

OUT OF THE WOODS? YELLOW-THROATED APALIS

TIWONGE MZUMARA (2)

The Yellow-throated Apalis *Apalis flavigularis* is a small, forestdwelling passerine confined to three mountain massifs in southern Malawi: Malosa, Zomba and Mulanje. Within these massifs, the species is estimated to occupy a total range of 510 square kilometres, yet its habitat has been and continues to be severely fragmented by forest exploitation. This threat, coupled with the apalis's small estimated population (2 500 to 10 000 individuals, and decreasing), resulted in its classification as globally Endangered.

> In 2008, during October and November (the breeding season of the species), Conservation Biology student Tiwonge Mzumara embarked on a project to assess the population size of this poorly known bird on Mount Mulanje, a massif rising to 3 000 metres. Mulanje was chosen for the project because it is a biosphere reserve, which makes it most likely to be the massif receiving best protection in the future and key to conserving the biodiversity of southern Malawi's mountains. The forests of Mulanje mostly exist as isolated fragments in a matrix of grassland and are characterised by the presence of the endemic Mulanje cedar, an emergent tree that can grow to a height of 40 metres. Despite the area's biosphere status, it is estimated that exploitation of the cedar could drive it to extinction within a decade.

Even small, degraded forest patches such as this one surrounded by alien Himalayan raspberries can support the Yellowthroated Apalis (inset).

Tiwonge surveyed apalises in forest patches with and without cedars on Mulanje. The total area of cedar forest is known (845 hectares), but the extent of forest lacking cedars is not. Interestingly, apalis densities did not differ between forest patches with or without cedars, but they were positively influenced by the presence of alien Himalayan yellow raspberry, listed as one of the 'worst 100' invasive species in the world. Areas covered with (and cleared of) alien Mexican pines supported no apalises at all. On the plus side, apalises persisted in even the smallest patches of native forest: indeed, they occurred at higher densities in these patches than in larger forest tracts, probably because they favour forest fringes rather than the interiors. Average apalis densities ranged from 10 to 12 birds per hectare (comparable to densities of the highly restricted Namuli Apalis A. lynesi in Mozambique), although ringing studies carried out at the same time suggest that these might be under-estimates. Using a very conservative technique, Tiwonge calculated the minimum number of apalises in cedar forests alone to be at least 7 900 birds. This is very encouraging because, taken with the equally high densities of apalises in forests lacking cedars, numbers at Mount Mulanje alone probably exceed the most optimistic estimate of the species' global population.

Given that Yellow-throated Apalises occur at two other Malawian massifs, the species' global conservation status is probably far less precarious than that of Namuli Apalis and Taita Apalis *A. fuscigularis*, both of which occur at only a single site. But there is one factor that could work against this upbeat conclusion: where the birds go in winter. If large numbers move to lower-altitude forests (as some are known to do), this could change the picture because the lower forests are under more threat than the higher-altitude ones, where the apalises breed. What is certain, however, is that the IUCN estimate of the minimum population size is too low.



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