



Biodiversity Observations

<http://bo.adu.org.za>



An electronic journal published by the Animal Demography Unit at the University of Cape Town

The scope of Biodiversity Observations consists of papers describing observations about biodiversity in general, including animals, plants, algae and fungi. This includes observations of behaviour, breeding and flowering patterns, distributions and range extensions, foraging, food, movement, measurements, habitat and colouration/plumage variations. Biotic interactions such as pollination, fruit dispersal, herbivory and predation fall within the scope, as well as the use of indigenous and exotic species by humans. Observations of naturalised plants and animals will also be considered. Biodiversity Observations will also publish a variety of other interesting or relevant biodiversity material: reports of projects and conferences, annotated checklists for a site or region, specialist bibliographies, book reviews and any other appropriate material. Further details and guidelines to authors are on this website.

Paper Editor: H. Dieter Oschadleus

INSIGHT INTO THE OPPORTUNISTIC FEEDING HABITS OF CHORISTER ROBIN-CHAT *COSSYPHA DICHROA*

Alastair M Campbell and Robin Colyn

Recommended citation format:

Campbell AM, Colyn R 2017. Insight into the opportunistic feeding habits of Chorister Robin-chat *Cossypha dichroa*. Biodiversity Observations, Vol 8.32: 1-4

URL: <http://bo.adu.org.za/content.php?id=327>

Published online: 5 July 2017

AVIAN BIOLOGY

INSIGHT INTO THE OPPORTUNISTIC FEEDING HABITS OF CHORISTER ROBIN-CHAT *COSSYPHA DICHROA*

Alastair M Campbell*¹ and Robin Colyn²

1 Ingula Nature Reserve, Eskom, Private Bag X10046, Ladysmith 3370, South Africa.

2 Ingula Project Manager, BirdLife South Africa, P.O. Box 515, Randburg 2125, South Africa.

*Corresponding author: CampbeAM@eskom.co.za

Introduction

The diet of the Chorister Robin-chat *Cossypha dichroa* consists largely of insects, the majority of which are beetles and ants, but does include moths, orthopterans, spiders, ticks and flies (Skead 1997). This species exhibits both extensive ground foraging and foliage gleaning feeding strategies and as such is noted to utilize all strata within respective forest systems (Symes et al 2015, Oatley 1959, Dean and MacDonald 1981, Skead 1997, Vernon and Dean 1988). Additionally, the adaptive foraging behaviour employed by Chorister Robin-chat does occasionally include associations with forest antelope, including Blue Duiker *Cephalopus monticola* and Bushbuck *Tragelaphus scriptus* (Oatley 1959). This commensal association incorporates Chorister Robin-chats deriving benefit from forest antelope disturbing prey items through their foraging activity (i.e. acting as 'beaters') (Oatley 1959). However, very few documented observations have been made of this association between Chorister Robin-chat and Bushbuck (Symes et al 2015). Due to the dense habitat structure and secretive nature of both species, obtaining evidence thereof is difficult, which could result in this association being more common than previously acknowledged (Oatley 1959, Symes et al 2015).

Camera trap observations

A camera trapping study across several forest pockets on the Ingula Nature Reserve found both Chorister Robin-chat and Bushbuck. Significantly, two spatially independent cameras across separate forests have yielded results of the Chorister Robin-chats alighting on the back and head of a Bushbuck. Both observations were documented over the same period, namely early winter (April 2017).

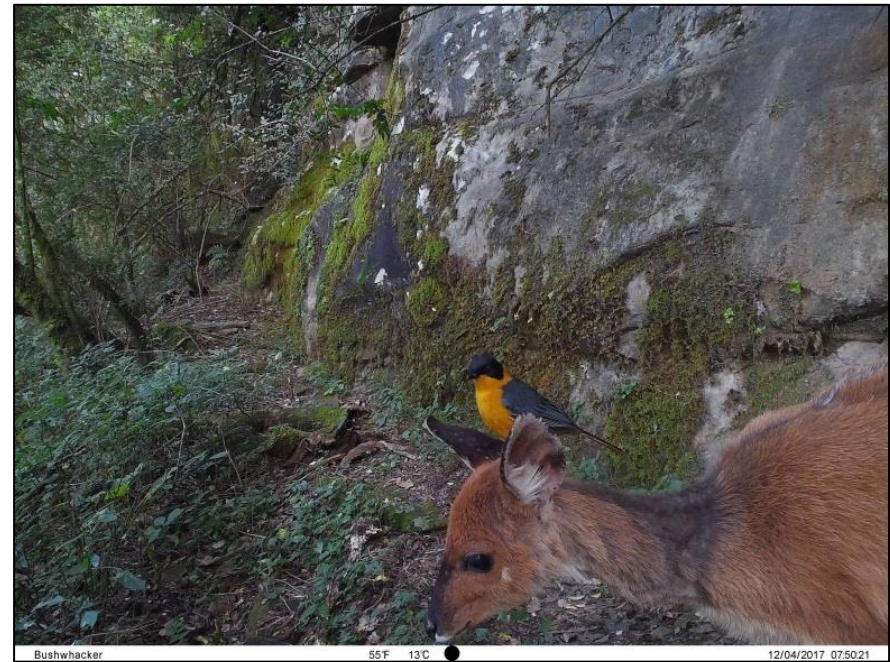


Figure 1: A chorister Robin-chat perched on the head of a Bushbuck ewe, 12 April 2017.

The first observation displayed a Chorister Robin-chat perched on a Bushbuck ewe's head, moving only when she turned to scratch herself (Fig. 1). While video footage was not available for confirming gleaning directly from the animals, there is certainly evidence that the

Bushbuck are being used as a 'beater' by the Robin-chat while foraging. The second observation at a separate forest pocket displayed a Chorister Robin-chat flying through to alight on the back of a Bushbuck ewe, after which it moved off to perch on a nearby branch (Fig. 2). The Chorister Robin-chat then continued to follow the Bushbuck ewe through the forest as she foraged.

Discussion

Our sightings, in conjunction with others made across varied provinces (Oatley 1959, Symes et al 2015), corroborate that the symbiotic association between Chorister Robin-chat and forest antelope, including Bushbuck in this case, is likely a common foraging strategy employed that largely goes undocumented due to restricted observer ability within these forest systems. Given these respective sightings and the opportunistic and adaptive foraging behaviour of Chorister Robin-chat (Oatley 1959), we postulate that the association is primarily commensal in nature with Chorister Robin-chat utilizing forest antelope (e.g. Bushbuck) as beaters. The noted occurrence of a potentially mutual relationship, whereby Chorister Robin-chat glean parasites from antelope, is likely a secondary opportunistic foraging strategy. Additional sightings from ongoing and new camera trap studies across varied temporal and spatial scales will hopefully provide further insight and clarity into this respective symbiotic association. Similarly, all records (Symes et al 2015, Dean and MacDonald 1981, Skead 1997, Vernon and Dean 1988) made thus far excluding Oatley (1959), are records of Chorister Robin-chat interacting with Bushbuck ewes. Whether this is of significance or purely a factor of respective sex-ratio densities exhibited by Bushbuck (Waser 1975) will need a more robust and conclusive database to confirm.





Figure 2: Photo sequence indicating the Chorister Robin-chat following the ewe as she foraged, 19 April 2017.

References

Dean WRJ, MacDonald IAW 1981. A review of African birds feeding in association with mammals. *Ostrich* 52: 135 – 155.

Oatley T 1959. Notes on the genus *Cossypha* with particular reference to *C. natalensis* (Smith) and *C. dichroa* (Gmelin). *Ostrich* 30(S1): 426-434.

Skead CJ 1997. Life history notes on East Cape bird species. *Bird biology* Vol 2. 1940-1990. (design editor: JH Landman), Western District Council (Formerly Algoa Regional Services Council), Port Elizabeth.

Symes CT, Rees T, Nelson K 2015. Chorister Robin-chat *Cossypha dichroa* gleaning on Bushbuck *Tragelaphus scriptus*. *Ornithological Observation* Vol. 6: 44-45.

Vernon C, Dean WRJ 1988. Further African bird-mammal feeding associations. *Ostrich* 59 (1): 38-39.

Waser P. 1975. Diurnal and nocturnal strategies of the Bushbuck *Tragelaphus scriptus* (Pallas). *African Journal of Ecology* 13(1): 49-63.