

relegated to second place when the 16 volumes (including bibliographies, checklists and supplements) of the *Birds of Australia* was completed after 26 years' strenuous work. This is the result of the research and labour—a result of which the author is 'natural' enough to feel proud.—C.E.B.

Bird Display.—Something wider than mere courtship ceremony is apparent immediately one opens Edward A. Armstrong's *Bird Display* (Cambridge University Press, 1942—pp. 1-381 + 1-xvi). A further perusal involves one in a consideration of every possible kind of display performance of the avian world, of which ceremonial gaping, courtship feeding, 'trance' or disablement states, injury feigning, social ceremonies, arena displays, territory performances and song (these are chapter headings) may be mentioned as illustrative. The field is world-wide, the literature consulted and quoted is enormous—there are over 700 references in the bibliography.

Ceremony plays a most important part in the lives of birds and many ceremonial activities are responses to emotional urges, one action impelling to others, as, for example, the connection between nuptial display and nest construction, although ceremonies are not always readily distinguishable, in some cases the relative associations being multiple. Ceremony is purposeful. It is "man's antidote to disorder and frenzy" but not man's only. It serves distinct purposes and gives rise to stimuli that form an integral part of the whole pattern of bird behaviour. This doctrine of 'releasers' has been brought prominently to the fore of late, particularly by Lorenz who says that the whole sociology of higher animals is built on releasers and innate patterns.

The sexual aspect of display is largely paramount and this physiological side and its effect on the reproductive cycle is fully dealt with. What may be regarded as elaborate ceremony may be an evolved process to synchronize the rhythms of male and female. There are many mutual and reciprocal acts. Often these tend to become social, and co-operative nesting and communal activities, with definite influences on the breeding cycle and certain advantages accruing, arise, sociality probably reaching its zenith with colonial sea-birds.

The significance of display is naturally dealt with, in such a work as this, chiefly from the psychological aspect, but the author, in dealing with the implications of related ceremonies, suggests that homologous customs are deeply significant and may be evidence of closer relationships than are admitted in systematic classification.—C.E.B.

Obituary

W. J. PAGE

Mr. W. J. Page, late of 'Quinby Apiaries,' Emu Vale, Queensland, died on September 30, 1942, and is survived by a widow and five adult children. He had been a member of the R.A.O.U. since 1924.

Although not a contributor to *The Emu*, Mr. Page, an apiarist of ability, was one of those out-of-doors men to whom the bush and the birds made a strong appeal, and his interest produced a knowledge and an enthusiasm that was transmitted to his associates. He presented to the R.A.O.U., some years ago, a number of well-prepared skins of birds collected locally. He held a diploma of taxidermy issued at Omaha, U.S.A.—C.E.B.