

The Food of the Red-Capped Parrot *Purpureicephalus spurius*

By W. B. ALEXANDER, M.A., C.F.A.O.U., M.B.O.U.

In *The Emu*, vol. xxix., p. 33, the late Dr. J. A. Leach writes as follows of this species:—"It is a highly specialised form intimately associated with the beautiful, red-flowering eucalypts (*Eucalyptus ficifolia* and *E. calophylla*) of the south-west. It has a long, narrow, hooked bill suited to extracting the small seeds from the hard, woody, pear-like seed-boxes of those famous and beautiful 'flowering gums' so often grown in parks and gardens as ornamental trees." Whilst it is naturally attractive to explain the presence of a peculiar bird in a comparatively limited area as due to its adaptation to some peculiar condition of the locality, it appears to me that it is impossible to accept the explanation suggested by Dr. Leach in this case, when all the known facts are considered.

My reasons for rejecting the theory are first, that the "King Parrot," as it is called in Western Australia, is quite common in districts where neither of the trees mentioned occurs, and secondly, that from the evidence available it would appear that the parrot feeds on a variety of fruits and seeds in addition to the seeds of eucalypts.

Dr. Leach's theory is doubtless based on the observations of Messrs. Milligan and Ashby, indeed it was the latter ornithologist who first suggested a connection between the form of this parrot's bill and the seed-capsule of the Western Red-Gum (*Eucalyptus calophylla*). Mr. A. W. Milligan wrote an account (which was published in *The Emu*, vol. ii.) of a visit he paid to the Margaret River district, and referring to this parrot he said:—"I observed several pairs of these birds, but only in the red-gum trees. Whilst sitting at lunch one day during my first visit, under the grateful shade of a red-gum tree, I was struck on the head by one of its cup-shaped seed capsules. Attributing the falling to natural causes, I paid no further attention to the circumstance until I was struck with a second and third capsule. Examining them I found they had been freshly gnawed close to the stem. After closely scanning the thick foliage at the top of the tree, I could just see through the very thick leaves the form of a bird. A well-directed shot secured for me a very handsome male bird of this species."

Mr. Ashby wrote:—"In May, 1889, I saw a good many of this interesting parrot near Kojonup, W.A.; they were almost always to be found feeding in the W.A. Red-Gums

(*Eucalyptus calophylla*), which grow chiefly on the iron-stone ridges. The strong and unusually long upper mandible of this parrot is an instrument well fitted to extract the seeds out of the large and wooden fruit of this gum." (Mathews' *Birds of Australia*, vol. vi., p. 389.)

It will be seen that in both cases it was the Red-Gum (*Eucalyptus calophylla*) on the seeds of which the parrots were found feeding. This tree is so called because it exudes a red gum similar to that which has earned for its eastern relatives the name of Bloodwood; its flowers are white, or, very occasionally, pink. I know no evidence at all connecting the Red-capped Parrot with the Red-flowering Gum (*Eucalyptus ficifolia*) "often grown in parks and gardens," but in a wild state confined to a very limited area, which has been visited by very few naturalists. I doubt whether there is any definite record that this parrot occurs in the area where these trees grow wild, though it is quite probable that it does so.

Eucalyptus calophylla is a species confined to the region of good rainfall in south-western Australia, but *Purpurecephalus spurius* extends into the drier country further east. Mr. Tom Carter wrote that about Broome Hill "they live a good deal in the Mallee timber (*Eucalyptus occidentalis*) and Marlock scrub east of the Great Southern Railway" (North's *Nests and Eggs*, vol. iv., p. 443). I met with them on the Warperup River, near Laurier, further to the south-east in February, 1920, and in *The Emu*, vol. xvi., p. 32, I recorded their presence at Bremer Bay on the south coast still further east. The sole trees in this locality, as recorded in my article, were the Yate (*Eucalyptus cornuta*) and the Peppermint (*Agonis flexuosa*). Both these trees have quite small seed-vessels.

Apart from the observations of Messrs. Milligan and Ashby already quoted, the following appear to be the only other records of the food-habits of this parrot. Gould, in his Handbook, doubtless quoting Gilbert's observations, wrote:—"It is usually seen in small families feeding on the ground, but upon what kind of food it subsists has not been ascertained." Mr. Tom Carter has written:—"I have seen a good many on the Blackwood River, shot in company with *Barnardius semitorquatus*, while eating fruit in orchards." (North's *Nests and Eggs*, vol. iv., p. 443). He has also stated:—"They seem to feed a great deal on the ground, especially in the Marlock scrubs about Broome Hill, but what seeds they were eating I could not ascertain." (Mathews' *Birds of Australia*, vol. vi., p. 388). I can add to these few records an extract from my notes, made in February, 1920, that along the Warperup River they were

"seen feeding on the cones of the She-oaks (*Casuarina*), which they bite into and drop before they are half finished."

Further observations on the habits of this unique and interesting parrot may be commended to the ornithologists resident in south-western Australia.

Australian Ground Thrush. — The Australian Ground Thrush (*Oreocincla lunulata*), though slightly larger, bears a close resemblance in appearance to the English Song Thrush, but its nests and eggs are very similar to those of the English Blackbird. All three species are classed together under the same family group. The Ground Thrush is still common in the damp gullies through many parts of Gippsland. In former years it was one of the commonest birds in the tea-tree belts along the eastern shores of Port Phillip Bay, but it has since been compelled to forsake many of its favourite haunts through the extension of settlement.—D. J. DICKISON, R.A.O.U., Melbourne.

Reviews

[A Handbook of the Birds of West Africa. By George Latimer Bates, M.B.O.U. (John Bale, Sons & Danielson Ltd., Publisher, Oxford House, London.) Price, 30/-.]

This book is a record of 30 years of diligent observation by the author amongst the birds of the West African region bounded by the parallel of 20° north and 2° south and the meridian of 14° east. One of the two accompanying maps illustrates the extent of the territory covered and comprises that portion of the African continent between Senegal and Gambia on the west and French Cameroon on the east, whilst extending northwards across the southern part of the Sudan and the French Territory of the Niger. The other map shows the types of country, and there is a chapter dealing with the physical features with notes on the predominant birds in particular areas.

A feature of the book is the bringing together as near as possible of groups thought to be related. There are short notes on the various orders and keys to the genera preceding the subdivision into species. To aid the student of ornithology the book is prefaced by a guide to the method adopted in the measurement of birds as well as an explanation of the terms used.

The publication is an admirable addition to the meagre records of the birds of that area and the author's original field notes and the scientific nomenclature make the work an essential for use by the systematist as well as for the