

## Forest loss in the Ulugurus, Tanzania and the status of Uluguru Bush Shrike *Malaconotus alius*

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*Abstract.* The Uluguru Mountains in eastern Tanzania are a site of great ornithological importance, including possessing two endemic birds. One of these birds, the Uluguru Bush Shrike is regarded as one of the rarest birds in Africa. Recent surveys of its population have shown that its population is more than double previous estimates, at around 1,200 pairs. However, the bird seems to be confined to the Uluguru North forest reserve, containing less than 100 sq km of forest, and where 16% of the forest at suitable altitudes for the shrike have been lost since 1977 (more than 20 sq km of forest loss). Although it is good news that the species survives at higher populations than previously thought, any additional losses of forest between 1200 and 1700 m altitude from this single site will further increase the extinction risk for this species.

Forest in the Uluguru Mountains of eastern Tanzania supports an exceptional biodiversity, including two endemic bird species and similarly high rates of endemism among other animals and plants. Following a Royal Society for the Protection of Birds–European Union project to plan conservation action in these mountains, the Danish Ornithological Society and Wildlife Conservation Society of Tanzania have obtained funding from DANIDA for a three-year project, which aims to initiate conservation in the region in collaboration with other local organisations.

During 2000 the project has mapped the area of remaining forest and undertaken a survey of the endemic Uluguru Bush Shrike *Malaconotus alius* (see below). The rate of forest loss will have a major impact on the habitat available for the Uluguru Bush Shrike, and hence on its long-term chances for survival. Aerial photographs from 1955 and 1977 permitted the former extent of forest cover to be determined. Ground surveys undertaken in 2000 have assessed the remaining forest area on the mountains, allowing some conclusions to be made on the degree of forest loss over time.

### Forest loss

Between 1955 and 2000 forest cover on the Ulugurus declined from c300 km<sup>2</sup>, to c220 km<sup>2</sup>. Most loss occurred in submontane forests (at 500–1,500 m) outside the Catchment Forest Reserves of Uluguru North and Uluguru South. The forest loss included almost the entire area of non-reserved forest on the north-west margin of the Uluguru North forest reserve (Fig 1). This area of forest has been converted to farmland and remaining forest areas are underplanted with bananas as a cash crop. Within the Uluguru North and Uluguru South Catchment Forest Reserves the forest remained over this period and even expanded slightly in some areas.

### Uluguru Bush Shrike

This species is the rarest of the Ulugurus endemic birds and one of the rarest in Africa. It now appears confined to Uluguru North Forest Reserve (83.6 km<sup>2</sup>), where it prefers forests at 1200–1700 m altitude in the submontane band. Regrettably, submontane forest was subject to the greatest destruction in 1955–1977 (Fig 2), a trend that has continued up to the present day.

Field work in the mid-1990s suggested that the population of Uluguru Bush Shrike was unlikely to exceed 1,000 individuals<sup>1</sup>. A new detailed survey was made over six weeks in December 1999–January 2000, using randomly located points and a tape playback methods. The survey provided a more precise population estimate of c1,200 pairs in Uluguru North Forest Reserve. No records were obtained from Uluguru South Forest Reserve (164.3 km<sup>2</sup>), where the species was heard on one

occasion in 1981. It is therefore tentatively concluded that the species now only occurs in Uluguru North Forest Reserve.

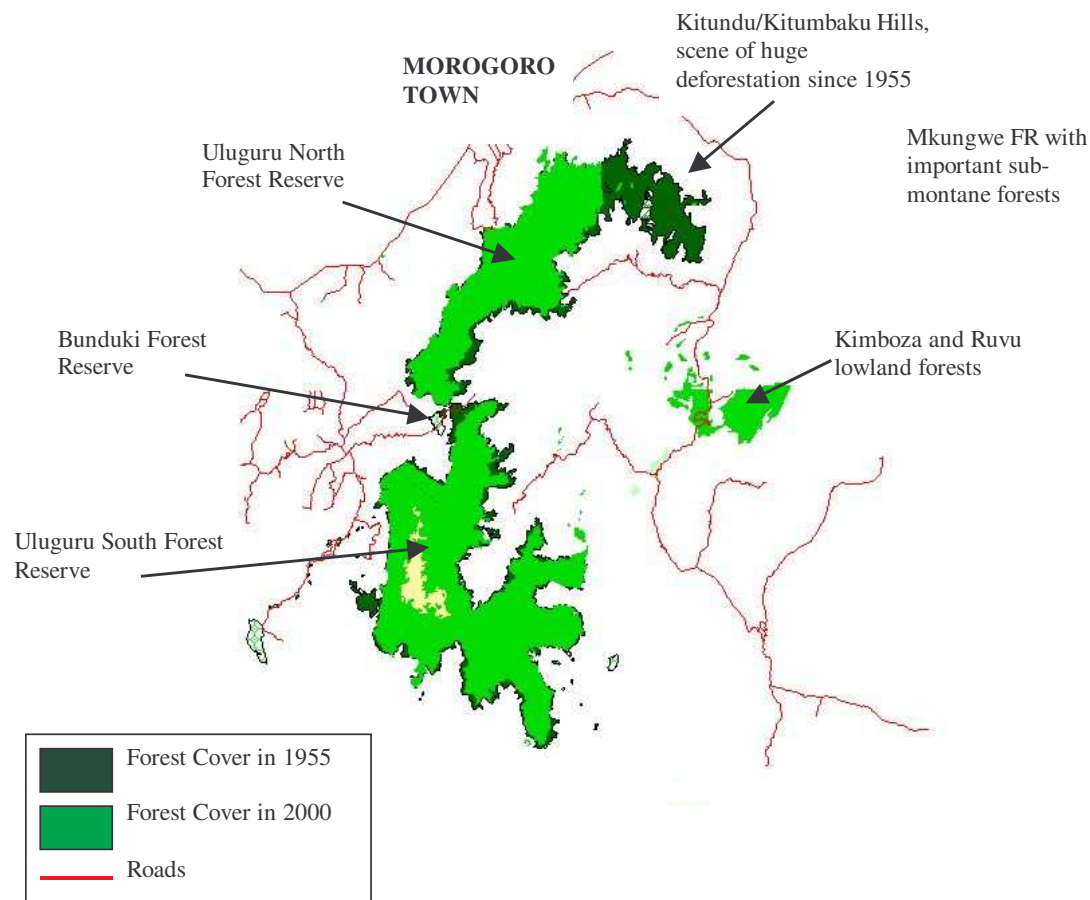
While it is encouraging that detailed surveys have raised the estimated population to 1,200 pairs, the loss of its preferred habitat in Uluguru North is of serious concern and the entire area of forest available to the species is now well below 100 km<sup>2</sup>. The species is currently listed as Endangered<sup>1</sup>, based on its tiny range at only one site. However, we are not overly pessimistic and believe that its chances of survival are greater than this status indicates. There is still available habitat in the Uluguru North Forest reserve in good condition and related species of *Malaconotus* elsewhere in montane Africa seem able to survive in very small patches of forest.

## Reference

1. BirdLife International 2000. *Threatened Birds of the World*. Cambridge, UK: BirdLife International & Barcelona: Lynx Edicions.

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Figure 1. Loss of submontane and montane forest in the Uluguru Mountains between 1955 and 2000



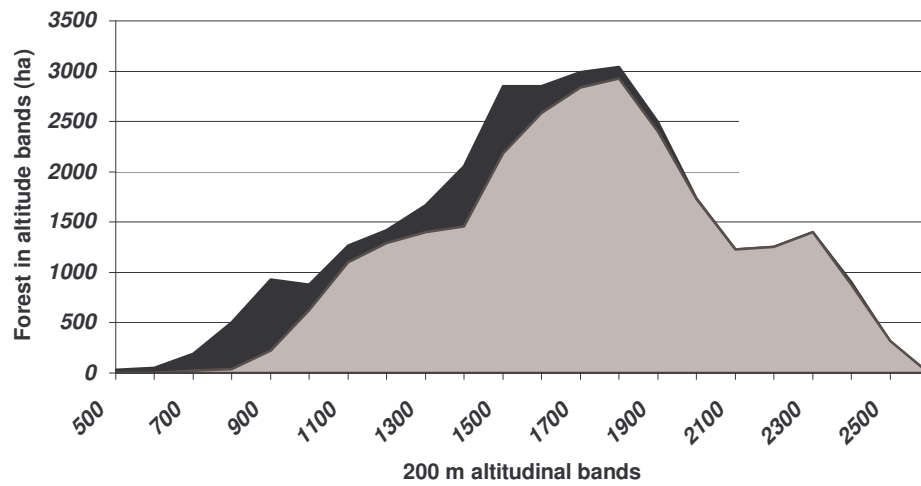


Figure 2. Altitudinal distribution of forest area in the Ulugurus in 1955 (black plus grey) and 1977 (grey only), excluding forests below 500 m. The trend of forest loss between 700 and 1700 m altitude exhibited here has continued up to the present day.