Bird Population Monitoring in Uganda:

Developing a new participatory scheme for the future

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Background

In Africa, as elsewhere in the world, many species of birds are declining and in need of more effective conservation. A recent review of former and current monitoring activities in Africa (RSPB, unpublished) listed 85 schemes in 13 countries, of which 69 are still ongoing. Some 25 African countries are currently monitoring waterbirds, but as yet there are far fewer schemes for landbirds, with only nine of those that do exist covering all species. In the absence of any standardised monitoring of widespread land bird species, there is the very real possibility that populations of those species we regard as 'common' may be facing declines without our knowledge, yet such declines would indicate a fundamental flaw in the way we treat our environment and thus influence the way we behave. There is clearly a considerable gap in our knowledge, and one which must be addressed if we are to achieve a significant reduction of the current rate of biodiversity loss at global, regional and national levels.

Land bird monitoring in Uganda 1983 - 2008

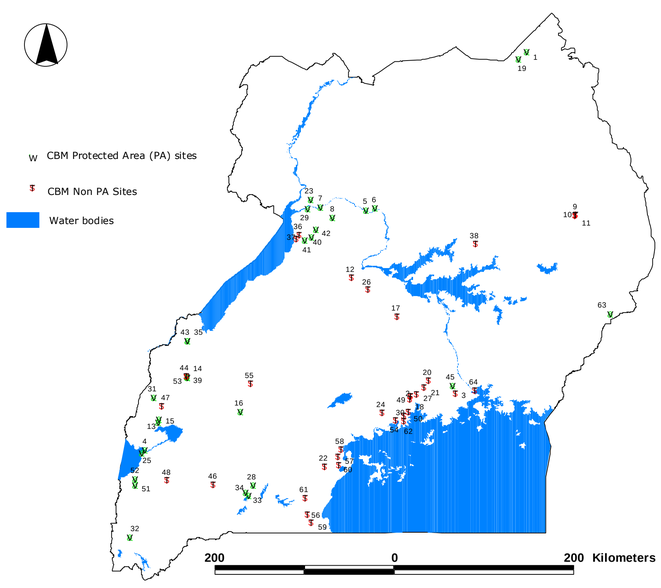
In Uganda, the rate of loss of biodiversity as a whole has been estimated at about 1% per year (Pomeroy *et al.* 2006): similar to the global rate (Loh *et al.* 2005). In 1983 a standardised landbird monitoring programme was instigated in Uganda by Makerere University Institute of Environment and Natural Resources (MUIENR) and the National Biodiversity Databank (NBDB) in Kampala. By 2008, the programme had made more than 1000 counts, recording nearly 500 non-forest species at 40 sites. With observers drawn from the staff and students of the University, birds were recorded by using Timed Species Counts (TSCs), which were originally developed to cope with species-rich habitats such as those encountered in Uganda (lists can go up to 50 species in an hour within a single habitat).

As well as being geographically dispersed, the sites are stratified in two ways - by land use (natural, pastoral and agricultural) and by original natural vegetation (forest, moist savanna, dry savanna and impeded drainage). However, although counts began in 1983, regular twice-yearly counts at all sites only began in 2004.

Developing an enhanced BPM scheme for the future

Following a review of the capacity of African BirdLife partners to initiate national Bird Population Monitoring (BPM) schemes that would particularly focus on common and widespread species, *Nature*Uganda, MUIENR and the NBDB joined forces with the RSPB/BirdLife Global Wild Bird Index Project to develop a new enhanced participatory BPM scheme. The new BPM scheme:

- Has been developed in consultation with many local conservation organisations, including the Uganda Wildlife Authority (UWA)
- Incorporates many of the original land bird monitoring programme sites
- Employs line transect methods to count birds every February and July
- Uses volunteer observers, coordinated by *Nature*Uganda
- Incorporates a training programme for volunteer observers & provides regular feedback to those taking part
- Has shown steady growth, both in the number of observers and the number of sites
- As of February 2011, includes 76 transects that cover a wide range of habitats both within and outside protected areas



BPM transects are located both within and outside protected areas and cover woodland, grassland, forest, agricultural & residential habitats.

Linking the 'old' with the 'new'

Although previous counts were made using Timed Species Count (TSC) methods, the new BPM scheme was designed to use standardised line transects. In practical terms, integration of the new scheme with the existing monitoring has been relatively straightforward and has presented few problems. At sites that were monitored previously using TSC's, a period of overlap has been built in whereby both old and new count methods have been used side-by-side, thus providing comparative data. All data collected will, in time, be used to produce aggregated population trends as an indicator of the general condition of natural habitats in Uganda.

Scheme coordination & training programme

The new BPM scheme is coordinated by a dedicated Project Officer in *Nature*Uganda, in close association with staff from MUIENR and the NBDB to ensure a smooth transition between the old and new schemes.

Key volunteer participants were identified to receive training at an initial workshop held at the launch of the new scheme in January 2009. with a follow up workshop in July 2010 Of the 41 participants that received training, 36 are now actively participating in transect counts and are actively training others to do the same.

Participants of the initial training workshop

In addition to the production and distribution of promotional materials, regular stakeholder meetings help maintain and build upon the collaborative nature of the scheme. The growth of the new scheme, in terms of both the geographic spread and number of sites, is some measure of the success of the ongoing training programme and the value of regular contact with those taking part.

The new national BPM scheme encourages everyone to take part, whatever level of skills they have – whether a participant can identify only 5 species of bird or 500. The aim is to get people involved in an enjoyable activity, interacting with birds and the environment they live in and collecting information that is valuable for its conservation.

Is the new scheme sustainable in Uganda?

By developing the new scheme in partnership and collaboration with several conservation organisations and by engaging volunteer observers, the new BPM scheme has real prospects of long-term sustainability.

Experience in Uganda leads us to encourage other countries to develop national BPM programmes, either by adapting or enhancing ongoing monitoring or by developing new schemes to work in collaboration with other existing monitoring programmes. A national scheme for monitoring common and widespread species is was also initiated in Botswana in 2009, and schemes will also begin in Kenya and Nigeria in 2012.

Further information

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