Book reviews

Edited by P. Dann

THE BLACK EAGLE — A STUDY by Valerie Gargett

1990. Acorn Books and Russel Friedman Books; Randburg. Pp. 279, colour plates 40, b&w figures 53, numerous b&w sketches, tables 60, 215 x 280 mm. \$100.

This very detailed monograph documents the results of a 22-year study of the Black Eagle Aquila verreauxii in the Matobo Hills in Zimbabwe. It is a tribute to the dedication and persistence of the author, Valerie Gargett, and her amateur helpers, the members of the Black Eagle Survey Team. As well as working in a difficult terrain, the team had to cope with many adversities such as the threat of terrorism and uninvited egg collectors. The period of the survey covered in the book (1961-1983) makes it one of the longest studies of a bird of prey anywhere in the world and it is pleasing to note that some aspects of the study continue to this day, even after Valerie and husband Eric retired to Australia in 1985. The 1991 breeding report from Zimbabwe shows 43 occupied territories from which 14 young were reared.

The 16 chapters cover the biology of the Black Eagle in great detail, starting with appearance, postures, flight patterns, territory studies and hunting, through the breeding cycle to dispersal and survival. For example, two and a half pages are devoted to just nest materials and how they are obtained. Despite the detail, the book is eminently readable, perhaps because all the tables have been banished to the end, leaving us only the text, illustrations and figures to cope with. In addition to the Black Eagle, the book provides information on some of the other raptors in this species-rich region, where 50 raptors occur and 32 breed.

The Black Eagle, our Wedge-tailed Eagle A. audax and the Golden Eagle A. chrysaetos are the three largest members of the genus. Their biologies have many similarities but there are also some interesting differences. Valerie Gargett made a special study of one such difference — the occurrence of sibling aggression or the 'Cain-and-Abel Struggle'. This phenomenon, where the first-hatched nestling attacks and kills its sibling, occurs occasionally in Golden and Wedge-tailed Eagles but invariantly in the Black Eagle. In the latter, although the usual clutch is two and both eggs normally hatch, never are two chicks reared to fledging. The larger, firsthatched Cain batters Abel to death, sometimes within 24 hours of Abel's hatching. Field experiments by Gargett provide some insights into this phenomenon, fuelling the controversy as to how such behaviour could have evolved.

The Black Eagle is well-written and incorporates information from Gargett's 29 scientific papers as well as new work and illustrations not previously published. She gives fulsome credit to Peter Mundy who was the scientific editor. I found the paintings by Graeme Arnott and sketches of Robert Davies, although not necessary, added to the aesthetic appeal of the book. I highly recommend it for all students and lovers of raptors.

M.G. Brooker

THE BIRDS OF PAPUA NEW GUINEA: INCLUDING THE BISMARCK ARCHIPELAGO AND BOUGAINVILLE, VOLUME I, NON-PASSERINES by Brian J. Coates

1985. Dove Publications; Alderley, Queensland. Pp. 464, colour photos 493, line drawings 44, b&w maps 362, 305 x 220 mm, \$110.

THE BIRDS OF PAPUA NEW GUINEA: INCLUDING THE BISMARCK ARCHIPELAGO AND BOUGAINVILLE, VOLUME II, PASSERINES by Brian J. Coates

1990. Dove Publications, Alderley, Queensland. Pp. 576, colour photos 557, several line drawings, b&w maps 366, 305 x 220 mm. \$140.

These two volumes deal with the approximately 740 birds of Papua New Guinea as a political area, thus excluding the western half of the island, Irian Jaya, but including the Bismarck Archipelago and the Admiralty Islands. These islands are not covered by any other works but have 46 endemic species out of the Papuasian subregion's total of 473 endemic species.

Volume I has an introductory section which discusses the avifauna and its origins; physical features and climate of the country; vegetation and the bird habitats; and certain features of the avifauna, such as its ecological distribution, and the itinerant mixed-species feeding flocks.

Volume II also has an introductory section which includes a discussion of the sequence of families in view of the new classification proposed by Sibley *et al.* (1988). Some of the proposed changes have been implemented for the passerines, so that related species have been grouped together. For example, the two melampittas are now included in the birds of paradise, and the longbills removed from the honeyeaters and placed with the berrypeckers. This is a good compromise while consensus is awaited on the new proposals.

Each volume has its own bibliography and indexes but Volume II also has appendices that list the species recorded from Irian Jaya and the Solomon Islands as well as additions and corrections to Volume I.

Each species has its own account which comprises description, distribution, habitats, altitudinal range, relative abundance and notes on habits, behaviour and breeding as well as a map of the Papua New Guinea distribution. If there are no photographs, line drawings supplement some of the accounts and they often show the display postures of the species.

The species accounts comprise the main body of the work. About two-thirds of the species are illustrated with colour photographs, the majority by the author. Many of these photographs are spectacular which attest to the skill and patience of the photographer. Because they are so shy, it is very difficult even to get a good view of many forest species in Papua New Guinea unless you lie down on the forest floor and wait.

The accounts vary in length and detail because some species are hardly known at all and others, although only visitors or vagrants to Papua New Guinea, are well known elsewhere. The meat is mainly in the accounts of the endemic species. There is a wealth of wellpresented information and discussion with up-to-date references. The birds of paradise and the bowerbirds are particularly well done and copiously illustrated. Much recent work and many photographs by other workers are brought together to cover over 150 pages.

The accounts are based on the author's own observations, published records and '... personal observa-

tions gleaned from friends and acquaintances' during his 13 years residence in the country. I knew the author for some of those years and valued his encyclopaedic knowledge as well as his observational skills. He still visits Papua New Guinea and, with Roy Mackay, found and described the first known bower of the Fire-maned Bowerbird Sericulus bakeri in 1986.

The author himself has probably seen most of the species treated but all references and observations by other people are acknowledged and assessed. Any disagreements are noted. As an example, the two black spots on each side of the hind neck of the Yellow-billed Kingfisher did once startle me when I came on the bird from behind, so that I would incline to agree with Bell (1981) that they mimic large staring eyes. The author says that he has no evidence to support this.

I have read most of the species accounts. The publishers describe the work as the first definitive account of the bird life of Papua New Guinea. I think they are correct. The work is monumental. It is an essential tool for those of us that are interested in New Guinea birds. As a work of reference it should have a place in any serious ornithological collection. The photographs could well form a collection on their own; they are quite magnificent.

The books are well produced and may well be considered expensive but they constitute a unique compilation of material gathered over many years.

References

Bell, H.L. 1981. Information on New Guinea Kingfishers, Alcedinidae. Ibis 123, 51-61.

Sibley, C.G., J.E. Ahlquist & B.L. Monroe Jr. 1988. A classification of the living birds of the world based on DNA-DNA hybridisation studies. Auk 105, 409-423.

Geoff Swainson

REQUEST FOR REPRINTS ON OWLS

Authors of articles or publications dealing with owls wishing them to be listed in the second edition of a Working Bibliography of Owls of the World are asked to send reprints to Richard J. Clark, The Owl Bibliography, c/o Department of Biology, York College of Pennsylvania, York, PA USA 17405-7199