

Black-tailed Cisticola *Cisticola melanurus* in eastern Angola: behavioural notes and the first photographs and sound-recordings

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A cisticola-de-cauda-preta *Cisticola melanurus* no Este de Angola: notas sobre o seu comportamento e primeiras fotografias e gravações de sons. Em julho / agosto de 2010 procurámos durante nove dias a cisticola-de-cauda-preta *Cisticola melanurus* em localidades no Este de Angola onde esta espécie mal conhecida (categoria 'Dados Insuficientes' da IUCN) tinha sido previamente registrada. Encontrámos um par e um grupo de 6 a 8 indivíduos, incluindo adultos e juvenis, em bosque maduro de *Brachystygia* (miombo) na área de Cacolo. Foram obtidas as primeiras fotografias e gravações de vocalizações. Um juvenil foi capturado e medido. Os indivíduos observados alimentavam-se sobretudo em matos densos perto do solo nas bordas dos bosques e em clareiras, mas também dentro dos bosques fechados a todas as alturas, do solo às copas mais altas (cerca de 12 m). Ao vivo, a espécie tem semelhanças com a cisticola-rabilonga *C. angusticauda* e, em menor grau, com a cisticola-de-cabeça-ruiva *C. fulvicapilla*; só superficialmente faz lembrar um *Apalis*, como previamente sugerido. Os sons que produz incluem estalidos com as asas, uma vocalização de contacto de baixo volume e um canto inconspícuo mas ainda assim único e bem diferente dos cantos da cisticola-rabilonga e da cisticola-de-cabeça-ruiva.

Summary. We spent nine days in July / August 2010 searching for the Data Deficient Black-tailed Cisticola *Cisticola melanurus* in eastern Angola at localities from where the species has previously been reported. We found a pair and a group of 6–8 birds, consisting of adults and juveniles, in mature miombo woodland in the Cacolo area. Photographs were taken and sound-recordings made. A juvenile was trapped and measured. Birds mostly fed low in dense undergrowth on the edge of woodland and in clearings, although they foraged at all heights, from ground level to the canopy of the tallest trees (c.12 m) in closed-canopy woodland. In life the species appeared similar to Long-tailed Cisticola *C. angusticauda* and to a lesser degree Neddicky *C. fulvicapilla*; it was only superficially similar to an *Apalis*. Sounds included wing-snapping, a weak, soft contact call, and an inconspicuous yet distinctive song, quite different from that of Neddicky or Long-tailed Cisticola.

Black-tailed (or Slender-tailed) Cisticola *Cisticola melanurus* is a scarce and localised warbler (Cisticolidae) known from a handful of localities scattered across eastern Angola and the western Democratic Republic of Congo (DRC) (Irwin 1991, Urban *et al.* 1997), both of which are remote and little-visited regions by ornithologists. Consequently, the species is poorly known and is listed as Data Deficient (BirdLife International 2010). Irwin (1991) summarised then-available information on the species, which consisted of six specimens collected in Angola, eight specimens collected in DRC, field observations by Neave (1910), G. Heinrich (*in* Ripley & Heinrich 1960) and J. Vincent (*in* Irwin 1991), as well as a sight record from Angola (Dean *et al.* 1988) which requires verification. Subsequently, we are aware of just two sight records, one by Sinclair *et al.* (2007) in February 2005 from 40 km north of Calandula, Malanje Province, Angola, and one

by A. Hester (*pers. comm.*) in March 2009 from near Kolwezi, Lualaba Province, DRC. Neither sighting was documented with photographs, sound-recordings or detailed field notes.

Furthermore, there are conflicting reports concerning the species' habitat preferences and behaviour. Its habitat has been variously described as tall trees, not bushes in woodland (Neave 1910), dry woods, usually in the vicinity of grassy clearings (Ripley & Heinrich 1960) and climax *Brachystegia boehmii* woodland (Dean *et al.* 1988). The bird has been stated to feed in the branches and crowns of lower-stature trees (Ripley & Heinrich 1960), in the canopy of tall woodland (Dean *et al.* 1988, Sinclair *et al.* 2007) and low in the undergrowth (J. Vincent *in* Irwin 1991). Finally, there is some uncertainty surrounding its taxonomic status; the species has been suggested to be conspecific with Neddicky (Piping Cisticola) *C. fulvicapilla* and Long-tailed (Tabora) Cisticola

C. angusticauda (Dowsett & Dowsett-Lemaire 1980); alternatively, it has been placed in a different genus (*Apalis*; Hall & Moreau 1970). In life Black-tailed Cisticola has been likened to an *apalis*, rather than to Neddicky or Long-tailed Cisticola (Irwin 1991, Sinclair *et al.* 2007).

In July–August 2010 we searched for Black-tailed Cisticola in north-east Angola, with the aim of photographing it, recording the species' vocalisations, studying its behaviour and, if possible, capturing one or more individuals to take genetic samples to be used to determine its phylogenetic position within the Cisticolidae.

Methods

The precise location of all previous (specimen and sight record) localities (Irwin 1991, Dean *et al.* 1988, Dean 2000, Sinclair *et al.* 2007) and potential access routes were determined prior to our field work. Between 26 July and 3 August 2010 we spent nine days travelling to and visiting two areas from which there are reports of Black-tailed Cisticola, accessing the region from the west, along the main road from Luanda to Saurimo in Lunda Sul Province. Two days were spent *c.*40 km north of Calandula, slowly searching miombo woodland and clearings at the edge of such woodland. There is a single sight record from this region (Sinclair *et al.* 2007), which is 210 km west of Cafunfo (08°46'11"S 17°59'49"E), the nearest locality from which a specimen is available.

From the Calandula area we continued east into the provinces of Lunda Norte and Lunda Sul. We initially planned to visit the Cafunfo region along the Cuango River, the nearest area to Malanje from where a specimen has been collected. However, due to safety concerns as a result of the region being located within the main illicit diamond mining zone, we elected to concentrate our efforts on the Cacolo area (10°08'41"S 19°15'53"E), 200 km to the south-east. Three of the six Angolan specimens were collected from the vicinity of Cacolo, and a fourth is from nearby Mona Quimbundo (Irwin 1991).

On the afternoon of 31 July we followed the road from Cacolo south-west towards Cacumbi 10°16'57"S 19°02'55"E) for *c.*23 km, stopping en route to search for Black-tailed Cisticola wherever the habitat seemed suitable. We camped adjacent to this road, on the edge of Sãoyaze village, *c.*7.5

km south-west of Cacolo, for two nights, and erected six mist-nets (total length = 54 m) in the nearby woodland, where we found a group of Black-tailed Cisticolas. On 1 August we spent most of the day following the group of 6–8 Black-tailed Cisticolas as they foraged, observing their behaviour, recording their vocalisations and trapping one individual in a mist-net.

Sound-recordings were made using an Edirol R09 recorder and a Sennheiser MKE400 microphone. Measurements were obtained as follows: mass to the nearest 0.5 g using a Pesola spring balance; wing and tail length to the nearest 0.5 mm using a standard wing ruler; bill length, width and depth (height), and tarsus length to the nearest 0.1 mm with a digital calliper. These measurements were taken as follows: wing length (flattened), from the carpal joint to the tip of the longest primary; tail length, from the uropygial gland to the tip of the central rectrix; tarsus length, from the tibiotarsus joint to the distal end of the tarsometatarsus when the foot is held to the leg; upper mandible length, from where the culmen enters the feathers of the head to the tip; and bill width and depth at the anterior end of the nares. Blood samples were collected non-destructively from the brachial vein, together with three rectrices. Blood and feather samples were stored in absolute ethanol. Triplicate samples are held at the Percy FitzPatrick Institute (University of Cape Town, South Africa), at the Museum of Vertebrate Zoology at the University of California at Berkeley (South Africa), and at the Centro de Investigação em Biodiversidade e Recursos Genéticos (University of Porto, Portugal).

Results

No Black-tailed Cisticolas were found in the area *c.*40 km north of Calandula, although Short-winged Cisticola *C. brachypterus*, Neddicky and Whistling Cisticola *C. lateralis* were all seen on several occasions.

In the Cacolo area, we almost immediately located a group of 6–8 Black-tailed Cisticolas feeding in the crowns of some lower-stature trees within dense miombo woodland near Sãoyaze village. On 31 July we observed the birds for 40 minutes as they moved through the area, made initial sound-recordings and took some record photographs. We also located a pair of Black-tailed Cisticolas 4.2 km distant at 10°12'35"S



Figure 1. The well-developed miombo woodland in which Black-tailed Cisticola *Cisticola melanurus* was found 7.5 km south-east of Cacolo, Angola (Alexandre Vaz)

Figura 1. A mata madura de *Brachystegia* (miombo) na qual a cisticola-de-cauda-preta *Cisticola melanurus* foi encontrada, a 7.5 km a sudeste de Cacolo, Angola (Alexandre Vaz)

19°10'44"E, in the understory of mature miombo woodland.

Behaviour and habitat.—The group of 6–8 birds spent the entire day within an area of *c.*2 ha of miombo woodland (Fig. 1). They moved together loosely, making it impossible to count the precise number of individuals or determine the exact age- and sex-composition of the group. Both adults and juveniles were present, and because all previous accounts suggest that the species lives in pairs (Irwin 1991), this may have been a breeding pair with several young from the previous breeding season. While they spent some time in mature, closed-canopy miombo woodland, the birds tended to forage in areas at the edge of well-developed woodland where the undergrowth was denser and the canopy cover sparser (Fig. 2). One of these more open areas was at the edge of a cassava field, which the birds flew across but did not forage in.

The cisticolas were seen to hop on the ground, forage in low, densely tangled vegetation, feed among the leaves in the canopy of the smaller trees (*c.*8 m above the ground), and also forage among the leaves in the canopy of the largest, emergent trees in the landscape (*c.*12 m above ground). The majority of their time was spent foraging low in dense undergrowth, especially in the morning, in the company of a pair of Tawny-flanked Prinias *Prinia subflava*. When disturbed the birds tended to fly into the canopy of the nearby trees.



Figure 2. The group of 6–8 Black-tailed Cisticolas *Cisticola melanurus* observed near Cacolo foraged preferentially in more open areas on the edge of miombo woodland and in clearings, where the canopy was more open and the undergrowth denser, although the birds also readily entered stands of dense woodland; we captured one individual in this mist-net (Martim Melo)

Figura 2. Um grupo de 6–8 cisticolas-de-cauda-preta *Cisticola melanurus* observado perto de Cacolo alimentava-se preferencialmente nas áreas mais abertas na borda da mata de miombo e em clareiras, onde a copa era mais aberta e o sub-bosque mais denso; no entanto, as aves também entravam regularmente nas zonas de mata mais densa; capturámos um indivíduo nesta rede (Martim Melo)

Besides the conspicuous noises made with the wings (described under Sounds), the most striking aspect of their behaviour was the way they held and moved their tails (Figs. 3–4). The tail was usually held below the horizontal, from which position it was constantly moved, both horizontally and vertically, in an apparently random fashion. They were not seen to flick their tails, nor their wings, as mentioned by Sinclair *et al.* (2007). Overall, they recalled Long-tailed Cisticola and, to a lesser degree, Neddicky, and the reported close similarity to members of the genus *Apalis* was not as apparent as we expected, based on the comments of other observers (Irwin 1991, Sinclair *et al.* 2007).

Sounds.—The descriptions of sounds presented here are based on sound-recordings made in the field, which are lodged at the Wildlife Section of The British Library Sound Archive. An edited summary track (131 seconds) was compiled using Goldwave software (www.goldwave.com), and is to be used in conjunction with descriptions given below. The track is downloadable from www.bird-sangola.org/downloads/ and www.birdingafrica.org/



Figure 3. Black-tailed Cisticola *Cisticola melanurus* is similar in appearance to Neddicky *C. fulvicapilla* and Long-tailed (Tabora) Cisticola *C. angusticauda*; it has a rich rufous head, reddish-brown mantle and back, grey-brown wings and whitish underparts (Alexandre Vaz)

Figura 3. A cisticola-de-cauda-preta *Cisticola melanurus* é parecida com a cisticola-de-cabeça-ruiva *C. fulvicapilla* e com a cisticola-rabilonga *C. angusticauda*; a cabeça é de um ruivo intenso, o manto e dorso castanho-avermelhados, as asas cinzento-acastanhadas e as partes inferiores esbranquiçadas (Alexandre Vaz)



Figure 4. As its name suggests, Black-tailed Cisticola *Cisticola melanurus* has a long, slender, all-black tail (Alexandre Vaz)

Figura 4. Como o seu nome indica, a cisticola-de-cauda-preta *Cisticola melanurus* tem uma longa e estreita cauda preta (Alexandre Vaz)

com/research/BlacktailedCisticola. Each section of the track (A–G) features a different recording and is separated by two seconds of silence.

While foraging in the undergrowth, birds were either silent for long periods or maintained

an almost continuous soft, weak *seep* call (section A, 49 seconds). This is probably the same call described by J. Vincent as a ‘small ‘wisping’ squeak very like that uttered by the Blue Waxbill *Uraeginthus angolensis*’ (in Irwin 1991). Sometimes a sharper *chip* (B, ten seconds) was also given. Both these calls are probably contact calls.

Perhaps the most distinctive sound is the clicking / wing-snapping sound made in flight (Neave 1910) (C, 2.6 seconds, D, 4.0 seconds, and E, 3.4 seconds), usually given in short bursts and not accompanied by any vocalisations. The birds often made this sound when disturbed and whilst flying up to a tree from the undergrowth, but appeared to also make it randomly at other times. Because J. Vincent did not note the wing-snapping behaviour during his observations in August, whereas observers in October and January did, Irwin (1991) commented that wing-snapping is perhaps seasonal. Our observations at the same time of the year as Vincent’s, outside the presumed breeding season, suggest that the behaviour is neither linked to breeding season nor to a breeding display.

Finally, a fairly inconspicuous song was given infrequently (F, nine seconds, and G, 41 seconds), usually by a single individual, from the crown of a tall tree. It consisted of various short burry phrases, each lasting *c.*0.2 seconds, given at intervals of 1–6 seconds, and usually lasting at least 15 seconds but sometimes for several minutes. The song is quite unlike the piping call made by Neddicky or Long-tailed Cisticola.

Plumage.—A juvenile, for which age-class the plumage is undescribed (Urban *et al.* 1997), was caught in a mist-net. It was similar to, although less brightly coloured than the adults (Figs. 3–4); the upperparts were more uniform, with the warm brown head grading into the brown mantle and back, and grey-brown wings (Figs. 5–7). As is characteristic of adults, it had a black tail (Fig. 7) and the rachis of the distal primaries appeared to be broadened and melanised (Fig. 6) as described by Ripley & Heinrich (1960). Measurements were as follows: mass = 7.0 g; wing length = 46.5 mm; tail length = 50 mm; tarsus length = 19.75 mm; bill length = 9.51 mm; bill width = 3.78 mm; bill depth = 3.16 mm.



Figure 5. The juvenile Black-tailed Cisticola *Cisticola melanurus* captured in a mist-net; the upperparts are duller than those of the adult, with a warm brown head grading into a brown back and grey-brown wings (Alexandre Vaz)

Figura 5. O juvenil de cisticola-de-cauda-preta *Cisticola melanurus* capturado numa rede; as partes superiores são menos vivas que as dos adultos, com a cabeça e dorso castanhos e as asas cinzento-acastanhadas (Alexandre Vaz)



Figure 6. The juvenile Black-tailed Cisticola *Cisticola melanurus* captured in a mist-net; the rachis of the five distal primaries is broad and black / melanised, and may be adapted to produce the wing-snapping sound characteristic of the species (Irwin 1991) (Alexandre Vaz)

Figura 6. O juvenil de cisticola-de-cauda-preta *Cisticola melanurus* capturado numa rede; a rquis das cinco primrias externas  larga e preta (melanizada) o que pode constituir uma adaptao para a emisso dos estalidos produzidos pelo bater das asas, caracterstico desta espcie (Irwin 1991) (Alexandre Vaz)

Discussion

Although our observations were short in duration, they indicate that Black-tailed Cisticola forages at all levels, from the ground to the canopy of the tallest trees. In general, the species appears to inhabit mature, closed-canopy miombo woodland,



Figure 7. A dorsal view of the captured juvenile Black-tailed Cisticola *Cisticola melanurus*, showing the black tail (Alexandre Vaz)

Figura 7. Vista dorsal do juvenil de cisticola-de-cauda-preta *Cisticola melanurus* capturado numa rede, mostrando a cauda preta (Alexandre Vaz)

although within this habitat it appears to favour clearings and more open areas with a denser undergrowth. This habitat appeared to be quite widespread in the Cacolo area, with large tracts uninhabited by people and unmodified, making it unlikely that this species is currently threatened by habitat loss, at least locally. At present the species is known from a few scattered localities within its range. We believe this to be a result of incomplete sampling, rather than the species being restricted to specific localities with favourable habitat. However, more extensive surveys will be needed before this can be assumed to be the case.

In life, Black-tailed Cisticola has been compared by most observers to members of the genus *Apalis* (Irwin 1991, Sinclair *et al.* 2007). However, our impressions were that it was much more like Long-tailed Cisticola and to a lesser degree Neddicky, which are often thought to be Black-tailed Cisticola's closest relatives (Dowsett & Dowsett-Lemaire 1980, Irwin 1991). Black-

tailed *Cisticola* has distinctive primary feathers and wing-snapping behaviour not shared by Neddicky or Long-tailed *Cisticola*. The distinctive song described herein further supports its recognition as a distinctive species and refutes the suggestion that it may be conspecific with Neddicky and / or Long-tailed *Cisticola* (Dowsett & Dowsett-Lemaire 1980).

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