Correspondence

TERRITORY AND BIRD SONG

To the Editor, Sir,

I must thank Mr. Chisholm for his letter (*Emu*, 45, p. 253), for it appears to me that he has rather strengthened the point I tried to make, and that was, that despite some views in Australia to the contrary, bird song chiefly serves a utilitarian purpose. That point of view is not conveyed to the reader by Mr. Chisholm's review of Nicholson's book.

The local branch of the R.A.O.U. held a meeting in September 1944, at which bird song was discussed. In this discussion it was made clear that the probable reason for so many of our birds singing out of season is that in many species, a pair of birds, or a group, defend a permanent territory all the year round. The Magpie, Butcher-bird, Magpie-Lark and Willie Wagtail were given as examples. These birds would therefore sing all the year, which they do, but singing reaches its maximum during the breeding season when competition is greatest (a summary of this discussion will be found in W.A. Bird Notes in due course).

Armstrong, in his excellent book, Bird Display, makes many references to The Emu, and yet says in a general way, "Female song is extremely rare among birds," which is quite erroneous if applied to Australia. But can he be blamed for making such a statement, if he can find nothing to the contrary in The Emu? Anyone who has studied bird song in Australia knows that in many species females are just as vocal as males, and in most, if not all, cases in which the sexes are equally vocal the birds mate for life and hold permanent or resident territories: the Magpie is similar in this respect, but a group of birds appear to hold a permanent territory, this territory being carried on from one generation to the next. It would appear that in all these cases where the female sings, she actively aids in defence of territory and when, as with the Rufous Whistler, she does not sing, she does not play any part in territory defence. In Australia, where migration is not such a feature as in England, permanent territories are often held and the regime is somewhat similar to that of the Wren-Tit in California.

Dr. N. A. Cobb, who made one of the most intensive studies on bird song in any Australian species, in a paper in the New South Wales Agricultural Gazette of 1897 on the sheep-fluke, gives instances of duets in Australian birds. He says—"This trait is well developed among Australian birds and frogs: in fact, I do not remember to have heard in any other part of the world such good examples of this

phenomenon." Again, in 1928, P. A. Gilbert in the Australian Zoologist pointed out in a most instructive paper entitled 'Female Birds in Plumage-Display and Song-Mimicry' that female song was far from rare in Australia, and yet I have searched the pages of The Emu since that time in vain, trying to find some enlightening paper on the significance of song and territory in Australian birds. Can overseas authors be blamed if we do not publish our records?

Howard, who was recognized as the greatest authority on English bird song in his time, maintained that the origin or development of song was closely related to the origin of territory, and that all song had some biological significance. But he also says, in *Territory in Bird Life*, that it "is true, of course, that some birds sing during the autumn, and, if the climatic conditions are favourable, in the winter also, just as others betray, in the autumn, symptoms of emotional manifestation peculiar to the spring; but just as the manifestation of the latter is feeble and vestigial, so, too, does the song of the former lack the vigour and persistency which is characteristic of the spring." He is referring to English species, in which the male alone sings and no permanent territory is held, and yet may it not aptly describe some of our autumn singing?

I have made song charts for some of our birds and have found that song is governed to a great extent by climatic conditions. I have found that favourable weather conditions will cause birds to sing and behave during March and April (autumn) much the same as they will do during the breeding season from August to December, and yet, owing to unfavourable weather, they will be quite listless in

between, with song almost non-existent.

Whisper songs, as distinct from sub-song, would appear to have no biological significance, and this applies to mimicry to a certain extent, though not always, as mimicry is used as a direct threat at times. There again, however,

can song-mimicry be classed as true song?

To conclude, it would appear to me that as the origin of bird song was probably a necessary part of evolution, to ensure the continuity of the species, so will the different developments of song be found to have their uses, whether as a stimulant, warning or threat, recognition or bond, outlet for sexual emotion or some other use.

Yours, etc.,

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Yanjettee, Coolup, W.A. 7/2/46.

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