

Geographic variation in Hildebrandt's Francolin *Pternistis hildebrandti* with particular reference to the form *altumi* Fischer & Reichenow

In 1878 Jean Cabanis described *Scleroptila hildebrandti* from a female bird collected by Johann Hildebrandt at Ndi in Taita District in July 1877. Six years later in 1884, Fischer & Reichenow described *Francolinus altumi* on the basis of two male birds collected by Fischer from near Korogwe in northeast Tanzania and from Lake Naivasha in Kenya's central Rift Valley, though no type specimen or even a type locality were designated by the authors. It appeared that Fischer did not realise that four birds he collected during his 1883 expedition to Masailand were in fact two males and two females of one species, no doubt deceived by the remarkable difference in both the plumage and size of his specimens. As a result, for several years Hildebrandt's female bird and Fischer's male birds were considered two different species. It was not until 1888 when Harry Hunter visited Moshi in northern Tanzania and trapped considerable numbers, that he quickly realised the marked plumage differences between the sexes of Hildebrandt's Francolin.

Hildebrandt's Francolin ranges from Kenya and northern Tanzania south to northern Zambia, Malawi and Mozambique with three core populations: one largely in and west of the Rift Valley, another in semi-arid rocky areas of northern and eastern Ken-

ya south through the dry interior of Tanzania to the Rukwa depression, and a third from southern and southeast Tanzania, south to Malawi and Mozambique. Plumage variation throughout the range is variable. Hall (1963) commented that the intensity and regularity of the patterning, particularly in females, decreased southwards, birds from the centre of the range, nominate *hildebrandti*, deemed intermediate between southern *johnstoni* and northern *altumi*; also that sexual plumage differences were greatest in *johnstoni* and *altumi*.

Reichenow (1900–01) in his *Die Vögel Afrikas* appeared not to accept the validity of *altumi*, yet this form has been recognized as a subspecies by almost all subsequent authorities (Jackson 1938, Mackworth-Praed & Grant 1955, White 1965, Britton 1980, Zimmerman *et al.* 1996, Dickinson & Remsen 2013 and del Hoyo & Collar 2014). The sole exception was Crowe (1986) who considered that any geographical variation in *hildebrandti* was clinal and not well described by subspecies. A recent examination by the author of specimens at the Tring Natural History Museum, UK, showed that mottling on the mantle and breast in females was most evident in specimens from around lakes Nakuru and Naivasha, but decreased in birds further south, with examples from the Mara-Serengeti, Mts Meru and Kilimajaro showing only a very small amount on the breast.

In conclusion, with variation in the female plumage highly variable and clinal, any sub-specific division within *S. hildebrandti* would seem unwarranted, and as recommended by Crowe (*op cit*) this is best regarded as a monotypic species. Certainly there appears no justification for the recognition of *altumi*, named and described solely on the basis of two male birds, the corresponding females having already been named as *hildebrandti*.

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