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Some Southern Records and

Other Observations of the

Buff-breasted Button-quail Turnix olivei

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Summary

Sightings of the Buff-breasted Button-quail *Turnix olivei* were made in the Kuranda-Mareeba area of north Queensland in 1985-1989, somewhat to the south of its accepted range. Some habitat segregation was evident between this species and the Painted Button-quail *T. varia*, the former preferring more open, stony areas. Southerly records of the Buff-breasted Button-quail in the 1970s included nests and eggs; these are described.

Introduction

The Buff-breasted Button-quail *Turnix olivei* is the least known and most restricted in range of the Australian button-quail species, with an accepted distribution in north Queensland (Cape York) south to Laura or Cooktown (Schodde & Tidemann 1986). It was not recorded during field work for the Atlas of Australian Birds in 1977-1981 (Blakers et al. 1984). Virtually nothing has been added to the field notes of the early collectors (Campbell 1922, White 1922a,b), other than Macdonald (1971) having clearly demonstrated that it is a distinct species and not just a race of the Chestnut-backed Button-quail *T. castanota*. This paper records recent sightings, including nests and eggs, of the Buff-breasted Button-quail 150 km to the south of its previously recorded range.

Sightings east of Mareeba 1985-1989

On 8 April 1985 I saw three quail which were strange to me, midway between Kuranda and Mareeba in north Queensland, and made the notes reproduced below. The description is a composite of the three birds, which were probably all males or immatures

Head and neck: grey with fine darker markings and a black band on each side of the crown and (?) through the eye.

Upperparts: mottled (not conspicuously streaked or spotted), a rich red-brown being the dominant colour. In flight, the rump and tail were plain bright rufous to the naked eye.

Underparts: not seen well, but bore no conspicuous markings on the chest and flanks.

Bill: large, but not proportionately as stout at the base as that of Little Button-quail *Turnix velox*.

Legs: straw coloured (pale orange-yellow).

The head pattern and leg colour eliminate all *Turnix* button-quail except the Painted *T. varia*, Buff-breasted and Chestnut-backed. The overall plain appearance of the upperparts, unmarked underparts, rufous rump and tail, and large bill indicate that these birds were Buff-breasted Button-quail.

I first saw these birds at a distance of about 6 metres. They walked away and disappeared at about 15 metres. When flushed, from almost underfoot, they flew short distances in different directions (no more than 15 metres) and dropped quickly. The terrain was stony, with sparse grasses and other small plants, on the middle and upper slope of a gentle hillside in dry, open eucalypt woodland at an altitude of about 400 metres.

Further visits were made to this area, but it was not until 22 June 1985 that another satisfactory view was obtained. On this occasion John McKean flushed a pair, almost at his feet. The birds flew a longer distance than previously, across an unsurfaced road, and gave him a good view. He is familiar with the two similar species and is satisfied that these birds showed the characteristics of Buff-breasted Button-quail, in particular the rich buff breast of the female and in both birds a bright chestnut colour to the back and top of the wings, quite unlike the Painted Button-quail.

Len Robinson, John Crowhurst and I spent a day in the same area on 14 July 1985, when Crowhurst had a good view of a female Buff-breasted Button-quail on the ground. It had bright buff on the sides of the chest and a more brightly coloured upper back. On this occasion, the area was more thoroughly searched than before and numerous birds were flushed, many with a grey rump and tail. These were taken to be Painted Button-quail and were almost all on the more densely vegetated lower slopes, with very little overlap in the area occupied by each species. The Painted Button-quail does occur in this general area, but I had previously seen it only at an altitude of 500-600 metres in woodland with more ground cover. John McKean, Kath Shurcliff and Mr & Mrs H. Gilston again had excellent views of two female Buff-breasted Button-quail in this area on 19 October 1985.

Since 1985, a number of visits have been made to this area by myself and others. The only good sightings of button-quail, to my knowledge, were obtained when Dawn & Arnold Magarry, John Crowhurst and Len Robinson found Painted on 13 July 1986; John McKean saw a pair of Buff-breasted on 3 June 1989; Dawn & Arnold Magarry found Painted on 8 August 1989; and Kath Shurcliff and Brian Finch found both species on 4 September 1989. On the last occasion, there was more overlap in the distribution of the two species, but the Buff-breasted Button-quail were always in the more open, stony areas and the Painted in the denser grasses and shrubs. Several further visits by me produced a pair of Red-backed Button-quail *T. maculosa* on 30 September 1989 and a pair of Painted on 17 November 1989, but no Buff-breasted.

Southerly sightings 1974-1987

John Young (pers. comm.) has records of Buff-breasted Button-quail in the Kuranda-Mareeba area from the early 1970s, including the place where I found them, and found it breeding between Mareeba and Mount Molloy in early January 1974. Frank Crome (pers. comm.), who is familiar with the Chestnut-backed Button-quail and knows the Painted Button-quail well, saw what he believes to be Buff-breasted Button-quail to the north of Mount Molloy in September 1984, but in the absence of specimens of the birds in question was not prepared to commit himself any further. He described the habitat as stony ground with patchy ground cover. I also flushed a quail with a bright orange-brown rump and tail from dry grass at the edge of riverine forest close to Mount Molloy in late March 1987.

Nests and eggs

John Young has generously provided me with notes on nests and eggs, of which the following is a paraphrase.

The 1974 nesting site between Mareeba and Mount Molloy was in a small, open, grassy area in open forest, about 300 m from a rocky ridge, with small stones dominating the surroundings and approach to the nest. The male bird was first accidentally flushed from, and later observed at, the nest. Bright chestnut on the bird's upperparts, and details of the nest and eggs, convinced him of its identity.

The nest was in a hollowed-out depression at the base of a *Chrysopogon* tussock and was built of stiff grass stems to form a domed structure with a large side entrance. It was well lined with soft, short, broad grass blades, and contained three eggs.

Other nests of the Buff-breasted Button-quail, found by Young in 1974 and 1979 between the Pascoe River and the Lockhart River airfield at Iron Range, were also in the drier, rocky areas; more than half of them were in glades of *Melaleuca*, *Acacia*, *Tristania* and *Alphitonia* within rainforest. The nests were domed and eggs were almost white, heavily speckled and blotched with deep chestnut, bluish grey and black. Clutch sizes were from two to four, usually three eggs. These details agree substantially with descriptions given by W. McLennan (in White 1922a,b) of nests found near Coen in 1921 and 1922.

Young also points out that the nests and eggs of the Buff-breasted Button-quail are quite different from those of the Chestnut-backed Button-quail. In his experience, the nests of the latter are open, not domed, and the eggs are pale greenish, lightly marked with shades of dark olive or brown. Clutches are three or four, usually four.

Voice

W. McLennan (in White 1922b) described five different calls of the Buff-breasted Button-quail. A repeated booming call, increasing in volume, frequency and pitch so that the last notes are about five tones higher than the first, is given by the female. Whistling, chirping and kwaare-kwaare (churring?) notes are given by the male. A rapid drumming call gug-gug-gug. . ., ascribed by McLennan to the male, may be given by the female: homologous calls of the Painted Button-quail include booming (on the one pitch) and drumming by the female, and chirping and churring by the male (S. Debus unpubl. data).

John Young remembers hearing a variety of calls at Iron Range, one of which was 'totally characteristic of the species' [Buff-breasted], but has forgotten which. Nevertheless, it seems that calls, once learned, are of use in identifying the Buff-breasted Button-quail.

Discussion

The birds observed by me agreed with published descriptions of the Buff-breasted Button-quail. Campbell (1922) gave a full description of the species. Macdonald (1971) summarised knowledge on it to date, argued the validity of *olivei* as a good species, and tabulated the differences between it and the other two similar species. An additional feature he listed is that the forehead and face of the Buff-breasted Button-quail have very few white speckles as compared to those of the other two which are speckled white.

The area of the above observations is well to the south (150 km) of the generally accepted range of the Buff-breasted Button-quail (see Schodde & Tidemann 1986). The apparent irregularity of the birds' appearance may suggest that the Buff-breasted Button-quail makes nomadic or irruptive movements as do some other button-quail.

However, in view of the difficulty of observing these birds, this is no more than hypothetical; they may even be resident in the area. Of possible significance is my impression that there was better growth of herbaceous plants in 1985 and 1989. This is borne out by rainfall records for Kuranda which, during the 'wet' from November to May, totalled 2376 mm and 2492 mm in 1985 and 1989 respectively. This contrasts with a range of 1048 to 1729, averaging 1408 mm, for the other five years since 1983. Rainfall in the area frequented by the button-quail would, of course, be much lower but the pattern would be the same.

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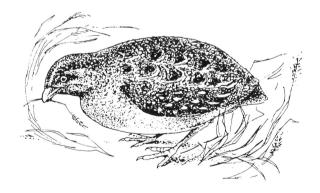
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