

Occurrence of Red-backed Fairy-wren and Southern Emu-wren at Warakeila

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INTRODUCTION

The Red-backed Fairy-wren (*Malurus melanocephalus*) is an uncommon resident species in the north of the Hunter region (Stuart 2005). Dungog (32° 25' S 151° 45' E) is considered to be the southern limit of its distribution in coastal NSW although at the time of European colonisation of Australia records provided by early paintings suggest that the species occurred as far south as Sydney (McAllan 2002). The Southern Emu-wren (*Stipiturus malachurus*), is an elusive species which is locally common in the Hunter region (Stuart 2005). This note places on record observations of the Red-backed Fairy-wren and Southern Emu-wren at Warakeila (32° 15' S 151° 31' E) and compares them with records of the more common Superb (*Malurus cyaneus*) and Variegated (*Malurus lamberti*) Fairy-wren species to demonstrate the significance of these rare sightings.

METHODS

Warakeila is a cattle property, sloping steeply upwards from the east bank of the Allyn River (altitude 190m) near Gresford. Approximately 10% of the property is vegetated, mainly along the edges of small creeks running down to the Allyn River. Between 1996 and 2007 Ann Lindsey and I made 45 surveys of the property at approximately 3 month intervals (usually in January, April, July and October). Each survey lasted about four hours, typically starting at about 7.30am. The protocols established for the Birds Australia "Birds on Farms" project were used. This involved recording all species and an estimate of their numbers. Surveys involved the same circular route which ascended along creek lines to the top of the property (**Figure 1**). In addition 20 minute surveys were made at four sites each approximately 2ha in area. These sites were selected to represent a variety of habitats including an area of creek side vegetation (site 1), woodland at the top of the property (site 2), an

isolated copse of trees (site 3) and flats adjacent to the Allyn River (site 4).

OBSERVATIONS

Red-backed Fairy-wren

The Red-backed Fairy-wren was first recorded at Warakeila in April 2001 when 3 birds, including a male in eclipse plumage were seen in a dry creek bed at the top of the property. The species has been recorded during five subsequent surveys including every season with the number recorded varying from one to five. All observations have been from the vicinity of the original record or from another dry creek bed running down the property within 1km of the original location (**Figure 1**).

Southern Emu-wren

The first record of the Southern Emu-wren at Warakeila was in September 1999 when two birds were seen in an area of rank grass above a creek on the lower slopes of the property. The species has been recorded on nine subsequent surveys with three or more records in each season other than winter when it was not recorded. Numbers ranged from one to eight, the highest total being of two groups, each comprising two males and two females. These two groups were in locations more than 1km apart and separated by a ridge. Two groups of Emu-wren were also recorded in January 2007, one just above site 2 and the other at site 3, where two well developed juveniles were accompanied by at least one adult. The Emu-wren sightings, including one record from the road at the edge of the property during October 2006 (not part of a survey) were more widely distributed than those of the Red-backed Fairy-wren (**Figure 1**).

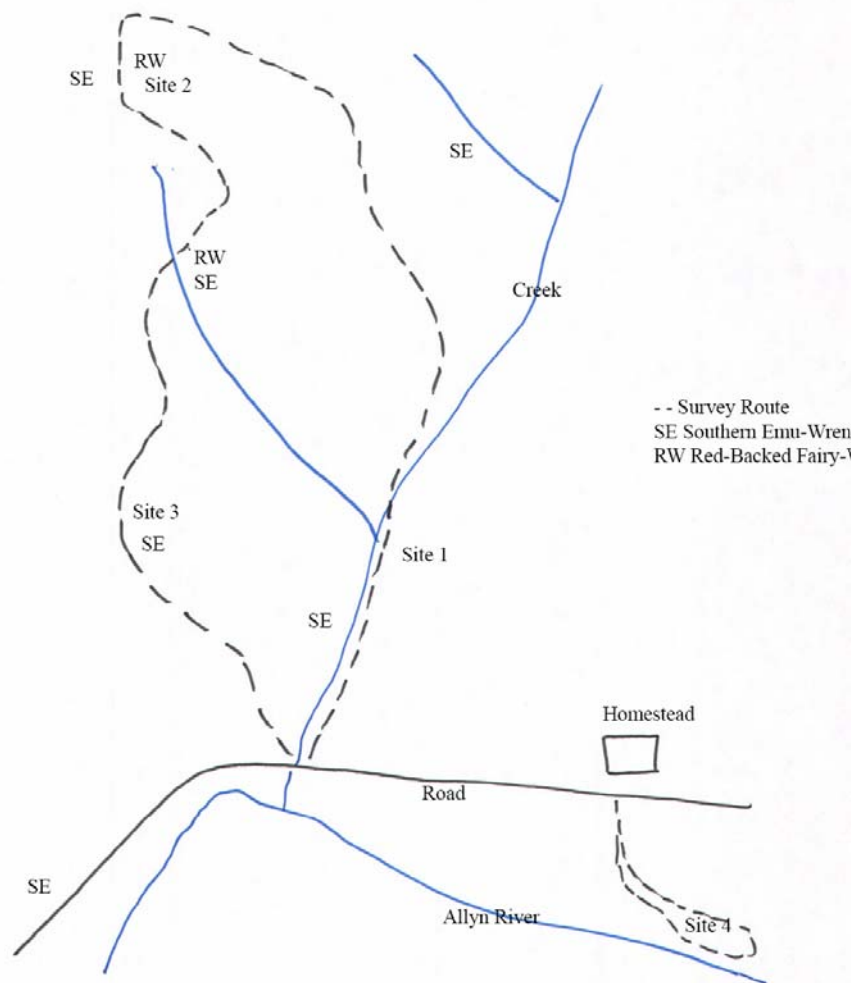


Fig.1 Warakeila - Survey Route and Locations of Key Sightings

Superb Fairy-wren

The Superb Fairy-wren was recorded on every survey and is one of the most abundant species on Warakeila being nearly 100 and 50 times more numerous than the Red-backed Fairy-wren and Southern Emu-wren respectively (**Table 1**). Numbers ranged from 20 to 70 birds with an average 40 birds/survey. Although numbers fluctuated there was no evidence of a decline in numbers over the ten year period. The species was present in all areas of the property including each of the 2ha survey sites which were selected to represent a range of habitat types as described above.

Variegated Fairy-wren

The Variegated Fairy-wren is much less numerous than the Superb Fairy-wren and has been recorded on only 35 of the 45 surveys at an average of 4 birds/survey with a maximum count of eleven. It was recorded in every season and was sparsely distributed throughout the property occurring in all the 2ha sites. However it was most frequently recorded in the vicinity of site 2 at the top of the property (**Figure 1**). There was no evidence of a decline in population over the 10 year duration of the study.

Table 1. Comparison of the number of birds recorded for four wren species.

Species	Number of surveys present (45 surveys)	Number of birds recorded all surveys
Superb Fairy-wren	45	# 1783 (94)
Variiegated Fairy-wren	35	184 (10)
Red-backed Fairy-wren	6	19 (1)
Southern Emu-wren	10	32 (2)

Numbers in parentheses indicate the number of birds recorded for each species relative to the rarest species, the Red-backed Fairy-wren

DISCUSSION

Three species of Fairy-wren (genus *Malurus*) and the Southern Emu-wren are resident on the Warakeila property. Statistics summarising the relative abundance of these species at Warakeila are shown in **Table 1**. All four species can occur together in areas of dry creek bed at the top of the property and in a separate creek bed extending down hill on the other side of an area of woodland (2ha site 2). Both the Red-backed Fairy-wren and the Southern Emu-wren seem to prefer dry creek beds in the more elevated parts of the property, particularly where patches of dense understorey such as the introduced blackberry provide cover. However the Southern Emu-wren appears to have a wider distribution than the Red-backed Fairy-wren on the property and is more likely to forage in areas of rank sedgy grass away from the creek bed cover. The other two species, the Superb and Variiegated Fairy-wrens are much more broadly distributed, less dependent on the creek beds, and occur right down to the flats adjacent to the Allyn River.

The Southern Emu-wren and the Red-backed Fairy-wren were not recorded until the surveys had been in progress for 3 and 5 years respectively. While this could indicate that the species had either moved into or increased in the study area, it is more probably attributable to observer bias. Emu-wrens are elusive and difficult to detect vocally. Similarly Red-backed Fairy-wrens are difficult to separate from the other *Malurus* species apart from the male in breeding plumage. During the summer surveys

the area where the Red-backed Fairy-wrens were seen was typically visited between 10.00 and 11.00 am, after the time of peak bird activity. Once it was realised that these species were present extra effort was made to detect their presence.

CONCLUSIONS

These records indicate a slight southern extension of the range of the Red-backed Fairy-wren. It is suggested that in the Hunter region both this species and the Southern Emu-wren are under-recorded in the highly degraded slopes to the east of the Great Dividing Range.

ACKNOWLEDGEMENTS

The contribution of Ann Lindsey to these surveys and for comment on the drafts of this note is greatly appreciated. Suggestions made during the Editorial process are gratefully acknowledged. We are also most thankful to Hilton and Margaret Hipwell for allowing us to visit their delightful property quarterly. These visits are made with fond memories of the late Keith Priestly, an HBOC member who introduced us to Warakeila and the Hipwells.

REFERENCES

- McAllan, Ian A.W. (2002). Early Records of the Red-backed Fairy-wren and Red-tailed Black-Cockatoo from New South Wales. *The Australian Bird Watcher* 19: 230-234.
- Stuart, A. (2005) Hunter Region of New South Wales Annual Bird Report Number 12 (2004). (Hunter Bird Observers Club Inc.)