.

**Action:**

- *Address the capacity gaps in conservation issues within County governments*

## Dealing with Human-Wildlife Conflicts and Poaching

The enactment and enforcement of the Wildlife Conservation and Management Act, 2013, is expected to contribute greatly to reduce poaching pressure due to the stiff penalties prescribed. For example, any offence affecting an endangered or threatened species or in respect of any trophy of that endangered or threatened species is punishable with a fine of not less than Ksh 20 million or imprisonment for life or to both. The new wildlife laws also recommend compensation for crop damage and livestock depredation. Implementation of compensation can greatly improve the attitude of local communities towards wildlife. In addition, lack of compensation has been the driving force behind the poisoning of wild animals, particularly predators, with the resultant poisoning of birds of prey, particularly vultures.

**Actions:**

- *KWS and other conservation stakeholders to create awareness on the new wildlife laws.*
- *The judiciary to take advantage of the stiff penalties in the new wildlife laws enacted in 2013.*
- *NGOs and the media to explain to the buyers of ivory and rhino horn that they are the ones who are killing wildlife and promoting insecurity.*

## Mining, Oil and Gas Exploration and Exploitation

Mining has emerged as a major threat to biodiversity conservation in Kenya. A case in point is Mrima Hill at the Kenyan Coast where proposed mining of Niobium and associated rare earth minerals using open cast method is likely to permanently destroy nearly the whole IBA. This IBA is gazetted as a cultural heritage site by the National Museums of Kenya. Another major threat is the ongoing exploration for oil and gas. Exploitable oil deposits have so far been discovered in Turkana area and exploration still goes on in the larger northwestern parts of the country. Oil and gas have also been found on the coast off Lamu and the Kiunga Marine National Reserve IBA. Kenyan laws are not very clear on mining in relation to protected areas.

**Actions:**

- *Mainstream ecological sustainability in exploration and exploitation of minerals including oil and gas in Kenya.*
- *Strategic Environmental Assessment (SEA) should be conducted for all major mining, oil and gas exploration and exploitation activities*

## Infrastructural Developments

Many large scale infrastructural projects continue to pose conservation challenges. For example the governments of Kenya, Uganda and Rwanda are partnering to construct a standard gauge railway from Mombasa, through Nairobi into Kigali. Such a project is expected to have immense environmental impacts during the construction and also during the operation phases. In Kenya, the railways will pass through the expansive Tsavo National Park and other conservation areas. It is not clear whether wildlife corridors have been taken into consideration. More importantly, the project might even commence before an environmental impact assessment is carried out. Other projects that are of concern include the LAPSSET project, and other large scale road projects.

**Actions:**

- *Proactively engage with the government so that these mega projects integrate principles of environmental sustainability.*
- *Strategic Environmental Assessment (SEA) should be conducted for all major infrastructural developments in the country.*

## NGO (and Private Sector) – Government Partnerships

There is need to promote NGO and Private Sector-Government partnerships. An example of such partnerships is the Important Bird Area – National Liaison Committee (IBA-NLC) coordinated by Nature Kenya. This committee brings together various government departments and agencies involved in conservation and also various NGOs and civil societies to advocate for the conservation of Kenya IBAs. Such forums provide opportunities for learning and for advocacy.

**Action:**

- *Involve NGOs and private sector in developing County management plans.*

## Msidunyi Forest

Towards the end of 2011, a patch of indigenous forest that was previously unknown to conservationists was "discovered" on the Western side of the Taita Hills (Figure 6). It was also confirmed to host an important proportion of the Critically Endangered Taita Apalis population, among other species. The site, locally called Msidunyi (03°24'S 38°18'E) comprises 7.5 ha of indigenous forest, surrounded by a belt of 30-40ha of scrub, (Borgesio, 2013). Msidunyi Forest is next to the larger 115 ha Vuria Forest which has no formal protection as it is classified as community land, yet it holds the second largest concentration of Taita Apalis.

**Action:**

- *Endeavour to put this site under formal protection.*

**Taita Hills Forest Fragments where *A. fuscigularis* was Observed**


**FIGURE 7: Map of the Taita hills forest fragments where *A. fuscigularis* was observed at the end of 2013. (Source: Luca Borghesio, Lawrence Wagura and Mwangi Githiru – http://www.africanbirdclub.org/sites/default/files/2012_Taita_Apalis2.pdf)**

## Recommendations for Government and Non-governmental Organisations

**Kenya Forest Service**

- Finalize, sign and implement the pending forest management plans for various forests.
- Develop a monitoring system for tracking and reducing the illegal wood and wood products trade taking place across border points of Kenya and Tanzania
- Encourage field staff to be submitting the basic monitoring forms on time.

**National Museums of Kenya**

- Document data on sites outside protected areas that might qualify as IBAs.
- Carry out continuous monitoring of wind turbines and power lines after being constructed

**Kenya Wildlife Service**

- Work with all stakeholders including local communities, other security agencies, and the public to limit wildlife poaching, especially elephants and rhinos.
- Fast track implementation of standardized bird monitoring using the National Ecological Monitoring Manual.
- Create more awareness, together with other stakeholders, on the newly enacted Wildlife laws, particularly as they relate to poaching and human-wildlife conflicts.
- Mainstream IBA basic monitoring as a core function of field research staff.
- Develop a monitoring system for tracking and reducing the illegal transportation of game meat/ trophies across borders
- Ensure that excision or degazettement of part of Nairobi National Park for the Southern bypass follows the law

**National Environment Management Authority**

- Lead in the development of a national planning framework for major infrastructure projects including energy.
- Review and strengthen existing environmental legislation in collaboration with other stakeholders.
- Encourage farmers to use low-pesticide agricultural practices such as Integrated Pest Management as a way of reducing the harmful effects of Carbofuran and other potentially dangerous pesticides on the country's wildlife and environment. Organic agriculture and promotion of natural pesticides are other methods that would help to mitigate the damage from pesticides.
- Continue sharing EIA reports for developments touching on IBAs, and allow sufficient time for comments.
- Mainstream IBA monitoring including use of IBA basic monitoring forms among field officers.

**Nature Kenya**

- Work with other stakeholders at the county level to build the capacity of county governments, county assemblies and civil society networks to enhance their capacity in sustainable development.
- Profile new sites that qualify as IBAs/KBAs in Kenya through the National Liaison Committee (NLC) and formally submit the list to BirdLife International. Major gaps exist in the IBA/KBA profiling in the former Eastern Province particularly in Kitui, Mwingi, and Makueni Counties; and also in the former North Eastern Province including Garissa, Mandera and Wajir Counties.
- Update Kenyan Important Bird Area documentation including the IBA book and other IBA material.
- Work with other stakeholders to proactively identify and engage in environmental policy processes in order to ensure environmental sustainability.
- Work with site managers to mainstream biodiversity monitoring at all IBAS sites. This should include basic monitoring, detailed monitoring and common bird monitoring as appropriate.

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## Appendix 1: Pressure, Status and Response Scores at Kenya IBAs Monitored in 2012 and 2013

| Site Name | Pressure | | State | | Response | |
|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 |
| Amboseli National Park | 3 | | 1 | | 2 | |
| Arabuko-Sokoke Forest | 1 | 2 | 1 | 3 | 3 | 3 |
| Busia Grasslands | 1 | 2 | 1 | 0 | 2 | 0 |
| Cherangani Hills | 1 | | 1 | | 1 | |
| Dakatcha Woodland | 0 | 2 | 1 | 1 | 1 | 1 |
| Dandora Ponds | 2 | | 0 | | 0 | |
| Dunga Swamp | 3 | 2 | 0 | 1 | 1 | 1 |
| Dzombo Hill Forest | | 2 | | 3 | | 2 |
| Kakamega Forest | 1 | 1 | 2 | 1 | 3 | 3 |
| Kaya Gandini | | 2 | | 1 | | 2 |
| Kianyaga Valleys | 2 | | 0 | | 0 | |
| Kikuyu Escarpment Forest | 1 | 2 | 1 | 2 | 3 | 3 |
| Kinangop Grasslands | 2 | 2 | 1 | 0 | 1 | 1 |
| Kisite Island | 2 | | 1 | | 1 | |
| Kusa Swamp | 2 | | 2 | | 0 | |
| Kwenia | 1 | | 2 | | 0 | |
| Lake Bogoria National Reserve | 1 | | 1 | | 1 | |
| Lake Elmenteita | 1 | 1 | 2 | 1 | 1 | 1 |
| Lake Magadi | 1 | 0 | 1 | 1 | 0 | 0 |
| Lake Naivasha | 2 | 1 | 1 | 1 | 1 | 2 |
| Lake Nakuru National Park | 1 | | 1 | | 3 | |
| Lake Ol' Bolossat | 2 | 2 | 0 | 1 | 2 | 1 |
| Lake Turkana | 1 | 2 | 1 | 1 | 0 | 1 |
| Lower Tana River Forests | | 3 | | 1 | | 1 |
| Marenji Forest | | 3 | | 3 | | 1 |
| Meru National Park | 0 | | 1 | | 1 | |
| Mida Creek, Whale Island and the Malindi - Watamu coast | | 2 | | 2 | | 1 |
| Mount Kenya | 0 | 2 | 1 | 1 | 3 | 3 |
| Mukurweini Valleys | 2 | | 1 | | 1 | |
| Nairobi National Park | 2 | 1 | 1 | 1 | 3 | 2 |
| North Nandi Forest | 2 | 1 | 1 | 1 | 3 | 2 |
| Ruma National Park | 2 | 2 | 2 | 2 | 3 | 3 |
| Sabaki River Mouth | 1 | 2 | 1 | 0 | 1 | 0 |
| Shimba Hills | 2 | 1 | 3 | 2 | 2 | 1 |
| South Nandi Forest | 0 | 2 | 2 | 1 | 3 | 3 |
| Taita Hills Forests | 2 | 2 | 1 | 1 | 2 | 2 |
| Tana River Delta | 1 | 2 | 0 | 1 | 1 | 1 |
| Tsavo East National Park | 0 | | 2 | | 2 | |
| Tsavo West National Park | 2 | 2 | 2 | 2 | 3 | 2 |
| Yala Swamp Complex | 2 | 2 | 2 | 1 | 1 | 1 |