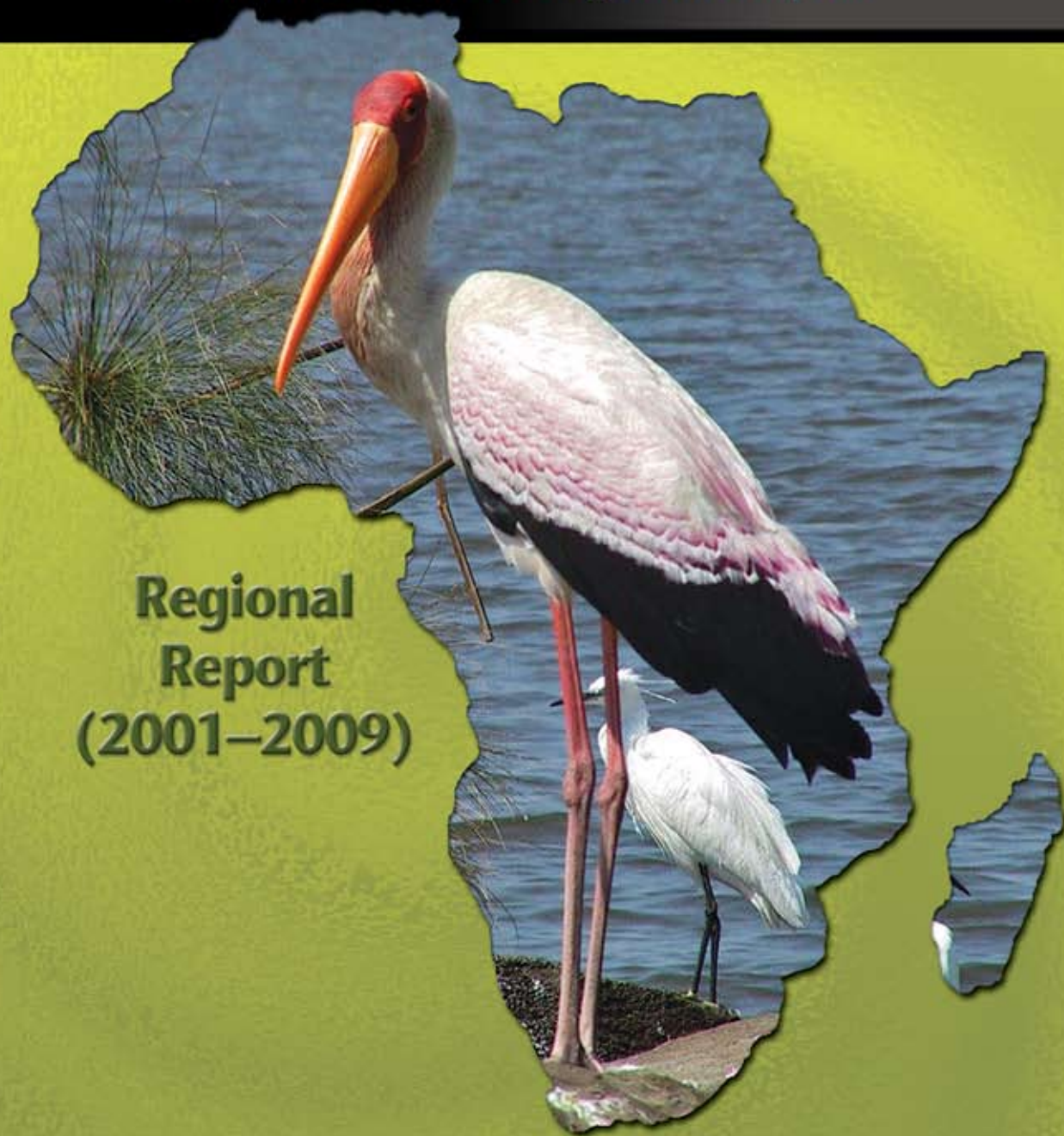


# Status and Trends of Biodiversity in Africa's Protected Areas (2001–2009)

**A Contribution to Reducing Biodiversity Loss**

**Regional  
Report  
(2001–2009)**



### Recommended citation

BirdLife International (2010): Status Trends of Biodiversity in Africa's Protected Areas: A contribution to reducing biodiversity loss — Regional Report (2001–2009).

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### ABOUT BIRDLIFE INTERNATIONAL

BirdLife International is a global partnership of non-governmental organisations striving to conserve birds, their habitats, and global biodiversity, working with people, towards sustainable use of natural resources. Currently, the partnership works in more than 116 countries through 117 national grassroot conservation NGO's. In Africa, the BirdLife Africa Partnership is a growing network of 23 such organisations plus one Country Programme, covering 24 countries, with a combined total of more than 300 staff and 30,000 members. Partners are involved in research, conservation action, environmental education and sustainable development through a broad agenda focusing not only on birds but also on other fauna and flora and social issues such as poverty alleviation.

All BirdLife Africa Policies and programmes are formulated and supervised by the Council for the Africa Partnership (CAP) comprised of heads of the member NGOs.

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### Disclaimer

This document has been produced with the financial assistance of the European Union (Europe Aid/ENV/2007/132-278) through RSPB. The contents of this document are the sole responsibility of BirdLife International and can not under normal circumstances be regarded as reflecting the position of the European Union.

### Acknowledgements


- The compilers are grateful to all BirdLife and Partner staff who were involved in developing the Global/Africa IBA Monitoring Framework, especially Dr. Lincoln Fishpool and Dr. Leon Bennun.
- BirdLife International truly values the financial and technical support given by the European Commission to promote monitoring of biodiversity in the African continent.
- We would specifically like to thank the RSPB and BirdLife information management team and especially Ian Fisher (RSPB) and Ian May (BirdLife) for sharing the much needed knowledge on Information management with the Africa Partnership.
- The compilers are also indebted to the various stakeholders within the BirdLife Africa Partnership, government agencies and communities that have laboured to ensure that the IBA monitoring framework is applied at as many sites in Africa as possible.
- The Protected Area authorities in Botswana, Burkina Faso, Burundi, Kenya, Tunisia, Uganda, Zambia and Zimbabwe are credited with offering technical expertise and supporting the monitoring of Protected Areas
- Members of the Partnership that have been instrumental in coordinating the monitoring activities at national level, especially, BirdLife Botswana, Fondation des Amis de la Nature- Naturama, Association Burundaise pour la Protection des Oiseaux (ABO), Nature Kenya, Association 'Les Amis des Oiseaux' – Tunisia, Nature Uganda, Zambian Ornithological Society and BirdLife Zimbabwe.



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**W**e all depend on biodiversity and yet we are losing it fast. Bird conservation continues to experience a number of challenges. The pressures on bird habitats and sites have become increasingly apparent. A major threat in Africa is the loss of habitat. The areas available to birds to breed and feed in relative safety are becoming smaller and isolated, and often deteriorating in quality. Against this trend has been the introduction of a range of international conventions, directives and agreements as well as a plethora of site-level focused interventions which strive to protect bird populations and the sites that they need for their survival.

All bird conservation work should be underpinned by objective information and systematic data on bird numbers and the relative importance of the sites in which they occur. It is towards this goal that, the Important Bird Areas programme is of enormous importance, as it identifies the key sites for bird conservation using objective criteria, and makes a strong case for safeguarding them.

The data used here are provided by highly motivated individuals who dedicate their time and energy freely to do their bit for nature conservation. In return, there is an expectation that, armed with this high quality data, the policy makers will respond by putting in place the measures necessary to ensure the appropriate conservation of these sites. Currently there are about 10,000 Important Bird Areas (IBAs) worldwide.

The IBA programme of BirdLife International is a global initiative aimed at identifying, documenting and protecting a crucial network of sites for conservation of birds. In Africa with its associated islands there are 1,230 IBAs identified in the 59 countries and territories.

The biodiversity status and trends information provided in this report is based on monitoring data collected in 2001, 2008 and 2009 from 178 sites occurring in Botswana, Burkina Faso, Burundi, Kenya, Tunisia, Uganda, Zambia and Zimbabwe. The monitoring is conducted using an internationally agreed methodology developed by BirdLife International (2006) and data collected in 2001 are used as the baseline. The BirdLife Partners in these eight countries are currently implementing a biodiversity monitoring programme under the auspices of a regional initiative funded by the European Commission. This report is a flagship publication of this initiative managed and coordinated by the BirdLife International and the Royal Society for Protection of Birds (RSPB). The main information sources for this report are the National Status and Trends Reports produced from the eight implementing countries. This is the Third Edition of the report produced at regional level; summarizing the latest data on status and trends of biodiversity in Africa and draws conclusions for the future strategy for the BirdLife Africa Partnership. This report reflects the status of the sites' condition, threats and conservation interventions as of 2009.

## Process

BirdLife International developed a baseline status of the sites condition, threats and conservation interventions as of 2001, largely based on the information contained in the regional IBA directory (Fishpool and Evans, 2001) and after consultation and verification with the stakeholders at national level. This was followed by targeted training of site monitoring teams, comprising mainly the Protected Area personnel. Data recorded by field observers was entered into the World Biodiversity Database (<http://www.eti.uva.nl/tools/wbd.php>) by individuals at designated institutions and the assessments automated into impact scores ranging from 0–3. Three aspects were monitored namely the State (condition of birds and their habitat), Pressure (threats focusing the sites) and Responses (the action being taken to conserve the sites)

## Calculating Scores

The monitoring involves assessing selected indicators that are relevant for our conservation objective. The indicators are classified into three categories namely; the State (condition), Pressures (threats) and Responses (interventions) at IBAs (Bennun, 2003). Details of scoring State, Pressure and Response differ, but the resulting scales are the same; Status scores for each are assigned on a simple 4-point scale, from 0 to 3 (BirdLife International, 2006).

## Calculating scores for State

State can be assessed based on the population sizes for one or more trigger species (for which there is good information) or each 'trigger' species assessed individually (then applying the 'weakest link' approach). Each species or habitat is scored independently. Using a 'weakest link' approach, a status score is assigned 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 the timing, scope and severity of each threat. Timing refers to the period (now or future) a particular threat is occurring. Scope refers to the extent of coverage across the site while severity refers to the scale of the resultant effect of the threat. Timing, scope and severity scores are then combined to give threat impact scores for each threat. Then, again using the weakest link approach, the threat with the highest impact is used to assign the threat status score for the whole IBA, as follows: 3 = Good; 2 = Moderate; 1 = Poor and 0 = Very Poor.

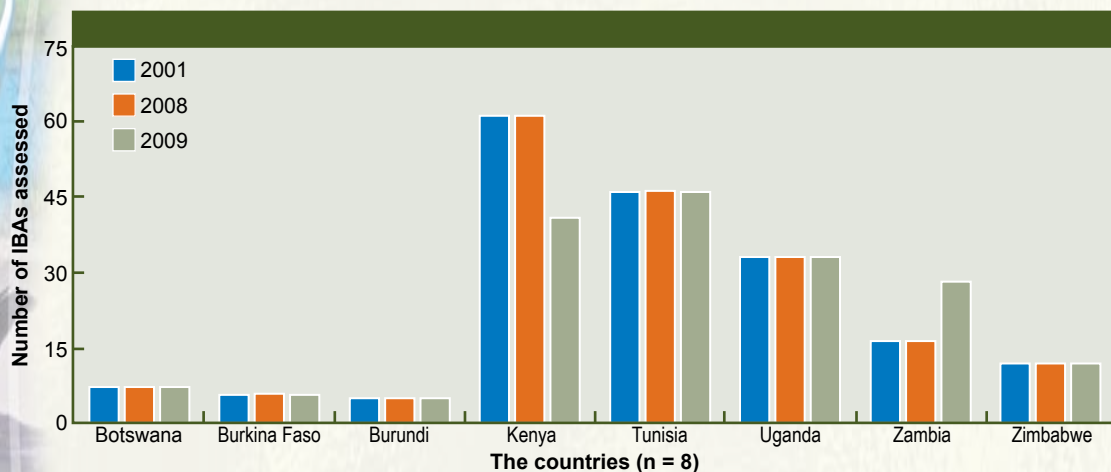
## Calculating scores for Responses

Response is assessed by scoring separately each of the degree to



which the site is designated for conservation, the adequacy of the management planning and level of conservation effort for an IBA. Each of these are also scored on a scale of 0–3, with the sum then converted onto a further 0–3 scale, to give the overall site response status score: 3 = High; 2 Medium = 1 = Low; and 0 = negligible.

Figure 1 below shows the distribution of IBAs which are also Protected Areas. The IBAs monitored in 2009 were 178. In 2008 they were 117 and 2001, 186. IBAs in Botswana, Burkina Faso, Burundi, Tunisia, and Zimbabwe IBAs have remained the same while Kenya and Zambia have changed between 2008 and 2009.



**FIGURE 1.** Number of sites for which biodiversity monitoring data (2001, 2008, 2009) was analysed in respective countries



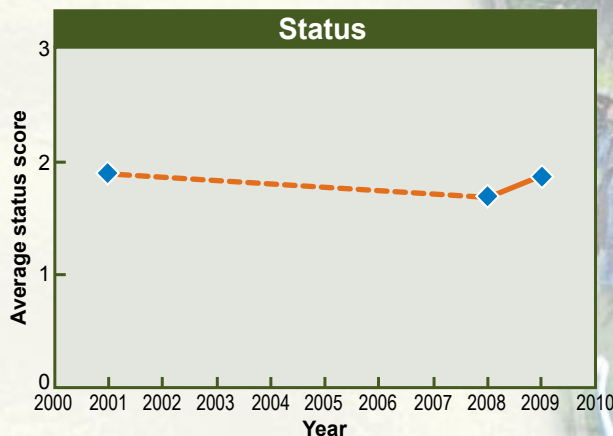
Kibira National Park in Burundi © Rodah Owako, BirdLife Secretariat

## Status

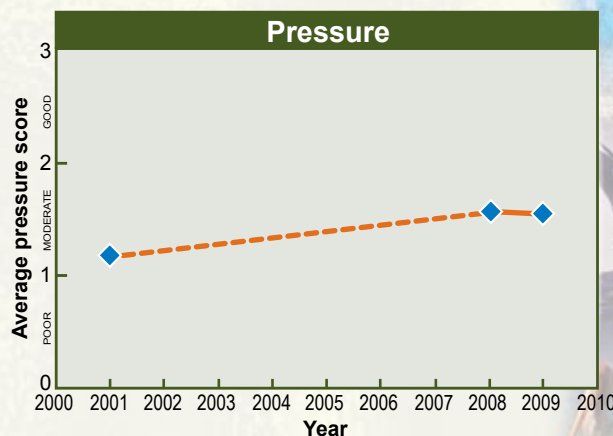
There has not been much change in protected IBAs' condition, with only slight deterioration between 2001 and 2008 and slight improvement between the year 2008 and 2009 (Figure 2a). However, at individual country level, larger improvements were recorded between 2008 and 2009. In some countries such as Burundi recorded 1.60 from 1.00, Uganda 2.20 from 2.13, Zambia from 1.36 to 2.38 and Zimbabwe from 1.36 to 1.60). Kenya recorded 0.97 from 1.00, a decline in the state of biodiversity in 2009 and this was attributed to severe drought prevailing in the country at that time. Overall, taking 2001 as the baseline in which the condition state score was (1.90), it shows that there has been a general decline in the conservation value of the IBAs.

## Pressure

Regionally, overall pressure on the sites has slightly increased over the years (Figure 2b). At the country level, Kenya and Zambia recorded the highest pressure scores compared to other countries in 2009. Burkina Faso, Tunisia and Uganda showed a slight reduction in pressure levels but there were no notable changes for Burundi and Zimbabwe between 2008 and 2009. While it is acknowledged that both environmental (droughts, flooding, climate change) and human factors contribute to the state of IBAs, it has been noted that in 2009 the threats



**FIGURE 2a.** Overall state of protected IBAs in eight African countries




**FIGURE 2b.** Overall pressure on protected IBAs in eight African countries

occurring in most of the IBAs are due to anthropogenic factors.

### Human settlement and urbanisation

— The ever increasing human population and demand for land have remained an important threat around most IBAs, especially in Kenya. Among the IBAs that experienced this threat is Nairobi National Park, where settlements and small towns are coming up along the southern boundary, interfering with wildlife migratory routes. In Masai Mara,





some pastoralists have begun setting up permanent homes, shopping centers, hotels and campsites within the once expansive Mara ecosystem, and this is interfering with the movement of wild animals. Even in Uganda, population increase and the increasing demand for land have made the IBAs and other biodiversity rich areas soft targets.

**Fires** — Fire incidences were reported in at least 84% of the sites monitored in Uganda. In Burundi, wild fires are common. The escalation of wildfires is mostly recorded during the dry season. The most impacted IBA is the savanna of Ruvubu National Park where more than 30% of the park was swept by fire in 2009. In Kenya, there was an increase in the incidences of fires from 57% in 2008 to 59% in 2009. This increase is attributable to the drought affecting most of the country during the year. In the Aberdares and Mt Kenya National Parks and the Mau Forest Complex of Kenya, several hectares of forest were burnt down. Most fire incidences arose from illegal activities within the forests, such as honey harvesting, opening up of new farms and charcoal making. In Zambia, fires were largely associated with the agricultural activities. In Zimbabwe, the occurrence of uncontrolled fires were high at Chizarira National Park, Middle Zambezi Valley, Matobo Hills and Save-Runde Junction while fewer incidences of fires were recorded at Nyanga Mountains, Batoka Gorge, Robert Mcllwaine Recreational Park and the rest of the IBAs.

**Deforestation** — The ever growing demand for construction materials is affecting the quality of IBAs. Most of the timber products and round wood products are obtained from forest reserves and sometimes national parks. This has been reported from 26% of the IBAs in Uganda and at least 69% of IBAs in Kenya, with notable destruction in the Mau Forest Complex leading to loss of catchment values. In Uganda, illegal logging has been carried out in Tisai Island, Ruwenzori National Park among others. In many cases, illegal logging is done by local communities.

**Agricultural activities** — this was a major threat reported in almost all the six monitored IBAs in Burkina Faso. Although there was a slight decrease of this threat in Kenya due to removal of settlers from the Mau Forest, 70% of the IBAs were affected. Notably the quest for biofuels in the Tana and Dakatcha Woodlands (Kenya) remained a key threat. In Zambia, shifting agriculture was reported in at least 38% of the IBAs, closely followed by small holder farming which occurred in more than 26% of the IBAs.

**Invasive plant species** — are a threat that can no longer be ignored. In Uganda problematic species have been reported from 29% of the IBAs. In Zimbabwe, invasive species such as water hyacinth, wattle and pine trees are occurring, (at least 4 IBAs in Zimbabwe), the grasslands of these sites are shrinking while the natural woodlands are being modified by



the invasive alien species. The Mare aux Hippopotames IBA in Burkina Faso is mostly threatened by invasive plant species.

Stakeholders need to be increasingly aware of threat from infrastructures such as: the construction of the roads, pathways & servicelines that lead to fragmentation and isolation of the habitats, logging operations, destructive mining & quarrying as well as the threat posed by climate change. Oil exploration is a new development in the threat categories.

## Response

In 2008, there was intense stakeholder intervention at site level. However 2009 recorded a decline in the response interventions (Figure 3). This is partly attributed to the global economic challenges that affected most of the project implementing countries. Most of the countries had to scale down

their operations. In those countries that were most affected by drought, human resources and efforts were being diverted to alleviating human suffering caused by severe weather conditions. However in general, the interventions measures that were adopted in 2009 include (a) development/updating of management plans, (b) intervention in climate change (c) mitigation, (d) advocacy, (e) education and empowering community at several IBAs. The response actions were instrumental in raising the level of consciousness about the impact of the threats on biodiversity. These activities were largely implemented through institutional collaboration.

The development and implementation of management plans has proved to be an effective tool. There is however still quite a number of sites where management plans have not been developed/reviewed/updated and this should be a priority for countries in Africa.

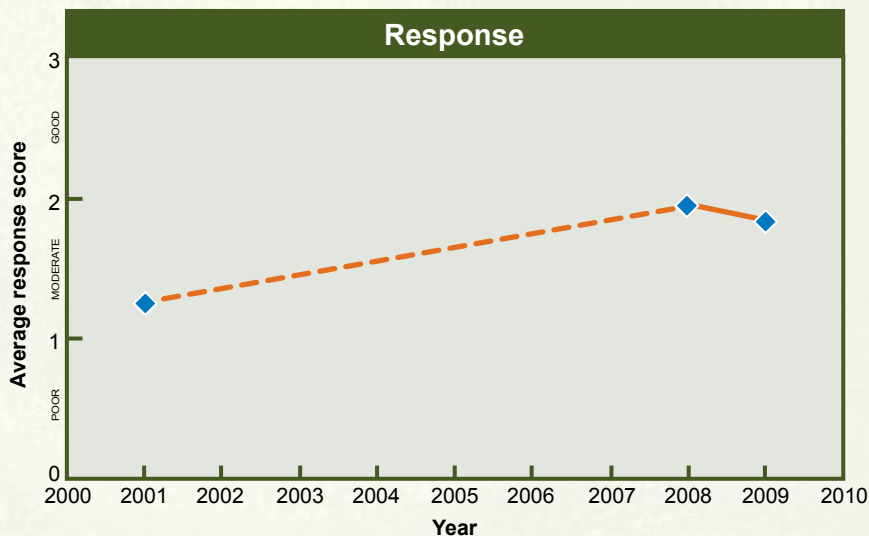


Figure 3: Overall response at protected IBAs in eight African countries

Pressures on IBAs are on the increase in Africa and unfortunately this is happening against the backdrop of limited financial resources as well as other capacity issues facing site managers, communities and policy makers. It is however important that despite the challenges, appropriate interventions be sustained to safeguard the birds and their habitats and other biodiversity at large. More time and effort is required in directly responding to the specific threats –that if addressed would add value to the sites. The main focus of any conservation programme is to reverse or reduce the threats considerably to the extent that they do not jeopardize the integrity of the sites. Sometimes an IBA may experience only one threat but the gravity of

its effect is more severe compared to the severity of other one with many threats and yet low. But then many small threats can combine to cause serious cascading effects. This therefore means that threats need to be clearly understood and their impact to the quality of the site or habitat articulated and renewed.

Vigilance against new and emerging threats is required and collaborative approaches at all levels are highly desirable. There is need for increased knowledge about invasive species in Africa and their impact on biodiversity. Dialogue and data sharing at national level is encouraged as well as linkages between national, regional and international processes so that appropriate interventions can be made.



Birdwatching in Olorgesailie, Magadi, Kenya © Michael Macharia, BirdLife Secretariat



- Bennun L.** (2003) Scaling up locally-based approaches: A framework for Important Bird Area monitoring. BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 0NA, UK.
- BirdLife Botswana** (2009) *2008 Status Report for Protected Important Bird Areas in Botswana*.
- BirdLife International** (2008) *Baseline report on the condition of the Protected Areas in AFRICA in 2001 as determined from the STATE-PRESSURE-RESPONSE scores*. BirdLife Africa Partnership Secretariat, Nairobi, Kenya. (Compiled by Kiragu Mwangi).
- BirdLife International** (2005) *Strategy for Conservation and Sustainable Management of Important Bird Areas in Africa 2005–2015*. BirdLife International, Cambridge, UK.
- BirdLife International** (2006) *Monitoring Important Bird Areas: A global framework*. Cambridge, UK, BirdLife International. (Compiled by Leon Bennun, Ian Burfield, Lincoln Fishpool, Szabolcs Nagy and Alison Stattersfield).
- BirdLife Zimbabwe** (2010) *Zimbabwe's Important Bird Areas: National Status Report 2009*.
- Fishpool L.D.C. and Evans M.I.**, eds (2001). *Important Bird Areas in Africa and associated islands: Priority sites for conservation*. Newbury and Cambridge, UK: Pisces Publications and BirdLife International (BirdLife Conservation Series No. 11).
- Fondation Des la Amis la Nature – Naturama** (2010) *Zones d'Importances pour la Conservation des Oiseaux (ZICO) du Burkina Faso; Statuts et Tendances 2009*.
- Mwinami T., Barasa F., Ngari A., Matiku P., Ngweni F., Musina J., Mwangombe J., Kanga E.** (2010) *Kenya's Important Bird Areas Status and Trends 2009*. Nature Kenya, Nairobi.
- NatureUganda** (2010) *Important Bird Areas In Uganda – Status and Trends 2009*.
- Nkezabahizi L. and Manirambona A.** (2009) *Burundi's Important Bird Areas Status and Trends in 2009*. Association Burundaise pour la protection des Oiseaux. Kigali, Rwanda.
- Zambian Ornithological Society** (2009) *IBA Status and Trends Report, Zambia*.

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