

THE DISTRIBUTION OF THE EMU-WRENS *STIPITURUS MALACHURUS* AND *S. RUFICEPS MALLEE* IN SOUTH AUSTRALIA

JOHN ECKERT

Accepted November, 1976.

SUMMARY

Certain early records of *S. r. mallee* are re-examined and the known ranges of both this and *S. malachurus* in South Australia are redefined.

In 1929 J. Sutton, F. E. Parsons, A. M. Morgan and E. A. and A. K. Ashby made a trip to Sugarloaf Park, 14 miles (22.4 km) south-east of Meningie, during which they recorded the Mallee Emu-Wren *S. r. mallee* (Sutton 1930a, Sutton *ms.* 1929a). They first noted this form on 30 September 5 miles (8 km) east of Meningie, where six individuals were seen and a male collected. On 2 and 3 October they recorded it again at a locality given as 27 miles (43.2 km) south-east of Meningie, where they saw eight individuals and collected two males, two females and two clutches of eggs. The nests were apparently in heathy country—one was in a low *Hibbertia* and decorated with *Banksia* down, the other in a dwarf *Casuarina* in a small clump of *Xanthorrhoea* (Sutton 1930a). The three males collected all passed into the Ashby Collection (Sutton *ms.* 1929a), and were presumably destroyed when Ashby's home at Blackwood was burnt down by a bushfire on 9 March 1934. The other specimens taken are now in the South Australian Museum:

- B11848, adult female, *ex* Morgan Collection.
- B23430, adult female, *ex* Parsons Collection.
- B17304, c/3, *ex* Morgan Collection (with B11848?).
- B18801, c/3, *ex* Parsons Collection (with B23430).

The precise spot where these specimens were taken is now difficult to determine. Perusal of Sutton's notebook (Sutton *ms.* 1929a) reveals that mileage travelled on the winding sandy tracks were almost double direct distances. Sugarloaf Park was 23 road miles (36.8 km) from Meningie. The specimens were collected at a spot 12 road miles (19.2 km) south-west of Sugarloaf Park on the property then owned by Mr. R. P. Hyman. From researches I have made, it seems almost certain that this locality was just inside the north-west corner of the Hundred of Field and probably about 16 miles (25.6 km) south-east of Meningie.

Shortly after this trip to Sugarloaf Park, the RAOU campout was held in the Salt Creek district from 11 to 17 October 1929 (Sutton 1930b). Here ten individuals of *S. r. mallee* were recorded, including two juveniles. Sutton's notebook for this trip (Sutton *ms.* 1929b) records that these were all seen in a dry cutting-grass swamp 4.7 miles (7.52 km) from the Pipe-clay Lake towards the Freshwater Lakes on 16 October.

In the South Australian Museum there are two specimens from Coombe collected by Mr. W. J. Harvey and labelled as *S. r. mallee*:

B11631, adult male, 5 November 1928.

B13811, adult female, 11 November 1930.

In a recent conversation with S. A. Parker, Mr. Harvey said that he had collected both specimens within half a mile of the Coombe railway siding.

I have examined the specimens in the South Australian Museum, and find that whereas the adult male B11631 is correctly identified as *S. r. mallee*, the adult females B11848, B13811 and B23430 are all actually *S. malachurus*. It is unfortunate that the three males taken near Meningie are not available for study, for they too may have been misidentified. Parsons often gave the measurements 'bill-tip to base of tail' and 'bill-tip to tail-tip' (to the nearest $\frac{1}{4}$ -inch) on labels of his specimens. S. A. Parker (*pers. comm.*) has found that for five specimens of *S. r. mallee* taken by Parsons from localities north of Pinnaroo this ratio is 0.409-0.455, and for seven *S. malachurus* it is 0.370-0.393. Sutton (*ms.* 1929a) gave measurements for the male from 8 km east of Meningie that give a ratio of 0.428. This suggests that it was correctly identified as *S. r. mallee* unless it was a *S. malachurus* with an unusually short tail (e.g. in moult). Measurements were given by Sutton for only one of the males from '27 miles east of Meningie,' and these yield a ratio of 0.384, suggesting that it was a specimen of *S. malachurus* as were the females taken there.

In June 1975 some SAOA members camped on Belacre, 12 miles (19.2 km) south-east of Meningie. This spot would be less than 8 km from where the specimens were collected on 2

and 5 October 1929. Several members reported seeing emu-wrens without identifying the species with certainty, though Dr. A. B. Black strongly suspected that they were *S. malachurus*. On 30 August 1975 I visited Belacre and collected a male of *S. malachurus*.

Despite the measurements of the specimen from 8 km east of Meningie, in the absence of the Ashby specimens the presence of *S. r. mallee* in the Meningie area must be regarded as unproven. I conclude also that the birds seen on the 1929 RAOU campout in the Salt Creek district were also misidentified, particularly as cutting-grass is a known habitat of *S. malachurus*. Likewise, the birds seen in tussock grass in a dry swamp in Messent National Park during 10-12. October 1970 (SAOA Newsletter 56 : 11, 57 : 10) are also likely to have been *S. malachurus* as originally thought.

By the above re-identifications, the proven range of *S. r. mallee* in South Australia now shrinks to an area bounded by Nadda*, Peebinga*, Pinnaroo* and Comet Bore** with an isolated westerly record from Coombe*. The tentative sighting from 2.5 miles (4 km) east of Chapman's Bore (Rix 1937) requires confirmation. *Triodia* appears to be an essential habitat requirement of *S. ruficeps* (Ford and Parker 1974 : 186).

The range of *S. malachurus* also needs to be redefined. It is now known to occur south and west of a line through Myponga, Yundi, Ashbourne, Finnis, Meningie, Coombe and the Naracoorte district. Condon (1962) overlooked its presence in the South-East (despite a specimen taken at Robe* by Parsons on 7 November 1937), but subsequently (Condon 1968-9) added 'and the South-East (J. B. Hood).' I have seen the species at Picaninny Ponds and Wattle Range, which, with Parsons' specimen and Attiwill's (1972) records from the Naracoorte district, suggests that *S. malachurus* has a wide range in the lower South-East. It occurs

over much of Kangaroo Island, and is also found in the extreme south of Eyre Peninsula, where specimens have been taken at Tulka** and Sleaford Bay*, and sightings made at Wanilla, Mikkira, Lincoln National Park and McLaren Point. The habitats preferred by *S. malachurus* are swampy vegetation, and coastal and inland heath.

The marginal sympatry between *S. ruficeps mallee* and *S. malachurus*, indicated by Harvey's specimens from Coombe, makes this a significant area for further study. The area of contact may well be much more extensive : *Triodia* occurs amongst the heath at Coombe, but small patches of *Triodia* can still be found in the Meningie district, which, coupled with the measurements of Ashby's specimen from 8 km east of Meningie, suggests that further collecting of emu-wrens in the Ninety-Mile Desert area is urgently needed. Opportunities for such work will undoubtedly diminish in the future, for land-clearing over the last 30 years has already reduced the habitat to scattered remnants in many areas.

* specimen in S.A. Museum,

** specimen at present in Eckert Collection.

ACKNOWLEDGEMENTS

Although my name appears as author of this paper it would not have been produced but for considerable assistance in many directions by S. A. Parker, Curator of Birds, South Australian Museum. This generous help is deeply appreciated.

REFERENCES

- Attiwill, A. R. 1972. Birds breeding in Naracoorte district, 1941-1971. *S. Aust. Orn.* 26 : 59-64.
- Condon, H. T. 1962. A Handlist of the Birds of South Australia with annotations. *S. Aust. Orn.* 23 : 85-151.
- 1968-9. A Handlist of the Birds of South Australia. 2nd and 3rd eds. *S. Aust. Orn. Assoc.*
- Ford, J. R. and Parker, S. A. 1974. Distribution and taxonomy of some birds from south-western Queensland. *Emu* 74 : 177-194.
- Rix, C. E. 1937. In the fast dwindling mallee. *S. Aust. Orn.* 14 : 86-91.
- Sutton, J. ms. 1929a. Field notes on the outing to Sugarloaf Park (notebook in S.A. Museum).
- ms. 1929b. Field notes on the outing to Salt Creek district (notebook in S.A. Museum).
- 1930a. An outing to Sugarloaf Park. *S. Aust. Orn.* 10 : 180-185.
- 1930b. The birds at Salt Creek, Coorong. *S. Aust. Orn.* 10 : 186-194.