Project update: April 2019

Bird population survey in Mount Loleza Forest Reserve

The Mt Loleza Forest Reserve (MLFR) comprises two types of vegetation: (i) natural forest with native tree species which are very crucial in preserving and protecting water sources, and (ii) artificial forest composed of planted trees such as of pine, etc., for timber and other uses.

We conducted a bird survey in MLFR and surrounding areas close to the reserve within the Mbeya range. Eighteen transects of 200 m were established, and birds were observed and identified either visually or by their calls. We used binoculars to help us see birds more clearly. Bird species were recorded for 4 days a week from morning (0800 to 1200 hours) to evening r (1700 to 1800 hours) from October 2018 to March 2019. The common bird species were easily identified; other species were confirmed in the guide book (Birds of East Africa). Additional information such as bird calls, shape, and food they eat were used during identification.

Some of the most common bird species observed during our survey included common bulbul, red-billed firefinch, sunbirds, mannikins, flycatchers, tawny-flanked prinia, doves, and pied crows. The least common species observed had less than 10 individuals (Table 1). We assigned each bird species to its IUCN Red List category, it was found that most bird species are in the Least Concern category except for the blue swallow (*Hirundo atrocaerulea*) whose population is Vulnerable (IUCN 3.1). However, some of the bird species in the Least Concern category show declines in their population; for instance, mountain thrush (*Turdus plebejus*), willow warbler (*Phylloscopus trochilus*), yellow-breasted apalis (*Apalis flavida*), red-faced crombec (*Sylvietta whytii*), and African green pigeon (*Treron calvus*) and immediate conservation actions need to be taken to rescue their populations from further declines.

In general, our results show that MLFR is very rich in bird species - about 167 species of birds with 4131 individuals were identified. We also found out that deforested areas had few bird species compared to areas with lot of trees (both natural and planted). We have further concluded that the MLFR and its ranges require immediate conservation measures to maintain its rich biodiversity particularly the bird population. Moreover, bird species whose population is decreasing or vulnerable need to be reassessed for further conservation measures.

Common name	Individuals	Scientific name	IUCN status
Hamerkop	4	Scopus umbretta	LC
Schalow's turaco	6	Tauraco schalowi	LC
Black-shouldered kite	7	Elanus axillaris	LC
Black kite	6	Milvus migrans	LC
African harrier-hawk	4	Polyboroides typus	LC
Blue swallow	5	Hirundo atrocaerulea	VU
African goshawk	7	Accipiter tachiro	LC
White-necked raven	5	Corvus albicollis	LC

More bird species will be available in the research paper that will be published at the end of the project.

Chinspot batis	9	Batis molitor	LC
Peregrine falcon	6	Falco peregrinus	LC
Black-backed			
puffback	9	Dryoscopus cubla	LC
Grey-backed fiscal	7	Lanius excubitoroides	LC
Brown-crowned			
tchagra	6	Tchagra australis	LC
Fan-tailed widowbird	6	Euplectes axillaris	LC
Black headed heron	8	Ardea melanocephala	LC
		Pseudoalcippe	
African hill babbler	6	abyssinica	LC
Plain nightjar	4	Caprimulgus inornatus	LC





Bird capture (using mist net) and identification