

Iris colour changes and behaviour in the Three-streaked Tchagra *Tchagra jamesi*: an observation from the past

The African bush-shrikes (Malaconotidae) are one of the bird families in which a significant number of species have a distinctively coloured iris (Craig & Hulley 2004). However, in this review paper we overlooked both the description of the Three-streaked Tchagra *Tchagra jamesi* in two standard handbooks (Archer & Godman 1961, Pearson 2000), and some published observations by a well-known East African ornithologist, V.G.L. van Someren. Changes in pupil size, or in iris coloration, seem to be close-range signals which are not often obvious to a human spectator – they are presumably directed at conspecific birds who are likely to be less than 1 m away. Some instances have thus been reported by bird-ringers with the bird in the hand (e.g., Black-bellied Starling *Notopholia corusca*, McCulloch 1963, Britton & Britton 1970). However, keen observers and especially photographers may be alert to such subtle changes in appearance.

In a long paper dealing with taxonomy and distribution, with only a scattering of other biological information, van Someren (1922, pg. 113) wrote of the Three-streaked Tchagra: “The peculiar spotted iris is remarkable, the size of the spots varying with the state of excitability of the bird, being large when the bird is excited, and contracting to mere pin-points when frightened.” He provided no further details of the circumstances in which this was observed, but his publications included photos of many bird species taken from hides.

Coloured flecks in the iris of other species have been attributed to sex differences (e.g., African Black Oystercatcher *Haematopus moquini*, Kohler *et al.* 2009) or possibly to age and breeding condition (e.g., Common Myna *Acridotheres tristis*, Feare *et al.* 2015), but there have been no reports of short-term changes in appearance. So here is a new challenge for birders and particularly photographers: what is happening at eye-level when birds are interacting?

The accompanying photograph, taken by the Ngulia Ringing Group of a bird in the hand, vividly illustrates the spots in the iris (Fig. 1). Clearly the bird was under stress in this situation – it would be interesting to know if the eye facing away from the photographer showed the same pattern, as I have seen an asymmetrical response in the eyes of a Black-bellied Starling in this situation.



Figure 1. Three-streaked Tchagra *Tchagra jamesi* in the hand, showing distinctive spots in the iris (photo courtesy of the Ngulia Ringing Group).

Acknowledgements

Don Turner alerted me to the reference in Archer & Godman 1961, to which I do not have access and Graeme Backhurst generously made available the photograph of the bird in the hand; my sincere thanks to them both.

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Scopus 41(2): 38–39, July 2021

Received 5 February 2021