

RWANDA'S FOREST BIRDS UNDER THREAT

The Afromontane forests of the Albertine Rift extend from the eastern Democratic Republic of the Congo to western Uganda. During the Pleistocene, these forests formed an important refuge for plants and animals and today are one of Africa's centres of endemism, supporting many unique species of mammals, birds, butterflies and plants. Some of the birds, such as the Congo Bay-Owl *Phodilus prigoginei* and Prigogine's Nightjar *Caprimulgus prigoginei* are among the least-known species in the world.

Rwanda is a small (26 350 square kilometres), land-locked country with high-altitude forests in the west and north. Its human population increased from 1.6 million in 1934 to 7.2 million in 1991: more than 90 per cent of this population depends on subsistence agriculture. To add to the country's human woes, the past decade has seen political instability, civil war and massive human resettlement.

Of the 36 bird species endemic to the Albertine forests, 24 are known to occur in Rwanda. However, there have been few recent bird surveys of the Rwandan forests, and historical data are inadequate to prove conclusively whether there have been any recent extinctions. In 1999/2000, Fidele Ruzigandekwe, a Rwandan national studying at the Fitzpatrick, documented the historical

patterns of forest loss in Rwanda to try and assess the probability of extinctions. To do this, he travelled to the Museum for Central Africa in Tervuren, Belgium, where he was able to digitise and analyse old and recent maps, aerial photographs and satellite images of Rwanda. The results of his study were chilling.

In the north of the country, the Mukuru-Gishwati-Volcans forest complex was, in 1934, a single forest block of 833 square kilometres. By 1955, it was divided into three discrete patches, and by 1998, only 18 per cent of the original forest remained. The largest forest, Nyungwe, lost only 26 per cent of its area over the same period, but the small Cyamudongo Forest – a particularly species-rich site – decreased in area by 71 per cent. Overall, 49 per cent of Rwanda's Afromontane forest disappeared between 1934 and 1998.

The use of digitised maps allowed Ruzigandekwe to calculate how much forest had been lost at different altitudes, in addition to the total losses. Fifty-five per cent of all forests below 2 200 metres have been lost since 1934, whereas all the forest above 2 800 metres has remained intact. In the northern forests, everything below 2 200 metres has gone. This is particularly worrying because the altitudinal ranges of 95 per cent of the forest bird species extend below 1 900 metres.



Orange-throated Forest Robin

By contrast, only 33 per cent have ranges that extend above 2 900 metres. Even in the largest forest (Nyungwe), it is feared that some species, including Yellow-billed Barbet *Tachyphonus purpuratus*, Cassin's Grey Flycatcher *Muscicapa cassini* and Orange-throated Forest Robin *Stiphornis erythrorhox* have already dwindled to extinction. Many more extinctions have undoubtedly occurred in the northern complex, including Fischer's Greenbul *Phyllastrephus fischeri* and White-bellied Robin *Cossyphicula roberti*.

While there are no forest-bird species endemic to Rwanda, some of the species found there have extremely small world ranges, occur at moderately low altitudes and are listed in the International Red Data Book. These are the species

for which Rwanda's forest losses create the greatest immediate concern. Highly restricted Albertine endemics such as Chapin's Flycatcher *Muscicapa lendu* and Grauer's Warbler *Graueria vittata*, may now be hanging on in Rwanda by no more than a thread.

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