Book reviews

Edited by P. Dann

A GARDEN OF BIRDS: AUSTRALIAN BIRDS IN AUSTRALIAN GARDENS by Graham Pizzey

1988. Penguin Books: Melbourne. Pp. 342, col. photos 32, b&w photos 50, b&w drawings 18, 185 x 255 mm. \$49.

This is a book which everyone can enjoy, as she/he shares the author's knowledge of, and enthusiasm for, all aspects of Australian wildlife and appreciates his vivid and evocative descriptions.

Those who like an historical perspective will find rnuch to interest them in the early chapters on the problems which beset the first colonists when they tried to establish vegetable and flower gardens. This was followed by the introduction of British gardening and farming practices which favoured the deliberately-introduced exotic fauna with devastating affect on the Australian landscape and wildlife. Many Australian gardens still retain the characteristics of these early British models, with neat lawns, colourful annuals in rectangular garden beds, a few introduced trees and a preponderance of exotic birds.

Pizzey believes the time has now come to rebuild and repair the fringes of our dwindling natural environment, by developing gardens of predominantly native plants which will attract and maintain our native birds and much other wildlife. Such a garden would aim to supply food, shelter, roosting and nesting sites for birds which have, over millions of years, become adapted to living in harmony with the unique Australian flora, a flora which is adapted to the often depauperate soils and landforms where it flourishes. We now have the skills needed for the successful propagation of Australian plants, and an excellent range of suitable plants is available from most nurseries.

The species of birds likely to be found in an Australian woodland garden, which would include groundcover plants, shrubs and trees, are briefly mentioned with some fascinating examples of how a range of species may live together, without undue competition, by selecting different foods, or by collecting food from different areas such as leaves, tree-trunks, or in the air. Photosynthesis and the movement of carbohydrates, protein and other nutrients through the food chain are briefly and simply described. The need to allow natural predators to help reduce plant pests is emphasised.

The gardener who plants a garden with Australian natives appropriate to the area is likely to be rewarded, not only with an easy-care garden, but also with the pleasure of glimpsing a new bird or butterfly, or of hearing birdsong early in the morning or cicadas in the heat of the day. There is a short section on ways of supplying artificial food sources to attract birds and these are illustrated with some colourful photographs. The presence of a pond or some other source of water is also recommended.

Pizzey points out that each bird-garden will be unique, and its success will depend in part on its proximity to other areas of native bushland, other bird-gardens or appropriately planted parks and tree-lined roads. He describes his own garden at Mt. Martha in Victoria, and a number of other bird-gardens which he has visited in the eastern states and comments on their successes and failures.

There is a short discussion on the dangers of further escapes of exotic plants into native bushland, particularly those whose seeds may be carried by birds. Established feral populations of birds are discussed in some detail. I would like to have seen mention of the dangers of allowing aviary escapes, including those of Australian birds not native to the area, to become established in the wild.

The book is illustrated with line drawings by Richard Weatherly, and many coloured and black and white photographs of birds, mammals, insects and other wildlife by the author.

In addition to the references given for each chapter, there is a list of books for further reading, as well as lists of societies for birdwatchers, native plant societies, the common and scientific names of birds, and native and exotic plants.

The well-researched chapters are divided into selfcontained sections, so that it is easy to dip into the book if time is short. It would be a great pity, however, to skip any section. I hope there will be many readers who will feel encouraged to put into practice the principles of making a bird-garden and, in due course, have the satisfaction of enjoying the many sights and sounds of the natural world so ably described in this book.

Joan Paton

THE FOOD OF AUSTRALIAN BIRDS 1 NON-PASSERINES by R.D. Barker and W.J.M. Vestjens

1989. CSIRO: Canberra. Pp. 480, b&w illustrations 57, 180 x 250 mm. \$55.

The aim of the book is succinctly described in a two-

line abstract on page three: 'Stomach contents are listed for Australian non-passerine birds collected from 1963 to 1980, together with results of a search of journals and other literature to the same date.' Items from the literature were only included if gut contents were analysed or a bird was specifically noted eating the item. The foods given refer only to birds on mainland Australia and Tasmania. As is so often the case, terrestrial birds from island outliers, Lord Howe, Norfolk, Heard and Macquarie Islands, are omitted. The brief introduction and methods are followed by four lines of acknowledgements and references to the 17 published works on which the taxonomy used in the book is based.

The main part of the volume consists of 446 pages listing the non-passerines recorded in Australia to 1979 and what has been reliably recorded as their food. A list of 699 references concludes the book. References are numbered and are referred to in the text by those numbers, so there is considerable flicking back to the reference section. For example, the 696 who mysteriously recorded a Musk Duck eating whale blubber was Wood, V.J. (1960) Recovery of a banded Giant Petrel. South Australian Ornithologist 23, 42. However, this system obviously avoids much repetition. Avian taxonomy follows R. Schodde and S.C. Tidemann ([1986] Reader's Digest Complete Book of Australian Birds. Reader's Digest Services Pty. Ltd.). The literature was searched to 1979 (but Frith, H.J. [1982] Pigeons and Doves of Australia. Rigby, Adelaide, is cited). No reason is given for the extremely long gestation period but it is noted on the title page that the junior author (W. Vestjens) died in 1979.

Each family is allotted a section introduced with a full page with family number, family name and a vignette (all but two from *The Atlas of Australian Birds*). In the case of the Struthionidae four pages are used to state 'No information recorded' on the food of the Ostrich in Australia. This is the extreme example but many other families, particularly seabirds, have more blank page than information.

Other criticisms can be noted. The dietary information is usually only the scientific name and an extensive

library is needed to identify many of the food items which are listed by Phylum then Family, Genus and Species (if identified to that level) and if to species the precise form of the food (seed, leaf and fruit for plants; eggs, larvae and imago for arthropods) is not always mentioned. This may reflect the original source in some cases but in several instances where I looked up the reference the precise form was given. No indication of the importance of any item is given. Thus, three species of raptor are recorded as having stomachs containing plant material which was likely to be ingested accidentally but it appears without qualification or notation. It could easily be assumed that some items are normal food when they are actually accidentally or rarely eaten. With so much blank space to each page a system of code letters (e.g. T for trace, U for uncommon, S for significant, O for observation, SC for stomach contents) could have been implemented where it was obvious from the original source. Also there is no indication whether the food was eaten by an adult, juvenile or nestling, or from where in Australia it was recorded.

In spite of these short-comings this is an important attempt to collect the scattered information on the food of Australian birds. It needs to be widely studied and the great gaps in the knowledge of the subject should be tackled now. The seabirds are probably the least known group in this regard and there are many avenues for amateur and professional ornithologists to contribute information. Of all those birds washed up on the beaches some will have identifiable stomach contents. Stomach flushing has been developed into a relatively safe and effective technique for collecting food samples without harming the bird. In addition, for some groups, birds killed on the roads provide a ready and tragically large source of specimens.

The Food of Australian Birds has the potential to launch a thousand research projects and when the second edition appears, the subject should be thoroughly documented.

Spencer Unthank