Counting, monitoring and conserving birds and biodiversity in Botswana

Title BirdLife Botswana, through the financial support from the Global Environment Facility Small Grant Programme (GEF SGP) in Botswana and the technical and financial support from the RSPB (BirdLife in the UK), has set up a Bird Population Monitoring (BPM) Programme in Botswana. The programme is sustained by dedicated, enthusiastic participants who voluntarily collect bird data every February and November. The programme is part of the global effort to monitor terrestrial birds around the world and has been adopted from the RSPB. The objectives of the programme are:

1. To develop a Wild Bird Index for Botswana showing bird population trends over time.
2. To use the trends to set conservation priorities, report on biodiversity changes/state of the environment in Botswana (and to contribute to African/global efforts ? Convention on Biological Diversity, CBD). The data collected also feeds into our local database systems like the Department of Environmental Affairs Environment Information System (DEA EIS).
3. To show that changes in the overall condition of ecosystems can be used by decision-makers to influence politicians to find suitable biodiversity management solutions.
4. To increase levels of community participation through building the appropriate capacity in bird identification and awareness

The methodology for BPM programme in Botswana is a point count technique and participants count birds on a 2 km route within a 50 km by 50 km designated grid square. There are 105 of these squares chosen as sample size throughout the country. Since the initiation of the progamme, there have been two counts undertaken, one in November 2010 and the other one in February 2011. The results obtained from the November 2010 count were, 159 observers for a total of 122 transects undertaken. There were 14,056 birds and 289 bird species recorded. The average number of birds recoded per transect was 127 and the average number of species was 23 recorded per transect.The second count during February 2011 recorded a notable growth of the Bird Population Monitoring programme. The February 2011 count results show a total number of 218 observers who participated in a total of 161 transects undertaken altogether. The total number of birds seen in all the transects was 27,605 with a total number of 352 species recorded by participants. The average number of birds recorded per transect was 177 and the average number of species recorded was 25 per transect. The results obtained from the two counts is shown graphically on figure 1 below and figure 2 shows a map of Botswana showing the distribution of the transects and the designated grid squares after the February 2011 count. The Society thinks that the increase in number of birds recorded per transect is due to significant breeding during the wet season by some species, such as Red-billed Quelea, and to the improved bird identification skills of some of the participants. In addition, from the results obtained by the programme, we are able to see the distribution, diversity, abundance, composition and population trends of birds of Botswana. The data can also be used, in relation to land use changes and rainfall variation, to determine if there is any change in their habitat in the long run. Nonetheless, BirdLife Botswana acknowledges that, the current data is still unripe to use to analyse the above-mentioned variables and so we depend on the observers to pledge a long term commitment to make all this a reality. This is because the existing bias is a result of counts being more skewed to human settlement areas resulting in less coverage in remote areas. Also some of the observers are still learning bird calls and they are unable to identify and record all the birds that they see or hear in their transects. To address the above-mentioned challenges BirdLife Botswana has produced a CD with 100 calls of common birds of Botswana and encourages participants to attend the Society?s monthly bird walks organised at each branch. There are bird identification courses provided to those who are already taking part and those who are showing an interest in volunteering to participate. The Society has approached the Department of Environmental Affairs (DEA) to assist with the procurement of three GPSs which will be availed to the observers and it has been approved. Lastly, the Society would like to acknowledge the implementing partners, the Department of Wildlife and National Parks (DWNP) and the Department of Environmental Affairs (DEA) for their continued support of the programme. To read the full report click here