

Hybrid Fairywren at Hart Lagoon, River Murray, South Australia

PETER HAINES

HART LAGOON

Hart Lagoon is a permanent lake approximately 2.5 km long and up to 0.5 km broad on the southern side of the River Murray and immediately north-west of Waikerie. It is a moderately saline lagoon which has been subject to an artificial drying and wetting cycle in the past 10 years. On the southern side of the lagoon there are several sites where water is seeping into it as a result of irrigation of vineyards and other horticultural crops on the edge of the flood plain. This part of the lagoon contains River Red Gums, *Eucalyptus camaldulensis*, and Black Box, *Eucalyptus largiflorens*, with a healthy understorey and reeds.

The northern side of the lagoon contains several bare saline areas with samphire, stands of dead eucalypts and surrounding patches of lignum. The patches of reeds that exist are not as extensive as on the southern side or as healthy. There is a sandy area between the lagoon and the channel of the River Murray that contains a grassland with stands of Black Box woodland and some areas of regrowth Black Box.

UNUSUAL FAIRYWREN OBSERVED

On Tuesday 10th September 2013, while bird watching on the northern side of the lagoon (34° 10.163' S 139°58.273' E) I observed a male fairywren that I had not seen before with colouring and markings resembling that of a Splendid Fairywren, *Malurus splendens*, but with white "wings" or shoulder patches (Figure 1). The bird was seen in a dense area of lignum, *Muehlenbeckia florulenta*, and was accompanied closely by a juvenile fairywren (Figure 2) which was of assistance in my being able to photograph the male bird. The surrounding area contained

several groups of Superb Fairywrens, *Malurus cyaneus*, and Variegated Fairywrens, *Malurus lamberti*, both of which are common around the lagoon.

At the time I observed the unusual fairywren I had not seen either the White-winged Fairywren, *Malurus leucopterus*, or the Splendid Fairywren, *Malurus splendens*, in the area.

On the following day Peter Jacobs, a local bird photographer, visited the site with me and took further photographs of the bird and posted one of them on a social media bird site 'Feathers and Photos' which resulted in several comments and very interesting discussion. Most respondents suggested that the bird looked like a hybrid between a White-winged Fairywren and either a Splendid Fairywren or a Superb Fairywren although there was also a suggestion that it could be a Splendid Fairywren with a weird moult.

Further opinions were sought by Emily Hoffmann, Wetlands Project Officer (Upper Murray) for the Natural Resources SA Murray-Darling Basin, who forwarded a copy of the photograph to several contacts. Professor Andrew Cockburn suggested it was a Splendid Fairywren with leucism which results in loss of expression of colour and Graham Carpenter suggested that it was a cross between a White-winged Fairywren and a Superb Fairywren.

During the following weeks I explored the area further and found the bird on every occasion I visited the site, with typical Superb and Variegated Fairywrens nearby, both male and female, but I also observed two other male fairywrens with the same colour markings, including

the whitish shoulder patches. One has not been relocated but I have regularly seen a male at a site approximately 700 m from that of the original bird (34°09.883' S 139° 58.033' E). This bird and the original one appear to be confined to very small areas that contain exclusively lignum and each is always at its individual site, with insufficient time for one bird to move to the other site between my observations. I last observed both the original bird and the other unusual one on 18th December 2013.

I have subsequently seen two typical male White-winged Fairywrens on several occasions near the site of the second atypical fairywren. They have brighter white shoulder patches, inhabit more open areas where the lignum shrubs are smaller and not as densely distributed and appear to occupy a much larger area than the atypical birds, including movements into the sandy area between the lagoon and the river.

I was referred to Andrew Black who has an interest in Malurid plumage. He believed that the atypical fairywren represented hybridisation between Superb and White-winged Fairywrens and gave the following reasons.

The plumage features are evidently a combination of the two, the appearance of the head, including the face, approximating that of the Superb Fairywren and the body (including throat) and wings being like those of the White-winged Fairywren. While the bird bears a superficial resemblance to a male Splendid



Figure 1. An atypical male fairywren seen at Hart Lagoon, 11 September 2013. (P. Haines)



Figure 2. Recently fledged fairywren associating with the coloured male in Figure 1, 11 September 2013. (P. Haines)

Fairywren there are two strong pointers against that species; the absence of a black breast band and the lack of difference in tone between the ear coverts and crown. In the Black-backed subspecies *Malurus splendens melanotus* of the region the ear coverts are substantially paler than the crown. The lack of almost any blue tone in the flight feathers is also against that possibility and finally, the Superb and White-winged Fairywrens clearly do come into close contact in the area, whereas the Black-backed Fairywren does not, its nearest records being some distance away in mallee, with consistent

observations at Pooginook Conservation Park and Stockyard Plains Evaporation basin which are over 15 km from Hart Lagoon. The identity of the fledgling is unclear but it shows at least a partially developed eye-ring and is most likely a Superb Fairywren.

If hybridisation between the above two species explains the bird's appearance it is evident that it has occurred between species belonging to the genetically distinct blue and bicoloured species-groups of fairywrens (Joseph, Edwards and McLean 2013) that belong to separate sub-genera *Malurus* and *Musciparus* respectively (Schodde and Mason 1999).

Hybridisation among fairywren species has been reported rarely. While two or even three species may be seen together in parties out of the breeding season, Cooper (1969) appears to have been first to report members of two species feeding the same brood. In November 1963, at Grafton, New South Wales, he saw a male Superb Fairywren assisting Red-backed Fairywrens to feed nestlings of the latter species and, in the same area, a male Red-backed Fairywren in the converse role assisting the feeding of Superb Fairywren nestlings. Wilson (1983) reported seeing a male hybrid Red-backed x Superb Fairywren south of Dalby, Queensland in January 1980 and recognised the same bird in eclipse plumage in the company of Superb Fairywrens in September of that year. Two months later the hybrid bird was seen consistently alone although occupying a territory immediately

adjacent to that of a group of Superb Fairywrens. The present record might therefore be the first in which a hybrid bird may have taken part in the raising of young, although actual parentage cannot be inferred.

ACKNOWLEDGMENT

My thanks to Andrew Black for helping edit the first draft of this note, locating references and providing additional relevant information.

REFERENCES

- Cooper, R.P. 1969. Multiple feeding habits of Wrens. *Australian Bird Watcher* 3: 145-150.
- Joseph, L., Edwards, S.V. and McLean, A.J. 2013. The Maluridae: inferring avian biology and evolutionary history from DNA sequences. *Emu* 113: 195-207.
- Schodde, R. And Mason, I.J. 1999. *The directory of Australian birds: passerines*. CSIRO Publishing, Collingwood, Vic.
- Wilson, M. 1983. Apparent hybridisation between two species of fairy-wren. *Sunbird* 13: 38-39.

Peter Haines
PO Box 181
Waikerie SA 5330
0429231946
Pha24559@bigpond.net.au