Series No. 6

# Important Bird Areas in Uganda

## Status and Trends 2010

May 2011

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for birds
for people
for ever

# Important Bird Areas in Uganda
## Status and Trends
### May 2011

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## Executive summary

The 2010 Status and Trend indices clearly indicates that the Uganda Wildlife Authority, National Forest Authority and Wetland Management Authority and the different stakeholders need to work together to safeguard biodiversity loss in Uganda. General analyses show slight improvement in status for all IBAs in Uganda when combined and maintained just above '*Near Favourable*' conditions. It also shows that the average pressure index increased to a rating score of "*Medium*" Initially the overall conservation efforts in all the IBAs registered significant progress up to 2008 but declined in 2009 and even declined further in 2010.

The baseline analyses of 2001 to 2008 indicate improvement in the status of Protected Area IBAs. The 2009 and 2010 analyses also show general improvement in the status of Protected Area IBAs. Meanwhile, the 2001 baseline index for pressures in Protected Areas increased in 2008, subsided in 2009 and increased again in 2010. Conservation efforts in Protected Area have improved in all previous years through 2010.

The condition of IBAs that are Forest Reserves registered declines through the years from baseline year of 2001 to 2008 and even in 2009 at various magnitudes. However, 2010, has registered a reverse trend and some improvement has been realized. Pressure index for Forest Reserve IBAs is below "*Medium*" and shows steady decline from the previous years up to 2010 which is encouraging in conservation terms. Conservation effort have however, continued to decline through the years from 2008, 2009, and 2010.

The status of the wetland IBAs have continued to decline through the years. The Pressure index score recorded is above "*Medium*" in wetland IBAs which show continuous increases in pressures till 2010. Similarly, conservation effort trends in Wetland IBAs have continued to decline. It is the wetlands that receive less attention compared to the other forms of IBAs. The conservation actions for wetlands continue to decline and yet it is already below average.

## List of acronyms

| | |
|---|---|
| IBA | Important Bird Area |
| UWA | Uganda Wildlife Authority |
| NEMA | National Environment Management Authority |
| NFA | National Forest Authority |
| WMD | Wetlands Management Department |
| NBDB | National Biodiversity Data Bank |
| NGO | Non Governmental Organization |
| RSPB | Royal Society for the Protection of Birds |
| CFM | Collaborative Forest Management |
| IUCN | International Union for the Conservation of Nature |
| WCS | Wildlife Conservation Society |
| AfWC | African Waterfowl Census |
| MIST | Management Information SysTem |
| BPM | Bird Population Monitoring |
| SEM | Standard Error of Mean |

# Chapter one

## 1. Introduction

The Important Bird Areas, initiated 15 years ago, has contributed immensely to protection of biodiversity in Uganda. The programme identified 30 IBAs (now 33) and produced a National Directory, advocated for better policies, initiated conservation and livelihood improvement programmes and raised the profile of ten wetlands that are IBAs into Ramsar sites. These are just a few of the many things that came with the IBA programme and biodiversity conservation.

To realize these, NatureUganda involved a number of stakeholders that included government environmental departments such as Uganda Wildlife Authority (UWA), National Forest Authority (NFA), and Wetlands Management Department (WMD). Also involved were various Non Governmental Organizations (NGOs), research institutions and local communities. Today, the IBA programme is well known for bird and biodiversity conservation. In Africa, there are over 1230 IBAs and over 10,000 worldwide.

### What are Important Bird Areas (IBAs)?

IBAs are sites of global conservation importance identified using global threatened birds to locate key sites for conservation across the globe. They are practical tools for conservation. IBAs are identified using standard internationally agreed criteria, which are; objective, quantitative and scientifically defensible. They must however, be large enough to support self-sustaining populations of those birds for which they are designated.

### Aims of the IBA Programme

The function of the IBA programme is to identify and protect a network of sites, at a scale large enough to ensure long term survival of naturally occurring bird populations. It is meant to cover the range of those bird species for which a site-based approach is appropriate. The IBA process has been used to build institutional capacity and set an effective conservation agenda without much technical research exercise.

### IBA monitoring framework

The IBA monitoring framework is used to assess designated IBA and protecting a network of these critical sites for the world's birds. Species and habitat variables are monitored periodically to determine the status of the site and detect changes in one or more variables and this is sequentially done in five questions for it to be successful.

- Why monitor?
- What should we monitor?
- How should we monitor?
- Who should monitor?
- What happens next?

All these questions are important, but the first and last generally receive far less attention than the others. Overall, the reason for monitoring IBAs is clear. We need to understand what is happening to the IBAs in order to adapt our interventions accordingly. To be effective, all information from the monitoring schemes should be integrated. There are many ways to categorize indicators, but the State-Pressure-and-Response (SPR) framework has been widely adopted.

### Why is monitoring and status and trends report IBA important?

Locally and nationally, this is done to detect and act on threats in good time. Assess the effectiveness of conservation efforts and provide information on biodiversity trends. The monitoring programmes have schedules but annual IBA monitoring is the target. To ensure that biodiversity and its habitats are conserved in a good way, we need to monitor these habitats and provide information that will guide management decisions.

### Levels of monitoring

The basic level of monitoring takes the form and advantage of low-level and low-cost opportunities. This seeks to involve local communities in data collection. This simple format allows sharing of responsibilities and encouraging data collection skills development.

The detailed level of monitoring aims to deliver deeper analyses. Considering the robust nature, this may target only specific sites with serious threats and it is very much dependant on available funding. Variables such as impact of interventions and magnitude of threats may be monitored and these need not be using same method. Based on this analysis, the two-tier IBA monitoring framework was developed.

## The SPR model

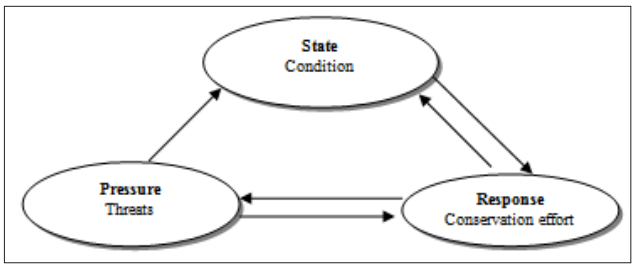



***Fig. 1 Diagrammatic relationship in SPR monitoring model***

## Mode of operation

A simple global monitoring framework for IBAs has been designed. An IBA monitoring form for Uganda has been adopted from this framework. This is a simple and easy to use form designed with an annex of guidelines. The variables have been often referred to as State, Pressure and Response making it simply be called "the SPR model". The three variables (SPR) complement each other and all contribute to the resultant trend analyses.

State or status means the condition of the IBA. The status of the IBAs can be assessed in two ways. The first way is by monitoring the population of the trigger species and relating to the habitat. And the second way is by using habitat as proxy as long as one has sound basis for using habitat. The most important thing to note is the relationship between habitat area and quality and trigger bird population.

Pressures on the IBAs refer to threats that the conservation area face. The IBA monitoring framework and the IBA monitoring form designed for Uganda both emphasize scoring three attributes for pressure. For pressure variable to be fully captured, information on time, scope and severity are required. The timing simply refers to the particular instant or period a threat is occurring. The scope refers to the extent of coverage or the scale of the threat while severity refers to the extent of the resultant effect of the threat.

Response refers to conservation efforts that are being taken to either reduce the threats or improve on the condition of the IBAs. These come in the form of different specific actions stipulated to address specific bottlenecks. These can range from research programmes, livelihood improvement initiatives to community support to conservation projects.

## Method for Bird Population Monitoring

Transects Species Counts (TSC) method is one which the Bird Population Monitoring Scheme has adopted for use across the country. The scheme has established sites in all the major habitat categories. Each of these sites is visited twice a year (January/February and July/August). Counts ideally start around 0700 hours and no later than 0900 hours. Similar starting time is maintained within and across years. Start and end times are recorded in 24 hour format.

# Chapter two

## 2. Methods

### Data capture

IBA monitoring form for Uganda (appendix 2) was adopted from the global IBA monitoring framework. The form is simple, easy to use and contains guidelines on how to collect data on the three variables: State, Pressure and Response. These data collection forms are used by different institutions in monitoring. However, this is not the only means of generating data. Other data sources include articles from national dailies, agricultural and forestry statistics, visitor and tourist monitoring data, management plans and bird monitoring data amongst others.

### Variables considered

IBA Monitoring involves assessing the Status of a few indicators of state (key species or important habitats), the pressure (threats) and responses (interventions) at an IBA (Bennun, 2003). Details of scoring State, Pressure and Response differ, but the resulting scales are the same; Status scores assigned on a simple 4-point scale, from 0 to 3 (BirdLife International, 2006).

### Calculating scores for State

State can be assessed basing on the population of the IBA trigger species, i.e. those species for which the site is recognized as an IBA or the habitats they use. Each species or habitat is scored independently. Using a 'weakest link' approach, the IBA is assigned a status score based on the species/habitat with the 'worst' status. The IBA condition status scores are as follows: *3 = good; 2 = moderate; 1 = poor; 0 = very poor.*

### Calculating scores for Pressures

Pressures or threats are assessed by scoring information on time, scope and severity. Timing refers to the particular period a threat is occurring. Scope refers to the extent of coverage or the scale of the threat while severity refers to the severity of the resultant effect of the threat. Different threats are assessed independently, and using the weakest link, the threat that poses the highest risk is used to assign the score to the whole IBA. Timing, scope and severity scores are combined to give an impact score as follows: *3 = Good; 2 = Moderate; 1 = Poor and 0 = Very Poor*.

### Calculating scores for Responses

Response is assessed by scoring the status of designation as a Protected Area, management planning and conservation efforts at an IBA. Each of these is scored on a scale of 0–3, with the sum showing the overall site response status score: *3 = High; 2 Medium = 1 = Low; and 0 = negligible.*

### Calculating trends

Trends in threats, condition and actions is calculated by comparing status scores between assessments to provide a snapshot in time. Thus, IBA status scores in the second assessment minus the status scores in the first assessment gives trend of status between these two assessments. For each of threat, condition and action, these differences map to a scale ranging from +3 to -3.

### Presentation of information

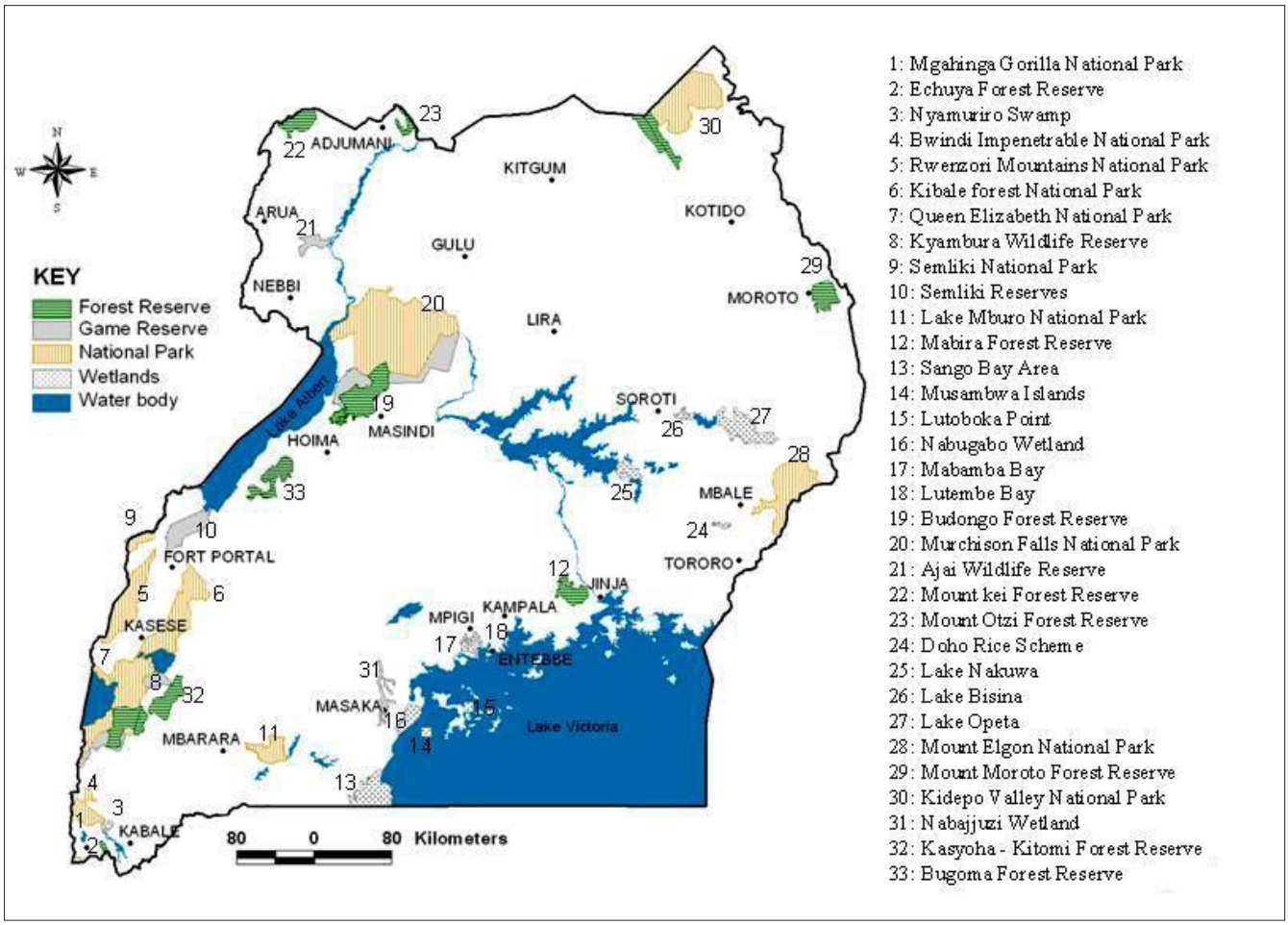
The weakest link' approach: worst case (most threatened species, least intact habitat) determines site score. The focus is on trigger species (those species for which the site is recognized as an IBA) - or habitats they use. Remember that the details of scoring Pressure, State and Response differ, but the resulting scales are the same. The trend scores are calculated by comparing status scores between assessments. This is analyzed using simple summary descriptive statistics and presented using charts and graphs. The differences in values are shown using their means and their standard errors.

### Use of the report

The UWA, NFA, WMD staff have all been involved and have a big input to the monitoring network. Each of the Protected Areas shall have data collected, analysed and used to inform management on what is happening in individual sites. This will be in form of a report as feedback to all the stakeholders. The management authorities are therefore urged to take up and implement the recommendations in the report. This report is intended to be used as an advocacy tool to improve the conservation status of the IBAs and involve more stakeholders in their protection.

# Chapter Three

## 3. Results and discussions




***Map 1 Map of IBAs in Uganda***

## [A] Status

### (a) Status rating

Three status ratings have been considered; Favourable, Near Favourable and Un-favourable. The IBAs generally seem to have been in Good/Favourable conditions (45%) considering that in 2009 only 32% were under this category. This is encouraging since the condition "Favourable" have escalated although the figure of 55% in 2001 remains unattained. Another encouraging trend is also being seen in "Un-favourable" rating down in 2008 and then down further in 2010, from 17% in 2001 to 8% in 2008 and 13% in 2009 and now 6%. Even more efforts towards improving such areas of low status ratings are encouraged. "Near Favourable" conditions in 2010 with 49% and 55% in 2009 and yet this took most of the IBAs in 2008 (72%) noting that most of them have improved, shows that with concerted conservation measures, all may not be lost. The different ratings in status through the years are as shown in fig 2.

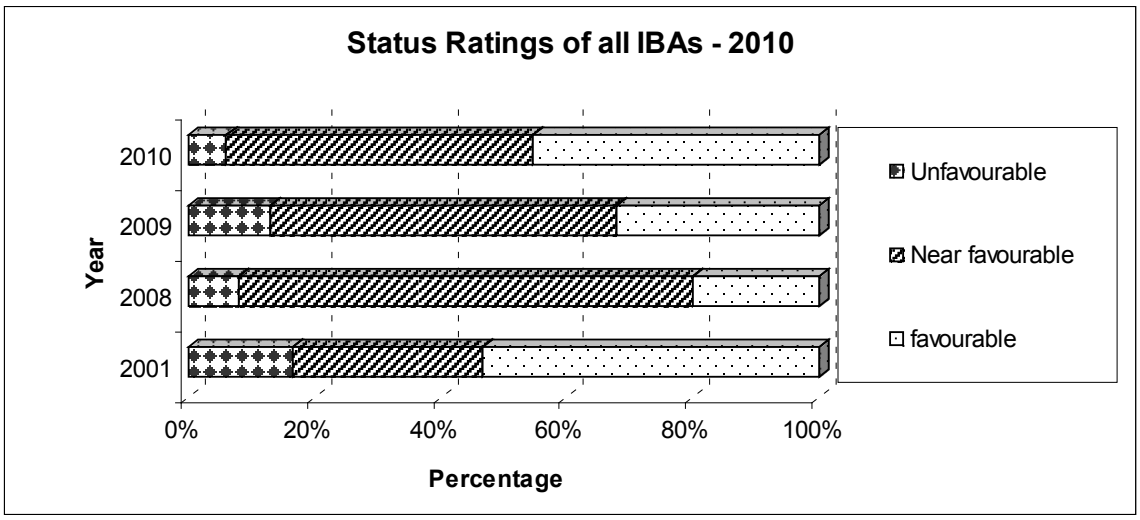



*Fig. 2 Status ratings of all IBA in 2010*

**(b) Status trends - 2010**

The baseline report of 2001, the 2008 analyses and 2009 trends give comparable indices although they vary in the number of IBAs included in the analyses. The 2010 analyses however, give a positive trend for all the IBAs in Uganda. The general trend has been maintained just above moderate conditions. There was general decline in status in 2001 - 2008 periods with 2.37±0.14 - 2.12±0.11 (Mean±SEM) to a steady improvement of 2.19±0.12 – 2.39±0.11 (Mean±SEM) in 2009 – 2010 periods. The most appropriate index of three still seem far from being reached and attaining that quality should be the ultimate in principle although difficult in practice too. The trends in status of IBAs in 2010 are as shown in figure 3 below.

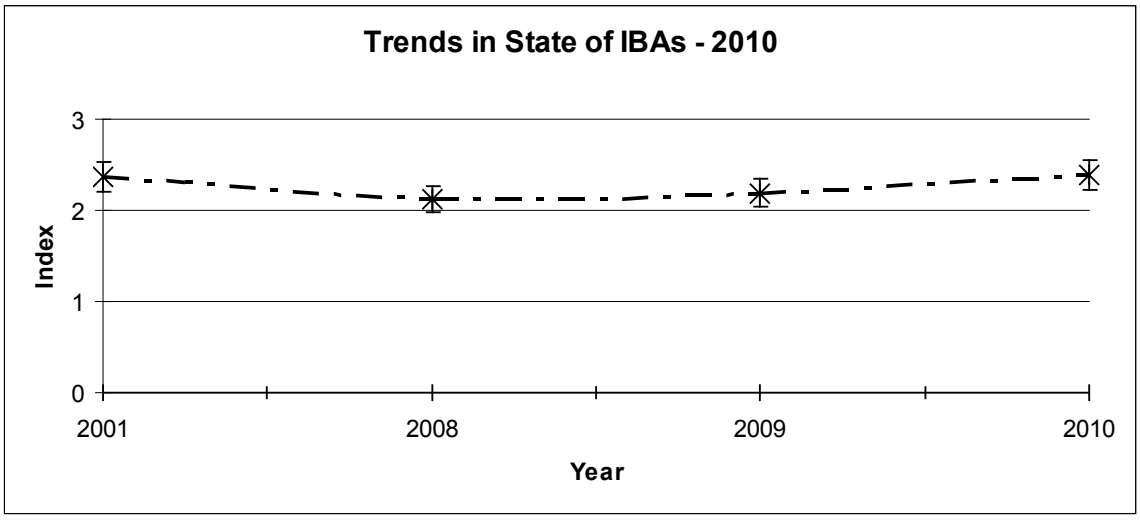



*Fig. 3 Status trends of all IBA in 2010*

**(c) Status trends of different IBA categories - 2010**

In Uganda, three major categories of IBAs may be formed using the majorly management categories namely Protected Areas under the stewardship of the Uganda Wildlife Authority, Forest Reserves managed by the National Forest Authority and Wetland IBAs under the mandate of the Wetlands Management Department. The trends are as follows:

i. The different management regimes (Protected, Forested and Wetlands IBAs) show '*Near Favourable*' conditions. The trends represent improvement except for Wetland IBAs whose graph indicates decline.

ii. The condition of Protected Areas from the baseline analyses of 2001 to 2008 indicate mean scores of 2.08±0.24 and 20.8±0.14 (Mean±SEM, n=13) respectively. The 2009 and 2010 analyses show 2.23±0.17 and 2.46±0.14 (Mean±SEM, n=13) indicating a general improvement in the status of Protected IBAs.

iii. The condition of Forest Reserves registered declines through the years from baseline year 2001 to 2008 and 2009 with index scores of 2.63±0.18, 2.25±0.25 and 2.11±0.2 (Mean±SEM, n=9) respectively. This has this time registered a reverse trend, meaning that some improvement is being realized with an index score of 2.5±0.17 (Mean±SEM, n=10).

iv. The slight improvement in 2009 seems to have been relative. This is because the status of the wetland IBAs have continued to decline through the years. The mean scores representing this are 2.6±0.22, 2.13±0.23 and 2.3±0.26 (Mean±SEM, n=10) for 2001, 2008 and 2009 respectively while an index score of 2.27±0.24 (Mean±SEM, n=11) for 2010.

Both Protected and Forest Reserves showed slight improvement probably because of their national protection status while Wetland IBAs showed declines. Considering that the country recognizes most wetland IBAs as significant sites for biodiversity protection (Ramsar Sites), they therefore should be given similar attention

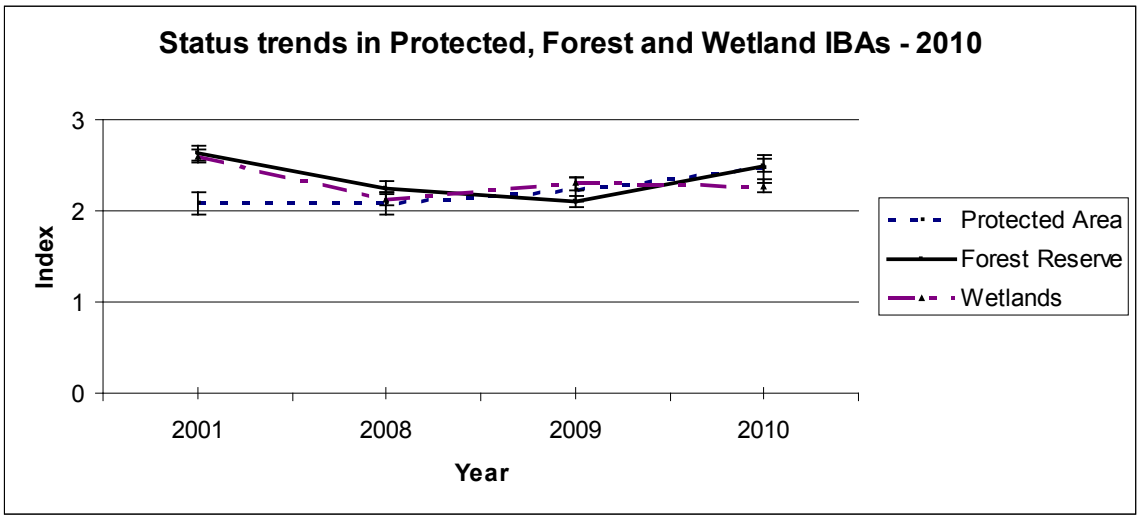



***Fig. 4 Status trends of IBAs in three management regimes - 2010***

**(d) Site specific analyses**

**i. Great White Pelican *Pelecanus onocrotalus* in Queen Elizabeth National Park (UG 007)**

Great White Pelican *P. onocrotalus* is one of the trigger species in Queen Elizabeth National Park (QENP). The main colony is in one of the remote and impenetrable forest areas of the Park. An attempt to count the colony was made in previous years but it was found that it required more time and money. Aerial survey was proposed to assessing the status of the Pelican population. However,

the waters around QENP provide good feeding grounds for this species. Mostly feeding on small fish, the Great White Pelican *P.onocrotalus* spends some time in water looking for food. Roost sites were identified and some are found within the count sites. From the records of the counted areas within QENP, the population of this species has collapsed over the years (Fig 5). A more detailed monitoring may need to be instituted to confirm the trend.

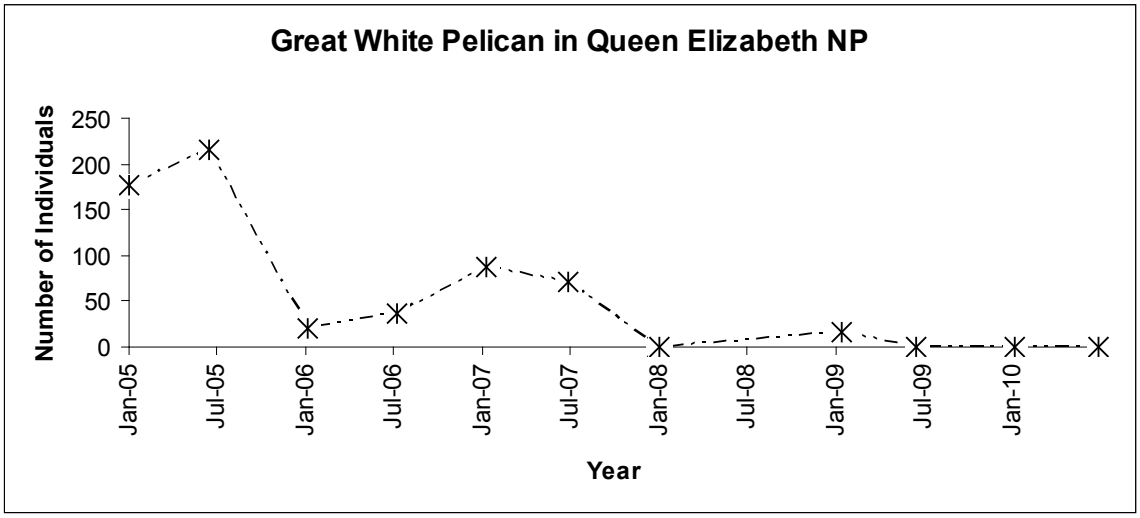



***Fig 5 Great White Pelican P.onocrotalus in Queen Elizabeth National Park***

**ii. White-winged Terns Chlidonias leucopterus in Lutembe Bay**

Lutembe Bay is known to be the best migration stop over for the White-winged Tern *C.leucopterus*. The counts estimates reached over a million on a number of occasions. These numbers dwindled but recent figures show that the numbers are picking up again (Fig 6). Lutembe Bay has had issues with habitat encroachment and most importantly, the roost areas for birds have reduced because the papyrus is extending and occupying the mud banks which are used by these birds as roosts.

However, the trends for the Gull-billed Tern *Sterna nilotica* show the contrary (Fig 7). Gull-billed Tern *S.nilotica* population has been decreasing for the last five years or so. This decrease may show a local scenario and specific to Lutembe Bay only due to habitat conditions or it may reflect an overall country or global decline. This may need to be followed to affirm the assertion that local habitat conditions could be limiting to the species.

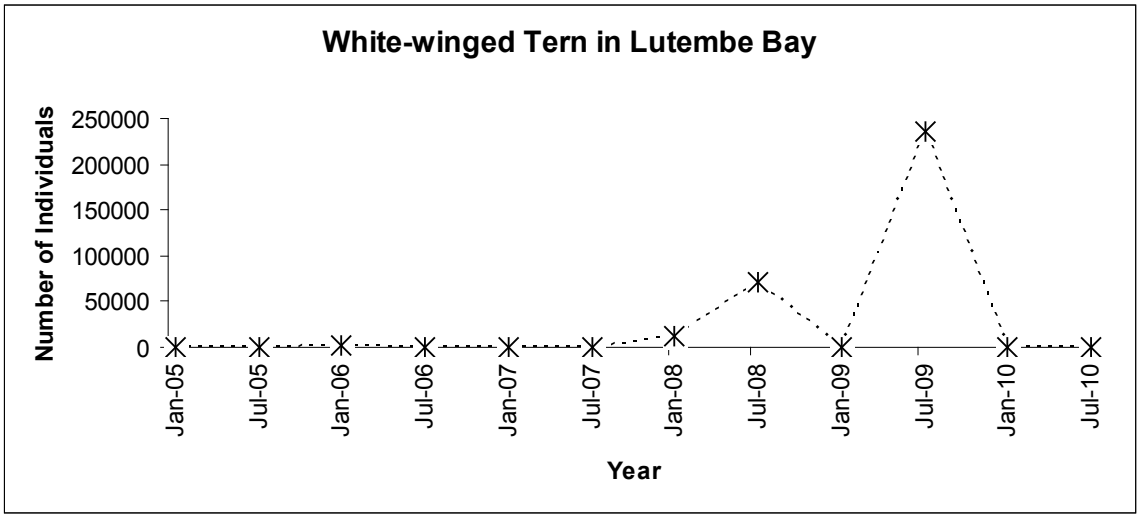



***Fig 6 White-winged Terns C.leucopterus in Lutembe Bay***

### iii. Gull-billed Tern *S.nilotica* in Lutembe Bay

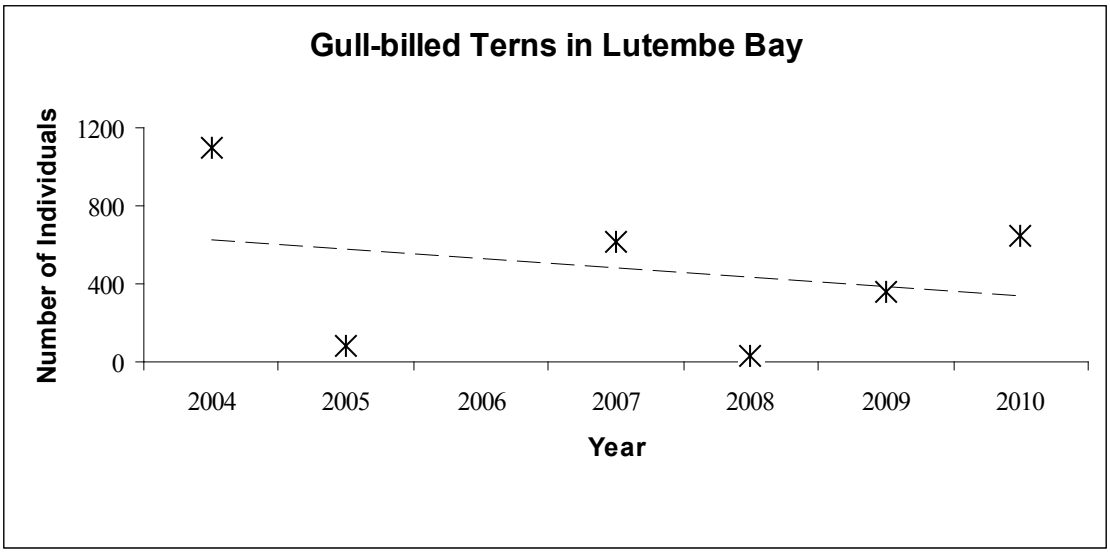



*Fig 7 Gull-billed Tern S.nilotica in Lutembe Bay*

### iv. African Darter *Anhinga rufa* in Murchison Falls National Park

There have been reports of accidental deaths of birds due to unsustainable fishing practice and increased use of outlawed fishing gears. The resultant effect may not be important since very limited numbers are always involved. The species which is the main victim is reported to be the African Darter ***A.rufa*** and an attempt to show this with the population trends may not be conclusive since many other factors come in play. However, the overall population trend does not seem to show any effect in this case as shown in the Fig 8 below.

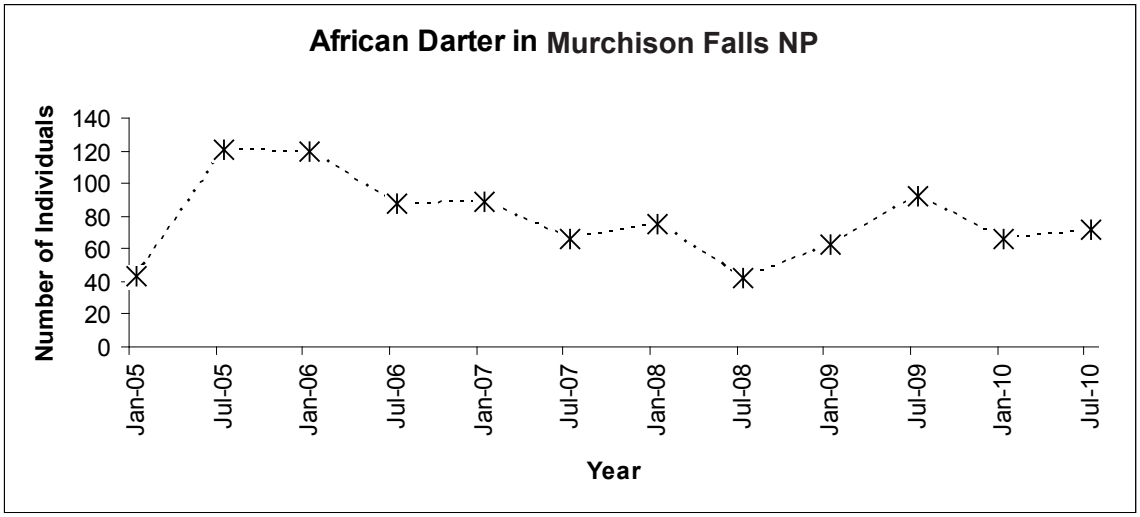



*Fig 8 African Darter A.rufa in Murchison Falls National Park*

### (e) Monthly Counts at Lutembe Bay and Nakiwogo Bay

### i. Number of species and individuals in the two sites

Lutembe Bay has been considered one of the most threatened IBAs in Uganda. Encroachment and habitat changes due to swamp reclamation and agriculture are the main threats. A monthly count was therefore started in order to follow the trends of birds throughout the year. This will help to find

out the most appropriate time of the year to do the counts and what effect threats have to bird populations considering that a similar count was also started in another Bay at Nakiwogo. The two figures below, Figs 9 and 10 shows the number of species and individuals recorded in Lutembe Bay and Nakiwogo Bay in the months of January 2010 to December 2010 respectively. All the figures show high numbers of both individuals and species at the beginning and end of the year, the time migratory birds were expected to have arrived. It should be noted that in 2010, the migration peak occurred in the months of September/October. More time is otherwise required for meaningful trends from the monthly analyses of counts to indicate effects of threats highlighted.

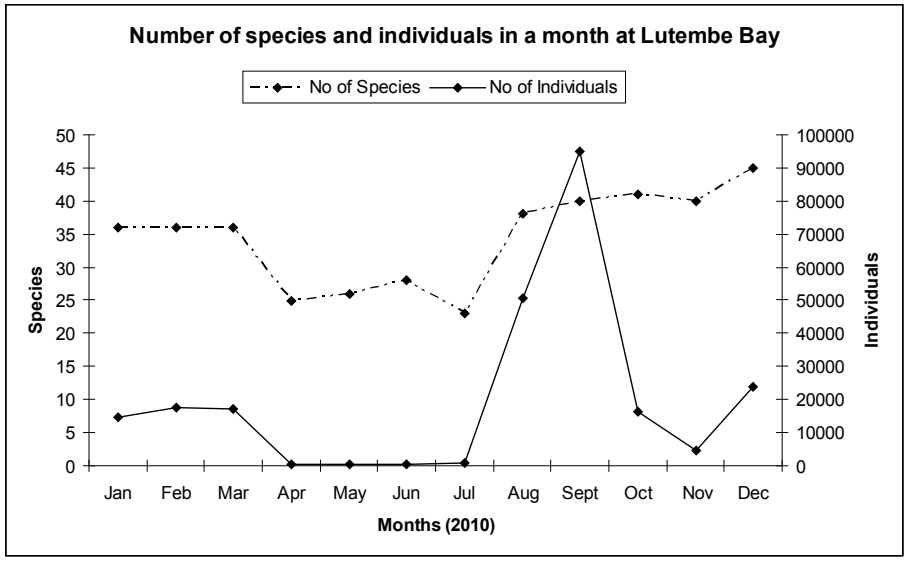



***Fig 9 Number of species and individuals at Lutembe Bay in 2010***

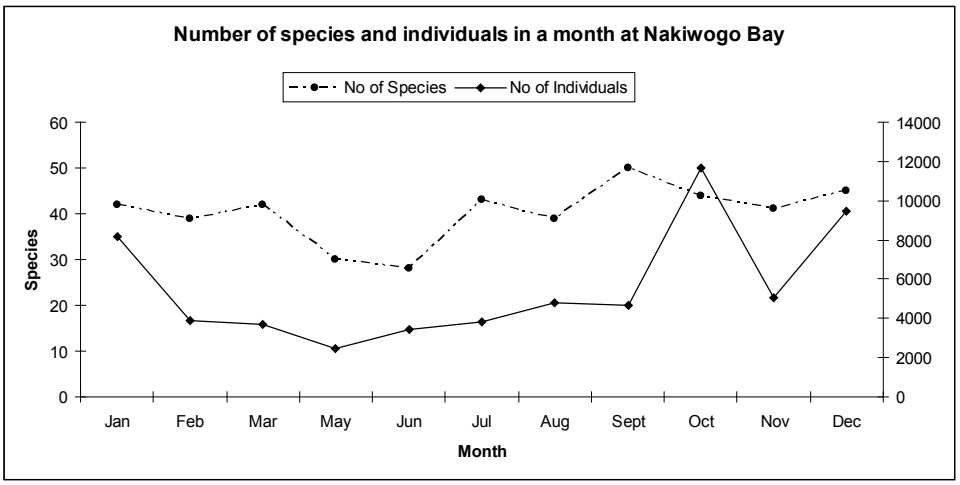



***Fig 10 Number of species and individuals of birds at Nakiwogo Bay in 2010***

**ii. Comparative analyses of species and month of counts**

The monthly counts are also aimed at highlighting effects of threats to specific species if the general trends are not appropriate. Alongside this assumption, it would also indicate the months that may be recommended such that resources can be appropriately maximized rather than conducting counts throughout the year. Three species, White-winged Tern *C.leucopterus*, Grey-headed Gull *Larus cirrocephalus* and Gull-billed Tern *S.nilotica* have been selected. White-winged Tern *C.leucopterus* and Gull-billed Tern *S.nilotica* are Palearctic migrants while Grey-headed Gull *L. cirrocephalus* is resident. The Grey-headed Gull *L. cirrocephalus* being resident occurs throughout the year but the most

appropriate time of count would be May to Oct as shown in Fig 11 while the migrants appear at the beginning and end of year as shown by Fig 12 and 13 for White-winged Tern *C.leucopterus* in Nakiwogo and Lutembe respectively and Fig 14 for the Gull-billed Tern *S.nilotica* in Lutembe.

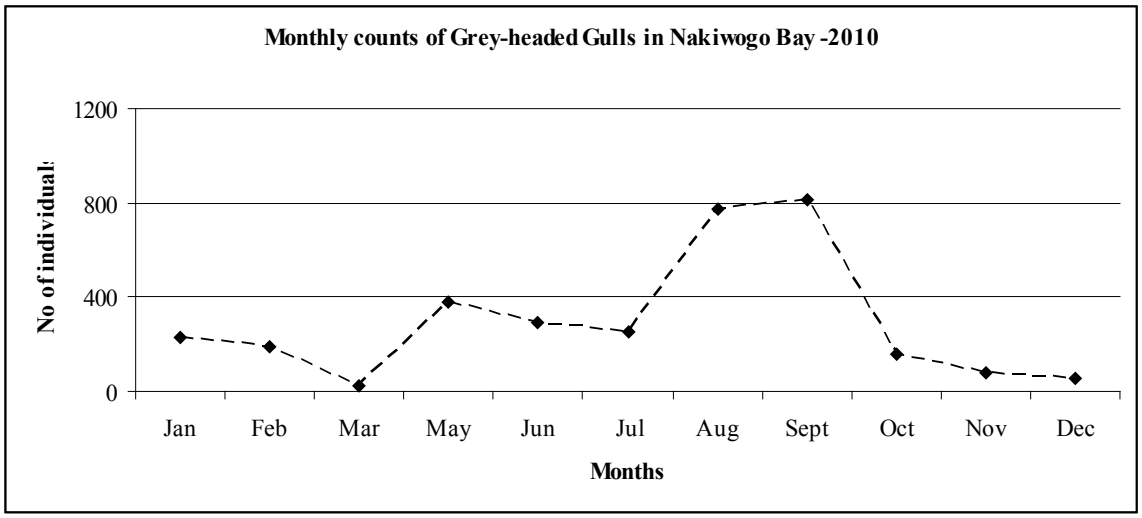



***Fig 11 Number of Grey-headed Gulls L.cirrocephalus in Nakiwogo Bay***

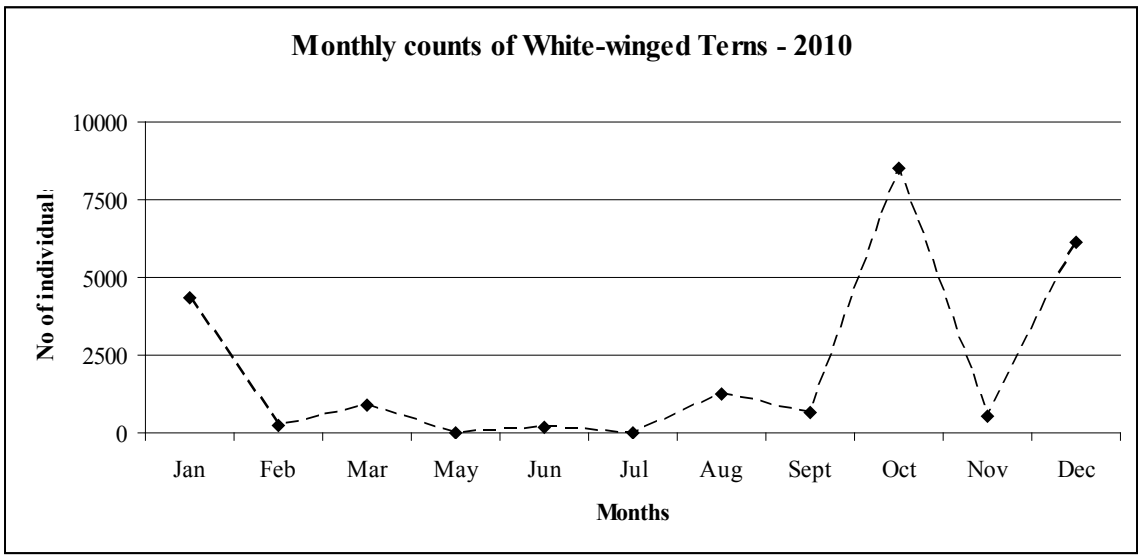



***Fig 12 Number of White-winged Tern C.leucopterus in Nakiwogo Bay***

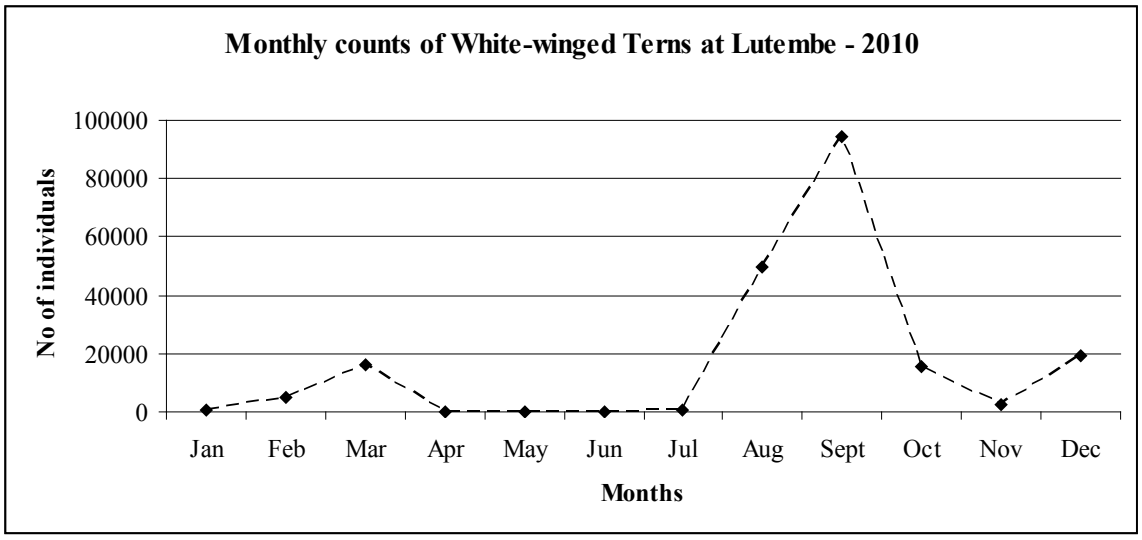



*Fig 13 Number of White-winged Tern C.leucopterus in Lutembe Bay*

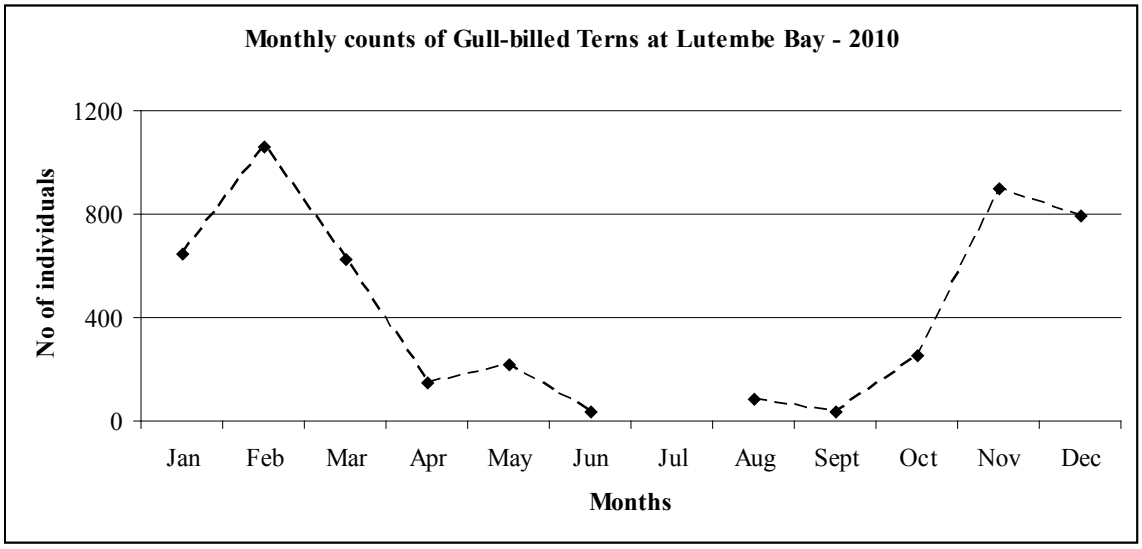



*Fig 14 Number of Gull-billed Tern S.nilotica in Lutembe Bay*

## [B] Pressure or Threats

### (a) Pressure rating

Four pressure ratings have been considered; low, medium, high and very high represented by 40%, 27%, 27% and 6% respectively. Looking at the trends, many threats are shifting to the undesirable end of higher rating scores. This was achieved using the developed systematic approach of capturing indices of threats. The information on threats was gathered from a range of sources and visits to the various sites. It can therefore be noted that the total list may not be exhaustive but comprehensive enough. On average, in terms of different threats each IBA recorded about six different forms, with the lowest having two (2) and the highest thirteen (13). Considering different pressure ratings, the year 2001 and 2009 both registered three categories while 2008 and 2010 registered four including "Very high" as the fourth. The other categories are as seen in the figure 15 below.

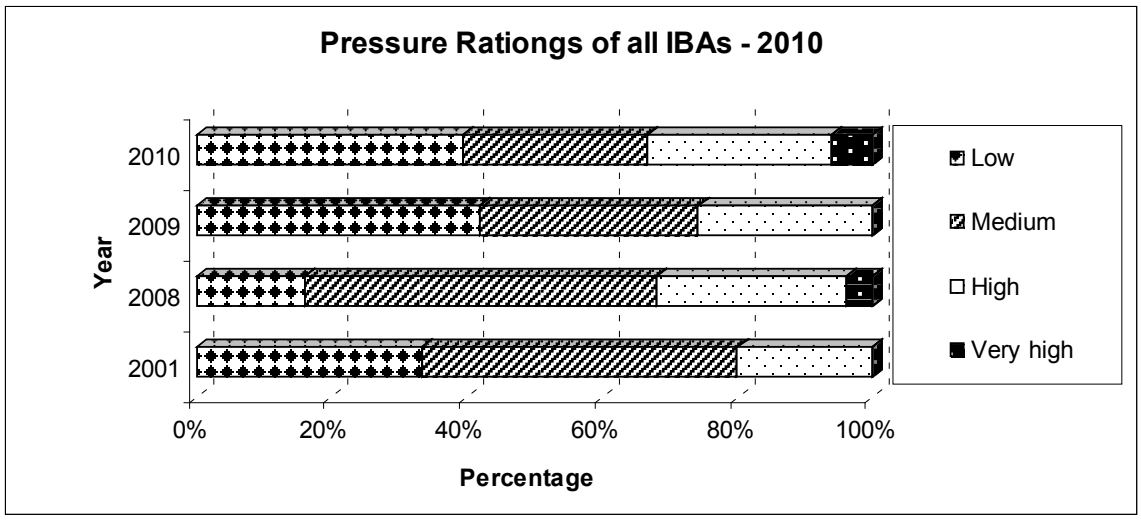



*Fig. 15 Pressure ratings of IBAs - 2010*

### (b) Pressure trends - 2010

The 2001 baseline pressure index score of 0.87±0.13 was lower than the 2008 index score of -1.2±0.15 meaning an increase in pressure. This momentarily improved in 2009 with mean score of -0.84±0.15 (Mean±SEM) but escalated in 2010 with an index score of -1.0±0.17. Overall, the trend of pressures to IBAs is on the increase. The 2010 analyses show that the average pressure index fall on threat rating score of "Medium" (Fig. 16).

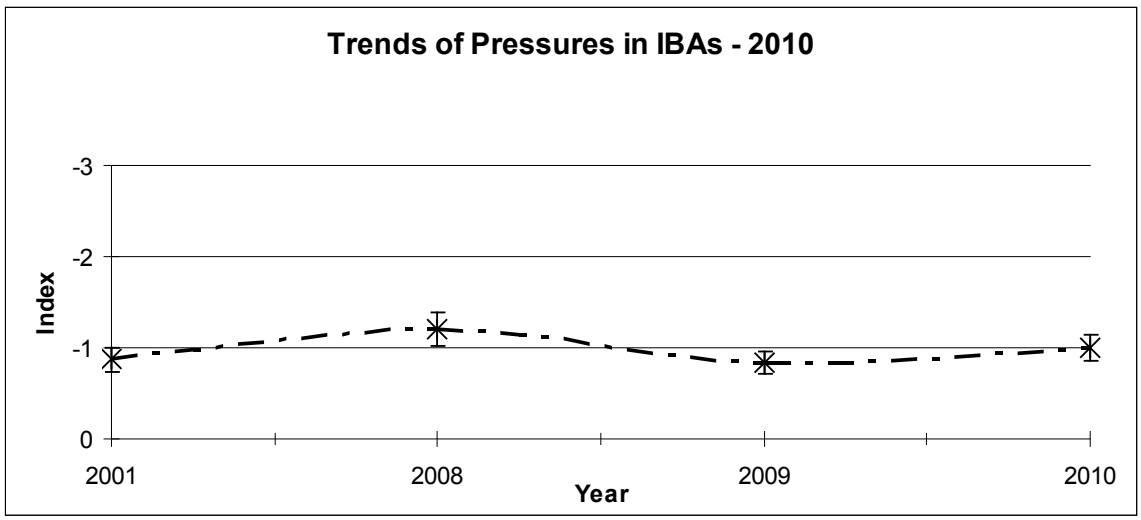



*Fig. 16 Trends in Pressure in all IBAs - 2010*

**(c) Pressure trends of different IBA categories - 2010**

The pressures in National Parks, Forest Reserves and Wetlands have all shown varying levels. Wetlands have shown marked increase in pressures compared to the other categories of IBAs as shown in Figure 17 below.

i. Initially, all the management regimes showed increase in pressures. The pressures however temporarily decreased in all habitat classes but now only Forest Reserves show declining pressures. Both Protected Areas and Wetland IBAs have shown increasing pressures.

ii. The 2001 baseline index for pressures in Protected Areas increased in 2008 and dropped in 2009 and increased again in 2010. The pressure index scores for the years are -0.92±0.24, -1.15±0.19, -0.85±0.22 and -0.92±0.24 (Mean±SEM, n=13) respectively.

iii. Pressure index score for Forest Reserves is below medium and showing steady decline from the previous scores. The 2008 – 2009 of -1±0.41 decline to -0.89±0.26 (Mean±SEM, n=9) in 2009 and further decline of -0.7±0.26 (Mean±SEM, n=10) in 2010 is positive in conservation terms.

iv. The only Pressure index score to have been recorded above "Medium" was in wetland IBAs. This shows continuous increase in pressures till 2008 and 2010 with a temporary halt in 2009. The index scores of -1.38±0.32, -0.7±0.3 (Mean±SEM, n=10) and -1.27±0.36 (Mean±SEM, n=11) for 2008, 2009 and 2010 respectively.

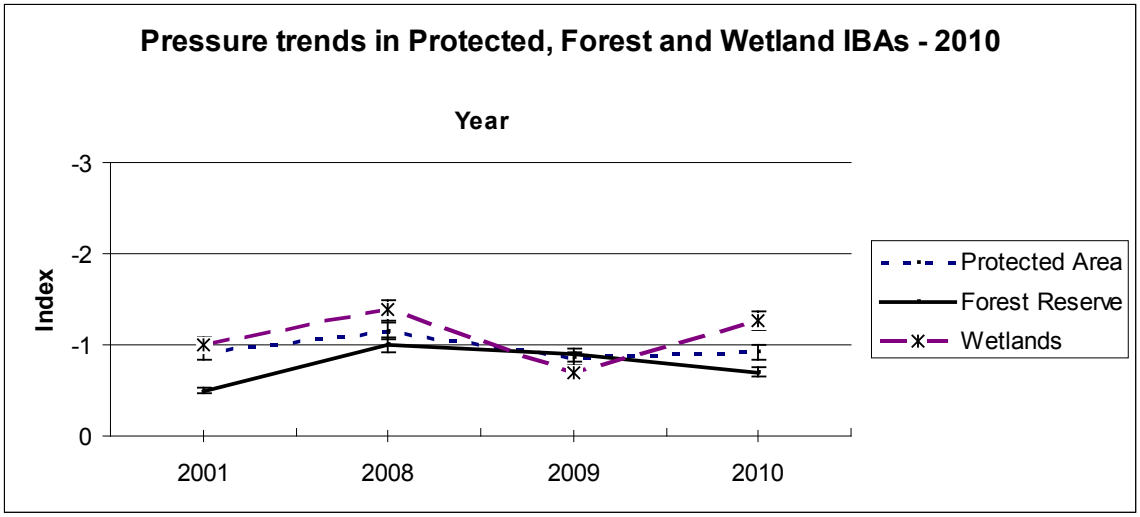



***Fig. 17 Trends in Pressure in IBAs in three management regimes - 2010***

## Threats - 2010

The total of 214 threats at sites was reported in 2010 (Appendix 1). Lutembe Bay remained the most threatened IBA while the least threatened remained Mgahinga National Park. Threat manifestations in IBAs that are not having any formal National Protection are always grave compared to those with formal National Protection status.

### Agricultural expansion or intensification

All kinds of agriculture have been considered within this threat category. Across IBAs in the country, agricultural expansion or agricultural intensification has been shown to increase to 74% (n=23) from 55% (n=17) in the country. Some visits were made to areas reported with such threats and they include potato growing in Nyamuriro Swamp, annual crop growing in Lake Nakuwa, flower farming in Lutembe Bay and rice field expansion in Doho rice scheme.

Although some wetland areas of Nyamuriro have been replanted, continued cultivation in some parts have downgraded such efforts. The receding of Lake Nakuwa has been attributed to the continued deposition of silt into the swamp. There is even an emerging threat of a colonizing plant that is beginning to occupy parts of the papyrus areas and again being linked to the deposition of silt. The population around the Lake is engaged in agriculture with parts of the wetland being turned to crop field.

Doho rice scheme has both artificial (the scheme) and natural (wetland) landscapes. It has been noted that the wetland habitat is being continually taken up by new fields.

### Grazing

Grazing can be either large scale or small holder grazing or forest grazing. Of major concern though are the pastoral communities around these IBAs who encroach and graze their cattle inside of the IBAs. The small holder farms may do this but only at the boundaries. Considering all forms together, the threats have been registered in 71% compared to the 68% (n=22 from 21) of the IBAs. The sites of major concern include Semliki NP, Mt Elgon NP, Nabugabo, KVNP and LMNP that have communities that are majorly pastoral.

### Drainage

Lutembe Bay and Nyamuriro wetland are examples where there is deliberate filling in of the wetlands. It refers to 6% of the IBAs. This is a type of threat which is not a stand alone. It comes because people want to drain for other purposes such as agriculture or construction. Other example are localized and of very minimal magnitude.

### Use of agro-chemicals

Nyamuriro Wetland, Lutembe Bay and Doho Rice Scheme are the three IBAs where use of agricultural chemicals has been reported. This reflects 10% (n=3) off the 33 IBAs, a figure not much different from 2009. As we reported last year, the major threats from chemicals are from flower industries. There should be strict regulations and practices so that the threat is minimized. Unguided disposal of chemicals may lead to serious pollution in places where they occur. The use of field crop chemicals and agro-fertilizers in Nyamuriro wetland and Doho Rice Scheme has continued to the present time.

### Burning of vegetation

The only places that had no incidences of fires included Kibale NP, Doho Rice Scheme, Lutoboka Point and Musambwa Islands. However, this is an increase from 84% to 90% of IBAs. Savannah areas having long dry spells throughout the year are notable potential fire hazard areas, those with serious effects include Kyambura, MFNP, LMNP, Semliki WR, KVNP and Mt Moroto FR. Please note that MFNP and LMNP have continued to experience extensive fires compared to any other National Parks. The resultant effect of fires may over time reflect on the general ecosystem functioning of the areas affected. Management authorities of such areas are advised to take maximum precaution to avoid eventual habitat change.

### Deforestation

Deforestation referred to here means unauthorized and large scale tree cutting. This has been reported in 42% (n=13) up from 26% (n=8) of the IBA. Most Forested IBAs fall victim due to increasing demand for construction materials. Examples of this are Mt Elgon NP, Mt Kei FR, Mt Moroto, Mt Otzi and Sango Bay areas among

others where some form of unauthorized logging has taken place. Selective logging or licensed Pit Sawing or selective cuttings are authorized by mandated institutions. This is done as a management tool or as a revenue generating tool. This is shown in places like LMNP where the PA authorities have allowed communities to cut down parts of the Park as a control to problematic invasive acacia. There are also similar arrangements in Forest Reserves such as Budongo FR and Mabira FR where selective logging is reported. The threat is reported from 16% (n=5) of the IBAs compared to previously 19% (n=6).

### Unsustainable utilization of resource

The resource utilization has remained the most reported threat with incidences from 97% (n=30) up from 90% (n=28) IBAs. Please note that all forms of resource use have been considered here. Considering that some uses are controlled by the management authorities, the resultant effect may be minimal. There are also incidences that lead to degradation of habitat categories when the uses of resources in IBAs are not controlled.

Such may include bamboo shoot harvesting in Mt Elgon NP and Echuya FR and fuel wood harvesting in various sites as shown in annex 1. Aware that natural resources support many rural communities, initiatives that encourage co-management together with the communities are paramount. These communities depend almost entirely on wood energy resources from such areas. *Different forms of wood fuel (round wood and charcoal) reported from 58% (n=18) of the IBAs down from 71% (n=22), which may reflect only a reduction in the magnitude of the threat. Such communities that are dependent on wood fuel are as shown in annex 1.*

### Human Settlement, Infrastructure and Real estate development

The total area in terms of hectares of an IBA may be lost to various forms of encroachment. Such examples include settlement in Mt Elgon NP, Real estate development in Lutembe Bay and Musambwa Island where portions have been lost to housing or settlement. Therefore such a threat needs not to be overlooked as was reported from 16% (n=3) down from 19% 16 (n=6), a reduction that may only show no other new cases in other previously encroached IBAs with similar threats. There is therefore need to demarcate IBA boundaries where this has not been done so that it is easier to track encroachment within IBAs.

### Recreation / tourism

Lutoboka Point has become very popular as a holiday destination. This has encouraged mushrooming of many tourism lodging facilities to be developed. Although in itself it may not be classed as very detrimental as long as proper regulations are followed. Considering that this IBA was designated because of Long-tailed Cormorant Phalacrocorax africanus breeding colonies, the disappearance of the nesting sites will adversely affect the designation status of this IBA. However, tourism is to a larger extent considered conservation friendly once all principles are followed. This lowly classed threat is reported from 26% (n=8) compared to 29% (n=9) of the IBAs in Uganda in 2009. Expansion of Nabugabo beach camp and other similar developments elsewhere needs to be monitored.

### Disturbance to birds

This is sometimes considered low impact threat by many people although it has been reported from 16% (n=5) of the IBAs, same as the 2009 reporting period. Examples of which are in places with some form of agricultural activities such as Doho Rice Scheme and fishing activity such as in Musambwa, Semliki WR and Mabamba Bay. Continued disturbance may lead to eventual shift in roost communities in places where they exist.

### Natural events (landslides, floods and drought)

The country remained largely dry during the year. The two forms of natural events were therefore, firstly landslides in Mt Elgon National Park region due to heavy rain and secondly stressful prolonged dry spells in the Karamoja region that may compound the effect of fires once they occur. Overall, these type of threats occurred in 13% (n=4) of the IBAs, the same as the previous year.

### Extractive industry

Different forms of extractive industry (mining, quarrying and excavation) is reported from 23% (n=7) of the IBAs in 2010 compared to 26% (n=8) in 2009. Taking examples from stone quarrying

in Lutembe Bay, sand mining in Mabamba and Nabugabo among others, some form of control may need to be instituted. Although some strict precautions and regulations are being followed in the oil exploration and proposed Early Production Scheme, their overall effect may still be followed. This follows prospecting activities in the whole Albertine Rift Areas.

### Invasive species or problematic native species

Some of the examples of such species include Paper Mulberry *Broussonetia papyrifera*, Shittim wood Acacia hockii Spectacular cassia *Cassia spectabilis* Babary fig *Opuntia vulgaris* that are found in Mabira FR, LMNP, Budongo FR and QENP respectively. Such problematic species were noted in 29% (n=9) of the IBAs in 2009 compared to 42% (n=13) in 2010. Although it may not reflect the spread of the problem, this shows that the problematic species are being increasingly recognized as potential dangers to the ecosystem. Such occurrences may lead to eventual colonization of the landscape. A succession behaviour that is induced rather than natural. This succession behaviour is seen to be increasing too with 13% (n=4) in 2009 and 16% (n=5) in 2010.

### Illegal fishing/ unsustainable fishing

Making comparisons to 2009, this particular threat has increased in spread from 35% (n=11) to 39% (n=12) IBAs. Although most of them were classed as low impact threats, any form of over-fishing, illegal fishing and use of illegal fishing gear is unacceptable. Obviously most wetland IBAs fall victim while some Protected Areas such as Semliki WR, MFNP and LMNP experience illegal fishing.

### Water abstraction

Water abstraction is being reported from 10% (n=3) compared to 13% (n=4) in the previous year. The gravitational water scheme in Rwenzori NP has been completed and it is seen to have not created much effect to the habitat.

However, the importance of wetland IBAs as a source of water to the communities and the economic activities should be recognized. Examples of which remain to be Lutembe Bay, Mabamba wetland and Nabajjuzi wetland that continue to be the main source of water for both the flower industry and the communities.

### Bird control / killing

Last year we reported that in two IBAs 6% (n=2), there was some form of bird persecution. This has however changed since one site had no such activity repeated bringing down the number to 3% (n=1). The killing of birds using poison in Doho Rice Scheme was not reported despite previous incidences.

## [C] Conservation efforts

### (a) Conservation effort rating

Four conservation effort ratings have been considered. The categories have been classified as negligible, low, medium and high. The figure shows that 2010 had many IBAs with 'high' response (45%) compared to 2009 (39%). There is marked improvement from the baseline year 2001 with only 7%. It is even more encouraging to see many IBAs with 'medium' response (30%) in 2010. this therefore means that at least 75% of all IBAs in Uganda have got considerable conservation efforts being implemented in them when the two ratings of "High and Medium" are considered together. The other conservation efforts ratings are as shown in the figure 18 below.

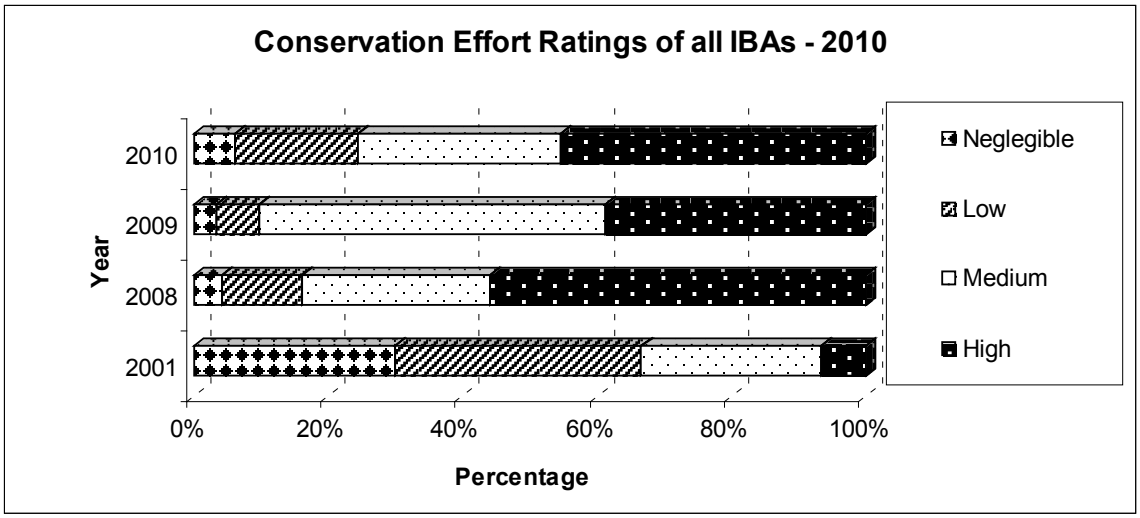



*Fig. 18 Conservation effort ratings - 2010*

### (b) Conservation effort trends - 2010

Site specific actions, designation processes and management planning processes contribute to the overall index score. Many IBAs have conservation actions going on. However, there are also many sites that are requiring more actions since they are faced with more pressing threats. Initially the overall conservation processes in all the IBAs registered significant progress but declined in 2009 with an index score of 2.26±0.13 (Mean±SEM, n=13) and declined further in 2010 to an index score of 2.15±0.16 (Mean±SEM, n=13). The Figure 19 below shows the overall conservation efforts at sites.

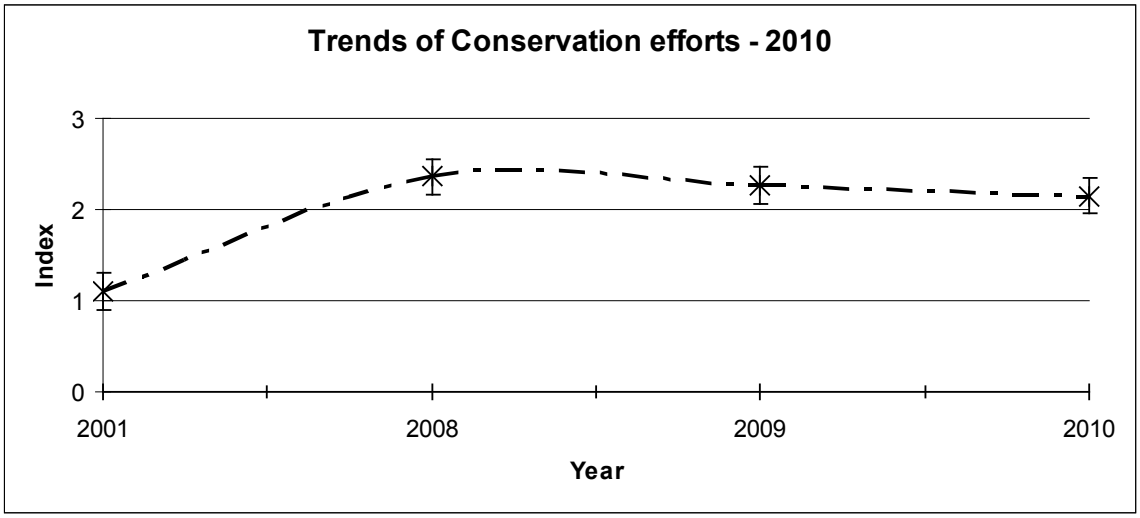



*Fig. 19 Trends in conservation efforts in all IBAs - 2010*

**(c) Conservation efforts trends in different IBA categories - 2010**

i. Protected Areas, Forested IBAs and Wetland IBAs experience different conservation efforts. Up to 2008, all three management regimes showed similar behaviour although at various scales. This however changed later on with improvements being seen in Protected Areas only. The figure 20 below shows that:

ii. Conservation efforts in Protected Area have improved. The index score has improved in 2010 with 2.92±0.08 having been slightly lower in both the previous two years with 2008 registering 2.77±0.12 and 2009 having 2.62±0.14 (Mean±SEM, n=13) as in figure 20 below.

iii. Conservation effort trends in Forest Reserves have however, continued to decline through the years 2008, 2009, and 2010 with index scores of 2.5±0.5,2.44±0.16 (Mean±SEM, n=9) and 2.0±0.3 (Mean±SEM, n=10) respectively. It is worth noting that the overall index score for Forest Reserves have dropped to a rating of "Medium".

iv. Similarly, conservation effort trends in Wetland IBAs have continued to decline. It is the wetlands that are receiving less attention compared to the other forms of IBAs. The index scores for 2008, 2009, and 2010 show declining trends as 1.63±0.32, 1.6±0.22 (Mean±SEM, n=10) and 1.27±0.19 (Mean±SEM, n=11) respectively. The conservation actions for wetlands continue to drop and yet it is below average.

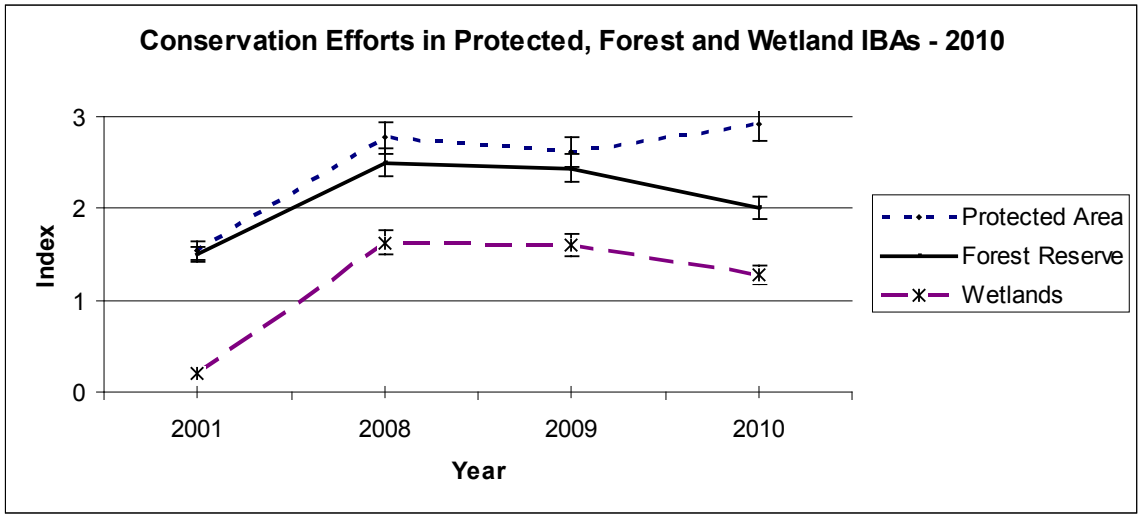



***Fig. 20 Trends in conservation efforts in IBAs in three management regimes - 2010***

**(d) Some examples of site actions**

The decision of National Forest Authority (NFA) to work through Forest Supervisors and Patrol Men has been effective controlling threats in areas where such man power are adequate. For example, Mabira Forest Reserve alone has nine stations each with a Supervisor and two Patrol Men. This kind of structure may be effective if it can be out scaled to other Forest IBAs where capacity is evidently wanting. The continued work of the Uganda Wildlife Authority (UWA), on the monitoring through rangers on patrol is good for wide coverage especially for the law enforcement unit.

This promotes the vigilance to the threats that biodiversity and the habitat they are in. Wetlands Management Department presence and activities are generally thin although most of the wetland IBAs overlap Ramsar Sites which should be given more attention for their importance. However, there are limited government efforts and capacity to improve wetland management in the country.

**(i) Research and Conservation**

***Nature***Uganda has continued to do research in different aspects such as species monitoring, habitat monitoring and in areas of impacts of interventions or developments. The information generated helps to guide conservation actions. At the moment, data storage is by National Biodiversity Data Bank that uses it to produce the biannual state of Uganda's biodiversity report. Such information is helpful in the production of advocacy materials, reviewed papers and other publications. It is important that the information generated is widely distribution especially in new areas such as climate change. This eventually highlights what we ought to know so that we prepare adequately for site actions.

**(ii) Livelihood interventions**

Community livelihood interventions have been one of the core conservation strategies of most NGOs working in IBAs in Uganda. ***Nature***Uganda has continued to support livelihood improvement interventions in Echuya FR, Kasyoha – Kitomi and Nabajjuzi Wetland. Two new CFM agreements were signed in 2010 between NFA and the communities in Kasyoha – Kitomi bringing the total of CFM agreements facilitated by ***Nature***Uganda to Eleven. CFM work in all these areas have been consolidated through enhanced community livelihood improvement strategies.

**(iii) Advocacy work**

Realising that Oil and Gas exploration would affect at least five PAs, a group of NGOs formed a coalition named Civil Society Coalition on Oil and Gas, and ***Nature***Uganda is a member. This coalition assesses how standards are being adhered to in exploration and production areas. Additionally, ***Nature***Uganda participated in training on basic understanding of sustainable oil and gas exploration and production in PAs and a review of Hydro power master Plan which suggests development of various sites in protected areas notably Murchison Falls National Park (MFNP) and Karuma Wildlife Reserve (KWR).

The support of formation of five Community Conservation Areas (CCAs) for inclusion into the National Protected Areas network is another item worth noting. These CCAs are annexed to Pian Upe WR and Lake Mburo National Park and therefore would benefit biodiversity conservation. ***Nature***Uganda, IUCN, Uganda Wildlife Society and Wetlands Management supported the development of Community Conservation Areas Action Plans for these five CCAs.

As a member of the National Committee on Climate Change, ***Nature***Uganda contributed to the committee's tasks of evaluating and advising on areas of climate change and how the country should move in this area without compromising biodiversity conservation. Additionally, the public were kept informed on various issues through public dialogue meetings that included topics on the conservation of Uganda's wetlands and its ability to provide ecosystem services. Secondly issues on climate change impacts on biodiversity and livelihoods were also discussed.

With controversial issues such as sport hunting being questioned, the society organized a Public Talk to highlight the effects of sport hunting to the existence of biodiversity especially in protected areas. Other interesting topics included the effects of vegetation clearing and tree cutting and focusing on land slides in Mt Elgon National Park.

**(iv) Site Support Groups**

These are the entry nodes for community actions in places where they exist. The SSGs at Musambwa Island, Lutembe Bay, Mabamba Bay, Echuya FR and Lake Katwe all played different roles in their various capacities to promote wise use approaches. Notably, is the participation in the Big Birding Day that was aimed at promoting tourism in the country. These sites demonstrated case studies where communities are able to engage, manage and benefit from tourism options. Continued collaboration with the SSGs has enabled NatureUganda to monitor impacts of interventions and major development in some sites. Threat monitoring in different IBAs where SSGs are present becomes much easier than in places where they are not.

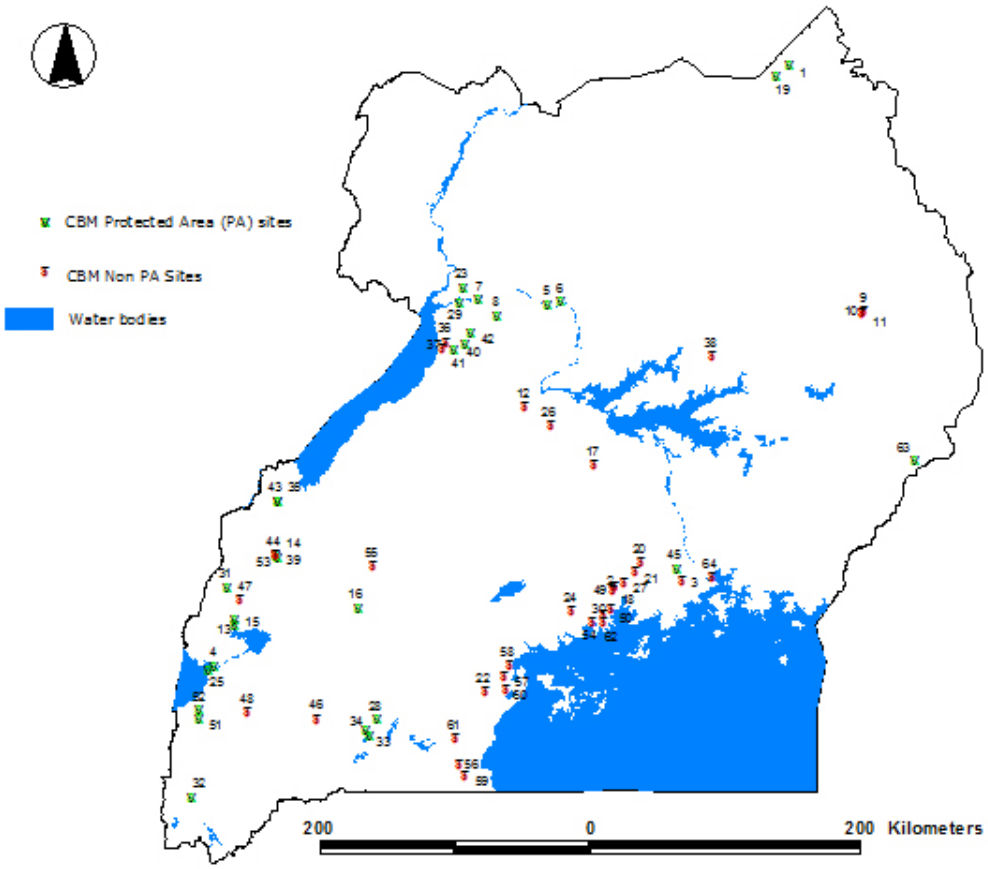
**(v) Sustainability strategies**

A new concept of sustaining community programmes through a Village Enterprise Fund has been a welcome model. Some of these are being given to organised groups through grants. For example the Budongo Chimpanzees project through the Jane Goodall Institute has made this a model part of the programme for provision of alternative income. The Carbon trade and Carbon credits that are being promoted by Eco-Trust Uganda in Budongo FR and Bugoma FR is another sustainable community initiative. Grants inform of carbon funds to plant indigenous trees for carbon sequestration and at the same time promote the conservation of the IBAs that such communities live near need to be promoted in other places too.

# Chapter Four

## 4. Bird Population Monitoring (BPM) Scheme

### (a) Site coverage of the scheme




*Map 2 Distribution of BPM sites*

| ID | Site Name | ID | Site Name | ID | Site Name | ID | Site Name |
|---|---|---|---|---|---|---|---|
| 1 | Apoka | 17 | Katuugo-Nakasongola | 33 | Rwonyo Gate | 49 | Makerere University |
| 2 | Bahai Temple | 18 | Katwadde | 34 | Sanga Gate | 50 | Lubowa Estate |
| 3 | Bulyasi-Mabira | 19 | Kidepo River | 35 | Semliki Safari Lodge | 51 | KK Forest 1 |
| 4 | Channel Track | 20 | Kifu | 36 | Waiga North | 52 | KK Forest 2 |
| 5 | Chobe Acacia | 21 | Kiweebwa | 37 | Waiga South | 53 | Kanyawara Shambas |
| 6 | Chobe Terminalia | 22 | Kumbu Forest-Nabajjuzi | 38 | Soroti Railway | 54 | Mabamba |
| 7 | Falls Woodland | 23 | MF Palms | 39 | Kibale Forest (K14) | 55 | Kyegegwa West |
| 8 | Imperata Gate | 24 | Mpanga | 40 | Budongo1 | 56 | Phoenix Savanna |
| 9 | Iriri-impeded drainage | 25 | Mweya Peninsula | 41 | Budongo2 | 57 | Kayanja Savanna |
| 10 | Iriri Acassia | 26 | Nakitoma | 42 | Budongo3 | 58 | Lukaya Flats |
| 11 | Irriri Combretum | 27 | Namugongo Shrine | 43 | Semliki NP | 59 | Marabigambo Grassland |
| 12 | Kafu Baranus | 28 | Nshara Gate | 44 | Bigodi Wetland Sanctuary | 60 | Nabugabo Grassland |
| 13 | Kamulikwezi | 29 | Paara Woodland | 45 | Mabira FR | 61 | Kyotera South |
| 14 | Kanyawara-Kibale | 30 | Park Alexander | 46 | Nyamitanga Mbarara | 62 | Ziika Forest |
| 15 | Kasese Woodland | 31 | Rwenzori Central Trail | 47 | Kinyaminigo/ Mubuku | 63 | Mt Elgon |
| 16 | Katonga Wildlife Reserve | 32 | Ruhija-Bwindi INP | 48 | Mutara Bushenyi | 64 | Bujjagali |

### (b) Relationship between BPM and IBA monitoring

Whereas BPM monitors bird populations by undertaking regular, repeated counts at a range of sites throughout the country, IBA monitors the state of IBA's by undertaking regular assessments of the condition of bird populations at those sites and the habitat that is found there. In time, habitat information will also be gathered at these sites covered by BPM of which some are in IBAs. The principle of assessing bird populations and at the same time making assessment of threats to birds and habitats within IBAs is being out scaled to BPM sites too. Joint trainings of IBA site monitors and BPM monitors have been done to harmonize the two schemes.

### (c) How can BPM contribute to this exercise?

BPM surveyors know the sites they visit very well. They are likely to be aware of any potential threats to the immediate area. Assessments of sites, habitats and bird populations are valuable everywhere, not just in IBAs. They can easily collect this information that will eventually complement the trends and indices of both schemes. Population trends of birds across BPM sites (Uganda) shall be analysed once the data become sufficient.

# Chapter Five

## 5. Conclusions

The overall 2010 status score has been maintained just above '***Near Favourable***' conditions. The overall threat status has increased while the overall conservation processes in all the IBAs when combined registered significant progress initially (2001 – 2008), but have continued to decline further in 2010 since that time.

When considered alone, there is a general improvement in the status of Protected Areas since 2001. The index for pressures in Protected Areas appear to be increasing but good enough, the conservation efforts in Protected Area have also improved.

The condition of Forest Reserves registered declines through the years from baseline year but there is some improvement being realized. Pressure index score for Forest Reserves is below medium and showing further improvement which is positive in conservation terms. Conservation effort in Forest Reserves have however, continued to decline.

With the slight improvement in 2009 which seemed relative, the status of the wetland IBAs have continued to decline through the years. This is because there has been continuous increase in pressures in wetlands too. Similarly, conservation effort trends in Wetland IBAs have continued to decline. It is the wetlands that are receiving less attention compared to the other forms of IBAs.

# Chapter Six

## 6. Recommendations

### *Nature*Uganda

» Need to complete the qualification of Key Sites as Key Biodiversity Areas and continue to advocate for their protection. These sites include Ramsar Sites, IBAs, Biodiversity Hotspots and Alliance for Zero Extinction (AZE) sites.

» Need to source for funding such that the conservation and community livelihood programmes in critical IBAs can be consolidated.

» Continue negotiating with the local government and central government for appropriate bye-laws, ordinances and policy frameworks that are favourable to conservation initiatives and community biodiversity management.

» Implement the Important Bird Areas sustainability plan in order to achieve the goal of effective monitoring of IBAs in Uganda.

### National Biodiversity Data Bank

» The biannual state of Ugandan's biodiversity has been a very good product of data stored and managed by NBDB. The institution should continue with this and support information processing.

### Wetlands Management Department

» Wetlands Management Department need to improve its capacity at both the district and site levels such that local capacity in site intervention can be enhanced.

» The sector has suffered greatly due to weak enforcement. This therefore seeks to encourage the institution to strategize law enforcement and policy implementation through various structures in order for concrete site actions to be realized.

» Develop working relationships with various stakeholders to halt or eliminate the various forms of wetland encroachment and ecosystem interference.

### National Forest Authority

» Consolidate the institution's initiative of setting up threat monitoring units headed by Forest Supervisors and supported by Patrol Men. This would improve on the management of threats.

» The boundaries of the reserves need to be marked and monitored to reduce on the various forms of encroachment.

» Strengthen community participation in management of the forests and the forest resources.

### Uganda Wildlife Authority

» Strengthen the law enforcement program to further reduce on the illegal activities and consolidate community sensitization programs.

» Work with the various stakeholders to halt the looming threat of de-gazettement and manage the threats posed by implementation of major developments.

# Appendices

## Appendix I: Threats in IBAs – 2010

| Site Code | Site Name | Agricultural intensification/ shifting agriculture | Burning of vegetation | Nomadic grazing / livestock grazing | Use of agro-chemicals | Proliferation of flower farms | Construction of barrages | Allien species / invasive species | Extraction industry/ mining/ quarrying/brick making | Colonization/ habitat change | Oil exploration | Deforestation | Disturbance to birds | Drainage/ filling of swamp/silting | Water abstraction | Firewood collection/ Charcoal burning | Industries/urbanization/ infrastructure/housing | Natural events/floods/ landslides/drought | Recreation/tourism expansion | Selective cutting/ logging | Resource harvesting/exploitation/medicine/bamboo | Bird persecution | Over fishing | Consumptive utilization / hunting | Pollution | Power line/transport way | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UG001 | Mgahinga Gorilla National Park | | * | | | | | * | | | | | | | | | | | | | | | | * | | | 3 |
| UG002 | Echuya Forest Reserve | | * | | | | | | | * | | | | | | * | | | | | * | | | | | * | 5 |
| UG003 | Nyamuriro Swamp | * | * | | * | | | | | * | | | * | * | | | | | | | * | | | | | | 7 |
| UG004 | Bwindi Impenetrable National Park | * | | | | | | | * | | | | | | | | | | * | | * | | | | | | 4 |
| UG005 | Rwenzori Mountains National Park | * | * | * | | | | | | | | | | | | * | | | | * | * | | | | | | 6 |
| UG006 | Kibale National Park | * | | * | | | | * | | | | | | | | * | | | | | * | | | | | | 5 |
| UG007 | Queen Elizabeth National Park | | * | * | | | | * | * | | | | | | | * | | | | * | * | | * | | * | | 9 |
| UG008 | Kyambura Wildlife Reserve | | * | * | | | | | | | | | | | | * | | | | | * | | | | | | 4 |
| UG009 | Semliki National Park | * | * | * | | | | * | | | | * | | | | * | | | * | | * | | | | | * | 9 |
| UG010 | Semliki Reserves | | * | * | | | | * | | | | * | * | | | * | | | | | * | | * | | | | 8 |
| UG011 | Lake Mburo National Park | | * | * | | | | * | | * | | | | | | * | | | | * | * | | * | | | | 8 |
| UG012 | Mabira Forest Reserves | * | * | | | | | * | | | | | | | | * | | | | * | * | | | | | | 6 |
| UG013 | Sango Bay Area | * | * | * | | | | | | | | * | | | | * | | * | | | * | | | | | | 7 |
| UG014 | Musambwa Islands | | | | | | | | | | | | | | | | * | | * | | | | * | | | | 3 |
| UG015 | Lutoboka Point, Ssese Islands | * | | | | | | | | | | * | | | | | | | * | | * | | * | | | | 5 |
| UG016 | Nabugabo Wetland | * | * | * | | | | | * | | | | * | | | | | | * | | * | | * | | | | 8 |
| UG017 | Mabamba Bay | * | * | | | | | | * | | | | | | * | | | | | | * | | * | * | | | 7 |
| UG018 | Lutembe Bay | * | * | | * | * | * | | * | * | | | | * | * | | * | | | | * | | * | | * | | 13 |
| UG019 | Budongo Foerest Reserve | | * | * | | | | * | | | | * | | | | * | | * | * | * | * | * | | | | | 10 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UG020 | Murchison Falls National Park | | * | | | | | | * | | * | | * | | | * | | | * | | * | | * | | | | 8 |
| UG021 | Ajai Wildlife Reserve | * | * | * | | | | * | | | | * | | | | * | | | | | * | | | | | | 7 |
| UG022 | Mount kei Forest Reserve | * | * | * | | | | | | | | * | | | | * | | | | | * | | | | | | 6 |
| UG023 | Mount Otzi Forest Reserve | * | * | * | | | | | | | | * | | | | * | | | | | * | | | | | | 6 |
| UG024 | Doho Rice Scheme | * | | | * | | | | | | | | * | | | | | | | | | | | | | | 3 |
| UG025 | Lake Nakuwa | * | * | * | | | | * | | * | | | | | | | | | | | * | | | | | | 6 |
| UG026 | Lake Bisina | * | * | * | | | | | | | | | | | | | | | | | * | | * | | | | 5 |
| UG027 | Lake Opeta | * | * | * | | | | | | | | | | | | | | | | | * | | * | | | | 5 |
| UG028 | Mount Elgon National Park | * | * | * | | | | * | | | | * | | | | * | * | * | * | | * | | | | | | *0 |
| UG029 | Mount Moroto Forest Reserve | | * | * | | | | | | | | * | | | | * | | | | | * | | | | | | 5 |
| UG030 | Kidepo Valley National Park | * | * | * | | | | | | | | * | | | | * | | * | | | * | | | | | | 7 |
| UG031 | Nabajjuzi Wetland | * | * | * | | | | | | | | | | | * | | | | | | * | | * | | | | 6 |
| UG032 | Kasyoha - Kitomi Forest Reserve | * | * | * | | | | * | * | | | * | | | | | | | | | * | | | | | | 7 |
| UG033 | Bugoma Central Forest Reserve | * | * | * | | | | * | | | | * | | | | | | | | | * | | | | | | 6 |
| | Total | 23 | 28 | 22 | 3 | 1 | 1 | 13 | 7 | 5 | 1 | 13 | 5 | 2 | 3 | 18 | 3 | 4 | 8 | 5 | 30 | 1 | 12 | 2 | 2 | 2 | 214 |
| | % | 74 | 90 | 71 | *0 | 3 | 3 | 42 | 23 | 16 | 3 | 42 | 16 | 6 | 10 | 58 | 10 | 13 | 26 | 16 | 97 | 3 | 39 | 6 | 6 | 6 | |

## Appendix II: IBA monitoring Form

Nature Uganda
The East Africa Natural History Society
P.O. Box 27034 Kampala
Telephone: +256 414 540719
E-mail: nature@natureuganda.org

**Important Bird Area Monitoring Programme for Uganda**

### Help to monitor Important Bird Areas – Key sites for biodiversity conservation!

Please answer the questions below and attach any additional information as indicated in the circulated guidelines herewith. Please give details and quantify changes wherever possible. All information is helpful, at any time. However, if you are resident at site or regular visitor, please try to return a completed form **once** every **year**.

Please return the completed form to ***Nature***Uganda or **Uganda Wildlife Authority** or **NBDB** (MUIENR) at the address below (pg 5) or by e-mail. An e-mail version of this form is available - if you would like to use this, please request one from ***Nature***Uganda.

**Fundamental and/or vital information: (Please use a different form for each site)**

(1). Name of the **IBA** _____ (2).Today's **date**_____

(3). Your **name**:_____ (4). Your **Contacts**: **Postal** address: _____

_____

_____

**Telephone**/fax:_____ **E-mail** address_____

_____

(5). What **IBA area coverage** does this form address? (Tick one box)

(a) the whole IBA ☐ (b) just part of the IBA ☐
If (b), which **part / how much** of the whole area

_____

(6) Are you resident at the IBA? (a) Yes ☐ (b) No ☐
If (b), what was the **date** and **duration** of the visit (s) you are reporting on?

_____

What was the reason for your visit (s)?

_____

(7) Please summarize the current status of the natural habitat in the IBA, based on your observations and information by circling a score from 1 to 4 below:

1. Largely intact and undisturbed
2. Slight decline in habitat area and quality
3. Substantial decline in habitat area and quality
4. Severe decline in habitat area and quality.

_____

(8) Please summarize the level of immediate **future** threats to the IBA, based on your observations and information by circling a score from 1 to 4 below:

1. No obvious immediate threats
2. Slight
3. Substantial
4. Severe

_____

(9) Please give any further information and details that you think may be helpful. Please attach or send more sheets or other documents, reports if necessary. There is no need to answer all the questions or fill in all the tables – please just put down the information that you have available. If possible, please attach a map (a copy of the topographical map, or a simple sketch map) showing the location/extent of the threats/actions that you identify and the location of any records.

## (a) CURRENT STATUS

(i) General comments

(ii) Please if you have, summarize the information on estimates of bird populations, area of natural habitats and the quality of natural habitats important for bird populations at the IBA

| Bird species or groups | Population estimate (Individuals or pairs) | Details/ other comments |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| **Habitat** | ***Area*** | |
| | | |
| | | |
| | | |
| | | |
| | ***Quality*** | |
| | | |
| | | |
| | | |
| | | |

**Habitat area and quality rating**:

| | | |
|---|---|---|
| **Good** | (overall >90% optimum) | **3** |
| **Moderate** | (70 – 90%), | **2** |
| **Poor** | (40 – 70%) | **1** |
| **Very poor** | (< 40%): | **0** |

Note: The percentages are given just as guidelines only: Use your best estimates and please justify your selection in the 'Detail' column.

## (b) THREATS OR CONSERVATION ISSUES

(i) General comments

(ii) Specific threats: Please assess the timing, scope and severity of the threat while using the scores as given below this table. Please give details or comments to explain your assessment and where possible, quantitative information are encouraged. The threats of major concern are those that may affect the bird species for which the IBA was listed. If you feel necessary, please attach the details on a separate sheet of paper.

| **Threat class** | ***Timing*** | ***Scope*** | ***Severity*** | **Details** |
|---|---|---|---|---|
| Abandonment/reduction of land management | | | | |
| Agricultural intensification | | | | |
| Aquaculture or fisheries | | | | |
| Burning of vegetation | | | | |
| Nomadic grazing/livestock grazing | | | | |
| Intensive use of agro-chemicals | | | | |
| Proliferation of flower farms | | | | |
| Consequences of animal/plant introductions | | | | |
| Construction/impact of dyke/dam/barrage | | | | |
| Deforestation | | | | |
| Disturbance to birds | | | | |
| Drainage | | | | |
| Dredging/colonization | | | | |
| Extraction industry | | | | |
| Filling in of wetlands | | | | |
| Firewood collection | | | | |
| Forest grazing | | | | |
| Ground water abstraction | | | | |
| Industrial/urbanization/infrastructure | | | | |
| Natural events | | | | |
| Bird egg collection | | | | |
| Consumptive utilization | | | | |
| **Others** | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**Codes:**

| **Timing** | | **Scope** | | **Severity** | |
|---|---|---|---|---|---|
| Happening now | 3 | Whole area/population (>90%) | 3 | Rapid deterioration | 3 |
| Likely in short term (4yrs) | 2 | Most area/population (50-90%) | 2 | Moderate deterioration | 2 |
| Likely in long term (>4yrs) | 1 | Some of population (10-50%) | 1 | Slow deterioration | 1 |
| Past/no longer limiting | 0 | Small area/few individuals (<10) | 0 | Imperceptible deterioration | 0 |

## (c) CONSERVATION ACTIONS OR RESPONSES

(i) General comments

(ii) Please assess the conservation designation or legal protection status, management planning and conservation action for the site by circling appropriate option and give information on the local conservation groups where appropriate.

| **Conservation action** | **Options / categories** | | | |
|---|---|---|---|---|
| Legal protection % coverage | Whole IBA | Most of IBA | Some of IBA | Little/None of IBA |
| Management planning | Comprehensive enough | Not comprehensive | Just begun the process | No management plan |
| Conservation actions | Effectively implemented | Not effectively done | Initiatives only in place | Little/no action |
| | | | | |
| Local conservation group name (LCG) | **Total number** | **Male members** | **Female members** | **Details / activities** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

(iii) Specific actions or responses: Please assess each action or response and give the major implementers of the action. Please attach separate sheets if details or comments to explain your assessment are necessary. Please give quantitative information as far as possible

| **Action/responses** | **Actions done by:** | | | | **Explanation/details** |
|---|---|---|---|---|---|
| | LCG | NU | Gov't | Other (specify) | |
| Site/area protection | | | | | |
| Resource/habitat protection | | | | | |
| Establishment of local conservation groups | | | | | |
| Development of site action plan | | | | | |
| General management and policing | | | | | |
| Policies and regulations | | | | | |
| Invasive or problematic species control | | | | | |
| Education and awareness | | | | | |
| Capacity building | | | | | |
| Resource use controls / quotas | | | | | |
| Eco-tourism initiatives | | | | | |
| Provision of alternative products | | | | | |
| Promotion of non monetary values | | | | | |
| Partnership development | | | | | |
| Surveys and research | | | | | |
| Conservation projects/actions implemented | | | | | |
| Advocacy/interventions for site | | | | | |
| Publicity generated for site | | | | | |
| Environmental impact assessment | | | | | |
| Mitigation measures implemented | | | | | |
| Other (Specify) | | | | | |
| | | | | | |
| | | | | | |

**Addresses**

NatureUganda, P.O Box 27034, Tufnel Drive, Plot 83, Kamwokya Kampala OR Uganda Wildlife Authority P.O. Box 3530 Kampala or National Biodiversity Data Bank (MUIENR), P.O. Box 7062 Kampala

For more information on Uganda's Important Bird Areas, see 'Important Bird Areas of Uganda' by Achilles Byaruhanga, Pantaleon Kasoma and Derek Pomeroy

Thank you

» Consolidate Community Protected Area Initiative and garner active community participation in the management of Protected Areas.

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