REVIEWS

The Age of Birds. A. Feduccia, 1980. Harvard University Press (distributed in Australia by Harper & Row, Artarmon, NSW), 196pp. rrp \$A32.95.

In his preface, the author states that his objective is 'to tell the story of the evolution of birds in a way that will appeal to people of diverse interests'. The author could not have penned a better brief description of the illuminating aspects of the origins of feathers, flight and birds which are so superbly written and illustrated in the chapters that follow.

The book contains a wealth of fascinating information commencing with the discovery of the first *Archaeopteryx* fossil in 1861 and the arguments as to whether this was in fact a flying reptile or the first 'bird'. This fossil was found only two years after Charles Darwin published *On the Origin of Species* and had a profound influence on the acceptance of the concept of evolution through natural selection. The author discusses the various theories that have been advanced to explain how and why feathered reptiles and flight would or could have evolved, the ancestry of birds and the evolution of flight. Separate chapters dealing with the multitude of bizarre adaptations, including dead ends, which led to the evolution of toothed birds and divers, shorebirds, ducks and waders, birds of prey, the evolution of flightlessness, and the rise of land birds are splendidly explained and copiously illustrated.

Professional and amateur ornithologists, bird watchers and non-birdos, will all find this book fascinating and engrossing reading. It is a comprehensive and easily read account of the evolution of birds. This book provides the reader with an understanding and appreciation of the evolutionary adaptations that resulted in the incredible diversity of both extinct and extant bird life. It explains the study and presents the story of avian evolution in a way that makes sense. It is a most interesting educational natural history book, which is well worth having.

J. W. Hardy, Lisarow, NSW

AUTHOR'S COMMENTS ON THE CORELLA REVIEW OF BANDER'S AID

We are grateful to the ABSA for allowing us to comment on the review of *Bander's Aid* which appeared in *Corella* 11(2): 71-72. We would have welcomed objective and constructive comment: this is not provided by the review which, while approving our methods and approach, does not, we think, give a balanced view of *Bander's Aid*.

The review contains an inadequate description of *Bander's Aid*, its format and aims, so the opportunity is taken to provide this here. *Bander's Aid* is the first book on ageing and sexing birds in Australia since *Bird in the Hand* in 1974. It is based on the study of live birds and was written to provide banders in the field with some of the information they need to age and sex the birds they eatch and with the expressed intention that banders will work co-operatively to extend its

coverage. David Purchase wrote the foreword, David Henderson and Bob Green prepared descriptions of nine Tasmanian endemics, Peter Congreve described three honeyeaters which occur in Western Australia, and Anthony Roberts described six introduced species. Several descriptions contain information from other banders throughout Australia. The descriptions give, where known to us, a general comment on the species (in many cases), characters for ageing and sexing, notes on moult and breeding, effects of geographic variation, basis of assigned age codes and sex, measurements (usually wing length, total head length, tail and weight), methods of sexing species that are dimorphic in size but not plumage, and numbers and atch locations of live birds on which the descriptions are based. There are appendices on interpretations of the banding scheme age codes, moult and statistical analysis. Twenty people commented on drafts of Bander's Aid.

The review states that we have failed to examine the published literature, particularly *Bird in the Hand.* We identified the literature that we have used and state clearly that we only quote from it when it provided a consensus. We found *Bird in the Hand* of little help, with one exception. It covers only 28 of the 112 species described in *Bander's Aid*, makes little mention of geographical variation, usually does not give numbers of birds studied, does not say where (or if) they were collected or caught, makes almost no mention of soft parts or moult, presents very little biometric information, and ignores several important ageing clues.

The review implies that we draw invalid conclusions based on small numbers of birds, but gives no examples. Species for which we have few data were included either to draw attention to practical points of handling the species or to present information, not described elsewhere, which might help the bander who catches the species. Where we do draw conclusions on small numbers of live birds (e.g., Painted Button-quail), we have supplemented our data with studies of museum specimens. This is explained in the introductory chapters.

We would take issue with the review on three technical points. First, our detailed description of cloacal protuberance is based on L. Svensson's Identification Guide to European Passerines and on our examinations of the cloacas of several thousand live birds, confirmed in many cases by independent sexing criteria. The development of breeding condition can change the shape of the whole cloacal region in some species, allowing an indication of sex of individual birds. It is not just the bulge behind the cloaca that allows sexing. We know and have reported that the huge bulge behind the cloaca of blue Superb Fairy-wrens is absent, at least in some parts of Victoria, when the species is not breeding. The review seems to have missed our statement to this effect.

Secondly, the review questions our use of the word "eclipse". We have used this or "eclipse phase" or "eclipse condition" as convenient labels to describe changes in plumage and/or soft part colours exhibited by some adults of some species often after breeding. No causal connection between these changes and breeding has yet been established.

"Eclipse" seemed to us the best of bad choices to describe this condition, at least until someone comes up with a better term. We accept that we should have made our usage of this term explicit.

Thirdly, the review says that we do not properly distinguish juveniles from immatures. The numerical age code system adopted by the banding scheme, applied throughout Bander's Aid, gives a scale on time whereas the adjectival system to which the review refers (adult, immature, etc.) is based on stages in birds' biological development. The two systems are essentially different. Our usage of the J code to fix as closely as possible the time of fledging is explained precisely in an appendix (not mentioned in the review). It is developed from the system used throughout Europe, which has two age codes for juveniles.

We do not, as the review states, point out the limitations of our data; we do question the inferences that can be drawn from them and stress throughout *Bander's Aid* the need for conservative judgements. The review also comments (correctly) that the birds we have studied were caught in Victoria. It then concludes that "This is why the book fails to be a reliable aid to ageing and sexing". Later, it dismisses *Bander's Aid* as a "band-aid" (sic) on the basis of arguable comment on four species. Yet the review does not establish a single instance where use of *Bander's Aid* will lead to an invalid age code or sex being assigned.

An example of this is provided by the Sacred Kinglisher. The review claims that we describe first-year birds as adults. This may be correct: we have, however, applied a conservative calendar age code (1+) which cannot mislead banders. At the same time, we describe a juvenile which was found dead below the nest. This is most similar to the first winter immature description in *Bird in the Hand* which cannot be considered definitive on this species. There is clearly more to be learned.

On the Grey Shrike Thrush, the review states that the most obvious field character separating the sexes is the eye ring. This may not be so obvious in Victoria. Certainly the most obvious character of birds in the hand is bill colour; it is also the most useful, as all but very young birds can be sexed on it.

The literature lacks consensus on eye colour differences in Horsfield's Bronze-Cuckoo and on a description of the juvenile Eastern Spinebill. *The Readers Digest Complete Book of Australian Birds* is the only source which mentions eye colour differences in the cuckoo, and its colours differ from the observations reported in *Bander's Aid*. The juvenile description of the Eastern Spinebill in *Bird in the Hand* differs from that in K. Simpson and N. Day's *Birds of Australia*, and is similar to what we have called an "age 1, immature" bird.

The review seems not to have recognized our purpose in publishing Bander's Aid. We write, "Our hope is that... banders in Australia will work together to fill the many gaps in our knowledge and that subsequent editions... will approach comprehensive coverage". We also say that, "... we will be pleased to receive any comment on this edition... and to receive new information for inclusion in future editions". The review will have done little to encourage such contributions or support for our purpose.

The correct title of our book is *Bander's Aid: A Guide to Ageing and Sexing Bush Birds*. There are five authors, not three. The price is \$17.50 plus \$2.50 for postage. It is available from A. Rogers, Lot 17, Ninks Road, St Andrews, Vic. 3761.

Ken Rogers Annie Rogers Danny Rogers Brett Lane Bruce Male

DATA EXCHANGE

Nestlings of the "Little" Cormorants

The nestlings of the Little Black Cormorant *Phalacrocorax* sulcirostris and the Little Pied Cormorant *P. melanoleucos* are both dark plumaged. This may be confusing for banders when handling these birds for the first time. Both species frequently nest in the same colony and the young birds, prior to flying. climb over the nesting trees or drop into the water below.

The problem of separating the two species can occur. However, the unfeathered skin on the head of the Little Black Cormorant is a pale bluish colour while that of the Little Pied Cormorant is a rusty brown.

S. G. Lane, Lot 6 Fairview Road, Moonee via Coffs Harbour, NSW 2450

New Members

FARMILO, B., Meringur, Vic. HARDY, M., Lisarow, NSW MOSS, M., North Sydney, NSW O'CONNOR, G. B., Edgeworth, NSW POETER, Dr. B. D., Ardross, WA RICHARDS, G. E., Maclean, NSW ROBERTS, J. P. Belmore, NSW SCHOEPFER, M., Bundoora, Vic. STRAW, P., Engadine, NSW