Series 2

IMPORTANT BIRD AREAS IN UGANDA

Status and Trends 2009

for birds
for people
for ever

Important Bird Areas in Uganda

Status and Trends 2009

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Executive summary

The four institutions alongside NatureUganda that are helping in monitoring IBAs are Uganda Wildlife Authority (UWA), National Forest Authority (NFA), Wetlands Management Department (WMD) and National Biodiversity Data Bank (NBDB). These institutions help in management, monitoring and research through various departments. The units involved in information management and community conservation are extremely vital to the processes of IBA monitoring. The community conservation programmes comprise revenue sharing projects, resource utilization, community tourism, conservation education and creation of institutional linkages.

These institutions have accepted to apply the global monitoring framework for IBAs which was customised for Uganda. UWA is applying this for the second year while NFA and WMD have been just introduced to the model. However this simple data capturing format summarizes the variables as State, Pressure and Response which all contribute to the resultant trend analyses.

The year 2001 is used as a baseline for which data is available. It should also be noted that although data for the 30 IBAs were available then, the 2008 analyses took care of only 22 IBAs and an additional two that were added later onto the list, making a total of 24 IBAs whose data were analyzed. Now in 2009, 31 of the total 33 IBAs have been included here in the analyses. The general trend has been maintained at just above moderate conditions. Interestingly the conditions showed a general slight decline from 2001 to 2008 confirmed by decline from 2.37±0.14 to 2.12±0.11 (Mean±SEM) when the analyses were done. This has however started to show an improvement of 2.19±0.12 (Mean±SEM). It should be noted that even with this improvement, the combined analyses do not reach the baseline level yet.

The general trend of pressure in all IBAs have been rising steadily with a mean score of -1.2±0.15 in 2008 and this has improved in 2009 with a mean score of -0.84±0.15 (Mean±SEM). The pressures in all IBAs if possible should be reduced to zero. It should be understood clearly that the trends are well explained over longer periods of time. This therefore means that the drop in pressures in 2009 should be taken with caution since a near future assessment may reflect a different scenario. However, 2009 assessment does reflect an improvement.

The overall trend in responses is impressive however there are some IBAs that still do not have management plans (e.g. Doho Rice Scheme, Lake Opeta, Lake Nakuwa and Lutoboka Point) and some are now out of date (e.g. Lutembe Bay and Nabajjuzi Swamp). The sites are all at different levels of implementing conservation activities. In 2008, the overall conservation processes in all the IBAs registered significant progress with 2.36±0.17 and a slight decline in 2009 with score of 2.26 ±0.13 (Mean±SEM). This is still good since the score is above average. A lot more work is therefore still needed to reduce the threats status further such that the conditions and quality of the habitats are favourable to the biodiversity within them.

The status of National Parks and Wildlife Reserves remained more or less similar up to 2008 and a slight improvement in 2009. The condition of Forest Reserves has continued to have a steady decline through the years (2001, 2008 and 2009 have all registered declines. The conditions of the wetland IBAs also have declined through the years except for a slight improvement in 2009.

Threats in National Parks/ Wildlife Reserves have for a long time been maintained at medium till 2008 and this dropped in 2009. Forest Reserves are below medium and with the gentlest rise of the three classes. This means that, in terms of effect, the Forest Reserves are still experiencing relatively minimal threats when spread throughout the sites. Threats in wetland IBAs are the most important of the three in terms of conservation action. This is because the mean scores for wetland threats rate highest and above the medium point and so efforts to improve the situation are needed.

Response trends in National Parks and Wildlife Reserves are the most encouraging of the three management categories. This is because all the PAs have some level of protection and with significant levels conservation activities. Forest Reserves follow a similar scenario as PAs in 2009. This means that, in terms of conservation activities, protection status and management planning, the Forest Reserves are rated second to National Parks and better than the IBAs in the wetland habitats. Responses levels (conservation efforts) in wetland IBAs are still low. This registered tremendous change by 2006 when many sites were designated as Ramsar sites.

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
KBA	Key Biodiversity Area
EBA	Endemic Bird Area
RSPB	Royal Society for the Protection of Birds
SSG	Site Support Groups
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CFM	Collaborative Forest Management
GEF	Global Environment Facility
IUCN	International Union for the Conservation of Nature
NU	NatureUganda
WCS	Wildlife Conservation Society
CARE	CARE International
WWF	Worldwide Fund for Nature
AfWC	African Waterfowl Census
NP	National Park
WR	Wildlife Reserve
NF	Near Favourable
UF	Un-favourable
ITFC	International Tropical Forest Conservation
IGCP	International Gorilla Conservation Program
CTPH	Conservation through Public Health
MUBFS	Makerere University Biological Field Station
MUIENR	Makerere University Institute of Env't and Natural Resources
FACE	FACE Foundation
LVCEEP	Lake Victoria Catchments Environmental Education Program
FD	Forest Department
CITES	Convention on International Trade on Endangered Species
FID	Forest Inspection Division
NWP	National Wetlands Conservation and Management Programme
DFS	District Forest Services
WD	Wetlands Department
NEA	National Environment Act
WID	Wetlands Inspection Division
FFNC	Faculty of Forestry and Nature Conservation
WARM	Wildlife and Animal Resources Management
PSPs	Permanent Sample Plots
MIST	Management Information SysTems
PA	Protected Area

Chapter one

Introduction

The concept of using Important Bird Areas to protect biodiversity is not new in Uganda. It is over 15 years since the programme was initiated in the country. The programme identified 30 IBAs (now 33) and produced a 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 concept and biodiversity conservation. To realize these, NatureUganda involved a number of stakeholders that included government departments [(Uganda Wildlife Authority (UWA), National Forest Authority (NFA), and Wetlands Management Department (WMD) etc], various Non Governmental Organizations (NGOs), research institutions and local communities. In short, the IBA concept is not strange in the conservation world and it is widely accepted and supported. In Africa, there are over 1230 IBAs and over 10,000 world wide.

What are Important Bird Areas (IBAs)?

IBAs are sites of global conservation importance identified using 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 species for which they are important.

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.

Introduction to IBA monitoring framework

The framework introduces on top of identifying IBAs, the aspects of monitoring and protecting a network of these critical sites for the world's birds. Monitoring here is used to mean the continual collection of information overtime, in order to 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 them 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 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 nature 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. A range of variables may be monitored and these need not be the same. Based on this analysis, the two-tier IBA monitoring framework was developed.

The SPR model

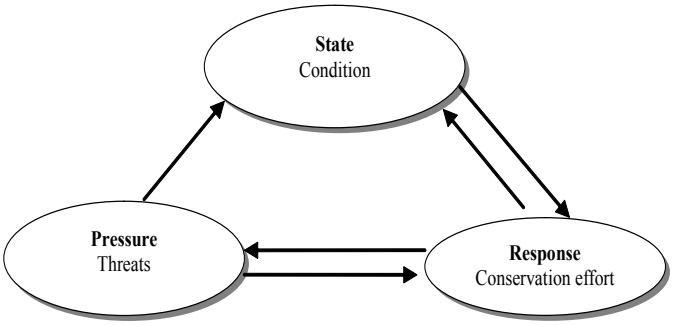


Fig. 1 Diagrammatic relationship in SPR monitoring model

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 instructions or 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 obtaining 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 to know is the relationship between habitat area and quality and bird numbers.

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 and out and out conservation projects.

Parallel monitoring Programmes

This SPR model does not necessarily work on its own. There are many monitoring techniques available that compliment the deliverables of the SPR model in Uganda. For example, the data generated from the AfWC is very helpful in determining the status of an IBA, the illegal incidences generated by MIST is helpful in knowing threat scores and so is wetlands inspection and monitoring.

Ranger Based Data Collection or Monitoring

This is the collection of data on wildlife and human activities by rangers on patrol. The basic tools used are patrol data sheet, GPS and a compass. There are many advantages of this method which include: cheap to collect data because staff are already on site, can cover the whole protected area relatively easily and rangers know the place and have a good idea about what is happening where. It is therefore necessary to manage ranger patrols by planning patrol routes, monitoring performance and evaluating patrol effectiveness. Management Information SysTem (MIST) is a custom-made, easy to use, flexible programme developed to improve management efficiency and effectiveness. It is for provision of up-to-date information needed for planning, monitoring and evaluation.

Permanent Sample Plots (PSPs) monitoring

Much of the knowledge on forest development is gained from focused research on resources. PSPs are means of obtaining such knowledge on growth and eventual yields. The major objectives for establishment of PSPs include: providing forest growth and yield information for efficient management of the forest and estimating the potential productivity of the site. PSPs also aim to quantify the effects of silvicultural treatment on growth and yield and provide data on the effect of management of stands on physical, chemical and biological properties of the site. The functioning of this method is well described in the forestry sector inventories literature.

Wetlands ecological monitoring

This occurs at both local and national levels. It attempts to map land cover through satellite images and photographs to detect change. Digital images or photographs are interpreted and processed into land cover maps and then compared to detect change in either size or land use. However, this is expensive since it requires expertise and time. At district level inventory reports produced are used for detecting change at systems level. It involves parameters such as flora, fauna and water quality. At local level, visits are conducted to sites following reports from informants, sub-counties or districts about encroachment

White-faced Whistling Duck: A target for consumption- Lake Bisina

Chapter Two

Methods

Data capture

A simple global monitoring framework for IBAs has been designed. From this, an IBA monitoring form for Uganda was adopted. This is a simple and easy to use form 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 newspaper stories, 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 recognised 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.

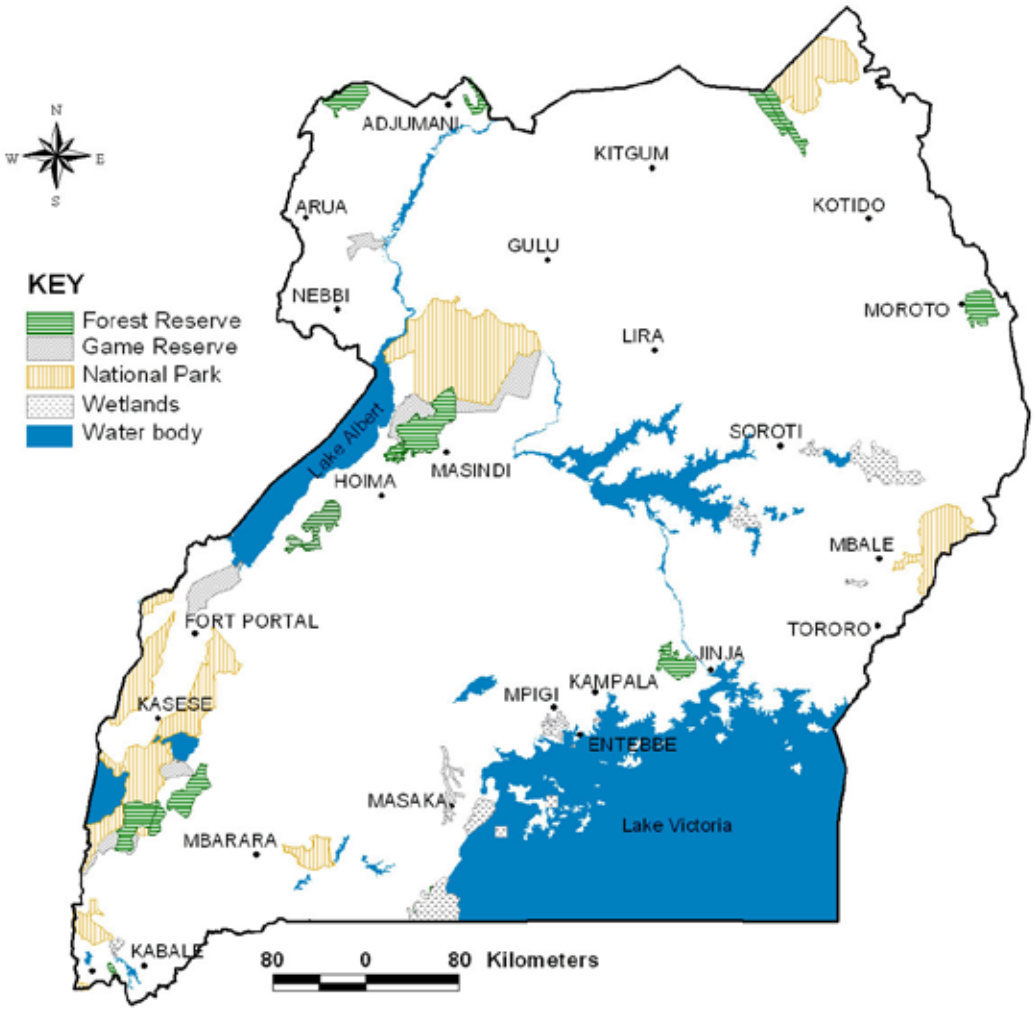
Use of the report

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 site. 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.

Black - headed Gulls: Their population in Lutembe Bay is threatened

Chapter Three

Results and discussions



1. Mgahinga Gorilla National Park
2. Echuya Forest Reserve
3. Nyamuriro Swamp
4. Bwindi Impenetrable National Park
5. Rwenzori Mountains National Park
6. Kibale Forest National Park
7. Queen Elizabeth National Park
8. Kyambura Wildlife Reserve
9. Semliki National Park
10. Semliki Wildlife Reserve
11. Lake Mburo National Park
12. Mabira Forest Reserve
13. Sango Bay Area
14. Musambwa Islands
15. Lutoboka point
16 Nabugabo wetland
17. Mabamba Bay
18. Lutembe Bay
19. Budongo Forest Reserve
20. Muchison Falls National Park
21. Ajai Wildlife Reserve
22. Mt Kei Forest Reserve
23. Mt Otzi Forest Reserve
24. Doho Rice Scheme
25. Lake Nakuwa
26. Lake Bisina
27. Lake Opeta
28. Mt Elgon National Park
29. Mt Moroto Forest Reserve
30. Kidepo Valley National Park
31. Nabajjuzi Wetland
32. Kashoya-Kitomi Forest Resrve
33. Bugoma Forest Reserve

Fig. 2 Location map of Important Bird Areas in Uganda

IBA Code	Name of IBA	Status	IBA code	Name of IBA	Status
UG001	Mgahinga Gorilla NP	Stable	UG018	Lutembe Bay	Small decline
UG002	Echuya FR	Small decline	UG019	Budongo FR	Small decline
UG003	Nyamuriro	Unchanged (UF)	UG020	Murchison Falls NP	Unchanged (NF)
UG004	Bwindi Impenetrable NP	Stable	UG021	Ajai WR	Unchanged (NF)
UG005	Rwenzori Mountains NP	Stable	UG022	Mount Kei FR	Small decline
UG006	Kibale NP	Unchanged (NF)	UG023	Mount Otzi FR	Small decline
UG007	Queen Elizabeth NP	Unchanged (NF)	UG024	Doho Rice scheme	Unchanged (NF)
UG008	Kyambura WR	Small improvement	UG025	Lake Nakuwa	Not assessed
UG009	Semliki NP	Unchanged (NF)	UG026	Lake Bisina	Small improvement
UG010	Semliki Reserves	Unchanged (UF)	UG027	Lake Opeta	Unchanged (NF)
UG011	Lake Mburo NP	Unchanged (NF)	UG028	Mount Elgon NP	Unchanged (NF)
UG012	Mabira FR	Unchanged (NF)	UG029	Mount Moroto FR	Small decline
UG013	Sango Bay Area	Stable	UG030	Kidepo Valley NP	Unchanged (NF)
UG014	Musambwa Islands	Stable	UG031	Nabajjuzi Wetland	Small improvement
UG015	Lutoboka Point	Not assessed	UG032	Kasyoha – Kitomi FR	Unchanged (NF)
UG016	Nabugabo Wetland	Small decline	UG033	Bugoma CFR	Small improvement
UG017	Mabamba Bay	Stable			

Table 1 Summary of status of individual IBAs 2008 – 2009 assessment

[A] Status and trends of conditions 2009

Monitored IBAs in Uganda and their location

There are now 33 IBAs in Uganda (Fig 2). Monitoring is being done with the help of the three main government departments in addition to NatureUganda's monitoring programmes. UWA staff are monitoring 10 National Parks and 3 Wildlife Reserves, NFA staff are monitoring the 7 main Central Forest Reserves while WMD monitors wetland IBAs/ Ramsar sites. There are four Ramsar sites that are either wholly or partly in national parks. These sites are therefore jointly monitored by the two authorities.

Summary of status of individual IBAs 2008 – 2009 assessment

The categories Favourable, Near Favourable, Un-favourable and Very Un-favourable describe IBA conditions signifying good, moderate fair and poor conditions respectively. When an IBA condition changes from one category to the next and depending on the direction, it shows either improvement or decline and sometimes it maintains its status quo. In 2009, 31 of the 33 IBAs were assessed. Table 1 shows the summaries with six IBAs in stable (good) conditions, seven had small declines, four had small improvements and two were in poor condition while 12 IBAs maintained moderate conditions when compared with 2008 assessments. Two IBAs (Lutoboka point and Lake Nakuwa) were not assessed in 2009.

Status categories of IBAs compared (2001 – 2009)

The IBAs generally seem to have been in good (Favourable) conditions than they are now. However, 2008 had 72% of the assessed IBAs in moderate conditions, while 2009 presents 55% under this category. This is a good indication since the numbers of IBAs that are in favourable condition have gone up from 20% in 2008 to 32% in 2009. This is however still less than the 55% in 2001. A 'not so good' trend is also being seen in IBAs in poor conditions (Un-favourable) changing from 17% in 2001 to 8% in 2008 and now 13% in 2009. This means that a lot more pressures are coming up or appropriate interventions are not being made. Note that two IBAs, one wetland and the other a Forest Reserve are not included in this year's assessment. A lot more conservation interventions should target such IBAs with poor conditions for example Semliki Wildlife Reserve, Lutembe Bay and Nyamuriro Swamp while also not ignoring sites that are in moderate state because they too need some level of attention. Such IBAs include Murchison Falls NP, Kidepo Valley NP, Queen Elizabeth NP and others as shown in table 1 above. The comparisons of the categories between the years are as shown in fig 3 below.

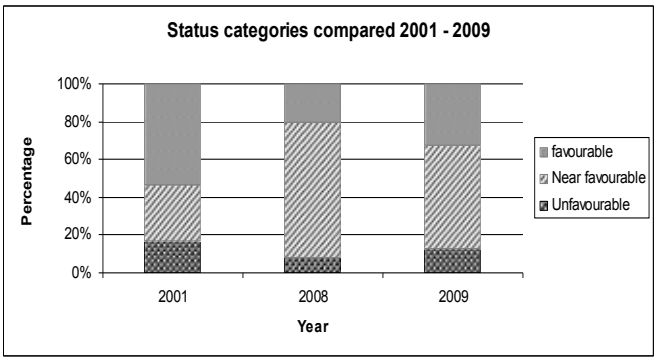


Fig 3. Comparison of status categories 2001, 2008 and 2009

Condition or state of IBAs

(a) Status trends for all IBAs combined

The year 2001 is being used as a baseline for which data is available. It should also be noted that although data for the 30 IBAs were available, the 2008 analyses took care of only 22 IBAs and an additional two that were added later onto the list, making a total of 24 IBAs whose data were analyzed. Now in 2009, 31 of the total 33 IBAs have been included here in the analyses. The general trend has been maintained just above moderate conditions. Interestingly, the conditions showed general decline from 2001 to 2008 showing a drop from 2.37±0.14 to 2.12±0.11 (Mean±SEM). This has however started to show an improvement of 2.19±0.12 (Mean±SEM). It should be noted that even with this improvement, the combined analyses does not reach the baseline level yet.

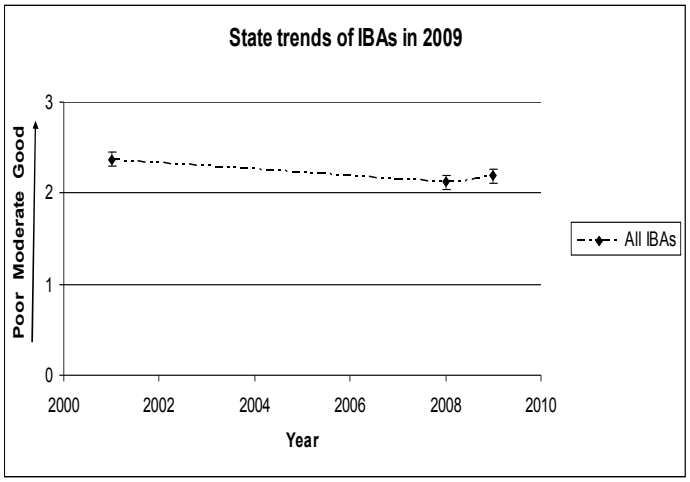


Fig 4 State trends of all IBAs combined

(b) Status trends of IBAs in three management/habitat categories

Sometimes it is not true that the general trend is the same across various habitat types and protected areas categories. Here attempts have been made to class the IBAs into three management categories namely National Parks and Wildlife Reserves (IUCN protection category II), Forested IBAs (National protection status) and Wetland IBAs (Ramsar sites/ no protection). This has shown interesting results as below:

(i) All the three categories (protected, forested and wetlands) fall just above moderate conditions but with varying trends. This means that the different habitat types are being faced with varying level of threats and challenges; a trend which may reflect the level of commitments if they are to be improved.

(ii) The condition of National Parks and Wildlife Reserves remained more or less similar for the 2001 to 2008 analyses with mean scores of 2.08±0.24 and 20.8±0.14 (Mean±SEM, n=13) and with a slight improvement in 2009 of 2.23±0.17 (Mean±SEM, n=13). This therefore shows a positive trend when considered individually.

(iii) The condition of forest Reserves has continued to have a steady decline through the years. Taking 2001 as the baseline, 2008 and 2009 have all registered declines of mean scores of 2.63±0.18, 2.25±0.25 and 2.11±0.2 (Mean±SEM, n=9)respectively. This is however exhibiting a much gentler decline as compared to the wetlands.

(iv) The conditions of the wetland IBAs also have declined through the years except for a slight improvement in 2009. 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.

The trends may reflect the different management regimes that are employed by the respective management authorities. Protected Areas have both national and international protection status probably requiring strict methods. Forest Reserves have national protection status but with limited management authority staff on ground. This is worse for wetlands that are only recognized as important sites (Ramsar) and with even more limited staff on ground

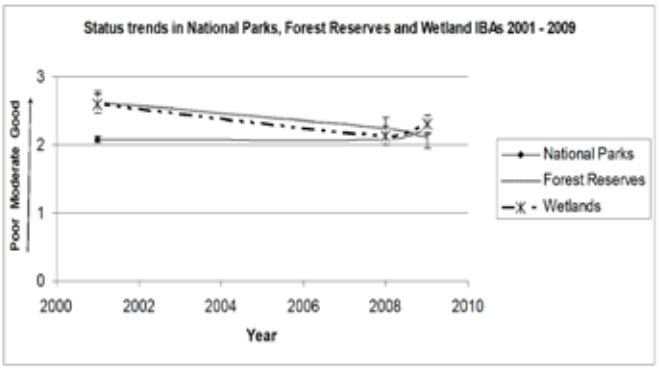


Fig 5 Status trends in National Parks, Forest Reserves and Wetland IBAs

(c) Some site specific trend analyses of species of interest

Bird hunting and its effect on population of target species

For some time, there have been reports on certain species (e.g. ducks and storks) being trapped in Lake Bisina. The mode of hunting/capturing varies. For example, the African Open-billed Storks are poisoned by some members of the community. Although there are no real statistics on the number of birds being trapped or killed, substantial numbers have occasionally been reported by witnesses. This may eventually reflect on the status of the bird's population. At least in the last ten years, the effect of this is not reflected on the population if the census numbers are to be considered. However, further research is needed to determine the impact on species demographic trends. Figure 6 and 7 below show population trends of the White-faced Whistling Duck in Lake Bisina and the African Open-billed Stork in Doho Rice Scheme. The species counts for Ducks show that population seems to have doubled in recent counts while the Storks population has remained stable over the last ten years. For now, the consumptive utilization seems to be having little effect on the population as shown by the two cases.

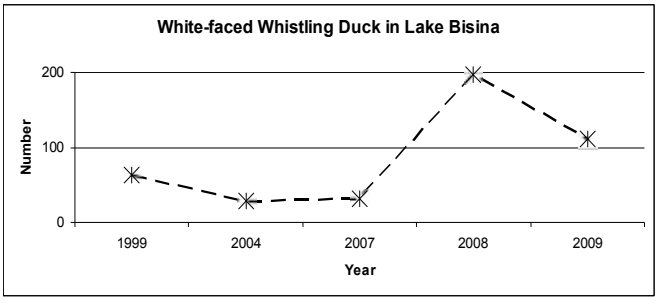


Fig. 6 White-faced Whistling Ducks in Lake Bisina

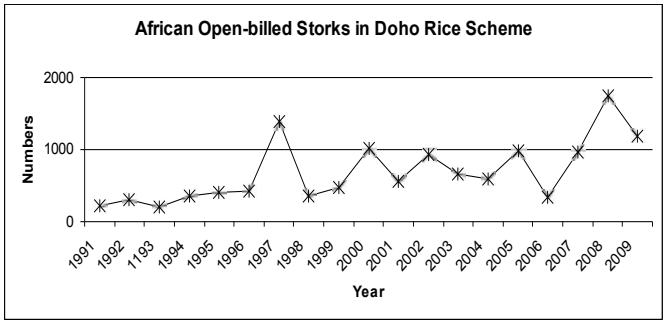


Fig. 7 African Open-billed Stork in Doho Rice Scheme

Human activity (day time fishermen numbers) and the Grey-headed Gull population

The Grey-headed Gulls in Musambwa Island are probably the largest breeding population in Lake Victoria region. This small rocky Island has for long been used by the fishermen as a jetty where they land and some even residing in makeshift structures on the Island. The population of the fishermen has been growing from tens to hundreds. In 2009, the fishermen numbers and the Grey-headed Gull population were monitored in the four quarters in the year to establish some indicative trends. This may need to be repeated for some time if clear correlations are to be established. The fishermen population fluctuated between 150 and 200 as shown in figure 8a below. This seems not to have direct effect on the population of the Grey-headed Gulls as shown in figure 8b. The most important thing to note here is that a threshold for the population of the fishermen not detrimental to the existing breeding birds. This needs to be ascertained such that some management and control measures can be employed.

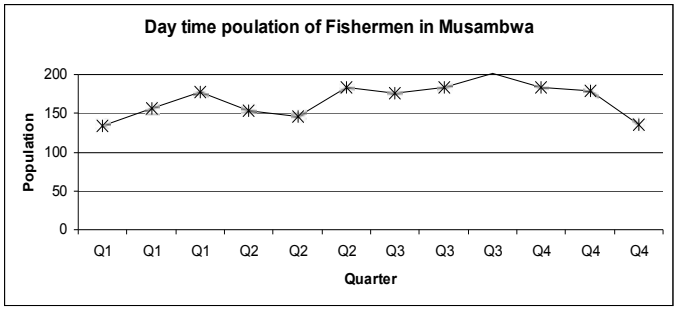


Fig. 8a Day time population of the fishermen in Musambwa Island

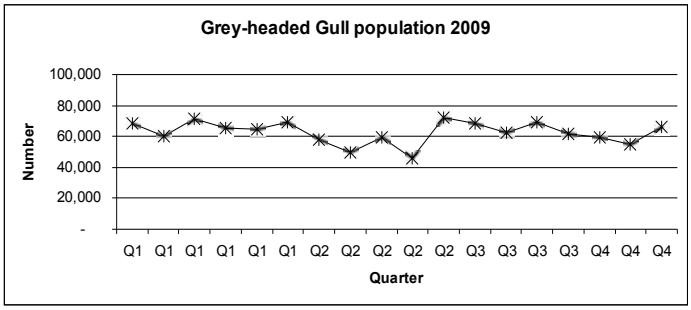


Fig. 8b Quarterly population of the Grey-headed Gulls in Musambwa Island

Protected Areas/ Non Protected Areas species trends

Waterbird population monitoring in Protected Areas have been conducted in Lake Mburo National Park (LMNP), Queen Elizabeth National Park (QENP), Murchison Falls National Park (MFNP) and Kyambura Wildlife Reserve (KWR). LMNP is interesting for resident species such as African Fish Eagles. QENP has interesting records of Palearctic migrants like Gull-billed Terns while KWR has interesting records of Black-

winged Stilts. The populations of Black-winged Stilts have shown a remarkable decrease in the last ten years (Fig 9). The comments from the monitoring teams always show continuous dry spells. The dry conditions have lowered the numbers from thousands to a few hundreds as shown in figure 9. For the Palearctic migrants in QENP, the trends in the last 10 years have remained stable. Specifically, the Gull-billed Terns numbers have been about 2,500 individuals except for the period between 1995 and 2000 when larger congregations were recorded (Fig 10). An even more consistent trend has been shown by Common Sandpiper as reflected in figure 11.

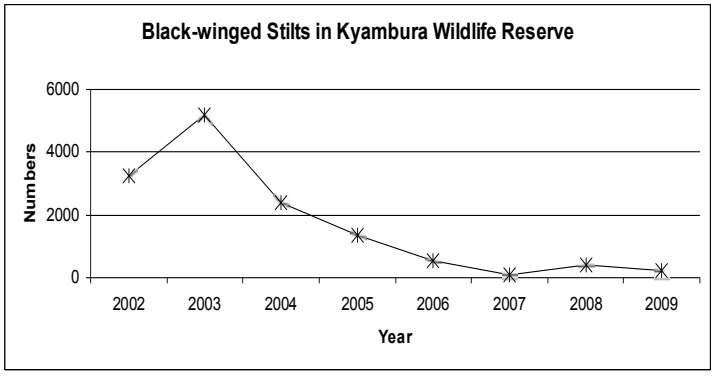


Fig. 9 Black-winged Stilts in Kyambura Wildlife Reserve.

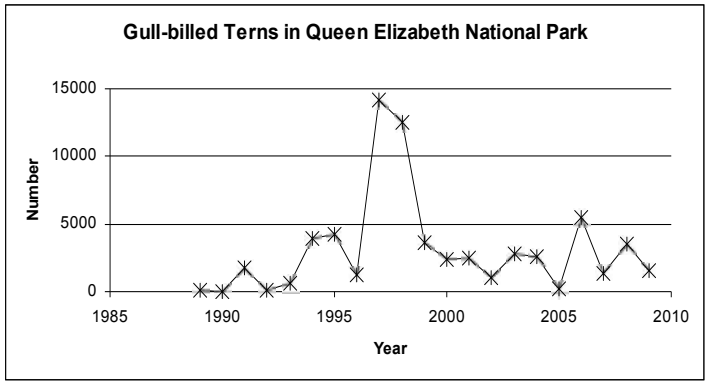


Fig. 10 Gull-billed Terns in Queen Elizabeth National Park

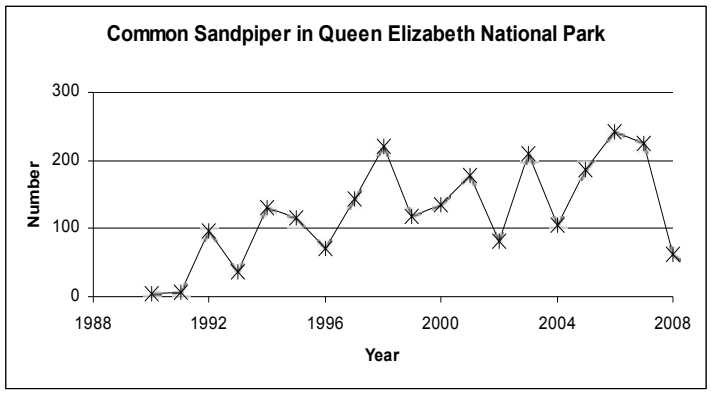


Figure 11 Common Sandpipers in Queen Elizabeth National Park

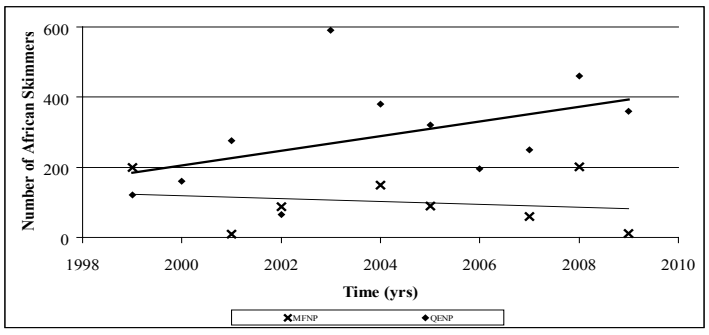
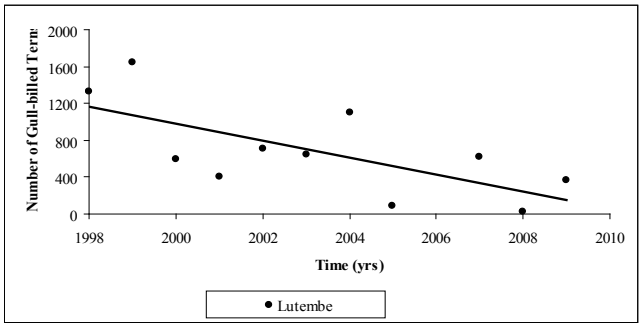


Fig 12a Trends of African Skimmers in Queen Elizabeth and Murchison Falls NP



12b Trends of Gull-billed Terns in Lutembe Bay

The effect of habitat disturbance to species population can be shown by the Figs 12 a/b. Where habitat conditions are shown to be stable, like the case in Protected Areas, species also show stable populations. The African Skimmer numbers in Queen Elizabeth NP have continued to show marked increase while those for Murchison Falls NP have been more stable. However, degradation, habitat change and pollution negatively affect the numbers of species as shown by Gull-billed Terns at Lutembe bay.

[B] Pressures and their trends 2009

Assessments of pressures in all IBAs

The main focus of any conservation programme in dealing with the threats would be to either eliminate or reduce them to considerable minimal levels to the extent that they do not jeopardize the existence of flora and fauna. Sometimes an IBA may experience only one threat but the severity of its effect varies compared to the other one with many threats and yet low severity. But then seemingly insignificant threats can combine to cause serious cumulative effect. This therefore means that threats need to be understood with their impact on the quality of the site or habitat.

The assessment of 2009 continued with the systematic approach of capturing pressures. This included the use of IBA monitoring forms, news paper reports and field visit experiences. These allowed for a comprehensive listing of the presence of threats specific to respective IBAs. On average, in terms of different threats each IBA recorded about seven incidences, the lowest had two (2) and the highest twelve (12). On a weighted scale, the year 2001 and 2009 both registered three categories while 2008 registered four and the fourth category (Very high) is the most undesirable. The general trend shows many threats classified as low compared to those classified as high. The 2009 assessment had 42% at low, 32% medium compared to 2008 of 16% and 52% respectively. The other categories are as seen in the figure 13 below

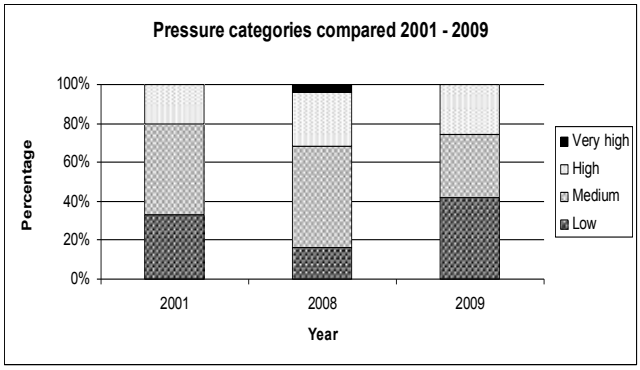


Fig 13 Assessment of threats in 2009

(a) General trends of pressures

The general trend of pressure in all IBAs have been rising steadily but just above the medium line with mean score of -1.2±0.15 in 2008 and this has improved in 2009 with mean score of -0.84±0.15 (Mean±SEM) as in figure 14 below. The pressures in all IBAs if possible should be reduced to zero. It should be understood clearly that the trends are well explained over longer periods of time. This therefore means that the drop in pressures in 2009 should be taken with caution since a near future assessment may reflect a different scenario. However, 2009 assessment reflects an improvement.

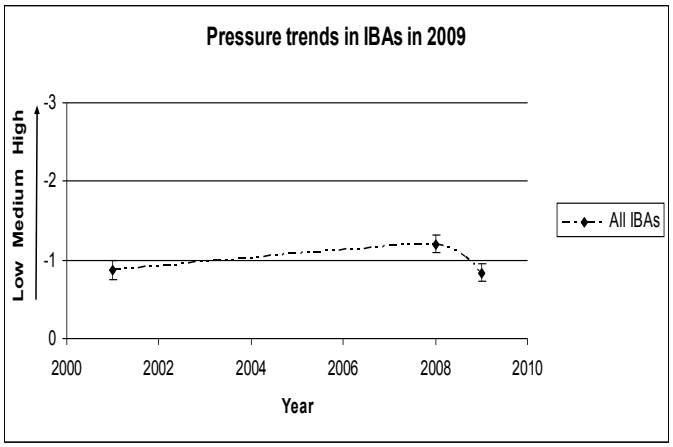


Fig 14 Assessments of general trends of pressures

(b) Pressure trends of IBAs in three management/habitat categories

The general trend of pressures show differences in the way they manifest themselves in the three Protected Area status categories (National Parks, Forest Reserves and Wetlands/ Ramsar Sites). Figure 15 as below provides a summary.

(i) The three habitat classes all show general initial increase and a decline in pressures. However, the levels of increase and decrease vary between categories. This is an indication that habitat classes all respond differently under different pressures.

(ii) Pressure trends in National Parks/ Wildlife Reserves have for a long time revolved around medium till 2008 and this dropped in 2009. The mean scores for the PA pressures were -1.15±0.19 and -0.85±0.22 (Mean±SEM, n=13) for the respective years showing a positive shift in pressure trends.

(iii) Pressure trends in Forest Reserves fall below medium and with the gentlest rise of the three classes registering mean scores of -1±0.41 in 2008 compared to -0.89±0.26 (Mean±SEM, n=9) in 2009. This means that, in terms of effect, the Forest Reserves are still experiencing relatively minimal threats when spread throughout the sites.

(iv) Pressure trends in wetland IBAs are the most important of the three in terms of conservation action. This is because the mean scores for wetland pressures rate highest and above the medium point. The overall trend shows continuous increase in pressures till 2008 and only a reverse trend in 2009. The mean scores of 2008 of -1.38±0.32 and -0.7±0.3 in 2009 (Mean±SEM, n=10) may be temporary and so efforts to improve the situation are needed.

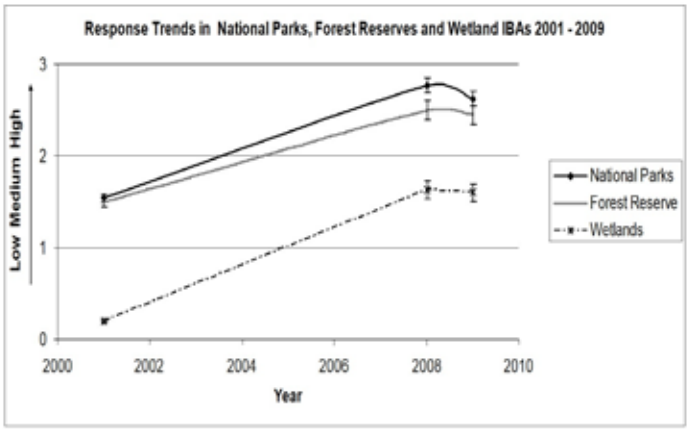


Fig 15 Pressure trends of IBAs in the three habitats categories

Description of threats in 2009

Appendix 1 shows an analysis of threats from each IBA. A total of 211 incidences of threats were reported in 2009. The most threatened IBA is Lutembe Bay while the least threatened is Mgahinga National Park. The differences in the management regimes may have contributed to the level and management of the threats.

Agricultural intensification

Agricultural expansion or agricultural intensification is one single threat category that is wide spread and affecting most IBAs (55%) in the country (n=17). Notable examples include banana growing in Mt Elgon NP areas, cassava growing around Mt Kei Forest Reserve, potato growing in Nyamuriro Swamp, cattle grazing in LMNP, flower farming in Lutembe Bay, annual vegetable growing in Nabugabo Wetland. Others include Nabajjuzi wetland, Ajai WR, Otzi FR and Rwenzori National Park especially in Buhundu Parish.

Use of agro-chemicals

The chemicals being referred to here are agricultural chemicals. It has been reported from 10% (n=3) of the 33 IBAs. The big problem here is being posed by flower farms that use chemical aerosols as pesticides and herbicides in green houses. Management and disposal of these chemicals is a major problem, which exacerbates its impact on habitats. Flower farms in Lutembe Bay have been accused of disposing chemicals into the Bay causing pollution. Other less serious use of chemicals includes field crop sprays like in Nyamuriro wetland and use of agro-fertilizers in Doho Rice Scheme.

Burning of vegetation

Prolonged and consistent fires are potential trigger of ecological succession, which may be a positive thing when this succession involves natural vegetation but a negative one when such fires suppresses natural vegetation and promotes prolific growth of invasive species. In 2008, there were notable fires of considerable intensity in Kidepo Valley NP, Semliki WR, LMNP, MFNP and QENP, however, 2009 registered some changes in occurrences. Sites (from 84%, n=26 of IBAs) reported with fires include Mt Elgon NP, Budongo Forest, Kyambura, MFNP, LMNP, Nabugabo, Mabamba, Semliki WR, Semliki NP, Mt Moroto FR and Sango Bay. Please note that MFNP and LMNP have continued to experience extensive fires compared to any other National Parks. Kidepo Valley NP however registered low fires compared to the previously reported one of 2008.

Disturbance to birds
The disturbance to birds has been reported from 16%, (n=5) of the IBAs. In Nyamuriro wetland and Doho Rice Scheme, the people who are working in the field are the source of disturbance, in Mabamba Bay, it is the fishing communities who use the same tracts as the shoebill trekkers and who are potential sources of disturbance. This trend is similar to Semliki WR and Musambwa Island fishing communities who sometimes construct makeshift structures within the IBAs.

Drainage
Deliberate filling or conversion of wetlands to agricultural fields is not new. This has been reported at 19% of the IBAs. The wetlands, where they exist, are seen as soil banks and options for increasing production even in times of no rain. Draining is being done in Nyamuriro wetland, Lutembe Bay and Doho Rice Scheme. Other areas reported include Nabugabo and Nabajjuzi wetlands.

Small holder grazing or forest grazing
Pastoral communities around IBAs are sometimes forced by either adverse weather conditions or encroach of inside or at the boundaries of the IBAs to access better pastures. This is happening in 68% (n=21) of the IBAs. Sites affected by this type of threat and respective communities include Mt Elgon NP (Bukwo), Budongo (Lake Albert), MFNP (Bulisa), Nabugabo (Grassland), Semliki WR (Ntooroko), Semliki NP (Grassland), Mt Mororo FR (Hill slopes), Sango Bay (Grassland). Other communities include the Toposa, Didinga and Dodoth in Kidepo Valley National Park.

Deforestation
This has been reported at 26% (n=8) of the IBA. The ever growing demand for construction materials is promoting illegal logging thus affecting the quality of IBA condition. Most of the timber products and round wood products (e.g. poles) are obtained from Forest Reserves and sometimes National Parks. It is worth noting that some of the extractions are done with the knowledge of the relevant management authority under controlled use quotas or production regimes. Examples of this can be seen in Mt Elgon NP, Mt Kei FR, and the shores of Lutembe Bay, Semliki WR, Semliki NP and Sango Bay. Extensive or intensive logging has not been reported.

Colonization
Succession can be a natural event or induced by disturbance from human activities in or around the IBAs. The change of conditions within the habitat may favour the emergence of species which may later on alter the ecology and the eventual species composition of the site. This is evident at 13% (n=4) of the 33 IBAs. The most notable is Lutembe Bay which has experienced many threats around it and all contributing to a change of habitat type with marshes dwindling and papyrus areas becoming more pronounced.

Firewood collection / Charcoal burning
The country's population is one that depends on fuel wood energy resources and most of these resources are derived from nature. The wood energy if restricted to dry wood harvests. Sometimes controlled use quotas ensure sustainability. Fuel wood collection has been reported from 71% (n=22) of the IBAs. Notable amongst others are the communities of Mt Elgon NP, Budongo, Kyambura, MFNP, LMNP, Semliki NP, Semliki WR, Mt. Moroto FR and Sango Bay that are dependent on this wood fuel energy source.

Human Settlement, Infrastructure and Real estate development,
The population increase and the concomitant demand for land have made the IBAs and other biodiversity rich areas targets for human settlement. There are cases of encroachment for settlement in Mt Elgon NP, Real estate development in Lutembe Bay, road construction and power line construction in Semliki NP, town extension and settlement in Mt. Moroto FR, Sango Bay, and Musambwa Island. Overall, this type of threat was reported at 19% (n=6) of the IBAs. It should be noted that some of the settlements are done on the edges of the IBAs but also inside the boundaries. There is therefore need to demarcate IBA boundaries where this has not been done so that it is easier to track encroachment within IBAs.

Natural events (landslides, floods and drought)
Natural events come in the form of landslides, floods and drought. The mountainous areas of the country have been mostly affected by landslides. The high inclines of the Mt Elgon NP and Rwenzori NP coupled with heavy rains have resulted in a series of landslides. The North Eastern part of the country especially Mt Moroto FR has experienced enduring stress from drought and drought related events such as fires. The eastern part of the country experienced heavy rains resulting into floods especially in parts of Butaleja where Doho rice scheme was under water. Overall, this type of threat occurred in 13% (n=4) of the IBAs that were monitored.

Recreation / tourism
Tourism is one of the sustainable use options in conservation however, new developments need to be checked and all the precautions taken. The threat is reported from 29% (n=9) of the IBAs in Uganda. There are new tourism developments in Mt Elgon NP, eco-lodges in Budongo FR, renovation of Lutembe beach, popularization of Nabugabo beach and camp, Mabamba shoebill watching and Semliki NP hot springs. These all risk potential sources of threats if not controlled. Controlled development of tourist facilities as well as ensuring these facilities meet the environmental standards through the mandatory environmental impact assessments and mitigation measures outlined.

Unsustainable utilization of resource
The use of biological resources is one of the main reasons why the IBA adjacent communities should be involved in the conservation process of the sites. The resources that are of notable values are bamboo shoots in Mt Elgon NP, fuel wood in Mt Kei, timber and non timber forest materials in Budongo FR, fuel wood in Kyambura, MFNP and LMNP. Wetland resources in Lutembe, Nabugabo, Nyamuriro and Mabamba, while rattan cane harvest in Semliki NP and fodder in Semliki WR and Mt. Moroto FR respectively. The resource utilization is the most reported covering 90% (n=28) of the IBAs. Some uses are however, sustainable and are controlled by the management authorities. However, a major problem is when the agreed use regulations are not adhered to or the managing authorizes lack the capacity to effectively enforce and monitor the levels of use.

Extractive industry
Extractive industry is reported from 26% (n=8) of the IBAs. There are different forms of extractive industries

that are being experienced in a number of IBAs. Notably mineral extraction in Nyamuriro swamp, stone quarry in Lutembe Bay, sand mining in Mabamba and Nabugabo and Limestone quarry in QENP and Kibale NP. When this is done on an extensive scale, it can be very detrimental. Oil exploration is a new development in the threat categories. This is already happening in MFNP and the surrounding areas. Up to 8 new exploration areas have been fenced off in addition to already existing sites. This activity is very soon going to scale out in parts of Semliki and QENP and therefore widening the potential sites whose integrity will be compromised.

Plant introductions / invasive species

There is a natural succession always happening but if the balance is disturbed, the ecology of plant community is also disrupted. Problematic species have been reported from 29% (n=9) of the IBAs. In Mt. Elgon, there is a very clear association between human settlements and spread of alien species, LMNP has continued to experience the problem of Acacia hockii, an invasive species, Semliki WR has problems of Opuntia vulgaris and Cassia spectabilis. Other invasive species are reported in QENP, Budongo FR, Mabira FR and Ajai WR.

Selective logging / Licensed Pit Sawing

The National Forest Authority as an institution manages central forest reserves for both biodiversity and productive revenue generation. In this case, the authority licenses pit sawing as one of the revenue generating activities. This is happening in Budongo FR in CFM plots. Other selective logging sites reported include Kasyoha – Kitomi, LMNP and Mt. Moroto FR. All together, the threat is reported from 19% (n=6) of the IBAs.

Consumptive utilization

A section of the community in Budongo Forest Reserve has been reported to collect eggs of big birds (probably Francolins and Guinea fowls) and also hunt the birds for food. This activity used to happen in Musambwa Islands but has since been halted. The only other notable place where birds are being hunted is Doho rice scheme. The threat is reported from these two places accounting for 6% (n=2) of the IBAs.

Illegal fishing/ unsustainable fishing

Illegal fishing has been noted in MFNP and LMNP. Over-fishing and sometimes using illegal fishing nets have been noted in a number of sites. In total, 35% (n=11) of the IBAs experienced this type of threat. Continuous fishing has been reported in Lutembe Bay, Nabugabo, Mabamba wetland, Semliki WR, Sango Bay, and Musambwa Island.

Water abstraction

All the flower farms around Lutembe Bay draw their waters from the Bay. The flower farms therefore depend solely on the lake for their water. Mabamba wetland water supply plant supplies Mpigi town with its drinking water while Nabajjuzi wetland continue to be the main source of water for the Masaka population. Rwenzori NP has built two gravity flow schemes to supply water for the communities. Water abstraction is being reported from 13% (n=4) of the IBAs.

Bird control / killing

Recently, the communities near Semliki national park have taken to rice cultivation. The rice growers are now using all possible methods to control the population of birds which they view as pests. The use of poison to kill birds has persisted in Doho rice scheme which may require immediate intervention. Two areas reported this type of threat and this accounts for 6% (n=2) of the IBAs.

Flower Farming

This new business has become very lucrative in recent times. In Lutembe Bay where only one flower farm existed in the early 2000's, there are now up to six huge flower farms and many out growers currently plying the trade. This trend may soon take root and move to other parts of the biodiversity rice areas that are soft targets. But so far Lutembe Bay is still the only IBA affected with this type of threat.

Pollution

The effect of pollution results from either the way the chemicals are applied, used or disposed. Lutembe Bay is still the only IBA with this kind of threat. More monitoring and control measures are needed to assess the impact of this to biodiversity in the Bay and the surrounding areas.

[C] Responses and their Trends in 2009

Responses and Trends

The Response Score is generated after assessing the levels of three different aspects. These are the level of protection within the protected area categories, the stages of the management planning process and the level of conservation initiatives being implemented. The protected area categories show the level of commitment towards the conservation of the site or habitat. The management planning indicates the short term, medium and long term laid down proposals that may be quickly implemented. And the conservation actions refer to activities implemented to improve conditions of the site.

The overall resultant score would be the combination of the three indicators. The categories have been classified as negligible, low, medium and high. Interesting trends show that 2008 had many IBAs with 'high' response (56%) compared to 2009 (39%), however 2009 had many IBAs with 'medium' response (52%) unlike 28% in 2008. The two higher categories (High and Medium) show encouraging trends as opposed to the two lower categories (Negligible and Low). The variation in response trends are as shown in the figure 16 below.

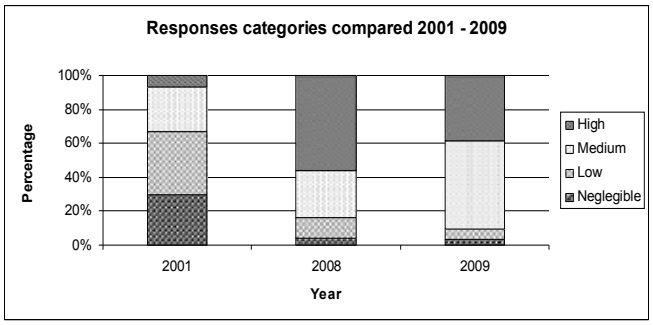


Fig. 16 Response categories 2009

(a) General trends of responses

The overall trend in responses is impressive however there are some IBAs that still do not have management plans (e.g. Doho Rice Scheme, Lake Opeta, Lake Nakuwa and Lutoboka Point) and some are now outdated (e.g. Lutembe Bay and Nabajjuzi Swamp). The sites are all at different levels of implementing conservation activities. In 2008, the overall conservation processes in all the IBAs registered significant

progress with 2.36±0.17 and a slight decline in 2009 with score of 2.26 ±0.13 (Mean±SEM). This is still good since the score is above medium as shown in the figure 17 below

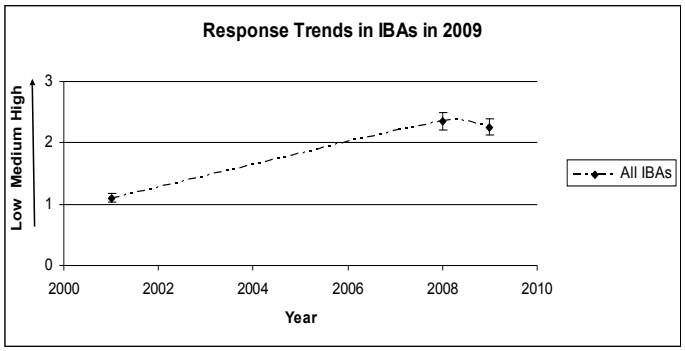


Fig 17. General trends of response

(b) Response trends of IBAs in three habitat categories

The general trend of responses shows a steady improvement in all the three habitat classes (Protected Areas, Forested IBAs and Wetland IBAs). The following can be obtained from the figure 18 as below:

(i) Response trends in National Parks and Wildlife Reserves are the most encouraging of the three management categories. This is because all the PAs have some level of protection and with significant levels conservation activities. The mean scores for 2008 and 2009 of 2.77±0.12 and 2.62±0.14 (Mean±SEM, n=13) for the respective years do not show significant difference although showing a slight decline as in figure 18 below.

(ii) Response trends in Forest Reserves follow a similar scenario as PAs with mean scores of 2.5±0.5 in 2008 compared to 2.44±0.16 (Mean±SEM, n=9) in 2009. This means that, in terms of conservation activities, protection status and management planning, the Forest Reserves are rated second to National Parks and therefore better than the IBAs in the wetland habitats in terms of conservation actions.

(iii) Responses level (conservation efforts) in wetland IBAs are still wanting. This registered tremendous change by 2006 when many sites were designated as Ramsar sites. Even then, the improvement of the conservation efforts fell short of a medium score. In 2008, the mean score registered was 1.63±0.32 and almost no significant shift in 2009 with 1.6±0.22 (Mean±SEM, n=10). This shows that less impact is being felt in wetland IBAs in terms of conservation actions.

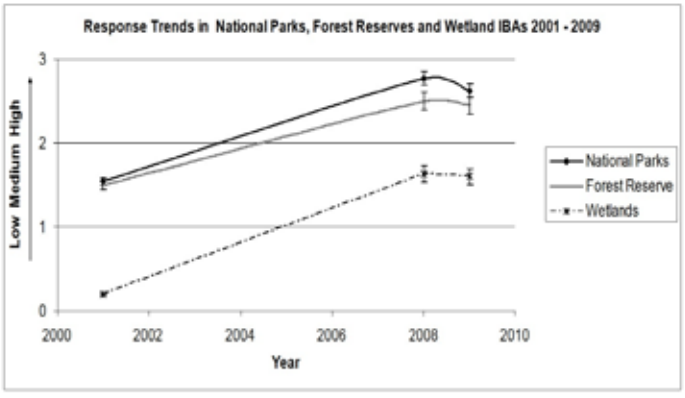


Fig 18 Response trends of IBAs in the three habitats categories

Some specific responses

The Uganda Wildlife Authority (UWA), the National Forest Authority (NFA) and the Wetlands Management Department (WMD) all work to promote the integrity of the biodiversity habitat under their jurisdiction. The Protected Area management agency is promoting conservation in 13 IBAs, Forest Reserve authority works in nine IBAs while Wetlands Management authority works in 12 Ramsar sites, some of them overlapping with protected areas. There are two IBAs that do not belong to any of the international or national protected area categories: Doho Rice Scheme and Nyamuriro wetland. The work of the management authorities in liaison with the communities help to enhance the conservation status of the sites. Although the overall impact varies from site to site, the efforts to initiate them need to be commended at all levels.

Research and Conservation

Budongo Conservation Field Station (BCFS), an affiliate to Makerere University is doing research in chimpanzees and related flora and fauna. National Agricultural Research Organization (NARO) is working on Senna spectabilis, an invasive species in Budongo. This is exploring ways of eradication of this invasive species because of its impacts on the alteration of habitats and displacement and suppression of native species. Economic Policy Research Center (EPRC), is carrying out research on valuation of economic potential of Budongo FR. Institute of Botany University of Hohenheim, Germany, which is part of the Biodiversity Monitoring Transect Analysis (BIOTA) in East Africa project is working on the forest regeneration and increament with specific reference to rainfall and soils. Makerere University Biological Field Station (MUBFS) in Kibale hosts researches in primates and fish. QENP yearly accepts proposals in different fields of ecology and management researches. There other such research activities in KVNP, MENP and MFNP.

Collaborative Forest Management (CFM)

There are six local community groups: Nyakase Environmental Conservation Develoment Association (NECODA), Siba Environmental Conservation Develoment Association (SEDA), Kavujubi Forest Adjacent Community Association (KAFAKA), Kapeeka Integrated Development Association (KICODA), Budongo Good Neighbour Conservation Association (BUNCA) and North Budongo Forest Community Association (NOBUFOKA) that have been registered as Community Based Organizations working towards the conservation of the forest. In Bugoma Central Forest Reserve, there are four CFM groups, namely Kaseeta Tugende Omumaiso Association, Kidoma Conservation and Development Association, Kyangwali Twimukye Association and Kabwoya Enviromental Conservation Development Association. In Echuya, there are four CFM groups, Mabira Forest Reserve has one while Kasyoha – Kitomi has five.

Site actions and site interventions

NatureUganda through its projects at two IBAs (Echuya and Kasyoha-Kitomi Forest Reserve) continue to support livelihood improvement interventions to conserve the biodiversity in them. So far 9 CFM agreements, 4 in Echuya and 5 in Kasyoha-Kitomi, have been signed in the two IBAs with an additional two under negotiation. The CFM agreements increased collaboration between NFA

and Local forest adjacent communities in both Echuya and Kasyoha-Kitomi. Community members now have access to forest products under agreed arrangements through CFM agreements, community attitude towards the forest is very positive and this has promoted the co-management of the forest by NFA and other stakeholders. NFA and Community relationships which had hitherto been hostile have greatly improved for the Batwa community near Echuya forest.

As part of the livelihood improvement and provision of alternative sources of forest based resources, different Income Generating Activities have been introduced in these areas. These include mushroom growing, bee keeping, fruit growing, and Sustainable Organic Agriculture (SOA) activities. In Musambwa Islands conservation was done through sensitization meetings, by-law enforcement and facilitation of SSGs in monitoring while in Nabajjuzi wetland system, an environmental education programme has continued to be the pillar in community sensitization. Support Ramsar Programme was used to implement conservation actions in three sites/ IBAs. The programme received a boost from the COBWEB project that is looking to extend protected area network to include two wetland systems (3 IBAs): Lake Opeta, Lake Bisina and Lake Mburo – Nakivali wetland systems.

Species Action Plans

NatureUganda in collaboration with other national institutions produced a draft of the National Grey Crowned Cranes Species Action Plan that will be a very useful tool in its conservation as its population continues to decline. The Grey Crowned Crane species Action plan was produced as one of the outputs of the Cranes and Wetlands Conservation project that is based in Western Uganda. The Project was developed by NU after realising the declining population of the bird due to destruction of its habitat. NatureUganda remains committed to monitoring the Cranes population and implement various wetland conservation through its project and programmes.

Monitoring Species Populations

NatureUganda through its waterbird monitoring under the aegeis of African Waterfowl Census (AfWC) monitoring programme has continued to monitor species at a number of sites. This programme covers IBAs that are PAs, Ramsar Sites and Non - protected sites with 32 established sites but only 28 regularly monitored bi-annually (Jan – Feb and Jul – Aug) since 1990. Other monitoring programmes include the Common Birds Monitoring programme (CBM), Raptor monitoring and Vulture population monitoring. The Common Birds Monitoring programme organised volunteers across the country and established 63 sites. Of these 30 are in PAs and 33 outside PAs classed as agro-pastoral, forested, agricultural and peri-urban sites. The programme started in 2009 and monitoring is done twice a year (Jan-Feb and Jul-Aug) in collaboration with MUIENR.

The raptor population monitoring is done both in 4 savannah PAs and outside PAs (along public roads). This has been monitored since 2008. The results are being compared with those done in 1960's, 70's and 80's for any changes. The attempt to get the relative abundance of vulture population in Uganda was done in 2003. This was again repeated in 2009 using a new suggested method of using animal carcasses in the four savannah PAs/ IBAs of Uganda. The monitoring activities of NatureUganda are sustained by volunteers and because of the need to build adequate capacity, NatureUganda organised national training for these volunteers. The CBM and the IBA monitoring programmes organised training to build the capacity and skills of the volunteers in the monitoring protocols. The IBA training aims at producing a yearly IBA status and trends report to be used as a tool for advocacy and triggering actions to save deteriorating site.

Advocacy work

NatureUganda as a membership organization has increased its membership base and continues to be of service to its members. As a way of servicing its members NU organizes monthly public talks on topical issues aimed at disseminating information to the general public. This is one of the many ways that the institution uses to reach the public and mobilize support for site interventions. In 2009, monthly public talks were taken to a much higher level, with the inaugural two day's scientific conservation conference, which brought together scientist, practitioners and national leaders being held in Kampala, Uganda. NatureUganda also organises nature walks for its members on a monthly basis and through its technical working groups, people of interest in different taxa are reached. Through the explorer's programmes, children in schools are being reached and exposed to environmental conservation issues and how they can be involved in conservation from an early age. Is there any other advocacy work you may want to mention i.e Mabira FR advocacy, articles in the media (recent one on shoe bill and wild bird trade that appeared in the East African weekly etc

Site Support Group actions

The SSGs at Lutembe Bay, Mabamba Bay and Lake Katwe (3 IBAs) have been supported to continue the advocacy of better conservation measures and wise use approaches including eco-tourism at these three sites. Support to the 16 SSGs in six IBAs has been maintained at various levels to retain presence even in areas where there is no active conservation funded programme. The SSGs are engaged in various advocacy, conservation and eco-tourism approaches which ensure wise use of resources. With the vigilance of the SSGs NatureUganda managed to save the only habitat for the Grauer's Rush Warbler by petitioning NEMA over the road construction that was being poorly done and destroying its home. Conservation activities around Echuya have seen the population of the Grauer's Rush Warbler increase more than double the number of pairs in 2004.

Institutional collaboration

NatureUganda has through the years established partnerships with various institutions. A number of MoUs have been signed and consolidated with MUIENR, UWA, NFA, MTTI and some District local governments. Where there are no MoUs, the institution has established good working relationships such as with NEMA and other relevant institutions. Through this synergy, better delivery of results can be ensured. Good relationship ensures effective participation in national planning processes and helps extend network development and improved communication between partners and other government sectors that require information.

Civil Society Organization presence

In Mt. Otzi FR, Jane Goodall Institute (JGI) is working on the conservation of Chimpanzees, Straight Talk Foundation, through the tree talk is encouraging tree planting through

schools and Environmental Alert is promoting both agriculture and environmental protection. In Mt. Kei FR, there is a vibrant CBO with a potential of being organized into a CFM group when appropriate. In Bugoma, Eco-Trust and CARE Uganda are promoting four CFM group actions through enterprise development, JGI works on conservation of Chimpanzees, WWF is handling enrichment planting.

In Kibale NP, quite a number of institutions are engaged in various activities: WCS provides technical and financial support in areas of monitoring and research, Kibale Fuel Wood Project works with the community through tree planting and environmental education. Uganda North Carolina International Teaching for environment (UNITE) and Wildlife Clubs of Uganda and American Friends of Kasisi Primary Schools (AFRO-KAPS) are supporting schools through infrastructure development and environmental education. FACE the FUTURE (Forest Absorbing Carbondioxide Emissions - FACE) is collaborating with UWA in restoration programmes. Other research programmes include Kibale Fish and Monkey project.

In Mt Rwenzori NP, WWF is working on landscape restoration in areas adjacent to the park. It also has community programmes handing environmental conservation. A CSO called Rwenzori Mountains Cultural Values Conservation Association (RweMCCA) is working towards conservation of sacred resources. PROTOS is working in the management of Mpanga River catchment while WWF work is concentrated in Semliki River catchment. In Mgahinga NP and Bwindi Impenetrable NP, ITFC is working especially on the Albertine Rift endemics, IGCP and Mountain Gorilla Conservation Project (MGCP) working on the conservation of Gorilla, Mgahinga Bwindi Impenetrable Forest Conservation Trust is supporting programmes within the park and the community. CARE Uganda is supporting resource use areas through development of monitoring parameters.

In Echuya, NatureUganda, through its livelihood and conservation project, is promoting conservation of the FR. Africa 2000 Network is working with CFM groups in areas of awareness, training and support towards Income generating Activities. Kulika Uganda promotes organic agriculture bamboo domestication among others and CARE Uganda is working with the Batwa community. The two districts of Kabale and Kisoro under the Farm Income Enhancement and Forest Conservation Project (FIEFCO) are supplying seedlings to the communities. Other sites that are not mentioned here do not necessary mean they do not have CSO presence but only that they were not compiled.

The Jane Goodall Institute

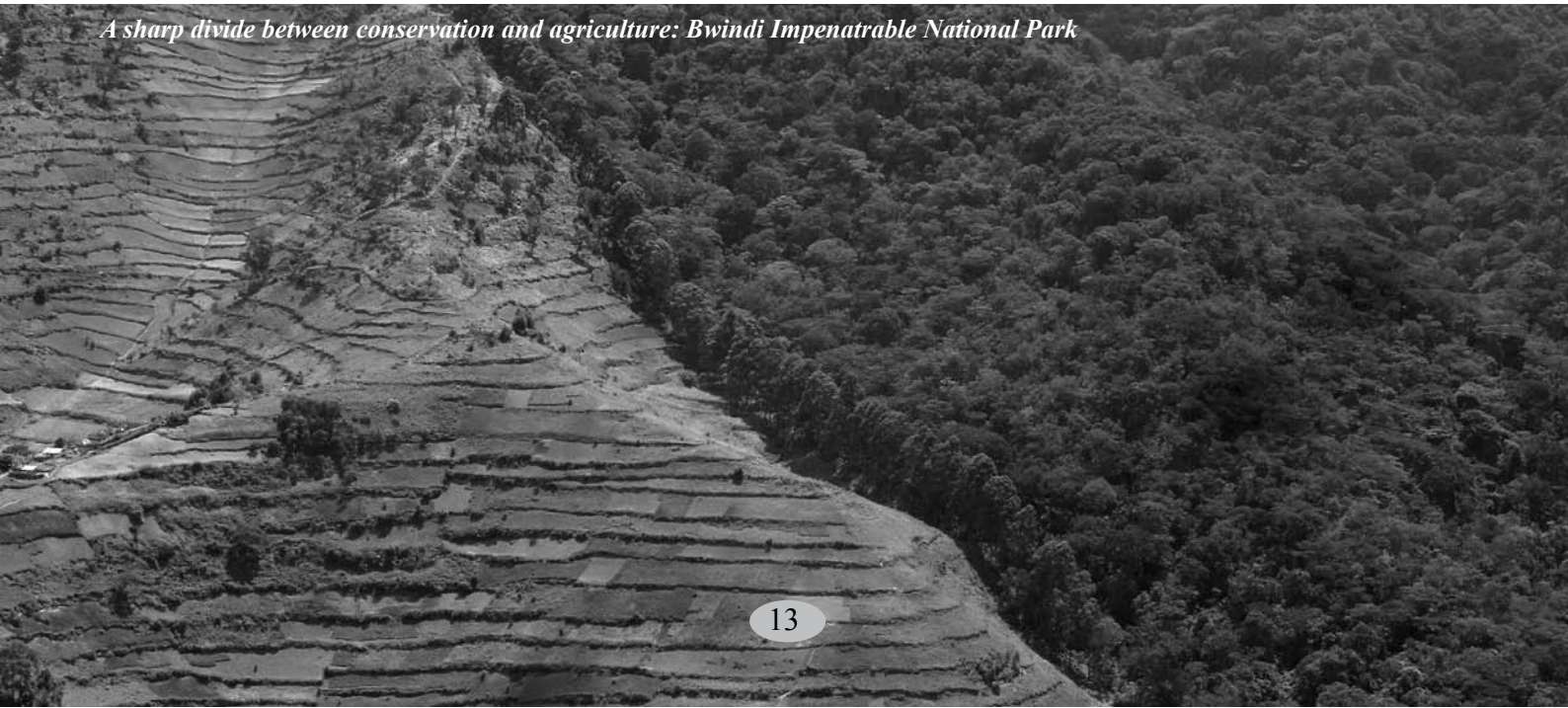
The Institute specializes in the conservation of Chimpanzees and chimpanzee's habitat in Budongo. They have habituated chimpanzees for eco-tourism development. They are now giving conservation education to the communities adjacent to the forest. Their work extends to parts of Otzi Forest Reserve. The introduction of a 'Village Enterprise Fund' is contributing towards conservation of Budongo Forest Reserve as a chimpanzee habitat. It gives grants to organized groups as an alternative source of income than going to the forest for the produce.

World Wide Fund for Nature (WWF) and Eco – Trust

WWF is dealing with the conservation of biodiversity in the Albertine Rift. Activities include forest protection, restoration of degraded areas, boundary maintenance, planting and re-demarcation of forest blocks especially in Budongo Forest Reserve and Mount Rwenzori National Park (MRNP). Eco-Trust is purposely engaged in the Carbon trade business. It gives out grants (carbon fund) to local adjacent communities and encourages them to plant indigenous tree species for purposes of carbon absorption.

Tourism development

There are two eco-tourism sites (Kaniyo Pabidi and Busingiro). Kaniyo Pabidi is situated in the north eastern part of the reserve. A group of about 30 chimpanzees has been fully habituated for eco-tourism purposes. The site is continuous with Murchison Falls National Park and Bugungu Wildlife Reserve. Busingiro eco-tourism site is situated in the south western part of the reserve with primates and many butterfly species. The Royal Mile is the epitome of Busingiro site. It is a stretch of one mile with a collection of tree species found in Budongo Forest. The site derives its name from the royal visits. It is maintained by NFA for aesthetic and recreational virtue. Restricted numbers of visitors always ensure minimal damage to the environment. Other examples of eco-tourism development include Rwenzori Mountaineering Services and Rwenzori Trekkers Services in MRNP.



A sharp divide between conservation and agriculture: Bwindi Impenatrable National Park

Chapter Four

Major conclusions

The general trend in condition has been maintained just above moderate as of 2008 and showing an improvement in 2009.

The status of National Parks and Wildlife Reserves remained more or less similar up to 2008 and a slight improvement in 2009 which is positive trend when considered individually.

The condition of Forest Reserves has continued to have a steady decline through the years (2001, 2008 and 2009 have all registered declines. This is however exhibiting a much gentler decline as compared to the wetlands.

The conditions of the wetland IBAs also have declined through the years except for a slight improvement in 2009.

The general trends of threats in all IBAs have been rising steadily but just above the medium and on a positive not, this has improved in 2009.

Threats in National Parks/ Wildlife Reserves have for a long time been maintained at medium till 2008 and this dropped in 2009.

Threats in Forest Reserves are below medium and with the gentlest rise of the three classes. This means that, in terms of effect, the Forest Reserves are still experiencing relatively minimal threats when spread throughout the sites.

Threats in wetland IBAs are the most important of the three in terms of conservation action. This is because the mean scores for wetland threats rate highest and above the medium point and so efforts to improve the situation are needed.

The overall conservation processes in all the IBAs registered significant progress with and a slightly declined in 2009. This is still good since the score is above medium

Response trends in National Parks and Wildlife Reserves are the most encouraging of the three management categories. This is because all the PAs have some level of protection and with significant levels conservation activities.

Response trends in Forest Reserves follow a similar scenario as PAs in 2009. This means that, in terms of conservation activities, protection status and management planning, the Forest Reserves are rated second to National Parks and better than the IBAs in the wetland habitats.

Responses levels (conservation efforts) in wetland IBAs are still low. This registered tremendous change by 2006 when many sites were designated as Ramsar sites. Even then, the improvement of the conservation efforts fell short of a medium score

Effect of road construction blockage to Muchuya Swamp, habitat to Grauer's Rush Warbler

Chapter Five

Major Recommendations

*Nature*Uganda

- Identify, assess and qualify more sites for inclusion as Important Bird Areas for example Kibimba Rice Scheme and extend the boundary of Mabamba Bay to include Makanaga, a vital new annex.
- Train Site Support Groups, Parish Extension Agents and key individuals in IBA monitoring and basic steps in biodiversity assessments. This should include mainstreaming Common Birds Monitoring, Land Bird Monitoring, Raptor Censuses and African Water Fowl Censuses into the IBA monitoring program.
- Continue advocacy for the different Key Biodiversity Areas and raise their profiles locally and internationally.
- Appropriately and effectively coordinate the process of IBA monitoring aimed at ensuring long term sustainability.
- Consolidate the wetlands restoration programs in Key Biodiversity Areas where it has been started and initiate it in areas that require immediate action.
- Continue the process of negotiating CFM agreements in collaboration with NFA and ensure that the agreements are abided by when signed.
- Source funding and support income generating activities within communities living in or near IBAs and enhance conservation of these areas.
- Where appropriate, establish SSGs and empower them to the level of protecting the site and monitoring and reporting illegal activities.
- Initiate and/or participate in development of management plans for IBAs that still do not have them and advocate for proper implementation of plans when developed.
- Negotiate with the local government and local communities for appropriate bye-laws and empower the communities to observe the bye-laws to protect sites.

UGANDA WILDLIFE AUTHORITY

- Monitor and reduce incidences of agricultural encroachment (small holder farming) especially in Ajai Wildlife Reserve.
- Monitor and prevent incidences of wild fires especially in savannah national parks (MFNP, KVNP and LMNP).
- Manage the resource harvesting and/or access by the communities and ensure that the agreements are adhered to.
- Initiate and properly manage the alien or invasive species that threaten the ecological health of the habitats.
- Monitor the oil exploration activities in the national parks and ensure that there are no detrimental effects to the biodiversity.
- Incorporate the IBA monitoring process into the existing Management Information System (MIST) for long term sustainability of the program.
- Increase community participation in resource allocations by negotiating quotas for resource harvesting and promotion of best practices that support biodiversity.
- Improve support to the habitat restoration program and where necessary, active involvement of other relevant stakeholders to be advised.
- Strengthen the law enforcement program to further reduce on the illegal activities and consolidate community sensitization programs.
- Develop targeted good management options that are aimed at improving the condition of the different habitat types in protected and wildlife rich areas.
- Improve on the program of eradication of alien invasive species while promoting those processes that have been proven effective and sensitive to conservation initiatives.
- Reduce / limit destructive tourism activities and develop and implement programs that are aimed at addressing such incidences.

WETLANDS MANAGEMENT DEPARTMENT

- Monitor the chemical use and disposal at Lutembe wetland and ensure that the bay is not polluted by improper waste disposal.
- Monitor and reduce incidences of agricultural encroachment (small holder farming) especially in Nyamuriro wetland and Nabajjuzi wetland.
- Monitor the wetland drainage at Lutembe bay and ensure that the bay depleted of its 200 M buffer zone.
- Quicken the process of developing management plans for the Ramsar sites / IBAs that do not have them and effectively implement the plans in sites that have them.
- Work closely with the different stakeholders in preventing or reducing the expanding destructive commercial farming in critical wetlands especially Ramsar sites and IBAs.
- Consolidate the involvement of local communities in the protection and restoration of degraded wetland habitats.
- Initiate and implement inventories on establishing boundaries of wetlands especially those with unique habitats and species.
- Encourage the institution of wetland policing programs that are aimed at enforcing law and regulation either through the government department or the communities.
- Improve on the involvement and participation of National Environment Management Authority in EIAs and decisions on developments in and near fragile wetlands.

NATIONAL FOREST AUTHORITY

- Monitor and reduce incidences of agricultural encroachment (small holder farming) especially in Mt. Kei, Mt Otzi and Budongo FRs.
- Check on the incidences of wild fires especially in drought prone forest reserves of Mt Kei, Mt. Moroto and Mt Otzi FRs.
- Effectively and efficiently supervise logging (selective logging of invasive species) activities to ensure that the habitats are not altered.
- The boundaries of the reserves need to be marked and monitored to reduce on the various forms of encroachment.
- Initiate or consolidate reforestation programs in heavily degraded forest reserves and ensure regeneration where appropriate.
- Promote alternative sources of fuel wood and use of

fuel saving stoves to reduce dependency on forest as sole source of energy.
- Strengthen community participation in decision making and management of the forests and the forest resources.
- Together with the relevant stakeholders, negotiate CFM agreements with the forest adjacent communities and ensure that the agreements are strictly followed.
- Increase education and awareness campaigns that address direct beneficiaries and discourage destructive developments
- Strengthen the use of policies and laws and promote relevant sections of the constitutions to enhance conservation of IBAs.

NATIONAL BIODIVERSITY DATA BANK (NBDB)

- Steer the process of incorporating the IBA monitoring data into the State of Biodiversity Report and other national reporting processes.
- Give support to the process of effectively and efficiently using the IBA monitoring data and support the process of publishing articles with major conservation journals.
- Continue to coordinate the process of data storage and management and where possible, link the IBA data with other national data available as supportive information.

MAJOR INSTITUTIONS INVOLVED IN THE IBA MONITORING PROGRAMME

Uganda Wildlife Authority (UWA)

The Uganda Wildlife Authority (UWA) was established in August 1996 by the Uganda Wildlife Statute, which merged the Uganda National Parks and the Game Department. UWA is in charge of management of 10 National Parks, 12 Wildlife Reserves, 14 Wildlife Sanctuaries and provides guidance for 5 Community Wildlife Areas.

UWA's mission is to conserve and sustainably manage the wildlife and Protected Areas of Uganda in partnership with neighbouring communities and stakeholders for the benefit of the people of Uganda and the global community. UWA is committed to adhere to the international conventions and protocols for which Uganda is a party. These include but are not limited to; the Convention for Biological Diversity (CBD), the Convention for International Trade in Endangered Species (CITES) and many others that have been ratified.

UWA's strategic programmes on Protected Area management rest with the Department of Planning, Monitoring and Research. The main sections include general management planning, annual operational planning, collaborative management and infrastructure development and Community Conservation and Benefits. The community conservation programmes comprise revenue sharing projects, resource utilization, community tourism, conservation education and creation of institutional linkages.

National Forest Authority (NFA)

The Central Forest Reserves are held in trust for the people of Uganda and managed by the National Forestry Authority. The National Forestry Authority which was launched in 2004 has tremendously registered success with regard to the aims and objectives for which it was established. Together with the stakeholders, NFA strives to achieve "a sufficiently forested, ecologically stable, and economically prosperous Uganda".

The Government of Uganda, in 1998 adopted a policy to restructure many government departments including the Forestry Department (FD). It recognized an urgent need for a change in the policy, legal framework and institutions controlling forestry in the country. It was decided that a new institutional arrangement was needed hence the Forestry Inspection Division (FID), the National Forestry Authority (NFA) and the District Forestry Services (DFS) were set up in 2003. The establishment of the National Forestry Authority was preceded by the development of the new Forestry Policy (2001) and the National Forest Plan (2002). These were to provide for a framework for distribution of roles and responsibilities amongst sector stakeholders and not just the Forestry Department.

Wetlands Management Department

In 1989 the Uganda government established the National Wetlands Conservation and Management Programme (NWP) to develop policies and strategies for sustainable management of the wetlands of Uganda. In 1995, the government endorsed the national policy for the conservation of wetland resources. From being called the Wetlands Department (WD), this transformed through the years to Wetlands Inspection Division (WID) and now Wetlands Management Department (WMD).
The Wetlands Management Department has an overall vision of ensuring conservation, wise use and protection of wetlands in Uganda through increased appreciation and effective management as a means to achieving sustainable development. This can only be achieved through knowledge and understanding of ecological processes, public and stakeholder awareness, institutional framework and planning and management of wetlands amongst others.

Wetlands in Uganda cover approximately 13% of the total area of the country and of various types. Of the many wetlands, 12 of them have been designated as Ramsar Sites. All these sites are also IBAs. The management of eight of them is vested in the hands of WMD and the remaining four (MFNP, LMNP, QENP and RMNP) is a joint venture between UWA and WMD as the boundaries are shared with Protected Area management. This therefore means that the general management plans of the respective PA covers partly the management of the Ramsar site in question.

*Nature*Uganda

*Nature*Uganda, East Africa Natural History Society (EANHS) is a Non Governmental Organization working towards the conservation of species, sites and habitats for people and biodiversity. It is the BirdLife International partner in Uganda and a member of IUCN. The conservation of species, sites and habitats are achieved through research, conservation and advocacy across the country.

- Create a nature-friendly public
- Enhance knowledge of Uganda's natural history
- Advocate for policies favorable to the environment
- Take action to conserve priority species sites and habitats

This is achieved through advocacy, research and conservation projects. NatureUganda, through its research pillar, identified

33 IBAs. Since the identification, several efforts have been advocated to raise the conservation status of these important areas which included Ramsar designation among others.

National Environment Management Authority (NEMA)

NEMA is a semi-autonomous institution that was established by an Act of parliament in May 1995 and became operational in December 1995. NEMA is therefore specifically mandated by the National Environment Act (NEA), Cap. 153 as the principal agency in Uganda charged with the responsibility of coordinating, monitoring, supervising and regulating all environmental management matters in the country. Its mission is to promote and ensure sound environmental management practices for sustainable socio-economic development.

The functions of National Environment Management Authority (NEMA) are amongst others to coordinate the implementation of government policy and the decision of the Policy Committee on Environment; to undertake research, and disseminate information about the environment; to prepare and disseminate a state of the environment report once in every two years and to mobilize, expedite and monitor resources for environmental management.

National Biodiversity Data Bank (NBDB)

Started with a mission "to inventory and monitor national biological resources and to provide biodiversity information to those interested in the conservation and sustainable utilization of these resources", the National Biodiversity Data Bank (NBDB) was established in 1990. This was as a direct data and information regarding the country's biodiversity, so as to aid the decision making process within the country. The unit was established in Makerere University Institute of Environment and Natural Resources (MUIENR) to act as a central repository for biodiversity information within Uganda.

The data bank is involved in a number of activities which include amongst others academic training, capacity building, NBDB Database development and research and publications. The data Bank is involved in monitoring of key species, habitats and biodiversity indicators. The publications include production of Uganda's State of Biodiversity Report as a continuous biennial output and publishing results of various data analyses in peer-reviewed journals.

NBDB collaborates with NEMA, NatureUganda, Wildlife Conservation Society (WCS), World Conservation Union (IUCN), the Institute of Tropical Forest Conservation (ITFC), and also with other government agencies such as Uganda Wildlife Authority (UWA), the National Forestry Authority (NFA), the Wetlands Management Department (WMD) and various research organizations. It also collaborates with various major institutions such as Departments of Botany and Zoology including the Botanical Herbarium and Zoological Museum; the Faculty of Forestry and Nature Conservation (FFNC), the Department of Wildlife and Animal Resources Management (WARM).

A closed canopy forest, Echuya Forest Reserve

Appendices

Appendix 1: List of threats 2009

Site Code	Site Name	Agricultural intensification/ shifting agriculture	Burning of vegetation	Nomadic grazing / livestock grazing	Use of agrochemicals	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	Egg collection	Consumptive utilization	Pollution	Power line/ transport way	Total	
UG001	Mgahinga Gorilla National Park		✓													✓												**2**	
UG002	Echuya Forest Reserve		✓	✓			✓			✓				✓		✓					✓						✓	**8**	
UG003	Nyamuriro Swamp	✓			✓				✓				✓	✓							✓							**6**	
UG004	Bwindi Impenetrable National Park	✓	✓	✓															✓	✓	✓							**6**	
UG005	Rwenzori Mountains National Park	✓	✓												✓	✓		✓	✓		✓							**7**	
UG006	Kibale National Park		✓	✓				✓	✓	✓						✓					✓							**7**	
UG007	Queen Elizabeth National Park		✓	✓				✓	✓							✓			✓		✓		✓					**8**	
UG008	Kyambura Wildlife Reserve		✓													✓					✓							**3**	
UG009	Semliki National Park	✓	✓	✓				✓				✓	✓			✓			✓		✓						✓	**10**	
UG010	Semliki Reserves		✓	✓				✓								✓					✓		✓					**6**	
UG011	Lake Mburo National Park	✓	✓	✓				✓				✓				✓				✓	✓		✓					**9**	
UG012	Mabira Forest Reserves			✓				✓								✓			✓	✓	✓							**6**	
UG013	Sango Bay Area	✓	✓	✓								✓				✓					✓							**6**	
UG014	Musambwa Islands												✓				✓						✓					**3**	
UG015	Lutoboka Point, Ssese Islands																												
UG016	Nabugabo Wetland	✓	✓	✓					✓					✓					✓		✓		✓					**8**	
UG017	Mabamba Bay		✓						✓				✓		✓						✓		✓				✓	**7**	

Site Code	Site Name	Agricultural intensification/ shifting agriculture	Burning of vegetation	Nomadic grazing / livestock grazing	Use of agrochemicals	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	Egg collection	Consumptive utilization	Pollution	Power line/ transport way	Total
UG018	Lutembe Bay	✓			✓	✓	✓		✓	✓				✓	✓		✓				✓		✓			✓		**12**
UG019	Budongo Foerest Reserve		✓	✓				✓				✓				✓			✓	✓	✓	✓		✓	✓			**11**
UG020	Murchison Falls National Park		✓	✓							✓					✓					✓		✓					**6**
UG021	Ajai Wildlife Reserve	✓	✓	✓				✓								✓				✓	✓		✓					**8**
UG022	Mount kei Forest Reserve	✓	✓	✓								✓				✓	✓				✓							**7**
UG023	Mount Otzi Forest Reserve	✓	✓	✓												✓					✓							**5**
UG024	Doho Rice Scheme	✓			✓								✓	✓				✓				✓			✓			**7**
UG025	Lake Nakuwa																											
UG026	Lake Bisina	✓	✓	✓												✓					✓		✓					**6**
UG027	Lake Opeta	✓	✓	✓												✓					✓							**5**
UG028	Mount Elgon National Park	✓	✓							✓		✓				✓	✓	✓	✓		✓							**9**
UG029	Mount Moroto Forest Reserve		✓	✓												✓	✓	✓			✓							**6**
UG030	Kidepo Valley National Park		✓	✓					✓			✓				✓			✓		✓			✓				**8**
UG031	Nabajjuzi Wetland	✓	✓						✓					✓	✓	✓					✓		✓					**8**
UG032	Kasyoha - Kitomi Forest Reserve	✓	✓	✓													✓			✓	✓							**6**
UG033	Bugoma Central Forest Reserve		✓	✓				✓				✓									✓							**5**
	Total	17	26	21	3	1	2	9	8	4	1	8	5	6	4	22	6	4	9	6	28	2	11	2	2	1	3	**211**
	%	55	84	68	10	3	6	29	26	13	3	26	16	19	13	71	19	13	29	19	90	6	35	6	6	3	10	

Appendix 2: IBA monitoring Form

NatureUganda
The East Africa Natural History Society
P.O Box 27034, Kampala
Telepone: +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 **NatureUganda** 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 NatureUganda.

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)	4
Moderate	(70 – 90%),	3
Poor	(40 – 70%)	2
Very poor	(< 40%):	1

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				
Recreation/tourism expansion				
Selective logging/cutting				
Shifting agriculture				
Unsustainable exploitation/Resource harvesting				
Bird persecution				
Over fishing				
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)					

(d) INTERESTING RECORDS

(i) Staffs, visitors and revenues from particular area or site

Particulars	*Number or amount*	***Comments***
Staffs and volunteers		
Visitors		
Revenues generated		

(ii) Interesting bird records, population estimates, lists or other details

Bird Species or group	***Population estimate***	***Details***

(iii) Records, population estimates, lists or details for other fauna and flora

Species or group	***Population estimate***	***Details***

(iv) Useful contacts (for research projects, site conservation groups, tourism initiatives etc.).

Name	*Postal*	*Telephone*	***Email***

(e) OTHER NOTES

APPENDIX 3 LIST OF CONTRIBUTORS

Richard Muhabwe - Kibale NP
Kaphu George - Murchison Falls
Taban Bruhan - Murchison Falls
Ahimbisibwe Milka - Semliki WR
Matsiko Moses - Lake Mburo NP
Opeto Andrew - Lake Mburo NP
Dhiwerara Samson - Semliki NP
Adaraku Robert – Queen Elizabeth NP
Tinyebwa Ronald - Kibale NP
Rwamuhanda Levi - Mghahinga NP
Okiring David - Kidepo NP
Kato R Raymond - Kidepo NP
Seguya Henry Kizito - Musambwa Islands
Polycarp M Mwima - ECOTRUST
Julius Obwona - Ajai Wildlife Reserve
Niwamanya Rogers - Kasyoha – Kitomi
Jimmy Muhebwa M - Nyamuriro
Zeneb Musiimire - Echuya FR
Robson Kato - Kyambura WR
Achoroi JP - Queen Elizabeth NP
Ada Nshemereirwe - Nabajjuzi Wetland
Guma Gard - Bugoma FR
Avako Norah - Mt. Kei FR
Mwesiga Patrick - Mt. Kei FR
Jennifer Atuhairwe - Bwindi Imp NP
Amadra Sabino - Mt. Otzi FR
Kirasi Simon - Echuya FR
Achuu Simon - Lake Bisina
Masereka Alfred - MRNP
Biira Sadress - MRNP
Makatu Patrick - MENP
Jolly - Mabira FR
Frank Walsh - Mt. Kei FR
Gafabusa Vincent - Budongo FR
Bihanikire Shem - Semliki NP
Benjamín Kennedy - Semliki WR
Odongkara JB - Mt. Moroto FR
Professer Derek E Pomeroy - MUIENR

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