

# The Red-tailed *Newtonia fanovanae* in the Ambatovaky Reserve, north-east Madagascar

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## Summary

The Red-tailed *Newtonia fanovanae*, known from two sites in the eastern rainforests of Madagascar, was found in the Réserve Spéciale d'Ambatovaky in February 1990, when two observations of birds in mixed-species flocks were made in primary lowland forest at 650–700 m. Such habitat may be rare in reserves, recent fieldwork having concentrated on higher-altitude sites. Ambatovaky's faunal richness as a lowland site is emphasised. Some differences in descriptions of the Red-tailed *Newtonia* exist.

Le Newtonie à queue rouge *Newtonia fanovanae*, antérieurement connu de deux sites dans les forêts tropicales orientales du Madagascar, fût trouvé dans la Réserve Spéciale d'Ambatovaky en février 1990, où deux individus furent observés parmi des bandes plurispécifiques d'oiseaux à l'intérieur d'une excellente forêt de plaine à 650–700 m d'altitude. Il se peut qu'un tel habitat soit rarement trouvé à l'intérieur de réserves, car les investigations de terrain furent récemment concentrées sur des sites en plus haut altitude. La richesse faunistique du site de plaine d'Ambatovaky est mise en évidence. Il existe des différences de descriptions du Newtonie à queue rouge.

## Introduction

Subsequent to the rediscovery of the Red-tailed *Newtonia fanovanae* in the south of Madagascar in October 1989 (see Goodman and Schulenberg, this issue), I made two sightings of this Madagascan endemic species in the Réserve Spéciale d'Ambatovaky in February 1990. I was unaware of the details of Goodman and Schulenberg's achievement until after my return from the field. The following notes, coming from a site 950 km to the north of their own, are intended to supplement their observations.

Ambatovaky is the largest Réserve Spéciale in the country and lies in the north-east of Madagascar, covering 60,050 ha of largely intact humid evergreen forest from 16°36'S in the north to 16°57'S in the south and from 49°04'E in the west to 49°25'E in the east, about 50 km WNW of the coastal town of Soanierana-Ivongo. It appeared that the reserve had never been visited by scientists, and for this reason the Madagascar Environmental Research Group (MERG) organised a team, of which I was a member, to carry out a faunal inventory and an intactness study of the reserve in February and March 1990.

The landscape looks uniform, everywhere incised by watercourses which drain shallowly east and which create a terrain of innumerable, small, steep-sided valleys, and sharp-crested ridges, with occasional hill summits where ridges converge. Altitude range is 300–1,200 m, averaging c.300–400 m in the

east rising to 900–1,000 m in the west. Mean annual rainfall in the reserve probably varies between 3,500 in the east to 1,500 mm in the west (Rand 1936: 206). The vegetation consists of c.50,000 ha (including areas now cleared) of Primary Lowland Forest and c.9,000 ha (again including areas now cleared) of Moist Montane Forest (White 1983, Nicoll and Langrand 1989: 255–6, 260), as well as smaller areas of slash-and-burn cultivation and secondary woodland/forest on abandoned cultivation. Both sightings of Red-tailed *Newtonia* were made near our first camp, a remote area, six days' journey on foot from the end of the road at Soanierana-Ivongo.

### Observations

On 14 February 1990 at 14h20 I found two Red-tailed *Newtonias* in a mixed-species flock consisting otherwise of two Souimanga Sunbirds *Nectarinia souimanga*, one Nelicourvi Weaver *Ploceus nelicourvi*, two Common *Newtonias* *Newtonia brunneicauda*, a male and a female Red-tailed Vanga *Calicalicus madagascariensis*, a Madagascar White-eye *Zosterops maderaspatana* and two Madagascar Paradise Flycatchers *Terpsiphone mutata*. The habitat was pristine Primary Lowland Forest at 700 m with a c.15 m high canopy (stunted on account of its ridgetop location); tree taxa noted in our study area at this camp included *Symphonia* sp., *Anthocleista* sp., *Polyscias* sp., *Pandanus* spp. and *Canarium madagascariense*; palm species diversity seemed high. The birds were at the point where the main path between the small villages of Iampirano and Ranomena crests a ridge which runs south from the peak called Ambatovaky Avaratra, at about 16°51'S 49°08'E. My colleague Paul M. Thompson was nearby, so I called him over and we obtained fragmentary views of the birds at ranges of 5–10 m for a total of about five minutes over a 10-minute period until we lost them. I watched and took detailed field notes on only one of the two birds.

The second sighting was on 23 February 1990 at 650 m elevation, about 500 m from the first sighting along the same path, in the direction of Iampirano. At 10h05 I located a single Red-tailed *Newtonia*, again in a mixed-species flock together with one Souimanga Sunbird, three Common *Newtonias*, a male and a female Red-tailed Vanga, four Madagascar White-eyes, a Madagascar Paradise Flycatcher, two Common Jeries *Neomixis tenella* and two Long-billed Greenbuls *Phyllastrephus madagascariensis*. The bird was foraging in the forest's mid-storey in the crown of a small sub-canopy tree in a swampy valley bottom in Primary Lowland Forest with a canopy height of c.20–25 m. No other observers were present and I had clear views of the bird for 10–15 seconds at about 10–15 m range before I lost it.

### Summary of field notes

My own field notes on the birds are summarised below, with related details from the first and second sightings placed next to each other in the text and prefaced with "(1)" and "(2)" respectively. Paul Thompson's field notes agree with the following description (1) on all significant details apart from two minor differences: he did not note the buff-pink flush on the breast, and he thought the tail appeared longer than in Common *Newtonia*.

Where comparisons with other species are made, these are direct field comparisons with birds in the aforementioned mixed-species flocks and are thus not wholly made from memory of previous experience, except in the cases of iris colour (Dark *Newtonia* *N. amphichroa*) and calls (Common Jery); my previous Madagascan birdwatching experience includes an eight-week ornithological inventory in eastern rainforest in 1988 (Safford and Duckworth 1990).

### *Structure*

(1) A small flycatcher, with obvious rictal bristles; size and shape similar to Common *Newtonia*, a species with which I was very familiar; I did however note that the bill was possibly of a more delicate build compared to Common *Newtonia*. The larger and heavier overall build of Red-tailed Vanga was immediately obvious in the field, as was its deeper, stouter, hook-tipped bill. (2) The bird seemed slightly smaller/daintier than Common *Newtonia*, with a finer bill.

### *Plumage description*

(1) Clear, neutral grey on forehead, crown, nape, lores and ear-coverts (roughly same shade of grey as on head of Red-tailed Vanga), with a much paler wash of grey on chin and throat. In contrast to the cool grey of the head, the mantle, back, upperwing coverts and remiges were a warm, fairly dark brown, darker and much browner than the pale brownish-grey upperparts of Common *Newtonia*, and unlike the concolorous grey crown, nape, mantle and back of Red-tailed Vanga. Uppertail was a rusty, rufous red, a similar colour to the tail of Red-tailed Vanga. Belly, flanks and vent were cold, clean white, with a pure and "icy" tone compared to the creamy underparts of female Red-tailed Vanga; the breast appeared to be concolorous with the rest of the underparts except that it was tinged with a very faint flush of buffish-pink, not visible at all angles. (2) Immediate impression of "multicoloration" compared to rather uniform-looking Common *Newtonia*, with grey head, warm umber (with a hint of olive?) mantle and back, white underparts (as opposed to pale pinkish-buff of Common *Newtonia*) and quite bright chestnut-red tail.

### *Bare parts*

(1) Bill was dark with a paler base to the lower mandible, legs appeared to be black; iris was dark, strikingly different from the pale iris of Common *Newtonia*, and similar to the dark eye of Dark *Newtonia* and Red-tailed Vanga; no eye-ring was visible, in contrast to the conspicuous, thin, whitish eye-ring of Red-tailed Vanga. (2) Eye was dark and legs appeared to be black.

### *Vocalisations*

(1) The birds were calling frequently, a high-pitched, rather monosyllabic note, higher-pitched than calls of Common *Newtonia*, and reminiscent of those of Common Jery. No song was heard. (2) Nothing noted.

*Behaviour*

(1) When first seen the birds were both feeding in the crown of a small, 7 m high sub-canopy tree on the ridgetop. The two birds were initially a few metres apart and may have been paired; however, they soon split apart as they travelled down along the crest of the ridgetop with the rest of the mixed-species flock, and foraged in the mid-storey and lower canopy strata. Compared to Red-tailed Vanga, the birds seemed more flighty and volatile. Sallying (fly-catching in mid-air) was observed. (2) The bird was foraging in the forest's mid-storey, about 10 m above ground in the crown of a small sub-canopy tree. Compared to Red-tailed Vanga it seemed to make faster and less direct progress through the tree's crown. It also seemed more volatile and flighty than Common Newtonia, not so much given to creeping along in the canopy. It sallied once, returning to the same perch.

**Discussion**

Some anomalies between my field descriptions and the descriptions in the literature are apparent. Although I have not seen the original type-description of Red-tailed Newtonia (Gyldenstolpe 1933), it would appear that the colour of the mantle and back of the unsexed adult type-specimen (see Collar and Stuart 1985: 568) and of the second, adult male specimen (Goodman and Schulenberg, this issue) resembles the mantle/back colour of female Red-tailed Vanga, i.e. grey. However the colour of this region on the birds that I saw appeared to be brown; I feel that this difference is probably real and not due to poor views. In addition, the prominent buff-brown throat/breast-band on Goodman and Schulenberg's specimen was not noted on my birds, only a much fainter wash across the breast, and I did not notice a thin white eye-ring as documented in Collar and Stuart (1985). The brown upperparts and perhaps the other disparities may be features of the undocumented juvenile plumage, but full explanation will have to await further field observations.

The Red-tailed Newtonia's status remains enigmatic; the habitats and altitudes at which it has so far been discovered suggest that it may be confined to primary forest at lower altitudes, especially below 800 m, as may some other forest species of eastern Madagascar (Safford and Duckworth 1990). This habitat, Primary Lowland Forest (White 1983), is not well represented in those eastern Madagascan reserves and sites of interest that have attracted ornithologists' research to date, such as Perinét-Analamazaotra, Ranomafana, Zahamena and Marojejy (Jenkins 1987, Thompson *et al.* 1987, Safford and Duckworth 1990). The lowland forest reserves of Betampona and Nosy Mangabe are extremely small, very isolated, disturbed in the former and with secondary vegetation in the latter (Jenkins 1987). It may be that this species occurs widely but sparsely in the unexplored primary lowland forest between the three known sites.

Although Ambatovaky is a Réserve Spéciale, its protected status is not enforced since the managers of Madagascar's protected areas, the Direction des Eaux et Forêts of the Ministère de la Production Animale (Élevage et Pêche) et des Eaux et Forêts (MPAEF), do not have the funds to station any guards to

patrol and protect the forest. As a result, deforestation of the reserve is proceeding unchecked along its eastern boundary, where the lowest and presumably most species-rich forest occurs.

The discovery of Red-tailed *Newtonia* in Ambatovaky strengthens the arguments for the conservation of this reserve. Not only does it hold the largest amount of primary lowland humid evergreen forest of any protected area in Madagascar (Nicoll and Langrand 1989: 260; pers. obs.), our brief faunal inventory revealed the highest amphibian diversity known at any site in Madagascar (58 species including at least seven new to science), a new species of reptile *Amphiglossus* and at least 12 threatened or near-threatened bird species (MERG 1990), as well as a great diversity of other animals, including a new species of tenrec *Microgale* (P. Jenkins *in litt.* to T. Barden) and probably several new species of Odonata (Dr D. A. L. Davies *in litt.*); these results will be published in a final report by MERG (Thompson and Evans *in prep.*), as well as in various journals.

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