

Further support for the specific distinctness of Elgon Francolin *Scleroptila elgonensis*

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Nouvelle preuve appuyant la distinction spécifique du Francolin d'Elgon *Scleroptila elgonensis*. Des photos son présentées de la sous-espèce nominale du Francolin d'Elgon *Scleroptila elgonensis*, restreinte aux landes d'altitude du Mont Elgon (Kenya / Ouganda) ; ce taxon n'avait plus été observé depuis 1997. Des enregistrements du chant confirment que le Francolin d'Elgon du Kenya / Ouganda et le Francolin montagnard *S. psilolaema* d'Ethiopie sont bien des espèces distinctes. Le chant de ce dernier a été ré-analysé avec des enregistrements non présentés par Hunter *et al.* (2019) et qui diffèrent par plusieurs critères de l'enregistrement de C. Cohen (*in* Hunter *et al.*). L'habitat du francolin au Mont d'Elgon est fortement dégradé par la pression démographique et le surpâturage.

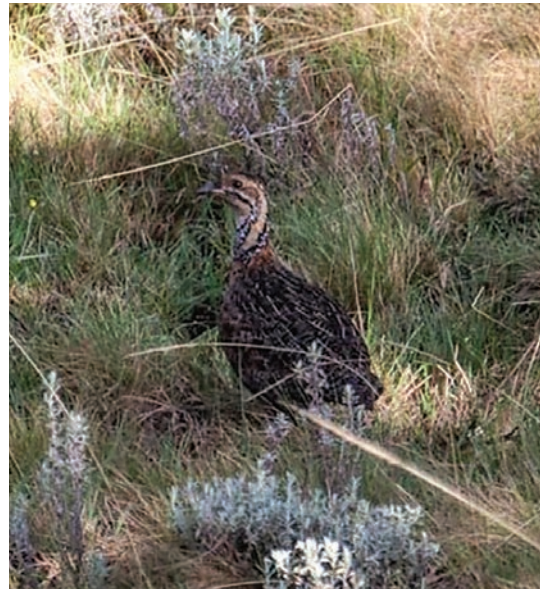
Summary. The first observations since 1997 are reported of the nominate race of Elgon Francolin *Scleroptila elgonensis*, which is restricted to the Mount Elgon moorlands (Kenya / Uganda), and the first photographs are presented. Sound-recordings further support the specific distinctness of Elgon Francolin from the Ethiopian Moorland Francolin *S. psilolaema*. The song of the latter has been re-analysed with recordings not presented by Hunter *et al.* (2019), and which differ in several respects from the recording by C. Cohen (*in* Hunter *et al.*). The habitat of the francolin on Mount Elgon is under enormous demographic pressure and is being degraded by overgrazing.

Until recently the two recognised subspecies of Elgon Francolin *Scleroptila elgonensis*, *S. e. elgonensis* on Mount Elgon and *S. e. theresae* from Mount Kenya and the Aberdares, were treated as races of Moorland Francolin *S. psilolaema*, but based on plumage characters and the vocalisations of *S. e. theresae*, Elgon Francolin is well differentiated from Moorland Francolin (del Hoyo & Collar 2014, Hunter *et al.* 2019). As a result, Moorland Francolin is now considered endemic to Ethiopia.

The nominate race of Elgon Francolin was, to our knowledge, last observed in December 1969–January 1970 and / or July 1971 (Britton & Sugg 1973) and November 1974 (DT pers. obs.), although birds were heard several times in alpine moorland by H. Wirth in January 1997 (Carswell *et al.* 2005). On 17–21 May 2019, RJT visited the Mount Elgon moorlands and observed several individuals at 3,200–3,300 m, including a family group, and was able to obtain photographs (Figs. 1–2) and sound-recordings. N. K. Krabbe kindly produced sonograms of both cuts (Fig. 3A–B). The dark background of the sonograms is produced by wind noise. The first cut represents a sustained series of two double notes with some variation, the whole lasting at least ten seconds. The second cut (of ten seconds' duration) is a slightly slower series, which matches

more closely the songs recorded by M. Mills on Mount Kenya (Fig. 3C). Although Hunter *et al.* (2019) write about 'three-noted calls' repeated in rapid succession (and see their Fig. 2), the first of the three is in fact also a double note, consisting of two rather short elements. In the second double note, the second element is two or more times longer than the first (as is very clear in Fig. 3C here). Nominate Elgon Francolins also show this tendency in some of their song types, in cut B, but not in cut A.

Hunter *et al.* (2019) 'corroborated aurally' their own recordings from Ethiopia with two recordings from the same locality (Sanetti Plateau, Bale Mountains), i.e. XC210009 and XC210010 (at www.xeno-canto.org), but the analysis of sonograms reveals some important differences in rhythm. Both XC210009 (illustrated here, Fig. 3D) and XC210010 consist of sustained series of two double notes, at a rate of eight double notes in three seconds. They differ from C. Cohen's recording (Fig. 1 *in* Hunter *et al.*) in several ways: the tempo of repetition is noticeably faster; the double notes are shorter (0.22 and 0.16 seconds, respectively), and the two elements of each double note are of (almost) equal length. The second element is a little shorter and lower-pitched in one of two double notes, in alternation. Thus, rhythmically, the songs of Ethiopian birds are



Figures 1–2. First known photographs of the nominate race of Elgon Francolin *Scleroptila elgonensis*, Mount Elgon, Kenya, May 2019 (Richard Turner). The darker and more richly coloured rufous neck and breast of these two birds distinguish them from *S. e. theresae* on Mount Kenya and the Aberdaries.

Premières photos de la sous-espèce nominale du Francolin d'Elgon *Scleroptila elgonensis*, Mont Elgon, Kenya, mai 2019 (Richard Turner). Le cou et la poitrine plus sombres et avec plus de roux de ces deux oiseaux les séparent de *S. e. theresae* du Mont Kenya et des Aberdaries.

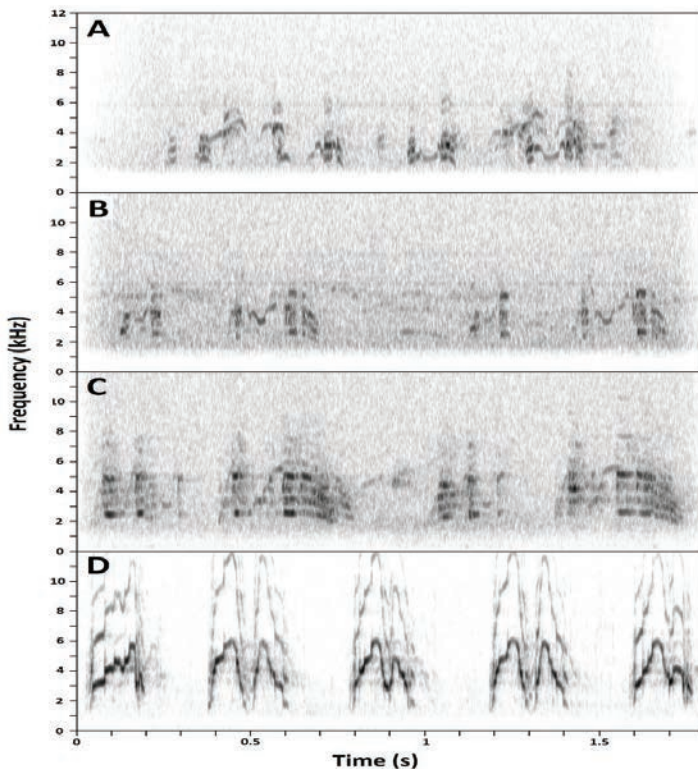


Figure 3. A–B = sonograms of songs of Elgon Francolin *Scleroptila e. elgonensis*, from two different cuts (000010901 and 000001109) recorded by R. J. Turner on Mount Elgon (Kenya), May 2019. **C** = sonogram of song of Elgon Francolin *S. elgonensis theresae* recorded by M. S. L. Mills on Mount Kenya, April 2016 (cut KEN16_042548_050). **D** = sonogram of song of Moorland Francolin *Scleroptila psilolaema* recorded by A. Spencer on the Sanetti Plateau, Bale Mountains, Ethiopia, January 2015 (XC210009). Sonograms were prepared by N. K. Krabbe using CoolEditPro.

Figure 3. A–B = sonogrammes de chants du Francolin d'Elgon *Scleroptila e. elgonensis* provenant de deux enregistrements (000010901 et 000001109) obtenus par R. J. Turner au Mont Elgon (Kenya), mai 2019. **C** = sonogramme d'un chant de Francolin d'Elgon *S. elgonensis theresae* enregistré par M. Mills au Mont Kenya, avril 2016 (KEN16_042548_050). **D** = sonogramme d'un chant de Francolin montagnard *S. psilolaema* enregistré par A. Spencer au Plateau de Sanetti, Monts Bale, Ethiopie, janvier 2015 (xeno-canto XC210009). Les sonogrammes ont été préparés par N. K. Krabbe avec le programme CoolEditPro.

rather similar to those from Kenya. Other xenocanto recordings (all from the Sanetti Plateau) represent flight calls or soft contact calls, an incomplete song bout, while XC306587 is of a bird flying away, with song changing into more spaced-out (one per second) and elongated flight calls. XC210009 consists of two song bouts each of *c.*10 seconds, of even tempo. XC210010 was obtained after playback: the bird gave a song bout of 11 seconds (slowing down slightly at the end, from eight double notes in three seconds to six double notes in three seconds), a second bout of just <10 seconds, slowing down very slightly at the end, and a shorter bout of 6.5 seconds, at a sustained tempo. The bird recorded by C. Cohen (*in litt.* 2019) was not flying away and was not apparently disturbed, although the elongated first element of each double note is reminiscent of the structure of the flight call. It is clear from this that more recordings are required to determine which are the species' more typical song types. As far as birds from Mount Kenya are concerned, M. S. L. Mills kindly sent us seven recordings, and they all show similar speeds of repetition of the double notes. Song bouts vary from a few to 10–11 seconds, much as in Ethiopian Moorland Francolins.

That said, songs of Moorland Francolins differ markedly overall from those of the *elgonensis* and *theresae* races of Elgon Francolins in the considerably higher pitch and less scratchy quality of the double notes, and we concur with Hunter *et al.* (2019) that vocal characters support the specific distinctiveness of the populations of Ethiopia and Kenya / Uganda.

Frederick Jackson obtained the type specimen of *S. elgonensis* on the northern (Uganda) side of Mount Elgon on 15 February 1890. For 19 years it remained unique until the taxon was rediscovered atop the Aberdares in August 1909. Jackson (*in* Jackson & Sclater 1938) considered the call of the Aberdare bird to be 'exactly similar' to that of *Francolinus africanus uluensis* (now *Scleroptila shelleyi uluensis*). Hall (1963) was the first to treat the montane francolin populations of Kenya, Uganda and Ethiopia as conspecific under the name *Francolinus psilolaemus*, a treatment that was followed by all subsequent authorities (e.g. Crowe *et al.* 1986, Johnsgard 1988, Madge & McGowan 2002, Dickinson & Rensen 2013) until recent scrutiny of their vocalisations, morphology

and genetics informed a different taxonomic arrangement (del Hoyo & Collar 2014, Hunter *et al.* 2019, Mandiwana-Neudani *et al.* 2019).

Mount Elgon is a gently sloping, comparatively isolated mountain straddling the Kenya / Uganda border with its peak, which lies inside Uganda, at 4,300 m. The moorland zone extends above 3,200 m and at least formerly consisted largely of tussock grasses such as *Festuca pilgeri*, with giant heath *Erica arborea* and *E. trimera elgonensis* along the numerous fast-flowing streams (Britton & Sugg 1973, Bennun & Njoroge 2001). The avifauna of this subalpine zone was partly discussed by Britton & Sugg (1973), but in recent decades the moorland and the adjacent forest have radically changed due to exploitation and degradation (Bennun & Njoroge 2001).

In 2018 the Kenya Forestry Research Institute reported that the human population in the Mount Elgon Forest Ecosystem, declared a Biosphere Reserve by UNESCO in 2003, had recently increased to *c.*600 people/km², principally as a result of immigration (KEFRI 2018). The majority of these people are poor peasant farmers who depend on the forest for the bulk of their needs. Consequently, most of the households within 3 km of the forest have converted large swathes of the mixed montane forest that borders community land into farmland. This has led to considerable levels of forest degradation, while logging operations in the 1990s removed most of the formerly dominant *Olea capensis* (syn. *O. hochstetteri*) and *Pouteria* (ex-*Aningeria*) *adolphi-friedericii* trees. The herbaceous species associations of the subalpine heath zone also changed over the same period, probably due to heavy grazing by livestock.

During RJT's visit in May 2019 it was clear that the subalpine heath zone at 3,200–3,400 m was extensively burned by local people who are permitted to live at 3,000 m and are now permanently established inside the national park. As a result, a large area of moorland has been transformed into overgrazed grassland, with up to 400 cattle, sheep and goats feeding there daily, while fires have eliminated large areas of heather and tussock grass, as well as destroying numbers of giant groundsel *Senecio johnstonii elgonensis* and other high-altitude flowering plants. Consequently, the nominate form of Elgon Francolin appears to be threatened.

Acknowledgements

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