

STATUS OF THE YELLOW ROSELLA

By ERHARD F. BOEHM

The affinities of the Yellow Rosella (*Platycercus flaveolus*) present an intriguing problem for the taxonomist. Its range has recently been stated by Serventy (2) to be "curiously restricted to the river-gum zone (*Eucalyptus camaldulensis*) of the Murray-Darling river system . . ." However, he draws attention to the interesting cline series in the Mount Lofty and Flinders Ranges, and suggests that these should be placed with *flaveolus*. Nevertheless, Serventy does not give any data indicating that there is contact between *flaveolus* and *adelaidae*.

Condon (1) considers the Yellow Rosella and the Adelaide Rosella to be races of the Crimson Rosella (*P. elegans*), apparently in the belief that the two former populations make contact and merge.

Recent field investigations and other inquiries by the present writer have now established the following facts:

(a) There is a very sparse intergrade population of Rosellas closely resembling *flaveolus* on the Mount Mary Plains, west of the North-West Bend of the Murray River, which overlaps the eastern range of *adelaidae* to an extent of about 20 miles. These birds have the small size of *flaveolus*, but are distinguished by having slightly more orange-red on the upper breast. They inhabit a region of tall mallee scrub receiving generally less than 10 inches of rain per annum. Of two pairs of Rosellas seen to fly separately to a tall mallee tree and settle for a few minutes, 2 miles east of Sutherlands, one pair was typical *adelaidae* while the other pair was the mallee form of *flaveolus*. This form of the Yellow Rosella has been seen north of Bower, and also east of Annadale. Mr. H. T. Condon has informed me that the South Australian Museum has two skins from near Robertstown, which, from his description, appear to belong to this mallee form. It seems likely that further investigation will reveal that the population, although evidently an intergrade one, deserves subspecific recognition.

(b) On several occasions individuals which are a distinctly yellowish type of *adelaidae*

have been observed apparently mated to normal individuals of *adelaidae*. Also, birds have been seen which represent various stages between the two extremes.

(c) The majority of Rosellas in the region of the 10 inches annual isohyet are typical *adelaidae*, and some of these sometimes wander along creeks and watercourses leading eastward towards the Murray River.

While it has been established that the very red form of Adelaide Rosella (*fleurieuensis*) does not make contact with *P. elegans victoriae* in the region of the Murray Mouth, it is uncertain that the northern yellow population (*subadelaidae*) in the Flinders Ranges is in contact with *adelaidae*. Possibly the development of an ecological barrier prevents contact in the north as well as the south, and it may date from mid-Recent times. The population of *elegans* on Kangaroo Island (*melanoptera*) is isolated by the sea.

Altogether, it does not tax one's imagination more to consider the small, pale *flaveolus* as conspecific with *elegans* than to regard the large red *fleurieuensis* as a race of *flaveolus*.

Serventy has made a notable contribution to Australian ornithology by his elaboration of the concept of the role of Bassian and Eyrean faunal regions, yet the imperfectly understood nature of the climatic and ecological fluctuations of Holocene times probably affected the various species concerned differently according to their geographic ranges and their genetic constitutions.

In my opinion Condon's concept of *P. elegans* as a widely distributed species comprising a series of geographic races ranging from large red forms of moist regions to the small pale form in the Murray-Darling River system is most acceptable.

References:

- (1) Condon, H. T., 1941, *Rec. S. Austr. Mus.*, VII, 135-7.
- (2) Serventy, D. I., 1953, *Emu*, 53, 131-145.