

In 1931 Mrs. Black undertook the compilation of a history of *The North Queensland Pioneers*, which is one of the most interesting books on that subject that has been published in recent years. Throughout her long life Mrs. Black was a keen lover of nature and did good service in promoting an interest in Australian birds and wildflowers amongst young people.—D.J.D.

Reviews

Western Australian Ornithology.—*The Western Australian Naturalist*, vol. 2, no. 5, September, 1950, is mostly devoted to bird matter. S. R. White ('Plumage changes in the red-shouldered Wrens (*Malurus*),' p. 121) gives detailed observations of the plumage sequences in the Morawa district of the *Malurus lamberti*/*M. pulcherimus* series and reports having failed to observe any fully-plumaged males in the winter months. V. N. Serventy ('Fairy Terns on Rottnest Island,' p. 126) gives field notes on a nesting colony, which in the 1949-50 season contained 234 pairs; a different site is chosen each season. L. Glaucert and D. L. Serventy ('Plumage changes in the Wandering Albatross,' p. 129) discuss three specimens received at the W.A. Museum in 1945 and include photographs of the ventral and dorsal surfaces with the wings outspread. The oldest is a bird in the 'snowy' phase (*chionoptera* of the older authors). An interesting point is revealed that the supposed reddish eyelid reported by some observers is really a post-mortem effect.

Among the 'From Field and Study' paragraphs is an item by S. R. White, accompanied by a splendid photograph, describing the nesting of the Little Grebe literally in the foliage of a jam tree (*Acacia acuminata*). The seeming paradox is explained by the site being a country dam, bare of vegetation and the only anchoring means available was a pendent spray of the tree. Mrs. Rica Erickson refers to bowing displays in the Rufous Whistler, which may be used both in courtship behaviour and in territorial disputes; "a knowledge of the boundaries of the territories of the birds concerned helps to decide the meaning of the whistlers' behaviour since courtship is conducted within a territory, while territorial disputes are usually held on its boundary."

A. Snell reports an instance of the Black-throated Butcher-bird mimicking the Blue-winged Kookaburra, and A. Robinson a case of the Grey Butcher-bird feeding on grapes. E. H. Sedgwick has a note on a Mulga Parrot (a male accompanied by a female) flying at its reflection in a window.—D.L.S.

Birds of Paradise and Bower Birds.—For those who have studied them in life, there can be little doubt that the birds of paradise are the most fascinating group of birds. They have everything—beautiful colour, exquisite feather structure, wonderful dances and displays, and a remarkable ecology. They would be an ideal group for someone to monograph and popularize. The mere description of their habits would make a fascinating story; to discuss the principles of their distribution, speciation, and general evolution would direct on these birds the limelight which they truly deserve.

Tom Iredale's *Birds of Paradise and Bower Birds* does not accomplish this object. The volume is clearly printed on fine paper and handsomely bound. This exhausts the only unreserved praise one can give to it. The plates have the advantage of completeness in that they illustrate all the described species, as well as nearly all of the hybrids. I have not seen the originals of Lilian Medland's paintings, but in the reproduction they often appear either wooden or, on the contrary, Audubonesque, and are not in the same class with work of artists like Lodge, Henry, Kobayashi, Fuertes, or Sutton.

In the reproduction the colouring often has only a faint resemblance to the birds themselves.

At that, the plates are far superior to the text, which is a typical example of Tom Iredale's writing with its Pythian style and chaotic arrangement. With its excessive attention to nomenclature and to tedious and historical taxonomic detail, the book, as a whole, strikes one as a throwback to an earlier generation of ornithological literature. The long-winded descriptions make dull reading, but, worse than that, the discussions of the various species are full of errors. It would be a waste of paper (and would require several *Emu* pages) to set them all straight, but this is unnecessary since these matters are correctly stated in the current literature on these birds (Stresemann, Junge, Stonor, Rand, Mayr, etc.).

There are one or two points of principle that are worth mentioning. One of the hardest things in science is to prove that a given interpretation of observed phenomena is correct. Often enough conclusions that were once accepted as correct are eventually proved invalid after further facts have come to light. The story of the bird of paradise hybrids is a good illustration of this. In the decades from 1870 to 1910 hundreds of thousands of birds of paradise skins passed through the hands of plume dealers, like Bruijn and Mantou, and of government officials, like Bensbach and Duivenbode. Most of these skins belonged to the common species, but occasionally something rare turned up, like *Astrapia splendidissima* or King of Saxony Bird of Paradise. These rare novelties came from the then unexplored mountains of the interior and reached the coast by devious trade routes. The homes of these species were eventually discovered when expeditions reached the Weyland Mountains, Snow Mountains, and other ranges of the interior. But when the exploration of the previously ornithologically unknown parts of Dutch New Guinea had been virtually completed, there were still about twenty so-called species of birds of paradise left of which the native range remained unknown. Most of these were based upon skins of single males culled from the myriads of trade skins. Still believing that these were representatives of rare species, Lord Rothschild sent me to New Guinea in 1928 for the express purpose of finding the native home of these birds in some of the isolated mountain ranges.

While I was vainly combing the Arfak, Wandammen, and Cyclop Mountains, Meise studied the type of one of these rare birds in the Dresden Museum and discovered that it was so precisely intermediate between two well-known species that no doubt could exist as to the hybrid nature of the specimen. Stresemann followed up this lead and systematically examined the types of each of the problematic birds of paradise. To his utter surprise, every last one of them was more or less intermediate between two well-known species. He therefore suggested that all those that were intermediate between two well-known species and were rare or unique and of unknown origin were hybrids. Twenty years have passed since Stresemann published (1930) this solution of the 'rare bird of paradise' problem. Since then numerous further expeditions have gone to many previously unexplored parts of New Guinea without finding the native home of even a single one of the birds that Stresemann had unmasked as hybrids. As a result, all recent authors have accepted the hybrid hypothesis. This makes Iredale very unhappy, for he complains that in my *List of New Guinea Birds* "no fewer than twenty described forms [are] being dismissed as hybrids, the most astonishing debacle in ornithological history."

But let us go back to a discussion of the principles of scientific theory. When the birds of New Guinea were poorly known, it was a sound working hypothesis to describe unique specimens as new species. Now that expedition after expedition has searched repeatedly every one of the mountain ranges that was accessible to plume hunters, without finding the native home of the so-called rare species,

the hybrid theory is a far better working hypothesis. To 'prove' it would be difficult because no one has yet successfully crossbred birds of paradise in captivity. However, the hybrid theory is further supported not only by the pronounced intermediacy of most of the 'hybrids' but also by analogy. Natural hybrids occur quite frequently in certain families of birds, particularly those which (as the ducks, grouse, and humming birds) have no pair formation or only a loose one. The birds of paradise are a family of such habits. There is nothing fantastic about the hybrid interpretation; on the contrary, it fits the known facts admirably.

The wonderful and extensive literature on the displays of birds of paradise, particularly as described by Crandall, Friedmann, Seth Smith, Stein, Stonor, and many others, is utterly ignored by Iredale. The careful anatomical work on the relationships and phylogeny of the birds of paradise by Stonor is not mentioned, in fact, I did not find anywhere a reference to the name of Stonor, one of the foremost students of the group. The introductory chapter is sketchy, except for a very readable historical account. Throughout the text many proposals are made for a new phylogenetic arrangement, but not a single concrete fact (anatomical or otherwise) is presented that would substantiate such claims as this: "... the smaller Sickle Bills. From here the true Birds of Paradise may be reached with the strange Blue-bird as probably a more aberrant member of the Rifle Bird series. Standing alone come the Manucodes, finishing with some false Birds of Paradise, such as Wallace's which is obviously only a glorified Friar Bird [*Philemon*, *Meliphagidae*], and the Enamelled, which may be anything save a relative of any of the foregoing. A bird like *Macgregoria* may be a Honey Eater ... " Merely a study of the displays would show that the suggested relationships are absurd.

Some of Iredale's confusion may be due to the limited material available to him. His inability to distinguish *Manucodia jobiensis* from *M. chalybatus* is explicable only if he has never seen any *jobiensis*. *M. jobiensis* differs from *chalybatus* so clearly by several characters (of which the narrowed, not swollen base of the culmen is the most conspicuous one) that no other recent author has had any difficulty telling them apart.

Iredale claims that in the genus *Paradisaea* the forms *augustae-victoriae* and *raggiana* co-exist in the same localities (p. 130). It would indeed be interesting to get proof for such an assertion, since the series *salvadorii/raggiana/intermedia/granti/augustae-victoriae* indicates complete intergradation between the two forms. Since *salvadorii* lives along the rivers that drain into the Gulf of Papua and *augustae-victoriae* on the uppermost Ramu, there is a possibility for a meeting of the two forms, if there is a break in the watershed that is low enough. No evidence for this has so far been published.

In the accounts of the bower birds, again most of the interesting recent observations on their habits have been ignored.

It seems a pity that so much money was invested in an effort so unworthy of the high traditions of Australian ornithology. Iredale's book does not fill the need for an attractively written and informative book on the birds of paradise and bower birds.—Ernst Mayr.

A member of the Council will be in attendance at the Union room, 386 Flinders Lane, Melbourne, at 8 p.m., on the evening of the third Thursday in each month, commencing in January, 1951, for the purpose of facilitating access to the library and attending to requirements of members.

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