

Project Update: June 2018

NILO NATURE RESERVE LONG-BILLED TAILORBIRD (*Artisornis moreaui*) POPULATION SURVEY

Population survey for long-billed tailorbird was conducted through walking in straight transects in the forest habitat for 4-5 hours/day from 7:00 am at the same time taking attention to bird calls. This is peak vocalisation time for most birds, thus ensures high detectability. Concentric plots of 50 m radius were established at every 250 m along transects marked by means of GPS and tree tags. The voice of the birds was recorded by means of Marantz PMD-222 audiocassette recorder and Sennheiser K6-ME66 directional microphone. Bird counts were conducted early in the morning through operating within the existing forest trails. A transect had a 3 km long and has 10 purpose counts with 300 m intervals. 10 to 15 minutes were spent in every point count, with 2 minute playing the *A. moreaui* playback recordings at the start and one minute of playback within the last 5 minutes. We recorded all tailorbirds that responded (heard). If the long-billed (*A. moreaui*) was noted from some points, we did not play the call at those particular points. This geared towards minimising the disturbance to this vital species. Moreover, we did not use the recorded playbacks to draw in untargeted species apart from *A. moreaui*. Aside from measuring the *A. moreaui* the team additionally recorded other associated species including Fisher's turaco, urban centre pecker, southern banded snake-eagle, red-caped forest warbler, pale-breasted illadopsis, red-tailed ant-thrush, Uluguru violet-backed sunbird, Amani sunbird, spot-throat and Usambara thrush. Since the species is very shy, therefore tended to live and hide in the forest on tall trees.

FINDINGS

***A. moreaui* population survey**

During this survey it was raining and foggy at NNR and most *A. moreaui* were observed in natural forest gaps dominated by lianas/climbers and vines vegetation cover. During the playbacks most of them were heard responding to the playback calls and only 15 long-billed tailorbird were visually observed. At the beginning of the trail there was a stream and a wetland whereby 17 sightings were recorded at about 1200 m asl in thick and dense forest sights especially those have been invaded by *Maesopsis eminii* no sighting was recorded.





Figure 1: *A. moreaui* survey in NNR (LHS) and type of habitats (RHS) where *A. moreaui* was sighted in NNR.



Figure 2: *A. moreaui* survey in NNR (LHS) and type of habitats (RHS) where *A. moreaui* was sighted in NNR.

While, the Nilo peak trail (1100 – 1500 m) there were only three points where the bird was observed further ascending above 1200 m did not locate any as the forest cover kept decline and shrubby and herb vegetation were dominant in these relatively drier areas. In general, five territories of *A. moreaui* were discovered 32 individuals sighted and 18 heard. It is was clear observed that *A. moreaui* prefers vines, lianas and climbers nearby *Ocotea usambarensis* and efforts searching in nearby farms planted cardmom, banana and cassava did not locate the bird apart from the forest edges implying that *A. moreaui* is a natural sub-montane forest dominated by tall trees dependent bird and with some natural gaps at altitudinal range of 800 to

1200 m. Nonetheless, it was observed that *A. moreaui* does not go to crop fields including tea plantations that are adjacent NNR.



Figure 3: Image of Long billed tailorbird (*A. moreaui*).

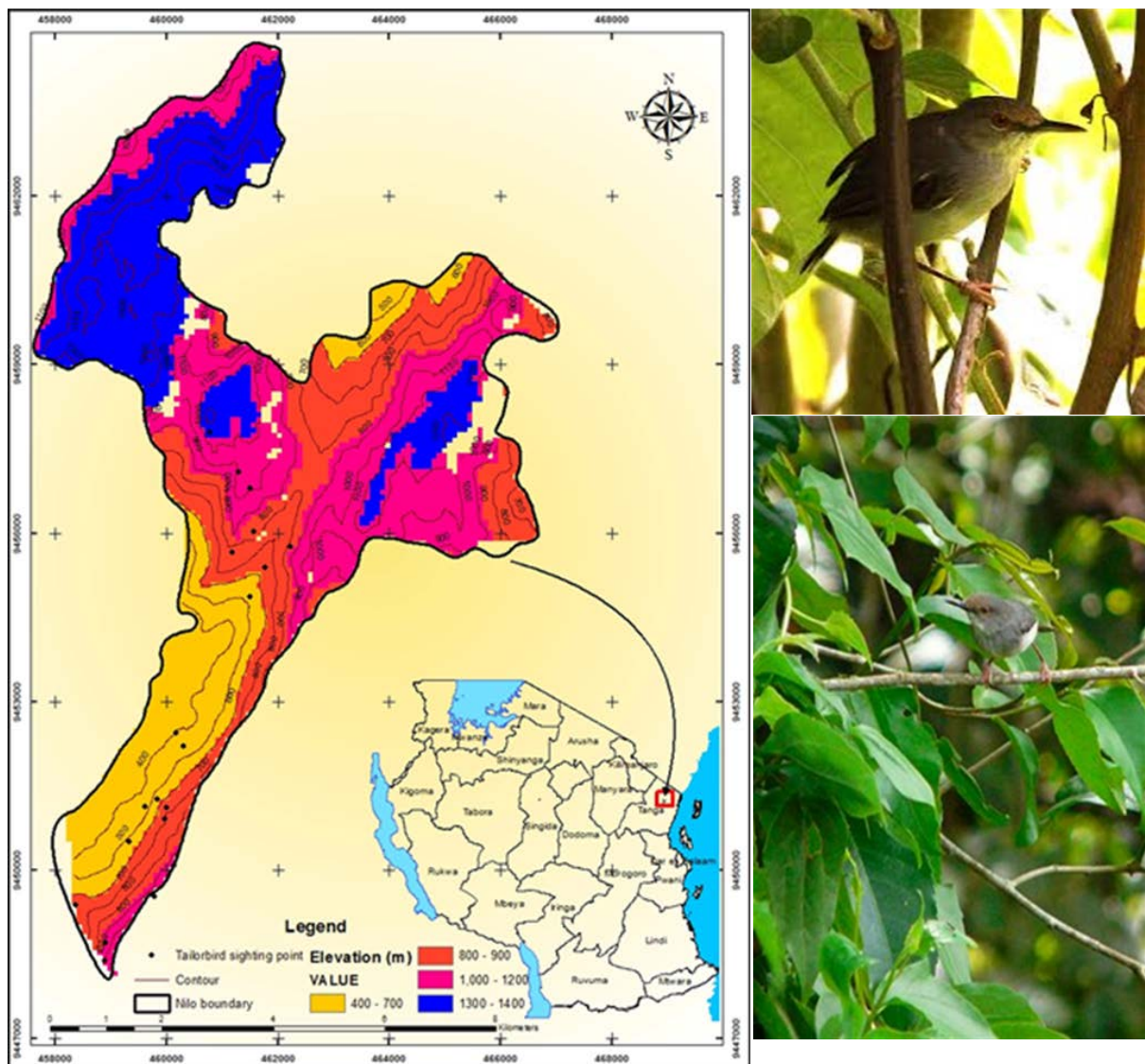


Figure 4: A map of Nilo nature reserve showing the survey points where the tailorbird was sighted, in Korogwe, Tanga, Tanzania.

Way forward

Undertake a population re-survey of *A. moreaui* during dry season when bird activities are high including breeding and the weather is conducive for clear bird sighting. This is based on the fact that the current bird survey was limited by short time and unfavorable weather. Further conservation education is still needed among local communities and integration of schools. This must be done in connection with provision of sustainable income generating activities.