

## A SPINIFEXBIRD IN THE FLINDERS RANGES

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### ABSTRACT

Sightings of a Spinifexbird *Eremiornis carteri* in the central Flinders Ranges in 2002 and 2003 are documented. The locality is 750 km south-east of the nearest report and follows several recent extra-limital records in South Australia and Queensland.

### INTRODUCTION

The Spinifexbird *Eremiornis carteri* occurs widely through the arid parts of central northern and western Australia (Blakers, Davies and Reilly 1984). It has only recently been recorded in South Australia following sightings of a pair with a juvenile in the Indulkana Range on 29 October 1998 (Hopton and Copley 1999) and a single bird in the Claude Hills, in the far north-western corner of the State, on 15 December 2001 (Gole 2002). Both records were in areas of dense, tall *Triodia* mixed with *Acacia* and *Eremophila*.

Gole (2002) and Kutt (2003) have speculated that their extralimital records of Spinifexbirds from South Australia and central Queensland respectively could be of nomads in response to wetter climatic conditions. In support, Kutt (2003) cited both the lack of morphological differences in the species throughout its extensive distribution compared with many other central Australian birds (Schodde and Mason 1999) and the mobility of closely related species such as the Little Grassbird *Megalurus gramineus*. In the absence of genetic studies, Kutt (2003) discussed the alternative possibility that there are small disjunct populations of Spinifexbirds but genetic variations between them are not expressed as differences in plumage and measurements.

### OBSERVATIONS

The first observation was made during a survey of the distribution and habitat of the Short-tailed Grasswren *Amytornis merrotsyi* during spring 2002 (Carpenter and Bellchambers 2003). GC and NdP visited a sandstone range covered with *Triodia* near Hawker in the central Flinders Ranges on 9 November 2002. On leaving the site in the late morning after no grasswrens had been

located, GC heard a loud 'chirrup' call about 100 m away, repeated several times. The call was recognised as similar to that of a Spinifexbird tape-recorded by D. Hopton in the State's north-west (Hopton and Copley 1999). (This recording was used, without success, in a search for Spinifexbirds during a South Australian Museum visit to the Anangu Pitjantjatjara Lands in September 2001; GC unpubl. data). The bird stopped calling before we reached the area from where it was thought the calls had come. We spent about an hour searching, when finally a brief view of a small brown bird was made at the base of an umbrella wattle *Acacia ligulata* growing among dense *Triodia scariosa*. Another call, a harsh 'chut chut' reminiscent of that of a Little Grassbird, was heard as the bird was lost to view among the dense *Triodia*.

The immediate area comprised shrubs of *Acacia ligulata* and broom bitter-pea *Daviesia genistifolia* (1–2 m high) with *Triodia scariosa* growing among and through them (Figure 1). Other prominent shrubs were turkey bush *Eremophila deserti*, narrow-leaved hop-bush *Dodonaea viscosa angustissima*, clammy daisy-bush *Olearia decurrens* and wallowa *Acacia calamifolia*. Measurements of the habitat were made as part of the grasswren survey and included noting the plant species or substrate type intercepted by each 0.5 m point along a 50 m tape run through the habitat in two areas, giving a total of 200 points. At the same time an estimate of shrub cover was obtained by noting plant species whose canopy intercepted 1 m or more above the tape. Percentage cover was calculated by dividing the count for each plant species or substrate type by the total number of points (Table).

The site contains about 100 ha of similar habitat on an orange-brown sandstone hill, isolated from similar habitat by black blue-bush *Maireana pyramidata* shrublands. Most of the site appeared to have been burnt about 20 years previously, judging from the presence of blackened stumps and dead native pines *Callitris* sp.

GC, LP, NdP, C. Kemper, K. Bellchambers and P. and N. Langdon relocated a Spinifexbird in the



Figure 1. Habitat of the Spinifexbird in the central Flinders Ranges (Photographer G. Carpenter).



Figure 2. Spinifexbird at the base of a dead umbrella wattle (Photographer L. Pedler).

Table. Percentage cover (based on 200 measurement points) at various heights at the Spinifexbird site in the central Flinders Ranges.

| Cover type/species              | Percentage cover |       |
|---------------------------------|------------------|-------|
|                                 | 0–1 m            | 1–3 m |
| ( <i>Triodia</i> 0–25 cm high)  | (19.5)           | (0)   |
| ( <i>Triodia</i> 26–50 cm high) | (33.0)           | (0)   |
| ( <i>Triodia</i> 51–75 cm high) | (7.5)            | (0)   |
| Total <i>Triodia</i>            | 60.0             | 0     |
| Leaf litter                     | 30               | 0     |
| Bare ground                     | 2                | 0     |
| Rock                            | 7                | 0     |
| <i>Templetonia aculeata</i>     | 1                | 0     |
| <i>Daviesia genistifolia</i>    | 0                | 7     |
| <i>Acacia ligulata</i>          | 0                | 9     |
| <i>Eremophila deserti</i>       | 0                | 1     |
| Totals:                         | 100.0            | 17    |

same area on 11–12 October 2003. Tape-recorded calls were played in an attempt to elicit a response. Again when about to leave the site in the late morning of 12 October, LP heard a ‘chirrup’ call nearby. After a brief search a small, brown, long-tailed bird was flushed from near a *Triodia* into the base of an *Acacia ligulata* intermixed with *Triodia*. The location was about 200 m from the 2002 observation. Good views were obtained to less than 10 m. The bird remained in the same area for about an hour giving time for LP to collect his camera and take several photographs as the bird emerged from within clumps of *Triodia* and climbed among the lower stems of *Acacia* and *Daviesia* (Figure 2). No other Spinifexbirds were seen or heard.

The following description is based on these photographs and field observations:

Upperparts mid-brown with rufous forehead and crown. Mantle and scapular feathers edged pale brown, giving a faintly scalloped appearance. Tail broad, dark brown and almost as long as the body, with rufous upper-tail coverts extending one-third the length of the tail. Off-white supercilium and ring around eye. Throat and breast off-white, merging to pale brown flanks. Eye dark. Bill relatively long and recurved, with top of upper mandible brown, remainder paler. Legs mid-brown.

## DISCUSSION

The current report of a Spinifexbird is about 750 km south-east of the Indulkana record, which

in turn was well south of previous reports. The plumage of the bird appeared to differ slightly from that figured by Hopton and Copley (1999), in that the whitish eyebrow, eye-ring and throat were more distinct. The habitat was similar to that described by Hopton and Copley (1999), in particular the presence of large clumps of *Triodia* growing under and into bushes of *Acacia* and *Eremophila*. The *Triodia* cover was similar to that measured by Kutt (2003) for two recent outlying reports in central Queensland, 120 km SE of Charters Towers and 100 km N of Aramac (40% and 50%, compared with 60% for the current record), although the habitat there lacked shrubs.

Without further evidence it is not possible to determine whether the current record is of a vagrant individual, or part of a previously unknown population in the Flinders Ranges. Despite a relatively intensive search, only a single bird (presumably the same individual) was located and in the same area one year later. Gole (2002) postulated that a period of above average rainfall might have led to a range expansion into north-western South Australia in recent years. The Spinifexbird is generally considered a resident species (e.g. Blakers, Davies and Reilly 1984). Closely related species such as the Little Grassbird are known for their ability to disperse into remote ephemeral habitats (e.g. Kutt 2003; Carpenter *et al.* 2003). In contrast to the far north-west of the State (Gole 2002), the central Flinders Ranges has received only average to below average rainfall since the early 1990s.

It is difficult to suppose that a resident population of Spinifexbirds could remain undiscovered for so long in the Flinders Ranges—a region well-known ornithologically. Nonetheless it is a relatively small and inconspicuous bird whose potential habitats in the Flinders Ranges are confined to limited areas, and the steeper *Triodia*-clad slopes are generally the least thoroughly searched by bird-watchers. Similar habitat (i.e. areas of tall *Triodia* intermixed with *Acacia*) has not been located during searches for the Short-tailed Grasswren throughout the Flinders Ranges from 2001 to 2003 (Carpenter and Bellchambers 2003; GC pers. obs.). In addition the number of Red Foxes *Vulpes vulpes* (a major predator of birds that live on or near the ground—Kinnear, Sumner and Onus 1996) in the area of the current report has declined substantially since the arrival of Rabbit Haemorrhagic

Disease and follow-up intensive and widespread fox baiting programs in the 1990s (Holden and Mutze 2002). Low numbers of introduced predators may have triggered an increase of Spinifex-birds in the central Flinders Ranges as appears to be the case for Short-tailed Grasswrens (Carpenter and Bellchambers 2003).

Clearly more extensive searches of rocky hills with *Triodia* in the Flinders Ranges are required to determine whether a population of Spinifex-birds exists there. Further, given the recent discovery in the Gawler Ranges of Short-tailed Grasswrens (Baxter and Paton 1998), and the presence of areas of potential habitat, the Spinifexbird may yet be found there.

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