

THE FAIRY-WRENS. A MONOGRAPH OF THE MALURIDAE by Richard Schodde illustrated by Richard Weatherly, 1982. Melbourne: Lansdowne Editions. Pp 203, col. pl.36, numerous b. & w. drawings, figs 34. 280 x 375 mm. Standard edition \$70, collector's edition \$395.

Imagine if "one of the world's leading field ornithologists" joined forces with "one of the three finest young bird artists in the world" (to quote Lester Short) to produce a monograph of an Australasian family of birds. Your expectations would probably be satisfied after studying *The Fairy-wrens*.

Dick Schodde and Richard Weatherly agreed to produce jointly a monograph of the Maluridae in 1974. They tracked down 24 of the 26 species of

malurid fairy-wrens in Australia and New Guinea in their quest to obtain first-hand information, prior to publication. The resulting monograph is set out as genus by genus and species by species accounts, introduced by a description of the family and concluding with a statement of conservation problems. Species-accounts contain information about the history of each species' discovery and fate in the ornithological literature, plumage phases and soft-parts of adults and immatures of both sexes, plumage cycles, morphometrics, geographical distribution, habitat, abundance, food items, the day-to-day behaviour and feeding of a territorial clan from rising to roosting, voice and displays, nest, eggs, breeding behaviour, and systematics and taxonomy. The latter section includes subspecific diagnoses and nomenclatural synonymies. A map of either New Guinea or Australia depicting the distribution of subspecies augments the text on geographical range. The writing style is aimed at naturalists. The text is thus designed to appeal to a popular audience as well as to be used by ornithologists. There is a corresponding duality of purpose in the illustrations, both to provide an accurate observation of the birds and their environment, and to "give each page an aesthetic character of its own" (p. 5). One life-size, full-page colour illustration accompanies each species-account, but distinctive subspecies are accorded their own plate. Additional black and white sketches depicting various postures and, occasionally, social interactions, as well as drawings of faunal and floral associates, are liberally sprinkled throughout. Comprehension is facilitated by an unusually complete and useful glossary.

One can judge a work such as this on the basis of its content and coverage. *The Fairy-wrens* is brim-full in content. As a test of the depth of the text, I listed all the nuances and unusual features of fairy-wrens that I knew prior to reading:— petal-carrying, tail-quivering, rodent-runs, puff-ball agonistic displays, tubule-filled seminal vesicles, patterns of nuptial plumage acquisition and loss, grasswren songs and so on. The monograph passed with flying colours. On the Australian scene, it is only matched in detail by *Nocturnal Birds of Australia* (1980), an earlier work of Schodde's in collaboration with Ian Mason. The monograph's bibliography approaches 700 literature citations in length, and Schodde takes pains to include and summarize all relevant work, duly referenced. In the many places where the literature is unhelpful, he uses personal observations, those of informants, or incorporates data from the Royal Australasian Ornithologists' Union's Nest Records Scheme, museum specimen collections and other unpublished data-bases. When all sources fail, he states that the data do not exist, providing a useful flag to future workers.

Schodde's systematic treatment of the Maluridae is unorthodox. Although Harrison's (1969, *Emu*,

69: 1-8) circumscription of the group is preserved, *Todopsis cyanocephala* and *Chenorhamphus grayi* are placed in *Malurus*; *T. wallacii* is retained as the monotypic genus, *Sipodotus*; *M. amabilis* is accorded specific rank whilst the lavender-flanked forms, *dulcis* and *rogersi*, are retained as subspecies of *M. lamberti*; *Stipiturus mallee* is separated from *S. ruficeps*; and the Flinders Ranges population of the Striated Grasswren is recognized as *Amytornis striatus merrotsyi*. It is a relief to find that the reasons for taxonomic changes, and the bases for the classification generally, are presented in some detail.

I am particularly impressed by the author's perspicacity in recording anatomical and morphological peculiarities, and either postulating functional hypotheses to account for them or merely questioning why they should be so. The Maluridae have an abundance of features, such as sexual differences in rictal bristle morphology and tail length, and the various forms and uses of the unusually long, cocked and reduced tail, to keep functional anatomists, morphological ecologists and behaviourists employed for decades.

Schodde highlights the generally ignored, endangered status of the Mallee Emu-wren, and the subspecies of the Southern Emu-wren endemic to the Mount Lofty Ranges, *Stipiturus malachurus intermedius*, which is on the verge of extinction. South Australian conservationists, take note!

I feel uneasy that, in a pace-setting work such as this, so much of the text is based on personal, informants', or other unpublished observations, to which the reader cannot refer; understandably so, in view of the gaps in the literature. Nevertheless, time and again, I am left wondering about the sample sizes on which statements are based and the generality of comments on behaviour and ecology. I can sympathize with anyone presently contemplating a monograph of an Australasian group of animals of this scope, because the problem will inevitably arise. One solution is to publish first the 'original' data in a standard manner, then cite these publications in the monograph. An alternative is to continually provide a record of dates, localities, times and numbers of observations when summarizing unpublished data in the main work.

The only area in which I can supplement the book's factual basis is in the distribution of some local species. The details, usually amounting to extensions of range of only a few kilometres, are appended.

The illustrations are superb. In accuracy and realism, Weatherly's work which was new to me, is in the same class as my favourite bird artist's. (I have to admit being disappointed in not seeing a rodent-run depicted.)

The scope or coverage of a publication is decided upon by its author and illustrator. Schodde and

Weatherly's aims are explicit in their introductory pages, and neither subsequently skimps. The question, then, is how can the monograph be improved? I have two suggestions. First, I would prefer to see a more formal writing style employed. Too much scientific precision and caution is sacrificed in the readable, naturalist-orientated style of the text. This, in turn, leads to generalization and minor inconsistencies. Contrast the "bold familiarity" (p. 30) of *Malurus* with the "secretive" (p. 36) nature of the Broad-billed Fairy-wren *M. grayi*. Such discrepancies are unusual, however. By far the more important ramification is that, in the lengthy introductions to the family and genera, large gaps in knowledge are glossed over with the tacit assumption that what is true for species *a* and *b* also holds for species *c* through *g*. This is a recurring fault in most or all publications aimed at naturalists; profound ignorance in various fields is masked, thus

providing no enticement to the non-professional to contribute and so help fill the gaps.

As a second suggestion, I would prefer to see a greater use of illustrations to portray systematically the plumage phases, transitional stages in acquisition and loss of nuptial plumage, habitats, nests and social interactions for each species. Colour or black and white photographs would be more suitable than artwork for at least some of these purposes.

The quality of the text and illustrations will ensure that *The Fairy-wrens* will remain a popular and standard reference to the Maluridae in the decades to come, and sets a high standard amongst monograph and handbook-style publications for others to emulate or improve on. Typographical errors are too infrequent to detract from the work. It would be on my shelf if I could afford it.

NICK REID

APPENDIX

SUPPLEMENTARY DISTRIBUTIONAL DATA FOR SELECTED SOUTH AUSTRALIAN SPECIES OF FAIRY-WREN

SUPERB FAIRY-WREN

Malurus cyaneus

EYRE PENINSULA

The northern limit on Eyre Peninsula is presently set by the following records of Jane and Peter Needle (pers. comm.) on 14-15 April 1979:

1. Middle Lake, 11km N. of Elliston. Four separate groups in dense *Melaleuca lanceolata* thickets draped with *Cassytha* sp. and associated with *Acacia* sp. and tall swamp grasses.
2. Most southerly lake in the Lake Newland complex, 19km N of Elliston. One uncoloured male with several females.
3. Lake Newland Station, 22km N of Elliston. One group containing an adult male in eclipse plumage, a young male with a blue tail and 3 females with brown tails.

Condon (1968, *A Handlist of the birds of South Australia*, p. 84) stated that a specimen had been collected "beyond Elliston", but there is no evidence of it in the South Australian Museum. Schodde (p. 43) ignored the report.

NORTHERN MOUNT LOFTY RANGES

The northern limit in the Mount Lofty Ranges is the Clare Valley. Lynn Pedler observed 1 or 2 uncoloured birds on the southern outskirts of Clare near Neagle's Rock in 1974. The habitat was blackberry *Rubus* sp. and hawthorn *Crataegus* sp. shrubbery and fruit trees, on the edge of peppermint box *Eucalyptus odorata* woodland. He also recorded one or more uncoloured birds in hawthorn in a creek near Skilloogallee about the same time. Subsequent searches at these localities and elsewhere in

the Clare Valley have failed to re-locate the species. Destruction of the thickets in which the birds occurred may have led to their local extinction in the area (Pedler pers. comm.).

NINETY-MILE PLAIN

In the Upper South-East, Eckert (1972, *S. Aust. Ornith.* 26: 37-38) recorded Superb Fairy-wrens in agricultural country near Jabuk and 14km S of Pinnaroo on the northern margin of the Ninety-Mile Plain. He inferred that the species occurred naturally in the better-class mallee country between Taillem Bend and Pinnaroo, but appeared to be absent from the largely uncleared sand-plains of the central and north-eastern Ninety-Mile Plain to the south. Schodde (p. 43) interpreted Eckert's records to mean that the species colonized the area towards Pinnaroo as a result of land clearance. The contention appears tenuous in view of the limited evidence. Recent information permits a re-appraisal.

Superb Fairy-wrens occur throughout Mount Rescue Conservation Park away from sites of disturbance in a variety of mallee, heath and stringybark *Eucalyptus baxteri* associations typical of the central Ninety-Mile Plain, as the following records from 8-9 October 1977 indicate:

4. Between western boundary of Park and Jimmy's Well. At least 2 coloured males and 2 uncoloured birds in whipstick mallee and low *Hakea* sp. dominated heath. Jane Needle.
5. Swale immediately north of Gosse Hill. A coloured male and females amongst mallee.
6. Botany Hut, 1 km SW of Gosse Hill. A party in *Banksia ornata* overtopped by *Eucalyptus baxteri* close to the Hut, and another in low

open-heath overtopped by *E. baxteri* between the Hut and Gosse Hill.

7. Two km E of Gosse Hill. A pair in low open-heath near tall *E. baxteri* stands, and another in the understorey at the junction of an extensive dense stand of whipstick mallee and low open-heath.
8. Three km S of Jimmy's Well. A group containing a coloured male and females in low open-heath on extensive sandplain.
9. Additional parties containing coloured males were observed at 3 soaks in the Park, including Rabbit Island and Buck's Camp. Birds were seen at these localities both at the edge of clearings as well as in *B. ornata* thickets overtopped by *E. baxteri* and *E. leucoxylo*n away from breaks in the vegetation.

R., M., and N. Reid, D. Close and J. McNamara were responsible for records 5-9. Records 4-9 form the basis of Close's (1982, in *The Ninety Mile Desert of South Australia*, Harris, Reeves & Symon eds, p. 169) comments regarding the species in this region.

There are two recent records of Superb Fairy-wren in the north-eastern portion of the Ninety-Mile Plain. Both were of birds in natural vegetation away from immediate sites of disturbance. Paton (1982, in *The Ninety Mile Desert of South Australia*, Harris, Reeves & Symon eds, p. 80) reported the species in mallee-heath in Scorpion Springs Conservation Park, October 1973. Nearby, Jane Needle (pers. comm.) recorded:

10. Twenty km SW of Pinnaroo on Bordertown road, 2 October 1977. A male Superb Fairy-wren in uncleared mallee-heath and broom-bush. Nearby, two coloured males and at least one female Splendid Fairy-wren *M. splendens* amongst regenerating mallee shoots and *Acacia* sp. on a knoll amidst cleared pasture.

By contrast with the above data, records of Superb Fairy-wrens in the eastern portion of the Ninety-Mile Plain tend to come from disturbed sites. Intensive surveys at Comet Bore between 1967-76 found small numbers only at the dam formed by the bore overflow (Hatch, 1977, *S. Aust. Ornith.* 27: 163-172). Max Possingham (pers. comm.) continued the survey of the birds of the region during eight visits in the period 1978-83, and spent approximately equal time bird-watching in disturbed sites (farm clearings, pasture boundaries, bores and along main roads) and in natural vegetation away from such areas (including bush tracks). He recorded Superb Fairy-wrens at several localities, including Quondong Bore, 27km N of Comet Bore, Bunn's Bore, 10km S, and an abandoned farm, 7km to the East. Of 13 records, 7 were of birds at the edge of farm clearings or in natural vegetation within 50m

of the same; two were of birds in reeds at Comet Bore dam; and one was of a group in mallee-heath alongside the main road, 2.5km N of Comet Bore. Only three records were of groups (4-5 birds) in natural vegetation, 100-1000m from the nearest disturbed sites. The vegetation associated with these sightings varied from closed-heath with a sparse overstorey of *Eucalyptus incrassata* to tall closed-heath of *Banksia ornata*, *Melaleuca uncinata* and *E. incrassata*.

I consider the above data equivocal with regard to Schodde's contention that Superb Fairy-wrens have invaded the north-eastern Ninety-Mile Plain towards Pinnaroo subsequent to agricultural expansion there. The species may have benefited from European man's activities in the Comet Bore area, accounting for its abundance in disturbed sites. Nevertheless, a sparse population may have inhabited natural vegetation in the region prior to European settlement, perhaps associated with plant associations more typical of the central Ninety-Mile Plain where the species is more common. A more discerning study is required before we can be confident of the relationship between agriculture, natural plant associations and Superb Fairy-wren abundance in the region.

Note that Record 10, above, and Paton's (*loc. cit.*) observation of both Splendid and Superb Fairy-wrens in Scorpion Springs Conservation Park in October 1973 are the first reported cases of sympatry of the two species (cf. Schodde, p. 51).

VARIEGATED FAIRY-WREN *M. lamberti*

In the South-East of South Australia, the species has been recently collected as far south as Big Heath Conservation Park (Lynn Pedler and Penny Paton pers. comm.).

Both Schodde (p. 83) and Condon (*op. cit.*) give Cowell as a southern limit on Eyre Peninsula, presumably on the basis of Sutton's (1924, *S. Aust. Ornith.* 7: 118-159) observation of a fully coloured male with two others "nine miles on from Cowell". However, no specimens were taken at the time. In view of the exclusive occurrence of the very similar Blue-breasted Fairy-Wren *M. pulcherrimus* in mallee areas north of Cowell, it is likely that Sutton erred in his identification.

WHITE-WINGED FAIRY-WREN

M. leucopterus

The distribution map (p. 110) neglects to show *M. l. leuconotus* occurring on the plains immediately east of the Mount Lofty Ranges (SAOA, 1977 *A bird atlas of the Adelaide region*, p. 48).