

First nest description for the Black-tailed Oriole *Oriolus percivali* from Gishwati Forest, Rwanda

The Black-tailed Oriole *Oriolus percivali* (also called Montane Oriole or Mountain Oriole) is found in the montane and submontane forests of the Gregory and Albertine rift valley highlands of East Africa and the eastern Democratic Republic of Congo (DRC), from 1530 to 3000 m (Stevenson & Fanshawe 2020). It is a relatively common resident of Gishwati Forest in Gishwati-Mukura National Park in western Rwanda, where the authors regularly observed or heard it vocalizing between June and August 2019. While the nests are known for the other three members of the Afrotropical black-headed oriole clade (*O. larvatus*, *O. nigripennis*, and *O. monacha*), the nest of *percivali* has remained undescribed, and little has been documented on its reproductive habits (Walther & Jones 2020).

On 2 July 2019, while conducting a point count above the bank of a small stream for an avian survey of Gishwati Forest (01°49'S, 29°22'E; 2050–2550 m a.s.l.), we observed two adult Black-tailed Orioles visiting a nest separately and feeding two chicks in a five-minute period. We assume that these were the two parents, and that therefore, both sexes of *percivali* feed offspring in the nest. One of the adults was subsequently filmed by SI while singing from a perch next to the nest, where it proceeded to briefly feed a chick and sing again before departing (see Inman 2022).

The nest (Fig. 1) was a deep, open cup seemingly woven almost entirely from *Usnea* beard lichen, lined with fine grass and suspended hammock-like from a horizontal fork at a branch-end in the canopy of a large *Dombeya torrida*. It was approximately 15 m above ground level and there were additional strands of lichen looping around other small branches off the central stem that supported the side of the nest.



Figure 1. A Black-tailed Oriole *Oriolus percivali* nest in Gishwati Forest, Rwanda, in July 2019 (S. Inman).

We made repeated visits to the nest site to monitor nest-occupancy and await permission from government authorities at the Rwandan Ministry of Environment (MOE) and Rwanda Development Board (RDB) to collect the nest specimen after successful fledging. We made no further observations of adult or young orioles at the site, and on 7 August 2019, SI collected the nest by carefully cutting the top branch of the tree, as it became too small to safely climb. Given Rwanda's rules governing biogenic collections, SI delivered the specimen to an RDB representative as property of the state before a more rigorous examination of the nest's internal construction and materials could be made, and the status of the specimen remains unknown at this time. Nest dimensions recorded at the time of collection were as follows: height 8 cm, cup depth 6 cm, internal diameter 6 cm and external diameter 10 cm.

Nest descriptions for the three other species in the Afrotropical black-headed oriole clade that are available in Walther & Jones (2020) reveal a similar use of beard lichen in nest construction and comparable nest dimensions, along with a similar nest placement toward the top of a tree. The breeding habits of *percivali* have been documented (Walther & Jones 2020): in the DRC, where adults with enlarged gonads have been recorded from May and June as well as in September, fledglings have been seen in August, and juveniles have been documented in both April and September–November; and in Uganda, where an adult has been observed feeding a fledgling away from the nest in October. Our sighting of a nestling in July and the absence of any activity near the nest in August aligns with the observations from the DRC. Meanwhile, both parents are known to feed chicks in *O. larvatus*, while in nesting *O. monacha* and *nigripennis* the feeding habits are less well documented. Given our observations of *percivali*, in conjunction with literature accounts of *larvatus*, we predict that *monacha* and *nigripennis* should also display bi-parental provisioning of chicks in the nest.

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