IMPORTANT BIRD AREAS IN UGANDA

Status and Trends 2008

UWA

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Important Bird Areas in Uganda

Status and Trends 2008

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About NatureUganda
NatureUganda is a Non Governmental Organization working towards the conservation of species, sites and habitats not only for birds but other taxa too. It is the BirdLife partner in Uganda and a member of IUCN. The organization is involved in various research, conservation and advocacy work in many sites across the country. These three pillars are achieved through conservation projects, environmental education programmes and community involvement in conservation among others. All is aimed at promoting the understanding, appreciation and conservation of nature.

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DISCLAIMER

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Contents

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Executive summary

The production of this status and trend report is the first in the assessment of progress on conservation efforts in IBAs in Uganda since the production of the IBA directory in 2001. It is hoped that the production of this report shall contribute immensely in the conservation of species, sites and habitats. This report acts as a useful guiding tool to the decision makers, management authorities and conservation NGOs. The report is expected to benefit the Convention of Biological Diversity (CBD) reporting processes of the country since it provides trends in both species and habitats for protected and non protected areas.

Important Bird Areas in Uganda were identified using standard criteria and guidelines developed by Birdlife International (Fishpool, 1997). Uganda has 33 IBAs comprising of National Parks (Protected Areas), Forest Reserves, Wetlands/ Ramsar sites and land under private ownership. A number of national IBA programs including prioritization of sites and conservation efforts, development of conservation projects and production of a National IBA Conservation Strategy have been done. Major recommendations from all these processes highlighted monitoring as the prime activity to guide the process of saving species, sites and habitats. Through various meetings and consultations, a global IBA monitoring framework was produced by BirdLife International. It is from this exercise that a monitoring framework for Uganda was adopted and used as a major tool for production of this document. This report contains assessments from 24 out of the 33 IBAs in Uganda.

The results present the following:
Status / conditions of the IBAs were assessed by obtaining either the population of the trigger species or habitat as proxy using habitat area and quality relationships. Results indicate a general slight decline in condition in 2008 compared to 2001. The overall status in 2001 was shared between "favourable" and "near favourable". However, 2008 presents 17 IBAs (70.8%) at "near favourable" and 2 (8.3%) at "unfavourable" conditions. Five IBAs, of the 24 assessed IBAs have remained in stable conditions (favourable).

Pressures or threats were assessed by scoring the three attributes of time, scope and severity. The pressure is described as medium (-1.21±0.16) compared to 2001 with pressures of -1.11±0.15. The mean score for pressures has increased signifying an increased stress on most IBAs. This shows an escalation in threats in different IBAs. The previous analyses (2001) showed fewer reported threats compared to 2008 with an average number of 6 – 10 threats in each IBA. This could be partly due to the now systematic way of reporting threats.

Response or conservation actions were assessed using designation status of the IBA, management planning processes and conservation site actions and described as 'high' (2.42±0.17) reaching 58.3% in 2008 while 2001 (1.81±0.19) had 4.5%. In 2001 assessment, 'negligible' level of conservation actions accounted for 27.3% compared to 4.2% in 2008. These improved conservation initiatives have been through collaborative effort of all stakeholders in conservation.

To improve on the areas not well addressed at the moment and maintain the already good work in some; this report presents suggestions or recommendations for the major government conservation agencies and other stakeholders in conservation.

List of acronyms

AWC	African Waterfowl Census
CARE	CARE International
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CFM	Collaborative Forest Management
CTPH	Conservation through Public Health
EBA	Endemic Bird Area
EIA	Environmental Impact Assessment
FACE	FACE Foundation
GEF	Global Environment Facility
IBA	Important Bird Area
IFAW	International Fund for Animal Welfare
IGAs	Income Generating Activities
IGCP	International Gorilla Conservation Program
ITFC	Institute of Tropical Forest Conservation
IUCN	International Union for the Conservation of Nature
KATIC	Katwe Tourism and Information Center
KBA	Key Biodiversity Area
LVCEEP	Lake Victoria Catchments Environmental Education Program
MUBFS	Makerere University Biological Field Station
MUIENR	Makerere University Institute of Env't and Natural Resources
NBDB	National Biodiversity Data Bank
NBSAP	National Biodiversity Strategies and Action Plans
NEMA	National Environment Management Authority
NFA	National Forest Authority
NGO	Non Governmental Organization
NIBACS	National Important Bird Areas Conservation Strategy
NLC	National Liaison Committee
NU	NatureUganda
PEMA	Participatory Environment Management
RSPB	Royal Society for the Protection of Birds
SPR	State Pressure Response
SSG	Site Support Groups
UNDP	United Nations Development Programme
UWA	Uganda Wildlife Authority
WCS	Wildlife Conservation Society
WMD	Wetlands Management Department
WWF	World Wide Fund for Nature

Part One

IBA programme in Uganda

General introduction on IBA programme in Uganda

The IBA concept is an innovation of BirdLife International, an umbrella organization of national NGOs that share a common ideology for delivering IBA conservation focusing on conserving birds and their habitats. This approach was first applied in Europe in 1985 and in 1993 it reached Africa. NatureUganda, the BirdLife Partner in Uganda adopted the concept and now promotes the four pillars of conserving species, sites and habitats while involving people. All these are aimed at:

- Preventing the extinction of any bird species
- Reducing the number of species that are globally threatened
- Enhancing the conservation status of all bird species
- Conserving crucial sites and habitats for birds

This is done by engaging people at different levels: from local communities who use the resources in the IBAs, to decision makers who influence policies at both local and international levels.

IBA process in Uganda

This started in 1994 with the initial aim of understanding IBA criteria and related issues. NatureUganda took the initiative and with the involvement of other relevant institutions, the programme has grown over the years. The Royal Society for the Protection of Birds (RSPB) supported the process by providing both institutional and technical guidance. A national IBA directory was produced in 2001 with the provision of information on 30 IBAs.

However, updating IBA directory has been improved and made web based through national focal persons. Data can now be updated constantly and accessed easily from the World Biodiversity Data Base (WBDB). The number of IBAs to date is 33. To date new information especially on the monitoring can be updated through available simple, easy to use and effective model that has been designed by BirdLife International. Anyone can make a contribution by filling in these forms and returning them to appropriate locations as per the guidelines.

Important Birds Areas in Uganda

This is a complementary concept in conservation that recognizes the importance of a site to hold considerable biodiversity. IBAs have been shown to support not only birds but up to 87% of biodiversity. This therefore qualifies them as Key Biodiversity Areas (KBAs) that require conservation efforts to maintain their unique biodiversity values. 33 IBAs identified are composed of 13 National Parks or Wildlife Reserves under the management of UWA, 9 Forest Reserves under NFA, 10 wetlands under WMD and one rice Scheme owned by private farmer groups. All the wetland IBAs have been designated as wetlands of international importance (Ramsar Sites). It is expected more IBAs will be identified in future when information is available. The conservation efforts shall therefore take the multi-dimensional nature considering the sectors and authorities that are involved in the management of these sites.

Criteria used in IBA identification

IBAs are identified and confirmed using four criteria namely:

- When they regularly hold significant numbers of a globally threatened species, or other species of global conservation concern. All IBAs in Uganda qualified under this with Queen Elizabeth National Park having the highest with 12 species.
- The site is known or thought to hold a significant component of a group of species whose breeding distributions define an Endemic Bird Area (EBA) or Secondary Area (SA). 13 IBAs qualified under this criterion. Species of Albertine Rift Mountains are well represented.
- The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome. All IBAs qualified at least in one of the five sub categories in this criterion.
- A site holds a large number of congregatory birds and 8 sites qualified under one or more of the four different sub categories within this criterion.

IBA prioritization process

This process was concluded in 2001. The process aimed at identifying conservation activities required for each category of IBAs based on level of threats and identifying major stakeholders to act on the threats. The major out come of this process was a list of prioritized IBAs in Uganda according to biodiversity values and threat levels. Also a list of priority conservation activities and their urgency was produced.

National IBA Conservation Strategy (NIBACS)

The NIBACS is a framework of analysis and of priority actions for conservation of IBAs in Uganda and is linked directly to the National Biodiversity Strategies and Action Plans (NBSAP). This was developed through a consultative effort of major institutions involved in conservation of biodiversity in Uganda. The National Liaison Committee (NLC) spearheaded the process. This committee involved Government, Non Government institutions, including NFA, WMD (then WID), UWA, NEMA, NatureUganda among others. NIBACS identified conservation priorities and made recommendations, of which IBA monitoring was highlighted. Collaboration was identified as being vital to the success of the strategy. As a result lead agencies such as UWA, WMD, have been involved in monitoring activities by BirdLife Uganda, a technical working group of NatureUganda.

Part Two
IBA monitoring framework

Introduction to IBA monitoring framework

The IBA monitoring framework is a working tool which describes the process of identifying IBAs, introduces the aspects of monitoring and protecting a network of these critical sites for the world birds. Monitoring means 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 data from the monitoring schemes should be consolidated into information that helps management make proper decisions. There are many ways to categorize indicators, but the State-Pressure-Response indicators described by this IBA monitoring framework are being widely applied within the BirdLife International Partnership through a project entitled 'Instituting effective monitoring of Protected Areas (Important Bird Areas) as a contribution to reducing biodiversity loss in Africa. Uganda is one of the beneficiaries of this project. The State-Pressure-Response model requires reporting on the condition of the IBA, the threats that they face and the conservation efforts that are being undertaken to either reduce the threats or improve the condition.

Levels of monitoring

The basic level of monitoring takes the form and advantage of low-level and low-cost opportunities. This seeks to involve volunteers in data collection. The simple nature of its application allows for sharing of responsibilities and encouraging data collection skills development.The detailed level of monitoring aims to deliver deeper analysis. Considering the robust nature, this may target only specific sites with serious threats and it is very much dependent on available funding, resources and capacity. 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 State-Pressure-Response (SPR) Model

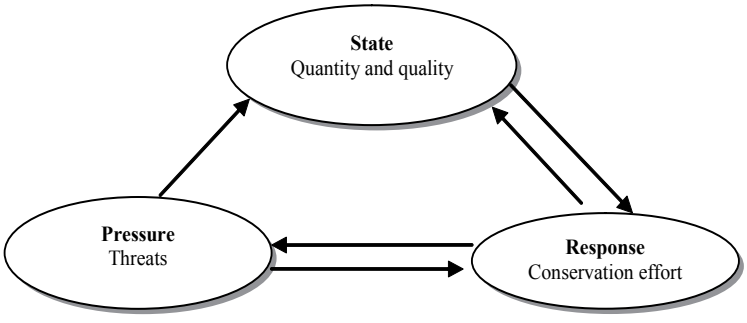


Fig. 1 Diagrammatic relationship in SPR monitoring model

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 (annex 5). This is a simple and easy to use form designed with an annex of guidelines. The variables have often been referred to as State, Pressure and Response, "the SPR model". The three variables (SPR) complement each other and all contribute to the resultant trend analysis. Status means the condition of the IBA assessed using population of the trigger species or their habitat as proxy. Pressures on the IBAs refer to threats they face and are assessed using timing, scope and severity. Response refers to conservation efforts that are being undertaken to either reduce the threats or improve on the condition of the IBAs. These can range from research programmes, livelihood improvement initiatives to community support to conservation and large scale conservation projects.

Strengths and weaknesses of SPR model

Strengths

The SPR model has been widely supported by many sectors because it is considered as a simple approach, easy to understand, cheap to manage and effective in providing deliverables. Once the process has been mainstreamed, it is self sustaining with a target of producing annual status and trends report. This therefore enables the process to contribute to an informed decision making of the country.

Weaknesses

From the way it is structured, the SPR model highly depends on volunteers for its data collection. Being a new concept, it takes time for people to grasp it although it has been proven easy to adopt. The initial processes require significant level of coordination. One major fear has always been the misconception that it is a bird's thing and therefore some people shy away from it. This also brings in the challenge of the opportunistic nature of data collection and minimal finances involved.

Opportunities

There is potential to work closely with the SSGs at sites. NatureUganda currently has four SSGs and many local communities involved at project level activities. There is opportunity within the UWA ranger based monitoring programme and NFA, WMD inspection activities. Tour guides and ranger guides with special skill in bird identification provide a good monitoring base for the programme. The NatureUganda branches and field offices are always involved in the IBA monitoring programmes.

Threats

The IBA monitoring is a long term programme and therefore the issue of sustainability is a major threat. This therefore means that more finances need sourcing and if not, the programme may slow at some stage. The reliance on field staff of other institutions makes the process vulnerable. This is because these institutions move staff members between sites and therefore making it hard to maintain site monitors. There is need for continuous trainings and refresher programmes to arouse and maintain interest and this may in itself be expensive.

Part Three

Status and trends of IBAs 2008

Map and location of IBAs in Uganda

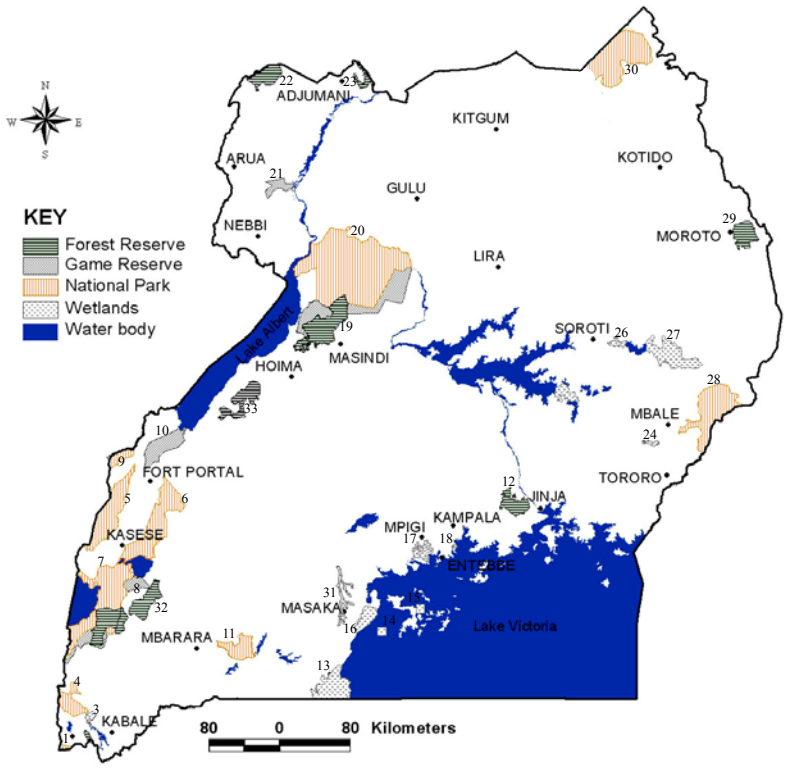


Fig. 2 Location map of Important Bird Areas in Uganda

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

The IBAs (fig 2) have been grouped in the different protection categories. Each protection category is being managed by a different government department. UWA manages national parks and wildlife reserves, NFA manages forest reserves and WMD manages wetlands/Ramar sites. (Management authorities sometimes overlap)

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

Table 1 Description of general trends of the condition of IBAs in Uganda

Five IBAs, of the 24 assessed have remained in stable conditions (favourable[1]), two (new IBAs) being assessed for the first time. The conditions that have not changed overtime and described as not favourable are as shown in Table 1. The unchanged conditions include Lake Opeta, Lake Bisina, Mabira FR, Murchison Falls NP, Kibale Forest NP and Kyambura all at 'Near favourable'[1] while Nyamuriro swamp and Semliki Reserves are described as 'Unfavourable'[1] condition.

In two areas (Kasyoha – Kitomi and Nabajjuzi), first assessments were made. The status of Kasyoha – Kitomi and Nabajjuzi wetland both are at near favourable. The pressures are low in both sites and responses are high. Assessments were not done in eight sites. These sites are mostly forest IBAs while two are wetland sites. All these sites shall be included in the next assessments when training of the NFA and WMD staff in IBA monitoring has been done.

* [1] *Favourable, Near favourable and Unfavourable are categories describing IBA conditions signifying Good, Fair and Bad respectively.*

The overall condition of IBAs in 2001 was marginally shared between favourable (40.9%) and near favourable (36.4%), the remainder being in unfavourable condition. These however, changed in 2008 with a majority (70.8%) of IBAs being 'near favourable', 20.9% being 'favourable' and 8.3% in 'unfavourable' condition.

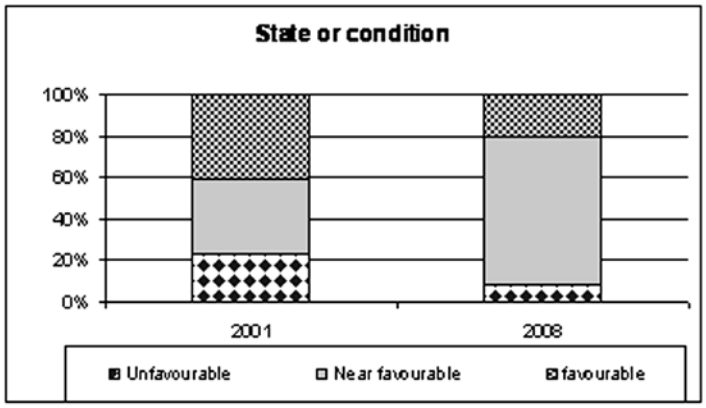


Fig. 3 The overall trend status or condition of the IBAs in 2001 and 2008 (N=24) where N is the total number of IBAs reported on

General status and trends

The overall State-Pressure–Response for the IBAs has changed from the 2001 analysis. There is a general slight decline in condition in 2008, 2.13±0.11 (Mean±SEM) compared to 2001, 2.18±0.17. The pressure is described as 'medium' (-1.21±0.16) and response as 'high' (2.42±0.17) compared to 2001 with pressures of -1.11±0.15 and response of 1.81±0.19. The analyses done here is based on data collected from 13 protected area IBAs 8 wetland IBAs and 3 Forests Reserve IBAs (N=24). It is important to note that the overall decline in status does not reflect decline in status of all the IBAs. The status across the individual IBAs may vary. For example, the condition of Echuya FR has improved whereas that of Lutembe Bay has declined. This is due to increased conservation efforts at Echuya and continued increase in pressures at Lutembe Bay. This sample (24/33), 75%, however, leaves out the majority of the forest IBAs. In total, 9 (27%) of the IBAs are not assessed.

The mean score for pressures (Fig 4) has increased showing an increased disturbance on most IBAs. This can be attributed to both increased reporting processes and the actual escalation in threats in different IBAs. The previous analyses (2001) showed fewer reported threats compared to now (2008), with typically 6 – 10 threats in each IBA (annex 1). However, this is likely to reflect the differences in the way in which data were collected in the two years. It is important to note though that when comparing the mean scores for the highest threats in the year 2001 and 2008, favourable comparison can be derived. This therefore has a bearing on the general trend of the mean status score of the IBA. In areas where the threats have persisted, the resultant effect has continued to make the conditions unfavourable for example, Semliki Reserves and Nyamuriro swamp. Worse still, escalating threats lead to decline in conditions as in Lutembe Bay, Kidepo valley NP and Ajai WR.

The conservation efforts or responses have increased. The responses signify the designation status, management plan development/implementation and active conservation interventions. The general trend has shown a steep shift in designation status. In addition to those sites that had already acquired protected areas status by 2001, nine wetland IBAs have been listed as Ramsar sites (appendix 4). Most IBAs have either had their management plan finalized or the production is being initiated (appendix 3). This should however, be consolidated with the active intervention to either reduce the current threats or improve on the conditions of the IBAs. The community protected area initiatives contribute significantly towards effective and sustainable management by UWA. Community protected area initiative is an innovation aimed at involving local communities living near protected areas in sustainable conservation programmes. The involvement of conservation partners in the protection and implementation of conservation projects across priority sites have been timely. The involvement of local communities through CFM negotiations and provision of IGAs are areas where NGOs are strong.

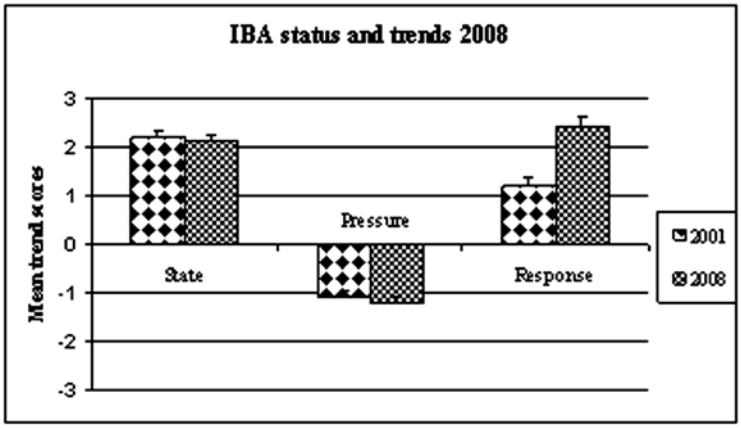


Fig. 4 The overall mean trend scores for IBAs in Uganda (N=24) where N is the total number of IBAs reported on

State of habitats and species of major IBA categories

Of the 33 IBAs, 13 are protected areas under UWA and data were received from all, 9 are Forest Reserves under NFA and only 3 were assessed, 10 are wetlands under WMD and assessment was done on 8 of them. Species data are from the regular waterfowl monitoring censuses. Lots of species data are available, however, only data on waterbirds that are trigger species for particular sites and with substantial trends are considered in these analyses.

State of protected area IBAs

The mean score for the status or condition of IBAs that are protected areas (N=13) remained stable in 2008 (2.07±0.14) compared to 2001 (2.07±0.24), Mean±SEM. However, pressures have continued to increase from (-0.92±0.21) in 2001 to (-1.53±0.19) in 2008. The conservation efforts by UWA have also increased in terms of production of management plans and effective site protection and management. There has been improvement in protected area community awareness programs by UWA and general ranger based patrols. Responses in protected areas have improved from 1.54±0.14 to 2.77±0.12.

The general trend in responses in protected areas looks good but there are clear instances where there is need for management intervention. The continued community settlements in Ajai WR, animal incursions in Queen Elizabeth NP and Murchison Falls NP and intensive and extensive fires in Kidepo Valley NP and Murchison Falls NP are a cause for concern as they continue unabated. There are however minor mitigation measures with regards to relocating the reserve settlers. To date, a team has been established to oversee the process of relocation and progress is being achieved. There has been tremendous support for the relocation process by the District Steering committee. The communities have been very positive while the UWA management remains committed to facilitating the process.

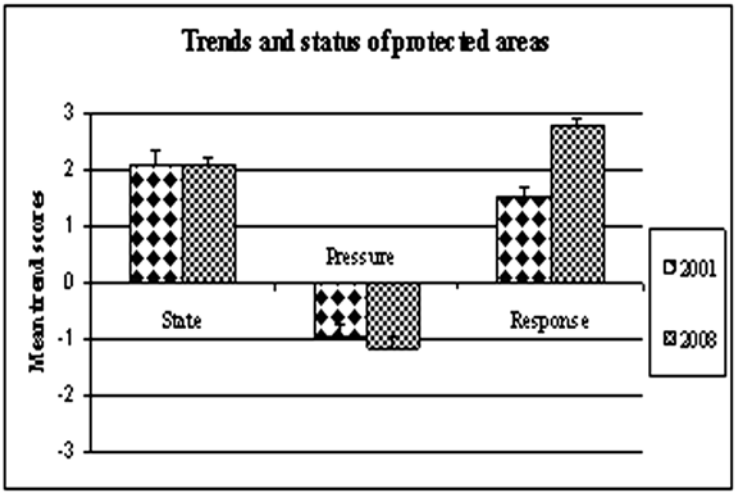


Fig. 5 The mean scores of protected IBAs (N=13) where N is the number of protected areas reported on

Protected area trigger species

Trigger species are those species of birds for which particular IBAs were qualified. There are many waterbird species in this category that are monitored at the protected areas through the AWC. These include African Skimmer, Lesser Flamingo, Gull-billed Tern, White Pelican and Black-winged Stilt. The habitat conditions are shown to be stable. The African Skimmer numbers in Queen Elizabeth NP have shown a marked increase while those for Murchison Falls NP have been more stable.

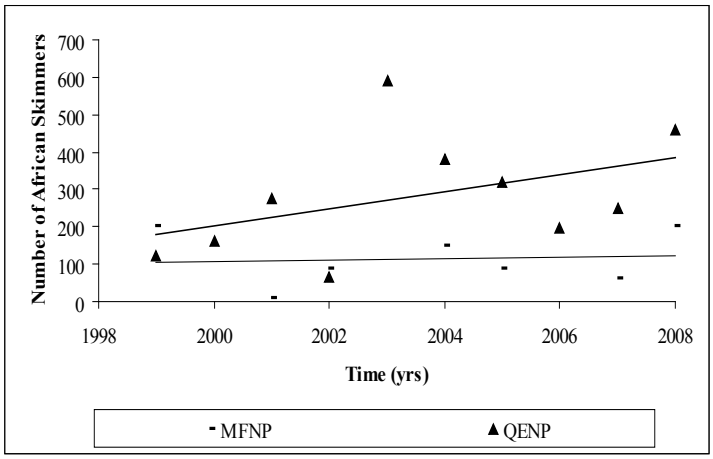
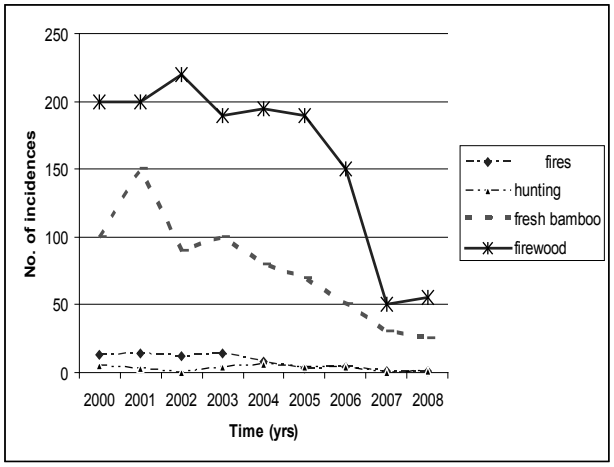


Fig. 6 Trend of African Skimmers in Queen Elizabeth NP and Murchison Falls NP



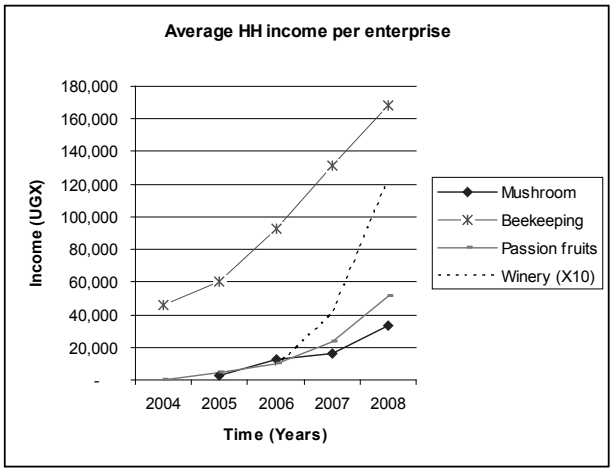


Fig. 7 Incidences of illegal activities and CFM interventions in Echuya FR (Echuya project monitoring report, NU Echuya office).

State of forest IBAs

The assessments of the mean scores of the Forest IBAs could have been a better indicator. But this was not possible since assessments were from only three forest IBAs. Kasyoha – Kitomi IBA is being assessed for the first time. The Status of Mabira Forest remained stable while there is an improvement in the conditions at Echuya Forest IBA. The improvement is attributed to the reduced incidences of illegal activities as a result of increased community awareness and CFM interventions. There has been a general improvement in Grauer's Swamp Warblers in Muchuya swamp, with the population reportedly doubling (Ellison, 2008).

State of wetland IBAs

The mean score for the status of wetland IBAs (N=8) has reduced from (2.43±0.30) in 2001 to (2.13±0.23), (Mean±SEM), hence poor conditions, overall reduction in pressures (-1.43±0.20) to (-1.38±0.32) in 2008 not withstanding. The designation of all wetland IBAs as Ramsar sites was one major conservation policy that has helped raise profile of wetland IBAs to some protection level both locally and internationally. Six sites have management plans but are with very minimal active conservation initiatives. The site actions such as conservation through livelihood improvement in Musambwa Island, environmental education in Nabajjuzi and various activities of SSGs in Lutembe, Mabamba, Musambwa and Opeta contribute to the overall improved trend in response indicator.

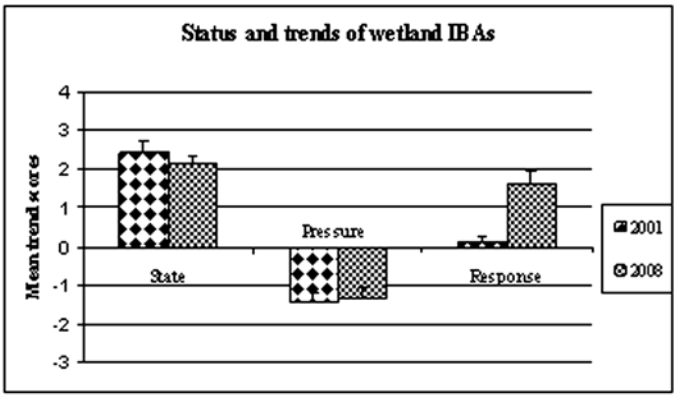


Fig. 8 The mean trend scores of wetland IBAs (N=8) where N is the number of wetland IBAs reported on

Wetland IBAs trigger species

Wetland trigger species are those waterbirds that are either threatened or are of large congregations that met the criteria. The contribution of SSGs in site conservation has been substantial. Currently, there are four active SSGs in wetland IBAs. All these are being involved in conservation in different capacities. Musambwa Island Joint Conservation Organization is being involved in monitoring threats and conducting joint bird surveys with AWC teams. The presence of the SSG has helped improve on the population of the breeding colonies of the Grey-headed Gulls at the Island.

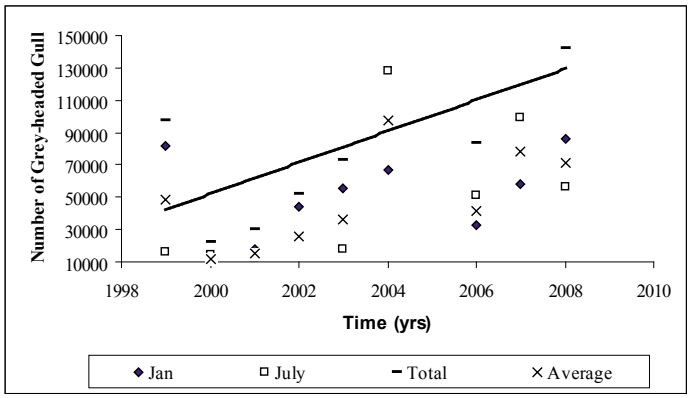


Fig. 9 Trend of Grey-headed Gulls in Musambwa Islands

State of farmed IBAs

There are three 'farmed' IBAs: Lutembe Bay and Nyamuriro swamp both have high intensity of farming around them while Doho rice scheme is predominantly a farmed IBA. There is a consistent waterfowl monitoring in Doho rice scheme and Lutembe bay. A common practice of poisoning of birds especially the Open-billed Stork remains a major threat in Doho. Smallholder potato growing in Nyamuriro has greatly affected the habitat conditions of the swamp although the local communities, through the Wetlands and Cranes program, have replanted a portion of the wetland but more needs to be done. Degradation, habitat change and pollution negatively affect the numbers of trigger species such as Gull-billed Terns at Lutembe bay.

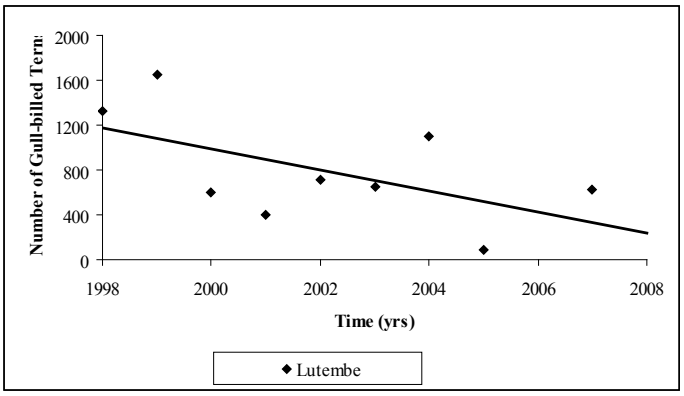


Fig.10 Trend of Gull-billed Terns in Lutembe Bay

Cattle incursion in Semliki Wildlife Reserve

Part Four

Status and trends of pressures 2008

General trends of pressures

With 2001 as a baseline, a time when the first IBA assessment can be traced, a number of threats were highlighted. These threats varied from one site to another but in general terms, each IBA experienced fewer incidences (3 – 6) of different threat categories compared to the 2008 assessment of (6 – 10) on average. However, this is likely to be an indication in the differences in the way in which data were collected in the two years. Pressures in most IBAs have generally increased compared to the previous assessment and again, this may be due to the more systematic way of capturing and reporting pressures. It is important to note that the fundamental threat in 2001 may have been reduced and another primary threat altogether is the focus of 2008. Nevertheless the drivers of the various forms of threats remain population increase coupled with increasing demand for resources, land for settlement, development and economic initiatives and the ever change in life style. This has resulted in various forms of encroachment and alteration of habitats. A threat class 'very high' only appears in the 2008 assessment and accounting for 4.2%. The other three categories show similarity although 2008 assessments show increasing threats in the higher threat categories as compared to 2001 (Fig 11). This eventually impacts on the condition of the IBAs.

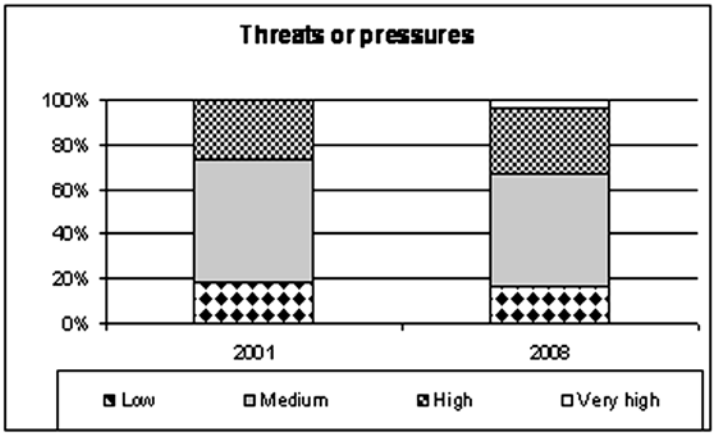


Fig. 11 General threat levels in 2008 (N=195) where N is the total number of threats encountered

Type and status of threats

- **Agricultural intensification**

Agricultural expansion is one of the major threats in most IBAs. Different forms of agricultural activities have been reported in 17 (53%) IBAs, wetland tree planting 1 (3.1%) and flower farming 1 (3.1%). The communities of Nyamuriro swamp have taken to potato growing in the IBA. Other examples include farming in Mt Rwenzori NP in parts of Kasangali, use of chemicals in Doho rice scheme and annual crop growing by two communities of Madali and Degia in Ajai WR. Also present is wetland edge gardening and tree planting in Nabajjuzi wetland, intensive use of chemicals in flower farming at Lutembe bay and various forms of encroachment reported in Murchison Falls NP, Semliki WR, Mt. Elgon NP, Mabira FR, Echuya FR and Kasyoha – Kitomi FR. The agriculture sometimes is done right to the boundary mark with no buffer.

- **Burning of vegetation**

Burnings within protected areas are of two forms; prescribed fires and wild fires. In 18 (56%) IBAs, eight destructive fires and ten fires of minimal effect were registered. These sometimes were extensive and intensive wild fires and examples being Murchison Falls NP, Kidepo valley NP, Semliki WR and Mburo NP. The management burnings that had less effect on vegetation were reported in other protected areas and forest reserves. Lake Opeta and Bisina also experienced fires during drier parts of the year. The wild fires are particularly started by poachers in protected areas or by hunters in wetland IBAs. Occasionally, these fires escape from the adjacent communities as they clear farms for next cropping season. The effect of fires on biodiversity can range from suppression of regeneration to excessive destruction of the vegetation cover in a habitat. This interrupts both the vegetation balance and the habitat quality and the ability of the habitat to successfully hold the biodiversity. Once the quality of the habitat is reduced, the populations of resident species are adversely affected.

- **Nomadic grazing/livestock grazing**

Grazing of domestic animals takes two forms; large herds driven into the IBA or small scale isolated cases. These two forms have been recorded from 18 (56%) of the IBAs. The Basongora communities in Queen Elizabeth NP and Kyambura WR, the Balalo communities in Murchison Falls NP, pastoral communities in Semliki WR, Karamojong communities in Kidepo valley NP and ranch farmers in Mburo NP are involved in large scale herding in protected areas. All other forms of grazing reported in other areas are localized and small scale particularly involving small animals and edge grazing except in the Lake Opeta – Bisina region that experience occasional incursion from pastoralists. This activity has increased with increased demand for grazing space. The resultant effect is conflict between the park authorities and the communities involved. In turn, there is an increase in human – wildlife conflicts which needs a well thought intervention.

- **Alien species / invasive species**

This has been reported from many of the protected areas. Overall, 11 (34%) of the IBAs were reported as having occurrence of alien/invasive species. However, individual protected areas have measures to eradicate the invasive species. In Lake Mburo, through the Acacia Project, the local communities are engaged in the removal of Acacia hockii. Acacia is a very aggressively spreading species in Lake Mburo and this prompted some action. A program to sustainably utilize the resource was sought and community involvement was key. The program aimed at checking the expansion of the species by allowing communities use the tree species as fuel wood source and the park authority benefits from their labour. Kibale NP has given concessions to private individuals to harvest exotic species. Similar programs are in other reported areas, such as Lake Mburo NP, Semliki WR and Echuya FR. The wetland IBAs (Lutembe) still have low volumes of water hyacinth but this may explode considering the invasive nature of the plant.

- **Extraction industry**

Major extraction activities are in form of mining salt and sand, quarrying of stones and excavation of clay for brick making. The activities are being practiced in 4 (13%) of the IBAs. Salt mining in Kasenyi and Katwe areas located in North and North eastern part of Queen Elizabeth NP, stone quarrying and sand mining in Lutembe bay and Nyamuriro swamp and clay excavation in Nabajjuzi swamp is taking place. Nyamuriro swamp continues to experience mineral exploration and mining which is done on small scale by the locals. All this could be sustainably planned through local community conservation initiatives.

- **Colonization/ habitat change**

Due to human activities within or in areas adjacent to the IBAs, changes in the habitats are being noted. This is evidently seen in 2 (6.3%) of the 24 IBAs. In Nyamuriro swamp, human activities coupled with heavy silting has caused habitat down stream to change from typical wetland vegetation to upland vegetation. At Lutembe bay, silting and swamp filling has increased the coverage of the papyrus swamp areas. The muddy areas liked by wading birds are slowly being colonized by Vossia miscanthus plants.

- **Deforestation**

This has been reported in 5 (16%) of the IBAs. Deforestations are mostly isolated cases of reasonable illegal cuttings. The areas most affected are Tisai Island in Lake Opeta region where there is large incidences of charcoal burning and fuel wood harvesting. Others are Mt Rwenzori NP where there are isolated cases of pit sawing, Kasyoha – Kitomi and Mabira Forest Reserves potentially are threatened. Kidepo Valley has witnessed many cases of illegal logging by local communities.

- **Disturbance to birds**

Disturbance to birds come in different forms. There have been reports from 4 (13%) of the 24 IBAs. At Musambwa Island, birds are constantly chased by fishermen from their catches and illegal egg collectors. There are people working all day long in the rice fields in Doho, long hours in Nyamuriro swamp and make-shift structures and busy transport route in Mabamba. All these activities might have an impact on either the breeding or feeding schedules for the trigger species.

- **Drainage/ filling/silting of swamp**

Wetland IBAs are potential targets for most developers. The wetlands are also places where communities see as alternative productive areas during difficult seasons. Drainage and silting is recorded in 3 (9.4%) of the IBAs. Silting due to excessive incidences of soil erosion in Nyamuriro swamp, drainage channeling in Doho rice scheme and swamp filling and barrage construction by flower farm extension in Lutembe Bay are the examples.

- **Water abstraction**

Most wetland IBAs support domestic water supply generally. The construction of major water treatment and/or supply plants have been in 3 (9.4%) IBAs. If not carefully planned, this is a potential danger in both reduced volumes and source of pollution. Lutembe Bay supplies water to all the flower farms around it. Mabamba Bay has a supply pump for Mpigi district and Nabajjuzi wetland treats and supplies water to Masaka district. Untreated waste water is drained into the sites as reported in Lutembe and Nabajjuzi wetlands.

- **Firewood collection**

The populations living near IBAs are dependant on wood for fuel. This is demonstrated by high incidences of firewood collection in 19 (59%) of the IBAs. Although the collection of the fuel wood mostly targeted dry wood, some collectors still cut fresh wood. In some IBAs (Kibale forest NP, Echuya FR, Kasyoha – Kitomi FR, Mgahinga NP and Bwindi Impenetrable NP), negotiated quotas have been effected to reduce on the resource off-takes. In Lake Mburo NP, the communities have been allowed to cut Acacia and burn charcoal from them. The trend may change with increased demands.

- **Industries/urbanization/infrastructure/housing**

A number of developments are coming up in or near the IBAs. This is reported in 8 (25%) of the 24 IBAs. Ajai WR still has communities within the reserve itself. Two villages, each of 22 households inhabit and farm within the reserve. The fishing villages in Semliki WR are expanding all the time mainly within the controlled hunting areas. The flower houses encroach into the wetlands in Lutembe bay. More houses are being built in Musambwa islands. Other forms of occupation next to the IBAs include urban development in Mabira FR, Nabajjuzi wetland, Kasyoha – Kitomi FR and Kidepo valley NP.

- **Natural events/floods/landslides/drought**

Floods in eastern and north western Uganda, landslides in rugged terrains and drought in north eastern Uganda were experienced natural occurrences. In 4 (13%) of the 24 IBAs, these were reported. Parts of Mt Rwenzori NP lost minimal areas due to landslides. There were floods in Opeta – Bisina areas and reported wilting of trees in Ajai WR. Serious drought was reported in Kidepo valley NP making the park very prone to wild fire outbreaks.

- **Recreation/tourism expansion**

Expansion of tourism facilities have been reported in 12 (38%) of the 24 IBAs. When developed with good planning, impact is minimal. Tourism affects the delicate bog areas of Mt Rwenzori NP. Facilities are being expanded in Queen Elizabeth NP, Murchison Falls NP, Kidepo valley NP, Kyambura WR, Kibale forest NP, Ajai WR and Lake Mburo NP in terms of road net work and accommodation facilities. In terms of increased number of visitors, Mabamba bay receives substantial shoebill trekkers and this may affect the behaviours of the species.

- **Selective cutting/logging**

The selective cutting is reported in 8 (25%) of the 24 IBAs. This is either done legally or illegally. The legal cuttings are supervised and the unsupervised ones tend to open up forest canopies. There have been consignments of bamboo in Echuya FR, removal of exotic tree species in Kibale forest NP and Semliki NP, Acacia removal in Lake Mburo NP and illegal harvests in Mt Rwenzori NP, Semliki WR and Kidepo NP.

- **Resource harvesting/exploitation/medicine/ bamboo**

This is the most wide spread threat reported in 20 (63%) of the IBAs. The harvesting of resources take various forms ranging from harvesting food (Bamboo shoots in Mt Elgon NP, leaves in Kidepo valley NP), harvesting construction materials (stakes, poles and grass by most adjacent communities), harvesting wetland resources in most wetland IBAs for crafts, harvesting for medicine from shrubs and tree barks,

harvesting bamboo shoots in Echuya FR, Mt Rwenzori NP and Mt Elgon NP. Since most of the populations depend on wood fuel, they resort to exploiting the resources, which are abundant in these IBAs in order to access this service.

- **Bird persecution (hunting)**

The killing of birds either directly or indirectly has been reported in 4 (13%) of the IBAs. Notable cases are poisoning in Doho rice scheme, indirect kills from fishermen in Semliki WR, direct hunting for consumption in Kidepo NP and kills resulting from fishermen protecting their catch from the Grey-headed Gulls. There have been incidences where Great White Pelicans in Musambwa, Open-billed Storks in Doho rice scheme and a variety of species in Kidepo Valley NP are targeted for consumption. Other different species (Herons and Ibises) have fallen victims of poisoning in Doho rice scheme.

- **Over fishing**

Fishing as an activity within the IBAs has been reported in 10 (13%) of the IBAs. Illegal fishing is carried out in four protected areas (Ajai WR, Semliki WR, Queen Elizabeth NP, Lake Mburo NP and Murchison Falls NP). There are high levels of fishing in five other wetland IBAs notably Musambwa where fishermen have continuously used the islands for drying their catch. The fishing activity has led to the increase in a number of fishing villages in Semliki WR and Queen Elizabeth NP, disturbance of habitat quality in Musambwa and Lake Opeta and potentially disturbance to trigger species.

- **Egg collection / consumptive utilization**

The habit of collecting birds eggs for consumption has been reported in 3 (9.4%) of the IBAs. Egg collection for consumption is a habit among communities in Musambwa Islands where eggs are harvested from the breeding colonies of the Grey-headed gulls. Although this is reported in Kidepo Valley National Park, no particular trigger species have been evidently reported but potentially present. The shoebill egg collection was reported in Semliki Wildlife Reserves and the culprit appropriately dealt with. Hunting and poisoning of birds is prominent in Musambwa Island (Pelicans), Doho rice scheme (Open-billed Storks and Herons) and Kidepo Valley National Park.

- **Military operations/ range grounds**

The IBAs that experienced incidences of war in recent times have continued to have military camps in them. Semliki Wildlife Reserve and Semliki National Park both have four army camps each and this account for 2 (6.3%) of the IBAs. This has a bearing on the habitat quality since areas are cleared for make-shift structures and the materials for construction come from within. There are also places (range grounds) cleared for military exercises although some have recovered, others are still active.

- **Pollution in IBAs**

Pollution due to use of chemicals that are either directly drained in to the water or the chemicals percolate to the water in the IBAs. The use and dumping of chemicals from agricultural activities into the IBAs are reported from 4 (13%) of IBAs. One special case is Lutembe Bay where chemicals from the flower farms enter into the wetland in relatively large volumes. The other kinds of pollution reported were waste dumping in Nabajjuzi wetland areas 1 (3.1%) and sewerage treatment 1 (3.1%). Another form of pollution is direct use of agro-chemicals in Doho rice scheme. Although this is small scale, less productivity may result in eventual increased use intensity.

- **Power line/transport way**

The loss of habitat quality or quantity caused by the passage of a main power line or transit route was evidently seen in three of the IBAs monitored. The freshly cleared opening for the power line in Semliki National Park, the major power line and a potential extension in Mabira Forest Reserve and a main transit water way in Mabamba bay contribute to the threat category which accounted for 3 (9.4%).

Annual crop (cassava) growing in Ajai Wildlife Reserve

Part Five

Status and trends of responses 2008

General trends of responses

The conservation efforts have tremendously improved from negligible through to high. The designation status, management planning and active conservation interventions have all increased. In 2001 assessment, negligible conservation actions accounted for 27.3% compared to only 4.2% in 2008. Improved trend has seen 2008 with 'high levels' of responses reaching 58.3% while the assessment of 2001 had 4.5%. This is attributed to the various efforts in designation of wetland IBAs as Ramsar sites and respective site focused conservation actions.

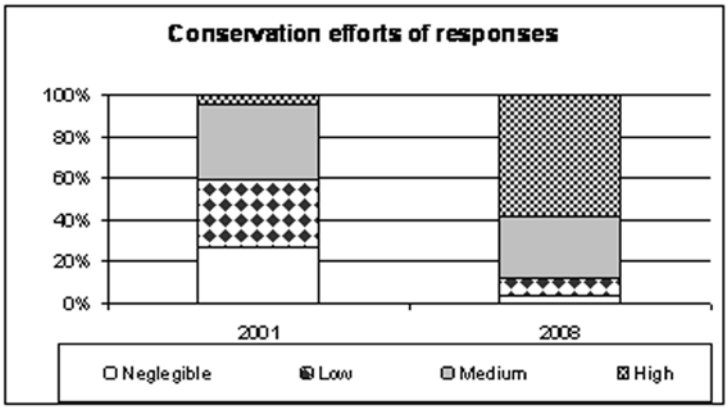


Fig. 11 General conservation levels in 2001 and 2008 (N=24) where N is the total number of IBAs considered

General responses

The conservation efforts or responses differ from one IBA to another. The designation status varies between sites, management planning processes are at various stages and active conservation interventions of different stature are being employed. The response are either for improving on the quality of the habitats or reducing or eliminating existing threats that might hinder the conservation of critical sites.

- Site Support groups (SSG) involvement in conservation
  The impact of working together with the local conservation groups in or around IBAs is demonstrated by the commitments of the local conservation groups to monitor, protect and sustainably use the available resources without reducing the quality of the habitats. It is evident that this is an effective way of involving communities in IBA conservation. Through various programmes of NatureUganda, four SSGs have been formed and three additional community groups near Kasyoha – Kitomi FR, Nabajjuzi wetland and Echuya FR IBAs closely work together with the organization to implement various conservation programmes. The SSG activities vary from one site to the next. At Katwe in Queen Elizabeth National Park, KATIC is involved in environmental education, tourism and migratory bird monitoring at Katwe and Munyanyange, a site known for Lesser Flamingos. At Lutembe, the SSG is involved in advocacy for site conservation and sustainable resource utilization. In Mabamba Bay, the SSG is involved in bird guiding, site protection and site monitoring. And in Musambwa, the SSG is involved in site protection, site management and various monitoring activities undertaken in Musambwa Island. Apart from these SSGs NatureUganda implement various project activities together with local groups. A Nabajjuzi wetland, the environmental education is being implemented together with the local groups. In Nyamuriro wetland, Echuya Forest and Kasyoha Kitomi Forest Reserves local groups are being involved in conservation through various initiatives including Collaborative Forest Management, wetland resource management and resource use allocations.

- There are a many projects that have been implemented in many IBAs. These projects address pertinent issues that are affecting particular sites. These include Musambwa Island conservation project, Echuya conservation project, PEMA in Kasyoha - Kitomi, LVCEEP in Nabajjuzi, IBA monitoring. Others include International Fund for Animal Welfare (IFAW), FACE Foundation, International Gorilla Conservation Program IGCP, Conservation Through Public Health (CTPH) and projects in research and monitoring by Wildlife Conservation Society (WCS) and CARE International. There are a number of community based projects that are being promoted either by government agencies or NGOs that are directly addressing conservation issues.

- There has been an improved trend in the operations of government agencies especially UWA. With most parks now relatively calm, there is improved policing and enforcement of law. Except for some few cases, mobility in most protected areas have been improved and this has improved on the reach and coverage of the areas to be patrolled by the park authorities. The mobility and the policing in both forest IBAs and wetland IBAs still remain a challenge.

- There have been additional sites identified and qualified as IBAs. NatureUganda identified, gathered information and proposed three additional sites. These are Kasyoha-Kitomi FR, Bugoma FR and Nabajjuzi wetland. Two of these sites (Kasyoha-Kitomi and Nabajjuzi wetland) have been assessed and confirmed. Qualifying sites as IBAs is vital to the advocacy process for sites and their recognition as areas of high biodiversity value.

- The process of designating wetland IBAs as Ramsar sites started in 2004. Addition to the two Ramsar sites that were designated before, all the nine wetland IBAs proposed were confirmed as Ramsar sites in 2006. This raised the profile of these sites as places of unique and high biodiversity sites. Now there is a joint program of popularizing the sites by NatureUganda and WMD. The communities are being involved in all the stages and processes through the local government.

- A number of research and monitoring programs that are aimed at informing management are being carried out by different conservation NGOs. Institute of Tropical Forest Conservation (ITFC) and CTPH in Bwindi – Mgahinga, WCS, NU and CARE International research programs, MUIENR and MUBFS data collection programs and all the monitoring activities of SSGs. The various NU projects have components of monitoring illegal activities in respective sites.

- The good collaborations between government agencies especially UWA, NFA, WMD and NatureUganda have helped in the execution of programs. The implementations of projects are done with the help of local government officials. This has been vital especially in negotiation with local communities in areas that are sensitive and need government interventions.

- A number of advocacy interventions were made at different IBAs. The advocacy interventions took the form of campaigns. For example, campaign against establishment of sugar cane plantation in Mabira Forest Reserve, filling of Lutembe wetland, Dura quarry proposal in Queen Elizabeth NP, oil exploitation in Queen Elizabeth and Murchison Falls conservation areas, sport hunting in Lake Mburo NP and wildlife trade in various species without proper documentation on numbers. Many of these have had proposals being reversed in favour of habitat protection. The positive thing for now is that the sites have been saved but the push for better policies and proper execution of EIA will be key issues. There has also been advocacy in order to mitigate community – protected area – wildlife conflicts.

- There have been various forms of environmental education programs in different sites. The Lake Victoria Catchment Environmental Education Program (LVCEEP) project work in Nabajjuzi, Echuya FR in Echuya, Participatory Environment Management (PEMA) in Kasyoha-Kitomi, Musambwa conservation project in Musambwa Island all focus on sensitizing the communities. SSGs in Musambwa and KATIC particularly have been vital in disseminating information to communities and schools. There were several informative public talks organized by NU and attended by policy decision makers, management authorities and academicians. All these helped in dissemination of information.

- The negotiation of Collaborative Forest Management Agreements especially in forest reserves and user quotas in protected areas improved community relations and minimized conflicts. Four CFM agreements were formally signed in Echuya FR and five in Kasyoha-Kitomi FR. User quotas have been negotiated in many protected areas notably Bwindi, Mgahinga, Kibale, Rwenzori, Elgon and both Semliki WR and NP. Various bye laws have been negotiated with local governments through local community groups and SSGs in Nyamuriro and Musambwa IBAs.

- Community Protected Area Initiative is a program being implemented by UWA in protected areas. This takes various forms. For example in Lake Mburo NP, the community is being involved in the eradication of the invasive Acacia hockii species through the Acacia removal program. In Kibale NP and Elgon NP, the communities are involved in Taungya farming in a re-afforestation programme. In Kidepo NP, the communities are being involved in the establishment of woodlots. The initiative is aimed at forging a long term engagement of the communities in conservation.

- Initiatives have been made to rehabilitate the lost habitats through habitat restoration programs. In Echuya FR, the CFM programs managed to plant 5,500 bamboo rhizomes and 300,000 trees on-farm over four years and this relieves strain on natural habitats. In Kasyoha-Kitomi FR, 50000 seedlings were planted. Through FACE foundation, Kibale NP and Elgon NP are replanting formally heavily encroached areas with indigenous tree species. In Nyamuriro, the local communities replanted papyrus in areas that were under crop. This improved on the 100ft buffer of papyrus along the river and added to the existing papyrus habitat.

- Provision of resource alternatives is one of the ways the conservation of particular habitats may be improved. This not only diverts the attention away from the natural resources but when properly planned, may improve livelihood. In Kasyoha-Kitomi and Echuya FR, alternatives such as passion fruits, bamboo shoots, coffee seedlings, mushrooms, and winery were instrumental. Income generating activities such as eco-tourism in KATIC, Nabajjuzi observatory, Shoebill watching at Mabamba and Musambwa eco-tourism, kitchen gardening in Nabajjuzi and Musambwa, energy saving stoves in Musambwa and Echuya and poultry and bee keeping in Kasyoha-Kitomi and Echuya were all livelihood options aimed at reducing pressure on natural habitats and resources.

- Problem animal control program by UWA with support from WCS and other stakeholders is a good move to reduce wildlife crop raids. In a move to reduce conflicts between wildlife and humans, the UWA management is implementing a revenue sharing programme. This involves giving back 20% of the protected area revenue collections to the surrounding communities. The revenue generated is invested in community projects. There is also an increased involvement of communities in park management decision making and providing employment through recruitment of surrounding communities in UWA staffing.

Part Six

Key recommendations for major stakeholders

*Nature*Uganda

- Identify, assess and qualify more sites for inclusion as Important Bird Areas.
- Train people from other major stakeholders in IBA monitoring especially NFA and WMD.
- Train Site Support Groups, Parish Extension Agents and key individuals in IBA monitoring and basic steps in biodiversity assessments.
- Provide the necessary field equipment that will facilitate the provision of good quality data from the field.
- 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.
- Contribute articles from the IBA monitoring program to the State of Biodiversity report and other national processes.
- Mainstream Common Birds Monitoring, Land Bird Monitoring, Raptor Censuses and African Water Fowl Censuses into the IBA monitoring program.
- Collaborate with major stakeholders such as the WMD and the local community in popularizing Ramsar sites.
- 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.
- Together with other stakeholders, identify and support eco-tourism initiatives that are aimed at enhancing conservation values of the sites.
- 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 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.
- Reaffirm commitments from the different stakeholders and where necessary review the current MoU or draft new ones.
- Organize expeditions or visits to sites with potential or actual detrimental threat of huge magnitude.
- Produce an IBA monitoring training manual that can easily be used within the set up of various institutions.
- Ensure prompt production of status and trend reports and widely distribute to relevant authorities for management decisions.
- Continue the production of IBA publicity materials both in English and local languages targeting both local and national audience.
- Promote the IBA monitoring framework amongst all the stakeholders

Uganda Wildlife Authority

- Incorporate the IBA monitoring process into the existing Management Information System (MIST) for long term sustainability of the program.
- Consolidate community protected area initiative in areas where it exists and initiate it in areas that are yet to adapt for long term community engagement in conservation.
- Improve the wildlife – human conflicts by increasing the levels of community involvement in decision making and management of the protected areas.
- Improve support to monitoring programs that are aimed at informing management and improving management interventions.
- Improve on the delivery of revenue sharing program and reduce on resource use conflicts by empowering communities through delivery of income generating activity programs.
- 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 is 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.
- Quicken the process of resettling families that still reside in protected areas and improve on the relations with the protected area adjacent communities with a common goal of appreciation of biodiversity and habitat improvement.
- Improve on the program of eradication of alien invasive species while promoting those processes that have been proven effective and sensitive to conservation initiatives.
- Promote pro-biodiversity guidelines for military activities, settlements and range grounds that are either within the protected areas or at close proximity to these important habitats.
- Reduce / limit destructive tourism activities and develop and implement programs that are aimed at addressing such incidences.

Wetlands Management Department

- Quicken the process of developing management plans for the Ramsar sites / IBAs that do not have 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.
- Identify, develop and promote community programs especially eco-tourism initiatives that is aimed at improving the profiles and values of these sites to a wider audience locally and internationally.
- Consolidate the involvement of local communities in the protection and restoration of degraded wetland habitats.
- Negotiate resource harvesting quotas with communities so that sustainable resource utilization is ensured.
- 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.
- Forge an inter-departmental collaboration with UWA in the monitoring and management of the Ramsar sites in protected areas since some of their boundaries fall outside protected areas.
- Improve on the involvement and participation of National Environment Management Authority in EIAs and decisions on developments in and near fragile wetlands.
- Improve on the skills of staff in monitoring and reporting on illegal activities and bad practices that may down grade the status of critical wetland systems.

National Forest Authority

- 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.
- Appropriately use the existing management plans and together with other stakeholders, produce management plans for areas that are lucking.
- 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.
- Strengthen monitoring programs and incorporate the IBA monitoring into the existing NFA monitoring structures.
- Together with the relevant stakeholders, negotiate CFM agreements with the forest adjacent communities and ensure that the agreements are strictly followed.
- Promote the domestication of resources such as bamboo and medicinal resources and encourage sustainable use for those obtained from the forests.
- Support various projects that aim at promoting IGAs with the adjacent communities.
- Support eco-tourism initiative within the forest reserves and promote biodiversity friendly tourism expansion.
- Increase education and awareness campaigns that address direct beneficiaries and discourage destructive developments
- Strength the use of policies and laws and promote relevant sections of the constitutions to enhance conservation of IBAs.

National Biodiversity Data Bank (NBDB)

- Liaise with NatureUganda, UWA, NFA and WMD on all the data gathered through IBA monitoring forms.
- 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.

Charcoal burning in Ajai Wildlife Reserve

Appendices

Appendix 1: Threats / pressures on IBAs in 2008

The table below provides a summary of threats for the different IBAs in 2008. Different sites experience different numbers and magnitudes of threats. The order of threat does not in anyway reflect its magnitude or frequency. Some threats may be reported in many IBAs and yet minimal in its effective impact and others may be scanty and yet very destructive. The differences in the resultant effect are reflected in the previous sections of this report.

Site Code	Site Name	Agricultural intensification/shifting agriculture	Burning of vegetation	Nomadic grazing / livestock grazing	Use of agro-chemicals	Proliferation of flower farms	Construction of barrages	Alien species / invasive species	Extraction industry/ mining/ quarrying/brick making	Colonization/ habitat change	deforestation	Disturbance to birds	Drainage/ filling of swamp/silting	Water abstraction	Firewood collection	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	Military barracks/ range grounds	Pollution	Waste dumping	Sewerage treatment	Wetland tree planting	Power line/transport way	Total
UG001	Mgahinga Gorilla National Park		U	U											U					U											4
UG002	Echuya Forest Reserve	N	N	N											N				N	N												6
UG003	Nyamuriro Swamp	N		N	N				N	N		N	N				N			N											9
UG004	Bwindi Impenetrable National Park		U	U				U							U					U											5
UG005	Rwenzori Mountains National Park	U	U								U				U		U	U	U	U											8
UG006	Kibale National Park	U	U	U				U										U	U	U					U						8
UG007	Queen Elizabeth National Park		U	U				U	U						U			U		U		U									8
UG008	Kyambura Wildlife Reserve	U w		U w				U w							U w			U w													5
UG009	Semliki National Park		U	U				U							U				U	U					U					U	8
UG010	Semliki Reserves	U *	U *	U *				U *							U *	U *		U *	U *	U *	U *	U *	*		U*						12
UG011	Lake Mburo National Park		U w	U w				U w							U w			U w	U w			U w									7
UG012	Mabira Forest Reserves	N		N	N			N			N				N	N		N	N	N						N				N	12
UG013	Sango Bay Area	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG014	Musambwa Islands											N			N	N				N	N	N	N	N							8
UG015	Lutoboka Point, Ssese Islands	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG016	Nabugabo Wetland	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG017	Mabamba Bay		N w									N w		N w				N w		N w										N w	6
UG018	Lutembe Bay	N w			N w	N w	N w	N w	N w	N w			N w	N w		N w		N w		N w		N w			N w					14
UG019	Budongo Foerest Reserve	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG020	Murchison Falls National Park	N U	N U	N U				N U							N U			N U		N U		N U									8
UG021	Ajai Wildlife Reserve	N U	N U	N U				N U							N U	N U	N U	N U		N U		N U									10
UG022	Mount kei Forest Reserve	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG023	Mount Otzi Forest Reserve	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG024	Doho Rice Scheme	w			w							w	w								w			w							6
UG025	Lake Nakuwa	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG026	Lake Bisina	w	w	w											w		w			w		w									7
UG027	Lake Opeta	w	w	w							w				w		w			w		w									8
UG028	Mount Elgon National Park	U	U	U											U					U											5
UG029	Mount Moroto Forest Reserve	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	0
UG030	Kidepo Valley National Park	U	U	U							U				U	U	U	U	U	U	U		U	U							13
UG031	Nabajjuzi Wetland	N	N						N					N	N	N						N				N	N	N	N		11

Key:

- N = threat presence as reported by NatureUganda
- W = threat presence as reported by African Waterfowl/Raptor Census Teams
- U = threat presence as reported by Uganda Wildlife Authority
- * = threat presence as reported by other sources
- X = no assessment made for the period 2008

Appendix 2: List of contributors

The following consists of site monitors who were trained in IBA monitoring techniques and have contributed to this status report by completing the IBA monitoring forms. Some people took the initiative to understand the forms by reading guidelines and filled the forms. The reports compiled by the African Waterfowl Census teams, land bird monitoring and raptor counts teams were vital. We thank all those who purposely visited sites when particular threats were highlighted. A complete listing of management plans was important in understanding of conservation efforts.

Richard Muhabwe - Kibale NP
Oyella Pamela – Mt. Elgon NP
Kapere Moses - Mt. Elgon 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
Aggrey Rwetsiba – UWA
Rwamuhanda Levi - Bwindi NP
Okiring David - Kidepo NP
Kato R Raymond - Kidepo NP
Ntibingirwa Joseph - Mgahinga NP
Opige Michael Odull - NU Secretariat
Seguya Henry Kizito - Musambwa Islands
Polycarp M Mwima – ECOTRUST
Deo Muhumuza – WCS
Achilles Byaruhanga - NU Secretariat
Ambrose Mugisha - NU Secretariat
Professer Derek E Pomeroy - MUIENR
Julius Obwona - Ajai Wildlife Reserve
Francis Otim - Rwenzori NP
Mark Vibbert - Semliki WR
Richard Ssemanda - NU Secretariat
Nuwagaba David Sancho - Kasyoha – Kitomi
Niwamanya Rogers - Kasyoha – Kitomi
Jimmy Muheebwa M - Nyamuriro swamp
Zeneb Musiimire - Echuya FR
Robson Kato – Kyambura WR
Wilson Amanyire – Semliki NP
John Muhangi – Semliki WR
Ntegeka Robert – Queen Elizabeth NP
Biira Petromila – Queen Elizabeth NP
Ddamba G Andrew – Queen Elizabeth NP
Achoroi JP – Queen Elizabeth NP
Siragy Sulaiman – Queen Elizabeth NP
Kamara Richard – Queen Elizabeth NP
Ada Nshemereirwe – Nabajjuzi Wetland
Kananura Vincent – Rwenzori NP
Katebaka Raymond - Neptune

Appendix 3 IBA Management plans and the respective operational periods

Site Code	Site Name	Start year	End year	Period (yrs)	Lead institution
UG001	Mgahinga Gorilla National Park	2001	2011	10	UWA
UG002	Echuya Forest Reserve	2006	2016	10	NFA
UG003	Nyamuriro Swamp	2002	2007	5	***Nature***Uganda
UG004	Bwindi Impenetrable National Park	2001	2011	10	UWA
UG005	Rwenzori Mountains National Park	2004	2014	10	UWA
UG006	Kibale National Park	2003	2013	10	UWA
UG007	Queen Elizabeth National Park	2000	2010	10	UWA
UG008	Kyambura Wildlife Reserve	2000	2010	10	UWA
UG009	Semliki National Park	2005	2015	10	UWA
UG010	Semliki Reserves	2007	2017	10	UWA
UG011	Lake Mburo National Park	2003	2013	10	UWA
UG012	Mabira Forest Reserves	2008	2018	10	NFA
UG013	Sango Bay Area	2008	2018	10	WMD
UG014	Musambwa Islands	2003	2007	5	***Nature***Uganda
UG015	Lutoboka Point, Ssese Islands	None	None	-	NFA
UG016	Nabugabo Wetland	2002	2006	5	WMD
UG017	Mabamba Bay	2003	2007	5	WMD
UG018	Lutembe Bay	2004	2008	5	WMD
UG019	Budongo Foerest Reserve	2008	2018	10	NFA
UG020	Murchison Falls National Park	2001	2011	10	UWA
UG021	Ajai Wildlife Reserve	2006	2016	10	UWA
UG022	Mount kei Forest Reserve	2008	2018	10	NFA
UG023	Mount Otzi Forest Reserve	2008	2018	10	NFA
UG024	Doho Rice Scheme	None	None	-	MAAIF
UG025	Lake Nakuwa	None	None	-	WMD
UG026	Lake Bisina	2004	2008	5	WMD
UG027	Lake Opeta	None	None	-	WMD
UG028	Mount Elgon National Park	2000	2005	5	UWA
UG029	Mount Moroto Forest Reserve	2008	2018	10	NFA
UG030	Kidepo Valley National Park	2000	2010	10	UWA
UG031	Nabajjuzi Wetland	2003	2008	5	WMD
UG032	Kasyoha - Kitomi Forest Reserve	2008	2018	10	NFA

Appendix 4 Ramsar sites in Uganda

Site	Location	Area (Ha)	Designation status
Lake Bisina wetland system	Kumi, Katakwi, Soroti	54,229	Ramsar site, IBA
Lake Mburo-Nakivali wetland system	Mbarara, Isingiro, Karuhura	26,834	National Park, Ramsar site, IBA
Lake Nakuwa wetland system	Kumi, Palisa, Soroti	91,912	Ramsar site, IBA
Lake Opeta wetland system	Nakapiripirit, Sironko, Katakwi, Kumi	68,912	Ramsar site, IBA
Lutembe Bay wetland system	Wakiso	98	Ramsar site, IBA
Mabamba Bay wetland system	Wakiso, Mpigi	2,424	Ramsar site, IBA
Murchison Falls Albert Delta wetland system	Masidi, Gulu	17,293	National Park, Ramsar site, IBA
Nabajjuzi wtland system	Masaka, Sembabule, Mpigi	1,753	Ramsar site, IBA
Sango bay – Musambwa island – Kagera wetland system (SAMUKA)	Masaka, Rakai	55,110	Ramsar site, IBA
Lake George Ramsar site	Kasese, Kamwege, Bushenyi	15,000	National Park, Ramsar site, IBA
Lake Nabugabo Ramsar site	Masaka	22,000	Ramsar site, IBA

Appendix 5. The monitoring form adapted from global IBA monitoring framework

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