



# 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.

**Lead Editor:** Arnold van der Westhuizen – **Paper Editor:** Arnold van der Westhuizen

---

## HOVERING BY COMMON FISCAL *LANIUS COLLARIS* AS A STRATEGY TO LOCATE PREY

**Les G Underhill**

Recommended citation format:

**Underhill LG 2016.** Hovering by Common Fiscal *Lanius collaris* as a strategy to locate prey. Biodiversity Observations, Vol 7.11: 1-4

URL: <http://bo.adu.org.za/content.php?id=204>

Published online: 24 February 2016

– ISSN 2219-0341 –

## HOVERING BY COMMON FISCAL *LANIUS COLLARIS* AS A STRATEGY TO LOCATE PREY

Les G Underhill\*

Animal Demography Unit, Department of Biological Sciences,  
University of Cape Town, Rondebosch, 7701 South Africa

\* Corresponding author: [les.underhill@uct.ac.za](mailto:les.underhill@uct.ac.za)

Butchart (1986) observed a Common Fiscal *Lanius collaris* hovering and dropping onto prey. He wrote: "During October 1985 I observed a Fiscal Shrike hovering low above the grass in the manner of a Blackshouldered Kite. The shrike hovered for several seconds above the same spot before dropping into the grass. It emerged 'empty-handed' but immediately resumed hovering over the same area." The observations were made at Kyalami, Gauteng, and the habitat was described as "open grassland." The inference is that there were no perches to use as vantage points to watch for prey, and that this bird was hovering as a prey location strategy. Dean (2005), in the *Seventh Edition of Roberts' Birds of Southern Africa*, commented that this was the only known observation of this behaviour in the Common Fiscal.

At 17:00 on 2 November 2104, I observed a Common Fiscal hovering on Rondebosch Common, Rondebosch, Cape Town. The bird was about 50 m away from the grove of pine trees that lines the western side of the common, opposite Rustenburg Girls' High School (Fig 1). As Butchart (1986) observed, the hovering behaviour was strongly reminiscent to that of the Black-shouldered Kite *Elanus caeruleus*. A stiff breeze was blowing, and the shrike faced into it,



**Fig 1** - This is the section of Rondebosch Common where hovering by Common Fiscal was observed. The structure of the vegetation does not provide suitable foraging perches.

and this appeared to assist it to remain stationery, and about 5 m above the ground. It hovered over several spots, a few metres apart from each other. After about 30 seconds from when I first noticed the bird, it dropped to the ground, but I did not see if it caught anything. It flew off to a nearby tree. Although I have revisited this area on multiple occasions since I made this observation, I have not seen this species in the area again. The vegetation over which it was hovering consisted of low shrubs and grass (Fig 1). This area provided none of the typical perches from which the species normally hunts as a "sit-and-wait" predator.



**Fig 2** - One of the lower branches of an alien pine tree provides the typical foraging perch used by Common Fiscals on Rondebosch Common.

Common Fiscals occur frequently on Rondebosch Common, mainly using the pines and other small shrubs as perches from which to forage (Figs 2 and 3). As Parker (1997) said of the species: "Its habitat requirements are determined by its foraging behaviour. It hunts from exposed perches and usually seizes its prey on the ground. It is found where open spaces coincide with exposed perches and short or sparse ground cover." Sections of Rondebosch Common provide habitat which meets this dual requirement. The fiscal described here was attempting to hunt about 50 m from the nearest perch.

Soobramoney *et al.* (2004) observed foraging behavior of Common

Fiscals for a total of 256 hours, during which successful foraging was observed on 1 820 occasions. 92% of foraging observations consisted of flying down to the ground from a perch, 4.5% consisted of catching an insect in flight (like a flycatcher), and 3.5% consisted of gleaning caterpillars off leaves and branches (like a warbler). In perch-to-ground foraging, Soobramoney *et al.* (2004) noted that fiscals "were occasionally observed to hover over their prey." Shernice Soobramoney (pers. comm.) has amplified this: "The shrikes hovered on the way down from the perch to the ground, closer to the ground. They did not hover to locate their prey."

There is an enormous energetic contrast between being a sit-and-wait predator, a characteristic of all shrike species, and hunting by hovering, as is done by some kingfishers and some raptors. It therefore seems unlikely that hovering by Common Fiscals can be a regular foraging strategy, and that the two recorded observations made of this behaviour must be exceptional foraging events.

Yosef and the International Shrike Working Group (2008) provided a 42-page introduction to the family Laniidae (shrikes) in the *Handbook of the Birds of the World*. This included a detailed eight-page overview of "Food and Feeding" in this family. Hovering is mentioned: "They also hover at times." But frustratingly, no further detail is provided, and this vague comment is unhelpful as an indication of the true extent of hovering by members of the shrike family. Because this was published after Dean (2005), and because this reference book would have been available to the authors, the mention of hovering might well refer only to Butchart's (1986) observation. However, there is extensive mention in the literature of "hovering" in shrikes (e.g. Kristin *et al.* 1998), including by Reuven Yosef himself in a study of foraging behaviour of Loggerhead Shrikes



**Fig 3** - In a section of Rondebosch Common where a late-summer fire had burnt one month before this photograph was taken, the skeletons of small shrubs provide foraging perches for Common Fiscals, with good visibility over almost bare ground.

*Lanius ludovicianus* in relation to vegetation height. In this study, it is reported that "all attacks from hovers appeared to be on prey located initially from perches, but which had moved from the location where first detected" (Yosef *et al.* 1993).

There are two distinct contexts in which hovering behaviour by shrikes takes place, and they do not seem to have been clearly distinguished. The first is the energetically expensive one, in which hovering, potentially for extended periods, is used to actually locate prey. The second context is when hovering occurs for a short period when prey, located from a vantage point, needs to be relocated during the flight from the perch to the ground. It seems that mention

of hovering by shrikes in the literature mostly refers to the second context. The observations made by Butchart (1986) and in this paper refer to the first context.

- oo0oo -

## References

**Butchart D 1986.** Hunting technique of Fiscal Shrike. Witwatersrand Bird Club News 134: 3.

**Dean WRJ 2005.** Common Fiscal *Lanius collaris*. In: Hockey PAR, Dean WRJ & Ryan PG (eds) Roberts Birds of Southern Africa. 7<sup>th</sup> edition. John Voelcker Bird Book Fund, Cape Town: 728–729.

**Kristin A, Zilinec M 1998.** Lesser Grey Shrike (*Lanius minor*) diet and foraging strategies during and after a cockchaver (*Melolontha melolontha*; Insecta, Coleoptera) swarming. In: Yosef R, Lohrer FE (eds) Shrikes of the World – II: Conservation Implementation. Proceedings of the Second International Shrike Symposium. International Birdwatching Center in Eilat, Eilat, Israel: 34–37.

**Parker V 1997.** Fiscal Shrike *Lanius collaris*. In: Harrison JA, Allan DG, Underhill LG, Herremans M, Tree AJ, Parker V, Brown CJ (eds) The Atlas of Southern African Birds, Volume 2. Passerines. BirdLife South Africa, Johannesburg: 408–409.

**Soobramoney S, Downs CT, Adams NJ 2004.** Variability in foraging behaviour and prey of the Common Fiscal Shrike, *Lanius collaris*, along an altitudinal gradient in South Africa. Ostrich 75: 133–140.



---

**Yosef R, Grubb TC Jr 1993.** Effect of vegetation height on hunting behavior and diet of Loggerhead Shrikes. *Condor* 95: 127–131.

**Yosef R International Shrike Working Group 2008.** Family Laniidae (Shrikes). In: del Hoyo J, Elliott A, Christie DA (eds) *Handbook of the Birds of the World, Volume 13. Penduline-tits to Shrikes*. Lynx Edicions, Barcelona: 732–796.