

Calamanthus Forms in the Shark's Bay District, Western Australia

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The members of the genus *Calamanthus* (Field-Wrens) fall into two groups, and in the *Birds of Australia*, vol. IX, 1922, Gregory Mathews recognizes only two all-embracing species—the Striated Field-Wren (*Calamanthus fuliginosus* V. & H.) and the (Rufous) Field-Wren (*Calamanthus campestris* Gould). In his discussion he admits, however, that the western birds of each might be separated out as distinct representative species, in which case the western form of the Striated Field-Wren would bear Milligan's name—*Calamanthus montanellus*, and the western Rufous Field-Wren would be *Calamanthus rubiginosus* Campbell.

Ashby reviewed the genus in 1924 and accepted the four species, but for the western Rufous Field-Wren he substituted *isabellinus* of North for *rubiginosus* as the specific name. North had described a Central Australian Field-Wren as *Calamanthus isabellinus* and Mathews had retained the form as a member of the eastern assemblage under *C. campestris*. Ashby considered that the affinity of *isabellinus* lay with the western *rubiginosus* and united the two, and, as the name *isabellinus* had priority, it therefore replaced the other as the species name.

This arrangement was accepted by the Checklist Committee and appeared in the second edition of the "Official Checklist," 1926. In the sorting out of the synonyms and sub-specific names, however, some anomalies appeared, to my mind, to have crept in and their unravelling was necessary before a full appreciation could be had of the significance of the island faunas in Western Australia. I refer to the naming of the *Calamanthus* forms in the Shark's Bay region—both on the mainland (Péron Peninsula) and Dirk Hartog and Dorre Islands.

The birds from each of these areas received sub-specific names, but all were regarded at first as local differentiations of the Rufous Field-Wren, *C. isabellinus* (or *campestris* as it was then generally known). Mathews described the birds from Dorre Island in 1912 as *Calamanthus campestris dorrie*; those from Dirk Hartog Island were named *C. campestris hartogi* by Carter in 1916, while the mainland forms from Péron Peninsula, on the opposite shore of Shark's Bay, were named *C. campestris peroni* by Mathews in 1917. The compilers of the "Checklist," however, transferred *C. campestris hartogi* to the synonymy of the southwestern species *C. montanellus*, but retained the other two with *C. isabellinus*. That left matters in the curious state that one island in the Shark's Bay area harboured a species

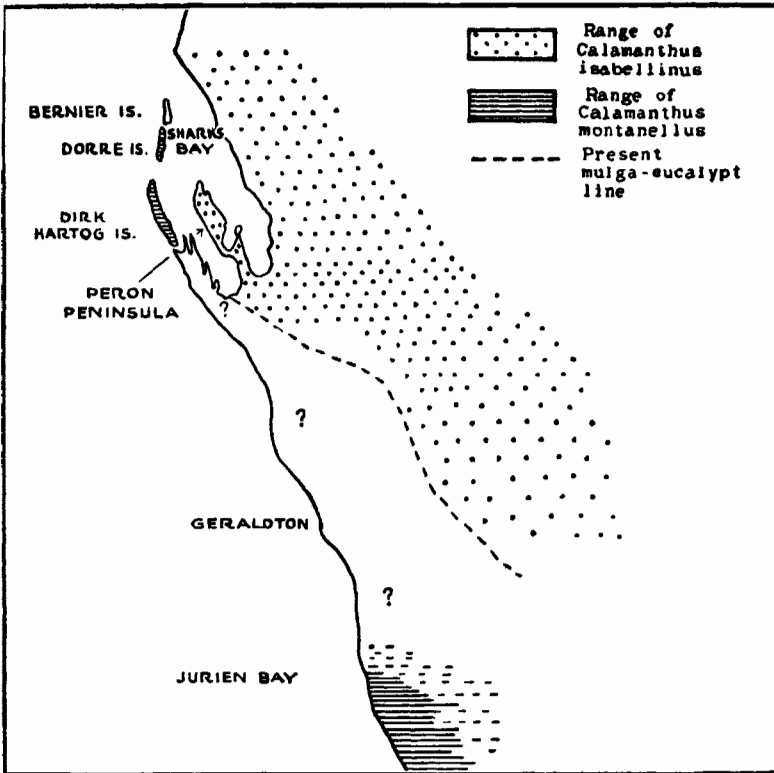
of Field-Wren quite distinct from that of an adjacent island and of the neighbouring mainland—a species, moreover, which did not otherwise occur on the mainland for some distance south.

To check up on the position I examined the specimens in the Western Australian Museum. The Dorre Island bird proved to be the same thing as the Dirk Hartog Island form, namely, a variety of the southern *C. montanellus* and definitely not *C. isabellinus*, as maintained in the "Checklist." It appears that the sub-species *C. m. dorrie* would cover the Dirk Hartog birds also and the extra sub-species, *hartogi*, is not warranted. The position with regard to the mainland bird, called *C. isabellinus peroni*, appears to be interesting. There are, unfortunately, no specimens in the Western Australian Museum. However, we have some definite statements by Tom Carter, who collected in the area. Thus he states: "The Péron Field-Wren is quite distinct from the Dirk Hartog bird. The specimens obtained of *Calamanthus campestris peroni* are quite unlike any of the long series obtained of *C. campestris hartogi* and more closely resemble *C. campestris rubiginosus* (i.e. *isabellinus*) from Pt. Cloates and the North-West Cape districts and *Calamanthus campestris wayensis* from the Day Dawn district." It does seem from these comparisons that the Field-Wren inhabiting Péron Peninsula is a true *Calamanthus isabellinus*.

The only emendation of the "Checklist" which is necessary, therefore, is to transfer the item "*C. campestris dorrie* . . ." from species no. 503 to species no. 501. A corresponding alteration is necessary in Mathews's treatment of these birds in his *Systema Avium Australasianarum*. Using his terminology, the form named *Calamanthus campestris dorrie* should be called *Calamanthus fuliginosus dorrie*.

This distribution of the two species (I am not concerned so much at this juncture with the sub-species as there is not enough comparative material available to discuss them profitably) from the bio-geographical view is of great significance. W. B. Alexander first pointed out (*Journ. Linn. Soc. London*, vol. xxxiv, 1922, p. 467) in connection with certain birds of the Abrolhos that on the mainland these particular species were not encountered until a considerable distance farther south is reached. This position also obtains regarding the Shark's Bay islands, which, with the Abrolhos, lie off that part of the Western Australian mainland which is now in the grip of more or less arid conditions. The distribution of the species under consideration can be best explained on the hypothesis that increasing aridity in recent times has displaced the mainland representatives to the south, whilst their island relatives, or such of them as had survived extinction, persist as relict forms testifying to the former wider distribution of the species.

In the case of the *Calamanthus* forms in the Shark's Bay district, *Calamanthus montanellus* appears to have disappeared from the neighbouring mainland, the present-day most northerly limit recorded being Jurien Bay (Orton and Sandland). The conditions, on the other hand, have favoured the extension of the arid country *Calamanthus isabellinus*, which has occupied Péron Peninsula but has not spread to the islands.



When the islands were first populated by *Calamanthus montanellus* that species must have ranged on the neighbouring mainland, which is now occupied by *C. isabellinus*. At that time the line separating the northern mulga from the southern eucalypt region was probably farther north.

This aspect of the island faunas of Western Australia is further considered in another paper shortly to appear under the joint authorship of Mr. L. Glauert and myself.

A member of the R.A.O.U. desires to purchase the first three volumes of *The Emu*. Communications to K. A. H. Hindwood, Wingello House, Angel Place, Sydney, New South Wales.