

FIRST SIGHT AND BREEDING RECORD OF THE SPINIFEXBIRD *EREMIORNIS CARTERI* IN SOUTH AUSTRALIA

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ABSTRACT

An adult pair of Spinifexbirds *Eremiornis carteri* was observed in October 1998 during biological survey work on the Anangu Pitjantjatjara Lands in the far north-west of South Australia. This first recorded sighting of Spinifexbirds in this state also included a breeding record as a juvenile bird was observed being fed by one of the adults.

INTRODUCTION

The Spinifexbird *Eremiornis carteri* is known to occur, in areas of suitable habitat, in Western Australia from Halls Creek and Fitzroy River, south to the Minilya River and Dampier and Monte Bello group of islands (20°S). Its distribution generally extends eastwards into the Northern Territory where it occurs north to Newcastle Waters and south to Alice Springs (23°S). This species also occurs in the Cloncurry and Opalton districts in NW Queensland (Reader's Digest 1986).

Ford and Parker (1974) found no constant differences in coloration, considered the difference in size across the range of the species of little significance taxonomically and recommended that no subspecies be recognised.

To date the Krichauff and James Ranges (24°S) appears to have been its southern published limit in the Northern Territory (Parker 1970). In Western Australia there are some unconfirmed reports further south from Wanjarri (27°S) (Blakers *et al.* 1984). Mike Fleming and Julian Reid (pers. comm.) have drawn our attention to an unpublished observation from Mt. Sunday Range (25°03'S, 133°38'E) which is contained in the Biological Records Scheme of the Parks and Wildlife Commission of the Northern Territory. The Spinifexbird was sighted at this locality on 16 June 1987 by M.J. Freeman.

The Spinifexbird is not rare but very localised. It appears to be associated with *Triodia* country and *Acacia* scrub mostly over 300 m elevation especially near watercourses and the bases of hills where run off causes dense growth of *Triodia* (Ford and Parker 1974; Reader's Digest 1986).

The Spinifexbird is sedentary and during the breeding season maintains a small territory which is defended vigorously by song and by chasing intruders. Some birds also appear to exhibit territorial behaviour outside of the breeding season. Behavioural observations and histological examinations suggest that Spinifexbirds can produce more than one brood in a breeding season (Ambrose and Murphy 1994). Breeding normally occurs during August and September. The nest is cup-shaped and usually concealed in a dense clump of spinifex. (Reader's Digest 1986).

This species feeds on a wide range of insects but predominantly *Coleoptera* (beetles) and *Hymenoptera* (dragonflies, bees, ants, etc.) (Wooller and Calver 1981). There is also a report of Spinifexbirds feeding mulla mulla *Ptilotus* sp. to nestlings. Gut analysis of an adult also contained the seeds of this plant (Whitlock 1918).

BIOLOGICAL SURVEY OF SOUTH AUSTRALIA

The Biological Survey of South Australia aims to systematically survey the flora and fauna of the state using relocatable, point-based survey sites. The information gathered may be used to provide recommendations for the management of natural areas.

The biologically little known Anangu Pitjantjatjara (AP) Lands in the far north of the state were surveyed from 1991 to 1998. Working closely with the traditional owners, the survey recorded some of the vast traditional ecological knowledge as well as the standard site-based flora and fauna data.

During October 1998 the last of the biological survey trips in the AP Lands project was conducted over two weeks. In the final week of this trip one of the survey sites was situated on the plateau of the Indulkana Range near the community of Indulkana (26°58'00"S, 133°18'00"E). The survey site was in mulga *Acacia aneura* low woodland with a spinifex *Triodia irritans* var. *irritans* understorey. The

woodland graded into a *Triodia* low hummock grassland (35 to 40 cm in height) with scattered rock fuchsia-bush *Eremophila freelingii* and silver senna *Senna artemisioides helmsii* (1 to 1.5 m in height) on the edge of a rocky gorge, which is where the following sighting was made.

OBSERVATIONS

On 29 October 1998 at 1740 h Deb Hopton was conducting a late afternoon routine check of the pitfall and Elliott trap lines set for small ground-dwelling vertebrates and heard an unusual two-note 'chup chup' call, not previously encountered by her. After only a few minutes of searching, the bird was easily located perched in an *Eremophila* bush where it was identified as a Spinifexbird, shortly before a torrential downpour hit the area. The bird disappeared into the *Triodia* at the base of the *Eremophila* as soon as the rain began. The rain stopped after about five minutes and the bird re-emerged from the *Triodia* into the *Eremophila* at which point the following notes were taken.

Description: Generally brown above, pale below more buff/grey than brown, no obvious markings except an indistinct pale eyebrow; rufous crown; rufous rump; long broad tail tapering towards the tip and also darkening towards the tip, held cocked; dark eye; pale legs.

Deb observed the bird for about 20 minutes. During this time it was observed 'fluttering' between *Eremophila* bushes and also disappearing into the *Triodia*. Squeaking noises made by Deb seemed to attract the bird and another bird was heard calling from an area of *Triodia* about 30 m away. During the time observed the 'chup' call was heard frequently, ranging from one to three repeated notes. Later Deb returned to the area with Peter and they had no trouble relocating the bird. Peter observed the bird for some time and confirmed the identification. He took the following field notes.

Description: Size: about that of a Fieldwren; Colour: pale creamy below, contrasting with darker brown-grey above. Eye dark, legs darkish (not viewed well); Distinguishing features: Rufous crown, rufous rump, tail mostly cocked and flicked forwards from time to time. Tail

feathers distinct and longer towards the middle, looking a bit worse for wear after rain. Pale eye line present but not well defined; Clutched *Triodia* in sideways posture (like Reed Warblers); Call: Chkk-Chkk! Chkk-Chkk!

Deb remained in the area for another 90 minutes during which time about 50 photographs were taken (e.g. Figure 1). The bird did not seem disturbed by human presence. Although 'the bird' kept disappearing into clumps of *Triodia*, two birds were finally seen in the same bush. Both appeared to be adults. They spent most of their time foraging for insects. Dragonflies and caterpillars were observed being taken from amongst vegetation and from the ground (Figure 2). The birds were observed taking these insects into clumps of *Triodia* and re-emerging without them. At first it was thought that there may have been a nest with chicks but it was decided there may have been fledglings when the adults were seen taking insects into different *Triodia* clumps. Eventually an adult bird was observed feeding a juvenile in a clump of *Triodia* and this activity was photographed. The other adult was in a shrub nearby. The young bird disappeared into the *Triodia* after being fed and was not observed again. The juvenile was brown above and paler below, slightly smaller than the adult, lacked the rufous colouring, and had a shorter tail and a yellow gape. Only one juvenile was observed but the distinct impression was gained that there were two from the behaviour of the adults. One adult bird was also observed bathing in a small pool of water on a rocky outcrop. The birds remained in an area of about 50 m x 50 m whilst being observed.

The following day Deb returned with a camera and a small tape recorder. Although not ideal for recording bird calls and having no external microphone the recorder was held within 2 m of one of the birds while it was calling to get some reasonable tape recordings. When the tape was played back the birds became agitated and approached quite closely. The recordings included a call similar to the 'cheerywheat' described by Pizzey (1983); joined by another call of 'jut-jut-jut' which, according to Serventy and Whittell (1967), is produced by the female. The originally heard 'chup-chup' call was recorded as well as a harsh 'tic' call which seemed to be used by an adult when close to the juveniles.



Figure 1. Spinifexbird in the Indulkana Range. At this angle the tail appears deceptively short and thin. (Photo. Deb Hopton)



Figure 2. Spinifexbird taking dragonfly. (Photo. Deb Hopton)

DISCUSSION

The record described in this paper, at almost 27°S, is the most southerly-confirmed record for this species as well as being the first record for South Australia. The closest previously recorded sighting was at the Mt. Sunday Range in the Northern Territory at 25°S. The presence of juveniles also makes this a first breeding record for the state. It is somewhat ironic that the observations were made on the last day of the last trip of an eight-year survey! Specific searches for this bird had been made by various ornithologists over the eight years, in apparently suitable habitat across the AP Lands without success.

The habitat the sighting was made in corresponds with literature researched, being in dense *Triodia* hummock grassland adjacent to a rocky gorge. The presence of juveniles at the end of October suggests a slightly later breeding season than recorded in the literature but may be a reflection of the good rainfall experienced in the area that season. The diet of dragonflies and caterpillars observed being taken by the birds also corresponds with the available literature.

The isolation of the north-west region of South Australia and the restricted access to the AP Lands may explain why it has taken until now to discover this species within the State. However the fact that it was discovered some 100 km south of the border, in the comparatively isolated Indulkana Range, points favourably to the possible occurrence of other populations in suitable habitat within the north-west of South Australia. The nearby Everard, Musgrave and Mann Ranges appear to be likely areas for the occurrence of this species as they contain areas of similar habitat. These habitats also occur in adjacent areas of the Northern Territory and Western Australia.

The Biological Survey of the Anangu Pitjantjatjara Lands has provided us with some very valuable information. This included many species range extensions and new records for the State for both flora and fauna, but due to the extensive size and remoteness of the area, the survey has really only scratched the surface as the record reported here almost certainly

demonstrates.

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