## **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.

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## 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 Pusserines* 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 "celipse". We have used this or "celipse phase" or "celipse 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.