



Proposal Field Survey

Fischer's Turaco

UNGUJA, ZANZIBAR

2021

"How many Turacos are left on Zanzibar?"

ABSTRACT

The Fischer's Turaco on Zanzibar is one of two subspecies of the Fischer's Turaco. The sub-species is the only Turaco species to be found outside mainland Africa. The Fischer's Turaco itself has an IUCN rating of Near-Threatened but were the Zanzibar Turaco to be its own species, it should be classified as Critically Endangered. The last review of 2001 of the subspecies' status estimates that in 2011 there are a mere 500 individuals left, at most, and the population trend is declining. After almost two more decades of continuous habitat destruction it is urgent to determine how many species are left and how to protect them from possible extinction.



Fischer's Turaco (*Tauraco fischeri zanzibanicus*)

Introduction

East African coastal forests are disappearing and shrinking everywhere at an alarming rate. Biologically very rich but considered highly threatened. In these patches of the forest, several endemic or sub-endemic mammals, birds, butterflies and reptiles are under severe threat of habitat degradation. The conservation importance of Zanzibar's natural habitat is therefore very high.

A comprehensive field survey "Habitat selection and the conservation status of Fischer's Turaco (*Tauraco fischeri zanzibanicus*) on Unguja, Zanzibar" was conducted in 2001 (none ever since) and the results presented by Luca Borghesio^A and Paul Kariuki Ndang'ang'a^B are alarming.

It was estimated the population of Fischer's Turaco in Zanzibar to be 900–1,500 individuals and a shrinking range. About 44% of the population is within protected areas of which Jozani Forest National Park is the largest. At 2001 exploitation levels, it appeared probable that within circa ten years, no natural forest will remain outside the protected areas. The survey shows that most (56%) of the estimated population of Fischer's Turaco in Zanzibar occur outside protected areas and therefore predicts a population decline of more than 50% in the next decade, hence around 2011.

We almost past another decade which makes it urgent to survey again and verify the population numbers. If the expectations from 2001 are realistic, the population of the Turaco would be less then 400-700 species in 2011. What does this mean for 2021? Another decade of habitat destruction. Is this the end of Fischer's Turaco presence on Zanzibar? It is possible, and

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that is why we need to re-survey and based on the results, start a conservation project to save and protect Fischer's Turaco for Zanzibar and the world.

Background Survey 2001

Turacos are a distinctive group of birds and endemic to tropical Africa. They are shy, frugivorous and live in forests or dense woodland habitats, descending to the ground only occasionally in order to bathe or drink (Fry et al., 1988; Turner, 1997).

In 2001 Fischer's Turaco was considered Near Threatened, being restricted to the coast of southern Somalia, Kenya and northeast Tanzania. The world population probably numbers no more than 2000 individuals and is declining. The subspecies *T. f. zanzibaricus* is endemic to Unguja island (commonly known as Zanzibar Island).

Following its description in the 1930s, *T. f. zanzibaricus* has been observed on comparatively few subsequent occasions and was suspected of being extinct. Few observations from Zanzibar have been published, all from the tiny area around Jozani Forest NP, a small reserve in the centre of the island.

In 2001 they censused Fischer's Turaco using unlimited- distance point counts, performing playbacks of the species' call at evenly spaced points throughout specific areas of the island. At each census point, they also recorded the presence of four other species: Indian House Crow (*Corvus splendens*), an introduced avian pest; the rare and protected endemic Zanzibar Red Colobus (*Procolobus kirkii*); Endangered Black and Rufous Elephant shrew (*Rhynchocyon petersi*); common and widespread Sykes's Monkey (*Cercopithecus mitis*).

Results/Conclusions 2001 Survey:

- The 2001 survey showed the distribution of the Fischer's Turaco is of a declining and fragmenting range. The apparent nucleus of the species' distribution is in the protected area of Jozani Forest NP. It was estimated the population of Fischer's Turaco in Zanzibar to be 900–1,500 individuals.
- At 2001 exploitation levels, it appears probable that within circa ten years, no natural forest will remain outside the protected areas. The survey shows that most (56%) of the estimated population of Fischer's Turaco in Zanzibar occur outside protected areas.
- They, therefore, predict a population decline of over 50% for the turaco in the next decade, a pattern also highly probable for the other threatened species on the island. Such dramatic declines and the confinement of the remaining populations in one or few areas could trigger an imminent extinction crisis on the island.

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- Only 44% (App. 530 individuals) of the total population presently (2001) occurs in governmental or privately managed protected areas.
- Fischer's Turaco presence is positively correlated with that of two endangered mammals, Zanzibar Red Colobus (*Procolobus kirkii*) and Black-and-rufous Elephant-shrew (*Rhynchocyon petersi*).
- The species is quite sensitive to habitat degradation and strongly avoids man-modified habitats. Fruit availability did not differ between occupied and unoccupied sites, suggesting that the species' distribution in Zanzibar is defined by habitat but is not food-limited.
- It selected only two habitat types (Albizia- and Diospyros-dominated). These are local tree species.
- The population density was higher in Albizia than in Diospyros. However, Diospyros, owing to its larger area, was estimated to host a higher proportion (57%) of the total population.

Actions Proposed by IUCN (2012):

- Conduct surveys across the species range to obtain a new total population estimate. Carry out regular surveys to track population trends. Monitor rates of habitat loss and degradation across its range. Monitor rates of trapping. Monitor levels of trade. Enforce, extend and tighten quotas for trade in the species.
- Consider to up-list the species to CITES Appendix I. (*Appendix I lists species that are the most endangered among CITES-listed animals and plants (see [Article II, paragraph 1](#) of the Convention). They are threatened with extinction and CITES prohibits international trade in specimens of these species except when the purpose of the import is not commercial (see [Article III](#)), for instance for scientific research. In these exceptional cases, trade may take place provided it is authorized by the granting of both an import permit and an export permit (or re-export certificate). [Article VII](#) of the Convention provides for a number of exemptions to this general prohibition.*)

Actions Proposed by Prof. Luca Borghesio and Paul Kariuki Ndang'ang'a (2001)

As stated in Survey (2001), "Fischer's turaco has both the characteristics of flagship and an umbrella species: i.e. it is both a charismatic species that could provide a focus for conservation awareness and, at the same time, it has habitat requirements such that, if adequately protected, would ensure the protection of other threatened species.

Local people usually have a positive attitude toward turacos because of their beautiful plumage. Fischer's Turaco also fits well in the criteria suggested by Bowen-Jones & Entwistle (2002), as it is a locally endemic subspecies (thus providing a possible symbol of local allegiance) and it is well-known and not readily confused with other species."

As a considerable proportion of the populations of other endemic and threatened taxa occur outside Jozani NP, the scope of future actions must include larger areas beyond the reserve. The patches of forest in the southern part of the island are also a priority.

- The categorization of Fischer's turaco as Lower Risk: near-threatened (IUCN, 2002) require reassessment. They suggest that it should be categorized as Vulnerable under the IUCN Red List criteria (IUCN/SSC, 1994) as it qualifies under criterion A2c, i.e. population reduction of at least 20% suspected to occur within the next ten years based on a decline in area of occupancy, the extent of occurrence and quality of habitat. For this, we need to conduct a survey.
- To develop an incentive system that encourages the creation of tree plantations. Such plantations would provide alternative wood sources and reduce pressure on the remaining natural woodlands, improving the survival prospects of the threatened species that depend on them.

Proposal Survey 2021:

Survey the species range to obtain a new total population estimate and monitor rates of habitat loss compared to 2001 survey. Field Survey 2021 will use same methodology as 2001 survey, all necessary data to conduct survey supplied by Prof. Luca Borghesio and his team.

We will use the same 150 unlimited- distance point counts, performing playbacks of the species' call at evenly spaced points throughout specific areas of the island. At each census point, we also record the presence of four other species: Indian House Crow, Zanzibar Red Colobus, Black and Rufous Elephant-shrew, Sykes's Monkey next to the status of habitat-degradation. Based on the results of the survey, we have to look at:

1. Change status from "Near threatened" to "Vulnerable" according to IUCN criteria.

As mentioned earlier we suggest that Fischer's Turaco be considered Vulnerable under IUCN criteria, as it appears to qualify under criterion A2c (population decline of at least 20% suspected to be met within the next ten years based on a decline in area of occupancy, the extent of occurrence and quality of habitat).

2. Need Breeding program.

After the results of the survey 2021, we have to establish if a breeding program is required for species' survival.

3. Investigate the potential for attracting interest from birdwatchers and generating revenue.

Zanzibar attracts large numbers of tourists. The main attraction for almost all tourists visiting the forests is the endemic Red colobus, found in Jozani Forest NP. As suggested Fischer's Turaco, being a species of considerable beauty and rarity, also has the potential for attracting interest from birdwatchers and generating revenue. The species can easily be lured with cheap audio devices so that the difficulty of observation could easily be overcome.

4. To encourage the creation of tree plantations in addition to corridors connecting the remaining patches of forest.

Plantations would provide alternative wood sources and reduce pressure on the remaining natural woodlands, improving the survival prospects of the threatened species that depend on them. Corridors which provide connectivity between landscapes, ecosystems and habitats, natural or modified, and ensures the maintenance of biodiversity and ecological and evolutionary processes not only for Fischer's Turaco but for other endangered species as well.

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