

THE CRESTED SHRIKE-TIT ON THE DARLING AND MURRAY RIVERS

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Accepted February 1980

INTRODUCTION

The purposes of this paper are firstly to document records of the Crested Shrike-tit *Falcunculus frontatus* from the Darling River and Murray River west of and including the Mildura region (a part of the species' range which is evidently little known) and, secondly, to offer an ecological explanation for the distribution pattern so depicted. We hope that other observers will be encouraged to publish records that they have which may clarify the occurrence of *F. frontatus* along the Murray and Darling Rivers.

RECORDS

A. Darling River

1. Bourke district, 1888; specimen in Australian Museum — AM 0.2868, male.
2. Bourke, 13 November 1976 (Schmidt 1978).
3. ca 15 km NE of Bourke, 2 January 1979; pair seen and heard in young Red gums *Eucalyptus camaldulensis* growing close together with height of 10-15 metres (JR, LJ).
4. Near Gunderbooka HS (= ca 60 km SW of Bourke), 20 April 1976, (Schmidt 1978).
5. Tilpa, 4 February 1974; two pairs, along with two flying young, near the Darling (Miller, in Rogers 1975).
6. Junction of Talyawalka Creek South and Darling River (= ca 50 km N of Wilcannia), 31 December 1978; heard only (JR).
7. Wilcannia, 29 September 1977; one seen and heard in a large Red Gum in the Wilcannia Caravan Park (Barry Baker, *in litt.*).
8. Halfway between Menindie and Wilcannia, dates not available; breeds in Red Gums (N. Favaloro, pers. comm.).
9. Kinchega National Park (Wheeler 1974); dates not available.
10. 60 km S of Menindie, 30 December 1978; heard only (JR, LJ).
11. Pooncarie, 29 December 1978; pair seen in young Red Gums (JR, LJ).
12. 2 km SW of Balcatherine HS (= ca 54 km NE of Wentworth), 23 June 1978; one seen in Red Gums; first seen feeding in low foliage four-five metres above ground, later in higher canopies (D. Franklin, *in litt.*).
13. About or between Burtundy HS (= ca 56 km NE of Wentworth) and Bellevue HS (= 30 km NE of Wentworth) on 3 July 1958 (two seen), 9 September 1972 (four), 10 September 1972 (one) (J. N. Hobbs, *in litt.*). In addition to these records, Mr Hobbs informs us that *F. frontatus* certainly occurred in this region regularly while he studied birds there.

B. Murray River west of and including the Mildura region.

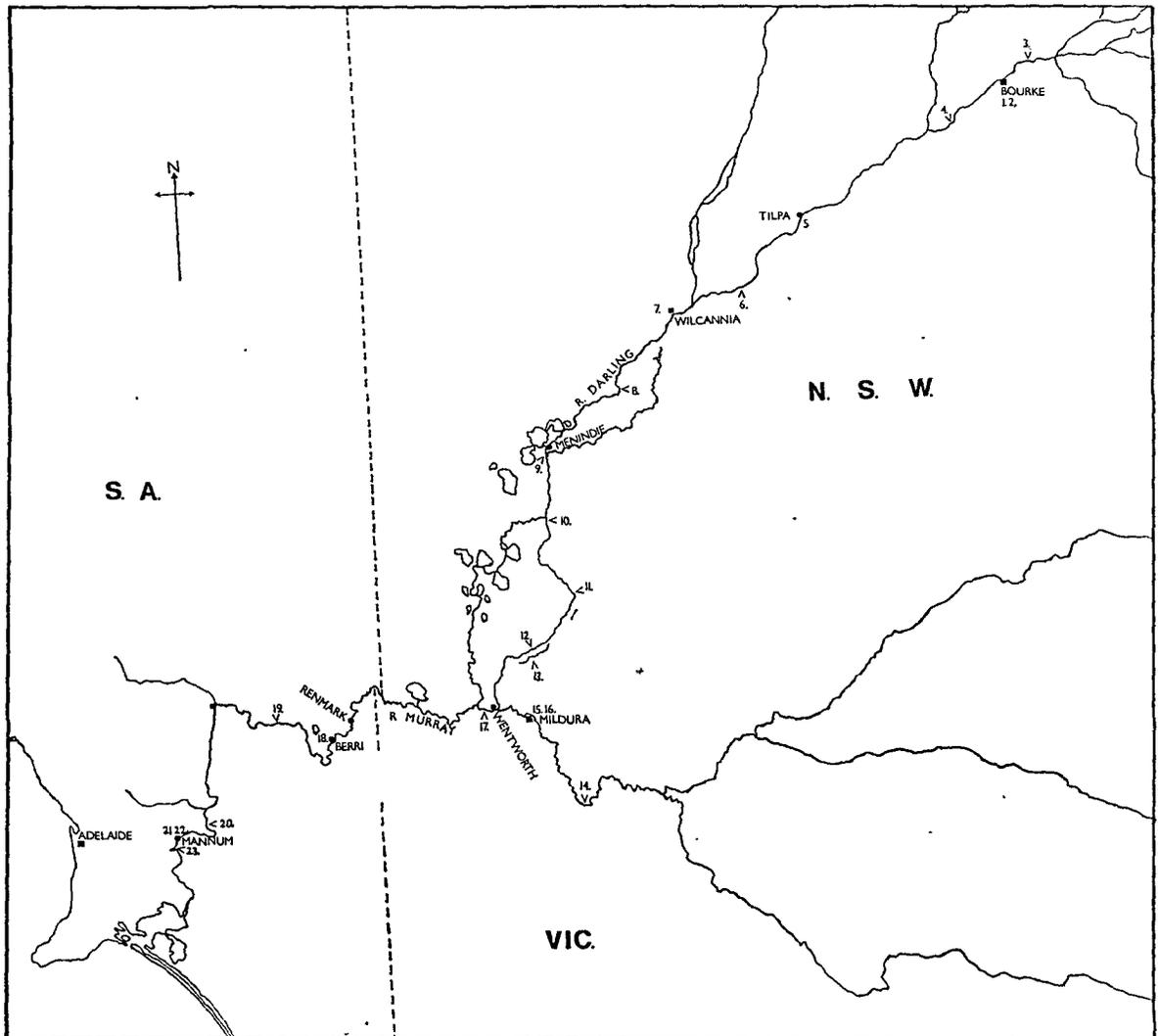
14. Between Hattah and Robinvale (= Happy Valley), 5 August 1978; one bird in immediate vicinity of river in mature Red Gums, canopy not dense (D. Franklin, *in litt.*).
15. Mildura, two permanent colonies breeding in sapling Red Gums (N. Favaloro, pers. comm.).
16. King's Billabong, Mildura, October 1962 (one bird), October 1964 (one), March 1965 (one), July 1965 (two); not found breeding (Thomas 1968, cited in J. N. Hobbs, *in litt.*).
17. Six Mile Creek (= 9.6 km W of Wentworth), 19 September 1961; at least one bird; habitat was a dense stand of half-grown Red Gums; the Creek is bordered by mature Red Gums, a few Cooba *Acacia stenophylla* with Black Box *Eucalyptus largiflorens* away from the Creek (J. N. Hobbs, *in litt.*).
18. Eremophila Flat, near Berri, 19 and 20 September 1964; one bird (Mack, in Glover 1965). Mr Mack (pers. comm.) now considers this record erroneous; and so we consider it no further.
19. Woolpunda, 14 April 1979; one bird seen in Red Gums (K. Woodcock, pers. comm.).
20. Walker's Flat, 10 August 1969; three birds (Black, in Glover 1972); in Red Gums at edge of river (A. B. Black, pers. comm.).
21. Mannum, 16 August 1969; two birds (Cox 1973).
22. Mannum, 30 September 1971; two birds (Glover 1973).
23. Ponde, 26 August 1976; a pair (R. Jaensch, pers. comm.).

DISCUSSION

The above records (see also Figure 1) suggest that *F. frontatus* may be evenly, if thinly, distributed along the Darling River. However, between Wentworth and Walker's Flat on the Murray River, a distance along the river of ca 280 km, there is but a single record. This probably reflects a genuine scarcity of the species, for this part of the Murray is frequented by bird-watchers, some of whom have resided there for many years. Downstream from Walker's Flat the species has been recorded more frequently, but only in the latter months of the

year. This may reflect a winter-spring movement of *F. frontatus* out of the Mt Lofty Ranges towards the Murray River and perhaps involving breeding individuals; but this is speculation.

We surveyed the Murray River between Renmark and Murray Bridge in February, April and December 1979 and searched specifically for *F. frontatus*, but with no success. However, we did notice that between Renmark and the vicinity of Swan Reach there is a preponderance of Black Box *Eucalyptus largiflorens* to River Red Gums *E. camaldulensis*. The latter tree is in this part of the Murray rather strictly



Scale 1 cm=50 km

Figure 1. Map showing localities of *F. frontatus* records listed in the text. Numbers correspond to those in that listing.

confined to the edges of the River and its backwaters and billabongs. That is, extensive stands of Red Gums are not formed. South of Swan Reach, the proportion of Red Gums, particularly young trees, increases markedly. Now a notable feature of the above records of *F. frontatus* is that the birds were often reported from Red Gums, particularly saplings or young trees. We therefore suggest that the dearth of *F. frontatus* records from between Wentworth and Walker's Flat is due to the preponderance of Black Box to Red Gums. More specifically, we suggest that *F. frontatus* is unable, despite its powerful bill, to glean food from Black Box's rough, deeply furrowed bark which is persistent upwards to the smaller branches of these trees (Boomsma 1972). Instead, the bird favours the flaky, ribbon-like bark of Red Gums, particularly younger trees, from which it can more easily glean its largely insectivorous diet.

Mr. J. N. Hobbs (*in litt.*) has independently expressed a similar opinion. Writing of the status of *F. frontatus* in the Murray-Darling system he says: 'Prefers the larger forests. In these there are often extensive stands of Red Gums sufficiently close to grow erect. These are usually some 30 to 40 feet high, that is neither saplings nor mature. I think the Shrike-tit prefers them. It never seems to extend into Black

Box which of course usually fringes Red Gum.' Referring to apparent gaps in the distribution of *F. frontatus* he also writes: 'The breaks may not be actual . . . but if they do exist are almost certainly due to the Black Box becoming predominant with Red Gums a thin strip only along the Creek banks not extending into stands.'

In conclusion, we feel that more observations, accompanied by careful notes on the relative frequency of Red Gums to Black Box in both the immediate and general vicinities of sightings, will be useful in providing a clearer understanding of the occurrence of *F. frontatus* on the Murray and Darling Rivers.

ACKNOWLEDGEMENTS

Our initial field work on this project was made possible by Allan Lees. We would also like to thank all those who responded to our queries and allowed us to publish their records, especially Mr J. N. Hobbs. Our thanks also to Mr John Cox for drawing the map.

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