REVIEWS

Edited by J.M. PENHALLURICK

The Birds of the Soviet Union: a Sound Guide (Russian) by Boris N. Veprintsev. Three 30 cm 33 1/3 rpm long-playing records nos. C90-18023/4, 5/6 and 7/8. 1982. Melodiya, All-Union Studio for Recorded Sound, 32-34 Smolensk Square, Mossow 200, U.S.S.R.

These records, published just in time to be on sale at the 18th International Ornithological Congress in Moscow in August 1982, are intended to parallel the new handbook of Soviet birds being edited by V.D. Ilychev and V.E. Flint. These three are the first of a projected set of twenty-five which will eventually present the sounds of 750 species. Four hundred and fifty have already been taped and are housed in the Library of Natural Sounds of the U.S.S.R. Academy of Sciences at Puschino-on-Oka (address Moscow Region 142292, U.S.S.R.). From this collection the sounds of sixty-three species – four divers and fifty-nine waders – have been selected and published. The total needle time is 117 mins.and 24 sec., an average of 1 min. 52 secs per species. This is a good allowance. The birds' names are announced in Latin by Boris N. Veprintsev, the principal recordist, compiler and scientific curator of the aforementioned archive. Eight thousand copies of each disc were pressed.

Although labelled "stereo" only a few of the recordings were made in stereo. These include the following bands: 2, 4, 6 (00'42") and 14 on the first disc; 6, 10, 13 (01'05") and 15 on the second, and 4, 5 and 13 on the third.

Birders' minds will be boggled by the image behind a recording of the distraction display of a Broad-billed Sandpiper Limicola falcinellus with Ross's Gulls Rhodostethia rosea calling, and Willow Warblers Phylloscopus trochilus singing in the background. Wader freaks will no doubt be 'sent' by the Rednecked Stint Calidris ruficollis that hangs lark-like in the sky for ten minutes pouring out its song. Songs of other northerners like the Spoon-billed Sandpiper Eurynorhynchus pygmaeus, the Far Eastern Curlew Namenius madagascariensis, the Longbilled Dowitcher Limnodromus scolopaceus and Sharp-tailed Sandpiper Calidris acuminata can also be heard. Readers of the recent paper in Ibis (124 (3): 302-320) about the Little Curlew Numerius minutus can now hear the vocal and instrumental sounds of that bird, taped in north-eastern Siberia. And from the diagonally opposite corner of the Soviet Union, the southwest - Central Asia - can be heard the White-tailed Lapwing (White-tailed Plover) Chettusia leucura and the Ibisbill Ibidorhyncha struthersii. The four divers include the Green-throated Diver Gavia pacifica.

Copies of the sleeve notes, translated from the Russian by M.G. Wilson, can be obtained from J. Boswall, Birdswell, Wraxall, Bristol BS19 1JZ.

J.H.R. Boswell

Waterfowl in Australia by H.J. Frith, 1982. Sydney: Angus and Robertson. Pp xiii and 332, col. pll 5 (with facing b. & w. drawings), half-tone pll 4, b. & w. photos 35, b. & w. drawings 38. \$29.95.

A 'revised issue of this classic work': so it is stated on the cover and to it proves to be. First published in 1967, Waterfowl in Australia was reprinted in 1968 and re-issued as a second edi-

tion in 1977 (by A.H. & A.W. Reed). Apparently the opportunity was given to the author to revise the text for the 1977 edition but at that time he did not consider it appropriate, contenting himself just with indicating the more important developments in the field and with listing relevant research articles which had appeared since 1967. Since much of the material contained in the first edition originated from Frith and his colleagues, the inclusion of data from works in progress anticipated their later publication and warranted the procedure and Frith's decision. However, for the 1982 revised edition (now ensconced in the Australian Natural Science Library) further information has been obtained and incorporated.

The book, seen as a standard text when first reviewed in the *Emu* (1968, 68: 154-155), has maintained its status as the years have passed. In the earlier review the internal format of the book was described and with but minor change it still pertains. Within the 332 pages (previously 328), the sections on individual species follow introductory discussion on the Anatidae family, habitat, conservation and field identification. In the initial pages there is but slight modification, but in the 'Conservation' chapter Frith takes additional space to dismiss a recent proposition that the major flood mitigation programs or irrigation impoundments have not had a serious effect on the production and maintenance of waterfowl habitat. The issue deserves further examination and fuller treatment.

Elsewhere some paragraphs have been deleted, replaced or modified but at a relatively minor level and without influence on existing hypotheses. New material has been introduced for some species (e.g. Black Swan) where later studies have classified some aspects of species' ecology, but I was surprised at the omission of any mention of Braithwaite & Miller's 1975 paper on the Mallard (Aust. Wildl. Res. 2: 47-61). There is no mention of recent papers on the need to compare oesophageal contents with those of gizzards, and the influence post-mortem digestion may have on food studies (e.g. Swanson & Bartonek 1970 J. Wildl. Manage 34: 739-46). In quite a different area, there is no discussion of palaeontological findings in relation to the origins and taxonomy of some species (e.g. Olson & Feduccia 1980 Smiths. Contrib. Zool. no. 323). Omitted too, again, is any mention of the role of parasites or disease or both in the regulation of populations, though here there is a dearth of primary material to discuss. Indeed, whilst there are text changes evident, and though the bibliography has been extended by almost 50 entries, that the modifications have been so minor is a sad reflection on the development of our understanding of the relatively few species of Australian waterfowl despite the increasing importance of that resource to an increasing number of hunters.

I have some trivial quibbles to raise. Whilst typographic errors are almost absent (I noted that the sonogram labels for the Plumed Whistling-Duck were absent though a gremlin was not, that Hartert was mispelt on p. 231 and not referred to either), as in the first edition, mensural data are still presented without indication of variability. The first reviewer drew attention to problems with the identification plates. Though they have been redrawn their reproduction is not necessarily improved, and the tonal clarity of some of the colour plates is not as precise as in the first edition (e.g. pl II). More serious is the considerable loss of definition in the replating of the b. & w. photos. In sum, though, faults are few.

The need for habitat conservation is emphasized explicitly or implicitly throughout the book and in my view rightly so, as recent studies in Victoria indicate (e.g. Corrick 1981 Proc. Roy. Soc. Vic. 92: 187-200). Frith is more emphatic: he considers that there has been little progress in the amounts of suitable habitat retained and its destruction continues unabated. The first edition of Waterfowl in Australia was presented in the anticipation that such a consolidated review would 'assist in the general problem of (waterfowl) conservation'. Doubtless it did, as will this revised edition, and it can only enhance the memories of those who had regard for Harry or for his work in the more general field of wildlife conservation.

F.I. Norman

Pigeons and Doves of Australia by H.J. Frith, 1982. Adelaide: Rigby. Pp 304, col. pll 7, b. & w. pll 31, many drawings. 220 × 285 mm. \$34.95.

Harry Frith did not live to see the publication of this fine book. I wish he had. In the late sixties and early seventies Harry embarked on a series of detailed studies of Australian and New Guinea pigeons and gathered staff to carry out the task. As the data were gradually analysed he conceived of this book as a natural follow on from his duck book and as a means of presenting some of the data on these really beautiful animals to the public. One of the major criteria the book had to meet was that it be inexpensive and available to all. Harry argued with his previous publisher who wanted the book produced in limited edition, a most lamentable modern practice amongst ornithologists and publishers, and, not being motivated by profit, he refused to compromise and changed publishers. The book, however, is not cheaply presented and apart from the unfortunate lilac bindings Rigby's have done a good job and the book is excellent value at \$35. It even smells good.

The text is arranged into twenty-seven chapters, the first one dealing with the biology of pigeons and aviculture, the other twenty-five being species accounts with one species per chapter.

There are seven colour plates of pigeons, seven plates of habitat photographs and twenty-four black and white plates in which sixty-six photographs of pigeons are presented. Colour Plate VII by Frank Knight is handsome but the other six plates are not quite as good. The photographs, most of them taken in the wild, are from a variety of sources and every species is represented. They are all interesting and the inclusion of this photographic section was a good idea. I would like to have seen more portrait shots but, unfortunately, few were taken while we had birds in captivity. The text is generously sprinkled with Frank Knight's excellent line drawings.

The first chapter gives a fairly detailed introduction to our pigeon fauna and summarizes much of their behaviour and ecology. Chapter 2 by D.K. Rushton presents avicultural information. All the species have been kept in the aviaries of the CSIRO Division of Wildlife Research and this chapter summarizes the husbandry techniques developed over this period. Each of the species chapters is arranged into subheadings as follows: other names, historical, description, relationships, subspecies, size, field identification, voice, habitat, routine, distribution and movements, food, display postures, breeding season, nest, egg, incubation, development of young and status. Sonograms accompany the descriptions of the calls of twenty-one of the species. The distribution maps are adequate but more information such as the distribution of subspecies could have been displayed for some species. The maps for the Brown Pigeon and Peaceful Dove differ slightly from the distribution given in the text.

The taxonomy used is conservative and it appears that several of the species synonyms are incomplete. The basic philosophy has been to leave the taxonomy alone unless there have been modern data to justify changes. At least it is an improvement on the RAOU Checklist. My treatments of the spinifex pigeons and rock pigeons have been followed but no attempts have been made to rationalize the subspecific treatment of Ptilinopus magnificus and P. regina. I suppose this is understandable. They are enormously difficult species and regina (sens. lat.), in particular, exists as a host of species and subspecies throughout the Pacific. There are some P. dupetithouarsii from the Marquesas that look awfully like P. regina xanthogaster. Similarly the Brown Pigeon has been left as M. phasianella because it and its congeners present so many problems.

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I'm not happy with the occasional lapses in consistency of style with which subspecies are treated. Thus all the subspecies of *Streptopelia senegalensis* are listed but not those of *Columba livia*, and while subspecies of *Geopelia striata* are listed, the plumage characteristics of all are not described.

Lapses in the text are rare, however, (although a comma missing after 'northern Pilbara' on page 268 makes for interesting geography) and the style is pleasantly readable. In particular, there are very few errors in the many plant names recorded under food. Unfortunately plant taxonomists have changed some names since Harry finished the book. Please don't write to me to find out what they are.

The sections on voice include sonograms of several calls. For each species except the Black-banded Pigeon, Rock Dove, Flock Pigeon and of course, the virtually silent Topknot Pigeon. We know the function of most calls of pigeons and the two sections 'Voice' and 'Display' therefore complement each other well. The catalogues of calls appear to be exhaustive and I could find only one call that I know that isn't described. This is a boo! given by Torres Strait Pigeons on rare occasions at breeding colonies.

Distributions and descriptions of movements have been carefully put together. In particular the matter of migration across Torres Strait by Purple-crowned Pigeons is dealt with well. The book concluded that Purple-crowned Pigeons have the capacity to cross Torres Strait and probably do, but that evidence for a seasonal migration to New Guinea is very slim.

Food is dealt with thoroughly but the plethora of plant names, particularly for the fruit pigeons, doesn't make for the most interesting reading. I would like to make one point about the differences found between the diets of the Purple-crowned and Wompoo Pigeons in Australia and New Guinea. The New Guinea data indicate figs to be the major part of the diet. I believe this to be incorrect since the data are from shot samples and therefore biased towards figs. It's easier to shoot birds in figs.

There is a lot of information on breeding of Australian pigeons and virtually all of it is presented in the book. I think it could have been treated less anecdotally for those species for which we have a lot of quantitative data such as Streptopelia chinensis and Geophaps scripta. One has no choice for species for which there are few data. Diagrams of breeding cycles should have been included in the text. The general discussion of breeding and moulting in Chapter I could also have been improved with well thought out diagrams, particularly for the discussion of arrested moult.

The sections on nests, eggs and young are straightforward. Surprisingly, adequate data are still lacking for some species. The incubation periods for the Wonga, Black-banded, and

Partridge Pigeons are unrecorded as is the development of the Wonga Pigeon squabs. For the Squatter Pigeon the only information is from one clutch recorded in 1908.

Finally Harry discusses the status of each species. The conservation situation is not too bad overall. A cheerful note I might add is that Torres Strait Pigeons appear to be increasing in the south of their ranges. Large populations have built up on the islands between Innisfail and Cardwell. They were almost gone from them ten years ago.

All in all this is a good book and a great compendium of what is known about pigeons. I only wish Harry had included the pigeons of New Guinea as I so often suggested, and that a photograph of a Wompoo was used on the dust jacket.

F. Crome

Estrildid Finches of the World by Derek Goodwin, 1982. London: British Museum (Natural History) and Oxford University Press. Pp 328, col. pll (by Martin Woodcock) 8, b. & w. drawings 80, maps 116, dendrograms 12. 225 × 285 mm. f 25 00.

The estrildids, comprising the waxbills, grassfinches, mannikins, parrot-finches and their relatives, are one of the world's major groups of passerine seed-eaters. They are confined to the Old World and largely to the tropics. Goodwin is well qualified to write this book. Working in the British Museum he has at his command one of the finest collections of estrildids in the world. He has had field and aviary experience of many of the species, and he has evidently read much of the extensive literature on them.

The five introductory chapters deal with nomenclature, distribution and adaptive radiation, plumage and coloration, behaviour and biology, and aviculture. Then comes, in systematic sequence, an account of each of the twenty-five genera and 130 species, beginning with the warbler-like ant-peckers (*Parmoptila*) of equatorial Africa and ending with the widespread genus *Lonchura* (here enlarged to include *Padda*).

For each genus (or group of closely related genera) Goodwin discusses relationships within and between the genera, illustrating his conclusions with dendrograms. For each species there is a description, information on field characters, distribution and habitat, feeding and general habits, nesting, voice, display and social behaviour, a range map and references. From the viewpoint of accuracy and completeness the text is excellent. Unfortunately the illustrations do not attain the same high standard.

It would have been more useful to have as many species as possible drawn in colour. However, the too few colour plates are less concerned with systematic coverage than with certain themes. Plates 1 and 2 illustrate respectively some African and Australian species to show the diversity in form and colour on each continent; plate 3 depicts some firefinches and twinspots; plate 4, some parrot-finches; plate 5, some Asian and Australasian mannikins; plate 6, geographic variation within species; plate 7, differences between adults and immatures; and plate 8, sexual differences in coloration, all examples being taken from the cordon-bleu genus Uraeginthus. Woodcock's style, possibly adequate for buntings and fringillids, does not do justice to the sleekness of contour and delicacy of pattern in estrildids. Worse, many of the drawings are inaccurate: the Red-browed Finch is given pale instead of dark eyes; the outer tail feathers of the Beautiful Firetail are shown as black instead of finely barred; and the bill of the adult Pictorella is coloured blackish grey rather than bluish grey.

Most of Goodwin's numerous black-and-white sketches are crudely drawn and serve little purpose. Generally the distribution maps are adequate. However the range of the Yellow-rumped Mannikin is grossly overstated, while the range of the nominate race of the Star Finch is left blank (Goodwin copied the erroneous map in the Reader's Digest Complete Book of Australian Birds).

Illustrations apart, this book is so replete with interesting and authoritative information that it deserves a place in the library of all serious ornithologists and aviculturists.

G.M. Storr

Australian Finches in Bush and Aviary by K. Immelmann, 1982. Third Revised Edition. London: Angus & Robertson. Pp. 224, col. pll (by N.W. Cayley) 12, b. & w. photos 22, col. photo 1, b. & w. drawings 21, maps 20. 160 × 240 mm. \$29.95.

The first edition of this book, published in 1965 and reviewed in Emu 66: 75, was well received by naturalists and aviculturists. The present edition is said to be 'fully revised' but is in fact a reprinting of the first edition with a few additional notes on a few of the species.

Probably in response to a reviewer of the first edition, Immelmann has increased the number of line drawings and has provided a distribution map for each species. Unfortunately most of these maps are inaccurate. In some species, e.g. the Star Finch and Yellow-rumped Mannikin, the distribution is greatly overstated; in others, such as the Painted Finch and Plum-headed Finch, it is considerably understated; and in a few species it is very misleading. For example, the distribution of the Diamond Firetail in Queensland is mapped as if it were confined to southeastern coastal areas, whereas in that state it is a bird of the eastern interior, ranging as far north as the hinterland of Cardwell. The map for the Red-eared Firetail is just as bad.

Page size has been increased in this edition by 15×15 mm; the paper is better than in the first edition; but printing of the colour plates, including the three additional ones, is sometimes poor. Despite some blemishes, the book is recommended to anyone who wants authoritative information on the morphology, natural history, keeping and breeding of these beautiful birds.

G.M. Storr

Species at Risk: Research in Australia ed. by R.H. Groves & W.D.L. Ride, 1982. Canberra: Australian Academy of Science. Pp 216. \$25.

No continent has been more adversely affected by European settlement than Australia. Clearing for agriculture, introduction of foreign plants and animals, intensive forestry, overgrazing by sheep and cattle, and changed fire regimes have irreversibly altered the face of the continent. As a consequence of these activities, Australia faces massive problems with soil erosion, salinization of soil and water, rural die-back of trees, and the loss of native wildlife. Some animals and plants which were formerly abundant and widespread are extinct. Many more are threatened or at risk of extinction. In Species At Risk, J.H. Leigh and his colleagues estimate that seventy-eight species of Australian plants are already extinct and another 200 are endangered. It is difficult to provide comparable data for animals given the large number of invertebrates which are poorly known. However, Ride and Wilson consider forty-four species of mammals or nearly 20% of Australia's mammal

fauna as extinct or at risk of extinction.

Extinction or a change in abundance is not always the result of human activities. If Europeans had not colonized Australia, there still would be rare plants and animals. The study of rare and endangered wildlife is therefore not only necessary for effective conservation, it is fascinating biology. Why do populations decline to extinction?

Species At Risk: Research In Australia is the proceedings of a symposium sponsored by the Australian Academy of Science on the biology of rare and endangered species in Australia. The symposium was a mixture of biology, conservation and soul-searching, but essentially two kinds of papers were presented. One set concerns case history studies of rare plants and animals. There is some very good biology in these, but the papers of greatest interest to ornithologists are the ones on Orange-bellied Parrot Neophema chrysogaster (P. Brown & R. Wilson) and Noisy Scrub-bird Atrichornis clamosus (S. Davies, G. Smith & F. Robinson). The second set of papers reviewed the status of Australia's wildlife and the reasons for rarity, analyzed the success of conservation efforts, presented the arguments justifying the need to prevent extinctions, and extended the scientific basis for reserve selection and management in Australia beyond the theory of island biogeography to include the fundamentals of population genetics.

Some years ago I expressed concern at the apparent preoccupation with endangered wildlife shown by some biologists
and many environmentalists. The cause for my concern was the
large amount of scarce resources (money) required to conserve
and manage relatively few endangered species and the lack of
any scientific rationale for deciding which species should (or
could) be saved and which allowed to vanish. In my view, it
was money and time which might be better spent on the conservation of plants and animals which did not appear to be endangered, but which to me were equally threatened by the large
scale changes that modern development was bringing to the
Australian continent. Among the speakers at the symposium,
only Don McMichael really addressed these problems. How do
we choose which species are worth saving? It would be foolish
in my estimation to continue to equate worthiness with rarity,
but as A.R. Main noted in his paper, people like rare things.

McMichael did not provide simple rules for us to follow in deciding which species we should save and which we should abandon. He did argue most strongly that aesthetic appeal and importance to human culture were at least as important as scientific value. In his view, large mammals, birds and trees rank higher on the scale of importance than mice, lizards and lichens. I think these are the criteria we already apply and, of course, are the ones most easily understood by politicians and voters. They may even be the best criteria and with the low priority given conservation and research by governments, they are the ones we will live with.

Some of my concern about the expenditure of scarce resources on studies of rare plants and animals was clearly unwarranted. For example, at least some rare species are easier to study and obtain good quantitative data than I thought possible. The work on the Western Australian tree, Eucalyptus caesia, by Stephen Hopper and his colleagues is a case in point. Their studies not only plotted the distribution of all known wild populations of this plant, but they were able to relate abundance, morphological variation and genic diversity to the plant's pollination system. In his paper, Otto Frankel made it clear that because of the fragmentation of populations into increasingly small breeding units, a knowledge of the genetics of populations will be an increasingly important part of the conservation and management of wildlife. Frankel also pointed to the need to evaluate the im-

portance of a species to the ecology of the community of organisms in which it lived. Some organisms, including many which are uncommon or rare, play pivotal or 'keystone' roles in the community and their demise may have effects out of proportion to their abundance. The loss of a key pollinator, for example, might affect not only the plants it pollinated, but all the animals dependent on those plants for food and shelter.

Species At Risk is a good review of the status of Australia's wildlife, of current research on threatened species, and of the attitudes of some of the people determining the future of Australia's conservation efforts. I am encouraged by what I read: conservation in Australia is developing a strong scientific base and the study of species at risk is contributing importantly to its growing maturity.

Harry F. Recher

The Falcons of the World by Tom J. Cade, illustrated by R. David Digby, 1982. London: Collins. Pp 192, col. pll 44, b. & w. drawings 10, maps 31. 310×235 mm. \$29.95.

Tom Cade, Professor of Ornithology at Cornell University in the state of New York, is director of raptor research at the Laboratory of Ornithology and is director of the Peregrine Fund. He has conducted field studies in Alaska, Africa and the western United States and has recently been involved in breeding large falcons in captivity. We are indeed fortunate that he has taken time from all of his various activities in order to document his wide experience with, and knowledge of, falcons in *The Falcons of the World*.

The text of this book represents what devotees of the birds of prey would expect from a dedicated scientist who has spent most of his life studying and working with falcons. In addition to discussing falcons and their biology in an informative and easily-read manner, the author commendably expresses his broad philosophy on conservation of falcons, drawing upon a wide range of studies conducted both by himself and others to exemplify this philosophy. Certainly, this book is one of the best illustrated texts available on falcons of the world, with forty-four full colour plates produced by the talented artist, R. David Digby.

The author writes particularly well when using personal experiences to describe what falcons are like, how they hunt, and how they relate to man and vice versa. Many small details about falcons, often overlooked by the casual observer, add to the book's interest. In essence the book is the culmination of many years of thorough observation and wide-ranging studies by a zealous raptor biologist.

The book is organized into two main parts. Part I is on the general biology of falcons and is composed of the following subsections: special characteristics of the genus Falco; classification; feeding adaptations; size and flying performance; hunting success; reversed sexual dimorphism; social behaviour and reproduction; and falcons and men. All portions of this section will be avidly read by individuals studying falcons and undoubtedly it will stimulate further thought and research in various areas. However, Cade is at his best when writing about his own research or on issues in which he is personally involved. As an example, the reasons for reversed sexual dimorphism in falcons has obviously interested the author for many years and his discussion of this topic makes compelling reading; it also gives a fascinating insight into how differences of scientific opinion can stimulate and maintain interest in a subject for many years. Three double page colour plates are in this section and they superbly depict the feeding of young, hunting and displaying.

Part II contains discussions and illustrations of the thirtynine species of falcons which constitute (according to the author) the world complement of the genus Falco. Discussions of each species contain, where available, information on distribution, status, appearance, distinctive traits, hunting habits, foods, reproduction, abundance and aspects of conservation. Here again, the author does his most interesting writing on those species he has personally studied or has had postgraduate students working on. The accounts of the Peregrine and Gyrfalcon stand out above all others and I am sure it is no accident that the Peregrine occurs as number one in his discussions of the thirty-nine species. With the exception of the Peregrine, the accounts of the species of falcons occurring in Australia are rudimentaty despite the fact that Cade has obtained and incorporated the most up to date material available, including some unpublished data on the Brown Falcon in Tasmania. Of course, the reason for this lack of data is because we, here in Australia, have conducted few studies on these exceptionally interesting species and consequently have produced little information for use by the author. Hopefully this book will stimulate much more local interest in the five species of falcons which are endemic to Australasia.

Some readers (including this one) will disagree with the author's views on falconry. He is an eloquent advocate for the sport of falconry and believes that control of the undesirable elements in this sport is possible through law enforcement. However, many will argue that the vexed problems of abuse of birds by unskilled falconers and illegal trade in wild falcons will be compounded by allowing and encouraging the sport to flourish throughout the world. In particular, Cade's discussion of the removal each year of 2000 Sakers from the wild for falconry is disturbing.

The account of the Peregrine Falcon contains a lucid summary of the mechanism by which the organochlorine pesticide, DDT, induces shell thinning in the eggs of Peregrines and it describes how this phenomenon resulted in declines and losses of Peregrine populations in the 1950s, 60s and early 70s. This account is of current interest to Australia because recent work done here by Olsen & Olsen (1979, Aust. Wildl. Res. 6: 217-226) indicates that shell thinning is occurring in most parts of the continent, with the Peregrines in Victoria being amongst those most severely affected. Research conducted in Victoria by Pruett-Jones *et al.* (1981, Emu 80: 281-287) between 1975 and 1977 showed that the shells of Peregrine eggs were 20 per cent thinner than normal and that the DDT residues in the egg contents averaged nearly 18 ppm (wet weight); both of these figures suggested that the Victorian Peregrine Falcon population was experiencing reproductive failure and an inability to maintain its population. Follow-up work on the Victorian population between 1978 and 1981 by the Fisheries and Wildlife Division (Victoria) has confirmed these high levels of shell thinning and DDT levels in eggs. These continued high levels are perplexing and lead one to suspect that more DDT is being used in Victoria than is officially recognised. It is apparent that more precise records on the use of DDT in Victoria are required.

Distribution maps for most of the thirty-nine species of falcons are located at the end of the book. That they do not occur in the proper numerical sequence (presumably to ensure that each page of maps is visually balanced) is of minor annoyance. However, upon examination of the maps, one finds that the same colour (solid blue) is used to show all breeding

ranges. This presents a major problem when breeding ranges for more than one species of falcon occur on a single map. For example, it is impossible to tell from the map where the breeding range of the Moluccan Kestrel ends and that for the Australian Kestrel begins.

In summary, I hardly have to recommend this book to those with a serious interest in falcons - they all surely will be familiar with it and most will have already read it. For Australian readers with more generalised interests it contains a useful treatise on the biology of a group of closely related species, but it provides limited data on most of the falcons found in this country. Finally, one can only hope that this book will be read by some of those individuals in Australia who are in positions to influence research priorities on avian species. It clearly shows that detailed studies on endemic Australians species such as the Black Falcon, Grey Falcon, Australian Kestrel, Australian Hobby and Brown Falcon are long overdue. Even the Peregrine Falcon, which has been the subject of a few Australian studies, should be further studied because, based on Cade's estimates, this country may now contain about a quarter of the world population of this species.

W.B. Emison

Die Vogelarten der Erde by Hans E. Wolters, 7 parts, 1975-82. Hamburg: Paul Parey. Pp $xx + 745.263 \times 175$ mm. No price given.

This is a systematic list of the birds of the world. It describes their distribution, and gives the German and English names of each species. The list includes such extinct species as the Dodo Raphus cucullatus, as well as such recently recognized species as the Northern Giant Petrel Macronectes halli, Hall's Babbler Pomatostomus halli, and the Atherton Scrubwren Sericornis keri. Part 7, which comprises the index, would alone be a valuable edition to any ornithological library.

E.F. Boehm

Das Grosse Buch vom Vogelzug by Kai Curry-Lindahl, translated and arranged by Elizabeth and Einhard Bezzel, 1982. Hamburg: Paul Parey. Pp 208, col. pll 40, ills 125, tables 19. 275 \times 250 mm. DM 89.

True to its title, is a 'big' book on bird migration. Originally published in Swedish in 1975, it provides a brief history of the development of knowledge of the subject, including the banding of birds of research purposes. Since 1890, an estimated 55 million birds have been banded, and more than one million have been recovered. Various types of migration are defined and discussed, and the role of body-fat, water metabolism, morphology in relation to migration, and release factors are mentioned.

Other matters dealt with are hazards encountered by migrants, and the protection of migratory birds by conventions and legislation in various parts of the world. This is an important reference work for organizations and individuals concerned with the migration of birds anywhere in the world.

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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The following Opinions have been published by the International Commission on Zoological Nomenclature in the *Bulletin of Zoological Nomenclature*, vol. 40, part 2, on 15 July, 1983:

Opinion No

1249 (p. 83) Toxostoma crissale ruled to be the correct original spelling of the name first published as Toxostoma dorsalis Baird, 1858 (Aves).

1252 (p. 90) Sterna cerulea Bennett, 1840 (Aves): conserved.