

## REVIEWS

Edited by J.M. PENHALLURICK

**Hawks in Focus** by Jack and Lindsay Cupper, 1981. Mildura, Victoria: Jaclin Enterprises. Pp 208, col. pll about 315, maps 25, 30 × 22 mm \$29.50.

*Hawks in Focus* is a privately published book, lavishly illustrated with colour photographs of Australia's twenty-four diurnal raptors: six falcons, three eagles, two harriers, seven kites, three goshawks, one sparrow hawk, one baza and the osprey. The book recounts the travels and experiences of father and son Jack and Lindsay Cupper who, for seven years, pursued these raptors with still and movie cameras. They photographed all the raptors at the nest during breeding activities, using high towers that they designed and built and which can extend to 30 m (100 feet).

The book contains twenty-eight chapters: an introduction; a chapter on equipment used to secure photographs; a chapter on each species of raptor; and two chapters devoted to one of two unusual events witnessed by the Cuppers - the interbreeding of Brown Goshawks and (white phase) Grey Goshawks, and the rearing of a brood of Australian Kestrels by Black-breasted Buzzards. In addition there is a foreword by A.C. Cameron, a glossary of scientific names, a few references and a short bibliography.

The chapter on each species is devoted mainly to the authors' experiences in finding and photographing the birds, with notes and observations of the raptors themselves. Several excellent photographs of each species are included, with shots of the birds in flight and of eggs, as well as various photographs of scenery near or on the way to the nest. The final page in the chapter on each species gives particulars about the bird including a distribution map (showing recognized distribution, the authors' breeding records and sight records), the meaning of the scientific name, other names (for example, White-breasted Goshawk for Letter-winged Kite), length, wingspan, distribution, voice, prey, nest and eggs. Under the last heading are included data on clutch size, egg size and colour and incubation and fledging periods.

The photographs speak for themselves. They are generously sized and with only a few exceptions, well printed. The first complete collection of photographs of all Australian species, they represent an enviable achievement.

The text can be reviewed from at least two points of view. As a personal account of the observations made and trials and tribulations encountered whilst pursuing their stated and admirably achieved goal of photographing all the Australian raptors, it is a delightful book, full of Australian character and countryside. On the other hand, as a source of reference for scientific information it leaves much to be desired, though so little is known of Australian raptors that it is bound to be used as a source of reference. Some of the book's more questionable observations have since been accepted into the literature. Because of this a number of points should be raised.

Firstly, the Cuppers have made a number of interesting observations that are worthy of further investigation, particularly the goshawk hybridization and the raising of Kestrels by Black-breasted Buzzards. The feeding of young Pacific Bazas (by placing food in the gullet) is of particular note as is the young Black Falcons being fed by a Kestrel. It was also interesting to learn, for example, that the Little Eagle they observed carried the paunch and intestines of a rabbit some distance from the nest to be discarded.

On their final page summarizing information on each species the authors have repeated much that can be found in the existing literature and added a few observations of their own, most of which were already contained in the main text.

The text and photo captions would have benefited from some scrupulous editing. Some definitions of terms used would have been useful: for example, 'incubation period' and 'fledging'. Incubation times are sometimes calculated as the period between the laying of the first egg and hatching and at other times some account seems to have been taken of the fact that incubation does not always begin immediately. This makes it difficult to interpret many of the periods given. One wonders why guesses were made for times of incubation of some species. Fledging is used in two ways throughout the text: for the age at which the chicks first fly (which is the definition usually used in ornithology) and for the growth of feathers. For example, the photograph on p. 50 shows downy Whistling Kite chicks in pin feathers with the caption 'Kite chicks soon after beginning to fledge'.

Other observations and comments are questionable and require further investigation. On p. 7, the authors report seeing a Black-shouldered Kite carrying a three-quarter grown rabbit. Assuming the Kite weighs 300 g and a three-quarter grown rabbit weighs, conservatively, 1000 g this feat begins to sound improbable and would be interesting to test. On p. 66, referring to the Black-breasted Buzzard raising Kestrel chicks, they report that the rearing of one species of raptor by another was 'behaviour ... unprecedented anywhere in the world'. This behaviour has been reported elsewhere: for example with Peregrines raising Kestrels in Britain (Ratcliffe 1980). On p. 69 of the same chapter, they note that the age at fledging for the Australian Kestrel is three to four weeks although elsewhere it has been found to be closer to five weeks (Australian Wildlife Research 1980 7:247-255). On p. 127 they give incubation and fledging times of the Australian Kestrel as 26-28 days and 26 days respectively though the above article reports 28-29 days and 31-35 days respectively. I doubt that a 26 day old Kestrel could fly well enough to fledge successfully.

Page 106 shows a clutch of Australian Hobby eggs in a nest lined with fresh green leaves, something I have never seen. If it is an example of a falcon lining its nest it is an important discovery. However this photograph, like some others of eggs, appears to have been 'set up': that is, eggs were taken from a collection and placed in an artificial nest (note the piece of cotton wool in the photograph of the eggs of the Pacific Baza on p. 182). If this is the case, the authors should describe their methods and make their nests as much like that of the species as possible.

Distributions given are sometimes incorrect. For example, the White-bellied Sea-Eagle occurs further inland than is shown, the Osprey does not occur in Tasmania and the Brown Goshawk does not occur in Fiji.

Some conclusions drawn by the authors about events they observed may have been accurate but are still open to second interpretations. On p. 65 and 69 they report a young Kestrel putting on 'a broken wing act no doubt in an effort to entice us away from the one on the ground'. This is very unusual behaviour for a young falcon and two other people present at the time have since offered an interpretation different from that given by the Cuppers. They thought the Kestrels were simply too young to fly properly. On p. 70, the authors

describe the interaction between two male Black-breasted Buzzards and a female as 'polyandry' and refer to Mader (1975) and De Vries (1975) who comment on this behaviour in the Harris Hawk *Parabuteo unicinctus* and Galapagos Hawk *Buteo galapagoensis* respectively (however the names of these papers or journals from which they come is not given). Polyandry is one explanation but so is promiscuous mating, a behaviour commonly observed in species like the American Kestrel *Falco sparverius* (Univ. of Calif. Publ. Zool. 1976 103: 1-83). We often see extra Peregrines or Australian Hobbies when visiting nests. On p. 186 the authors state 'Weather conditions appear to have a marked effect on the efficiency of the Osprey's fishing. On calm days fish were brought in regularly and in greater numbers than on windy ones'. This may be true but not necessarily reflect hunting efficiency. The Cuppers apparently weren't observing actual hunting so don't know whether, for example, different types of fish are more vulnerable in certain conditions. In fact, they go on to state that 'the total weight would not have varied as much as the numbers might indicate as the high tally was much smaller fish'.

Some aspects of the book require a comment about 'ethical considerations' in bird study. The authors give the locations of a traditional White Goshawk nest in Apollo Bay, Victoria. I recently met a falconer/photographer who found the nest quite easily after reading about it in the book. The task was made even simpler by the part of the hide and rope left in the tree. A farmer told him that a constant procession of people now visits the nest. It will be interesting, but perhaps sad, to see how this pair fares in the next few years. The authors frequently mention 'gardening' done at nests to obtain unobscured photographs, and the general disturbance they caused to nesting raptors. Some deaths were caused by their attempts to photograph some species like the Marsh Harrier. Other young may have been subjected to excess heat or prolonged periods without food.

Having drawn attention to some of the limitations of the book, I highly recommend it to all raptor enthusiasts, bird lovers and people interested in Australia. The photographs stand as a monument to what two determined men can accomplish and should hold a special place in Australian ornithology.

Jerry Olsen

**The Peregrine Falcon** by Derek Ratcliffe, 1980. Calton, Staffs: T. & A.D. Poyser. Pp 416, col. pl 4, b. & w. pl 32, figs 16, tables 23, appendices 5. 160 × 240 mm. £12.00.

This is probably the finest monograph yet written on any bird of prey. Derek Ratcliffe is eminently qualified to write such a monograph. Best known internationally for his discovery of shell-thinning in Peregrine eggs induced by pesticides, he has been fascinated by the Peregrine since boyhood. This fascination stayed with him as a research student studying the Peregrine, later as organiser of the Peregrine Enquiry for the British Trust for Ornithology and one of the pioneers of the early work on pesticides and birds of prey, and currently as Chief Scientist of the Nature Conservancy Council.

Ratcliffe's 'schoolboy' fascination and romanticism pervades much of the book and in doing so catches something of the spirit that worldwide attracts and sustains lovers of the Peregrine. It also produces some delightful reading. The reader cannot help but be struck by the apparent humility of the man who was once at the very centre of the bird of prey-pesticide controversy which was, in his own words, '... the forefront of the new wave of concern for the environment' (p. 347). Ratcliffe graciously gives credit where it is due, even attributing

the idea for measuring the thickness of eggshells to two of his distinguished friends, Desmond Nethersole-Thompson and Joe Hickey.

The sixteen chapters in the book are largely self-explanatory: The Peregrine and Man; The Peregrine's Country; Population Trends in Britain; Distribution and Numbers in Britain; Food and Feeding Habits; Nesting Habitat; The Breeding Cycle: Pairing and Courtship; The Breeding Cycle: Laying to Fledging; Movements and Migration; Breeding Density and Territory; Population Regulation and Dynamics; Ecological Relationships with other Birds; The Pesticide Story; Other Enemies; Appearance, Form and Geographical Variation; Conservation and the Future. In addition, there is a preface of over six pages devoted to acknowledgements and an introduction in the form of a reminiscence relating the personal and sometimes, romantic attachment Dr Ratcliffe has to the Peregrine.

Some chapters are weaker than others and Ratcliffe is at his best describing the Peregrine's country and his own (considerable) studies and observations. This he does in a logical and instructive manner, leading the reader through many of the problems encountered in designing, executing and substantiating his work. It may disappoint some readers that the book is mainly about Britain and deals only superficially and sparingly with the Peregrine as a cosmopolitan species. The distribution shown for the Peregrine in Australia in Figure 15 is incorrect. The initial errors in Dementiev's (1951) map have been constantly repeated in the literature in spite of the fact that Slater (1970) and others give correct distributions.

Much of the Peregrine's biology and ecology in Britain is similar to that in Australia, but there are some striking exceptions. The average size of cliffs used as nest sites in Britain dwarfs the average Australian cliff and the length of man's association with the Peregrine in Australia is similarly dwarfed by eleven centuries of close association in Britain. Ratcliffe shows how closely the biology of the species is tied to man in Britain; and how the fortunes of the Peregrine have waxed and waned under the influence of man. The story extends from the introduction of falconry by Frederick II in about 860 AD, through a period of esteem and protection by harsh penalties, to the invention of gunpowder, demise of the popularity of falconry and subsequent persecution of the then 'competitive' Peregrines by gamekeepers. It continues from the opening up of new habitat for Peregrines by deforestation in 1800, to the destruction of birds and nest sites in World War II due to the depredations of Peregrines on messenger pigeons. Finally it moves from the large-scale detrimental effect of pesticides in the 1960's to the subsequent recovery due to bans and limitations placed on the use of pesticides and protection of the birds themselves.

The book is worth purchasing for Ratcliffe's recounting of, and reflections on, the pesticide story. The originally misguided launching of the Peregrine Enquiry in response to the lobbying of pigeon fanciers concerned with an 'increase' in Peregrine numbers; the resultant discovery of a substantial decline in numbers; the initial suspicions and, after much effort, elucidation of the pesticide-Peregrine connection; and the scientific campaign to control pesticide use - all provide examples of the problems faced by scientists concerned only with the validity of their scientific hypotheses when their findings conflict with the interests or values of the times.

The views of Ratcliffe and his colleagues were vindicated in the recovery of the Peregrine population. His ability to see what some of his contemporaries could not, gives some credibility to his unsettling analogy for the future of the conservation movement: '... nature conservation is comparable to being on the weaker side in a long-drawn-out war, in which

the other side has overwhelmingly superior forces and must eventually and inevitably win ... In this situation the defenders strategy must be one for minimising losses overall and maintaining maximum tactical flexibility to repel new advances' (p. 348).

The book is pleasantly illustrated by Donald Watson, enjoyable reading, and an eloquent tribute to both the author and his subject.

Penny & Jerry Olsen

**Collins British Birds** by John Gooders, 1982. London, Glasgow, Sydney, Auckland, Toronto and Johannesburg: William Collins Sons & Co. Ltd. Pp 384, col. pll on most pp, b. & w. drawings 71, 173 × 260 mm. \$30.

This is an entirely new book written for popular readership, one that fills some of the gulf between the full-blown handbook of technical data and the sketchy field guide that says *little more than how to put a name to a bird*. Strongly bound and beautifully produced throughout, this book combines an informative and readable text with a fine collection of plates by Terence Lambert, in a very attractive layout.

The author's introduction is followed by chapters on identification (by Peter Grant), songs and calls (Eric Simms), habitats (Ian Prestt), nests and nesting (Jim Flegg), food and feeding (Philip Burton), range and distribution (Colin Harrison) and migration and homing (Robert Spencer). Drawn from an enormous combined expertise, these essays read well and I had only occasional uneasiness about points in them. Such moments arose from trite generalisations, for example, 'birds, in contrast to man, are specialised and fixed in their habits' or from insufficiently explained statements e.g., 'steppe conditions appear to encourage vagrancy'. Ian Prestt gives a particularly good account of the changing availability of habitats and their deliberate creation in contemporary Britain. A common thread of active conservation measures runs through these chapters, although I wonder if zeal has clouded some well-documented research in attributing egg-collecting as a 'major factor' in the decline of Red-backed Shrikes, which was not at all what was concluded by Ash (1970, *Brit. Birds* 63: 185-239).

The main text covers the 250 or so major species in Britain. Each receives one and sometimes two colour plates, distribution map and an account of features, voice, reproduction, food, range and worldwide distribution. These apparently simple and matter-of-fact accounts reflect something of the mountains of information to be drawn from in ornithological Britain. Thanks to atlas schemes and co-ordinated counts documented in recent years, a detailed distribution map and a population estimate are given for each species. The detail available for scarcer species is often stunning. Take the Goshawk: five small areas of residency are mapped out, yet the population estimate is just 18 pairs! Factual errors and omissions that I could spot were few and relatively unimportant. For example, the small but regular population of Whooper Swans that winters in mid-

to-south Wales went unmentioned; the exceptional gathering of Whimbrel at Bridgewater Bay occurs in spring, not early autumn and I am unconvinced that falconry becoming popular in the Middle East 'puts all Peregrine populations at risk'.

Terence Lambert's plates start off at a very high standard and get better and better: there are only a few problems and these mainly with birds that go clad in black. By the time one reaches the warblers and titmice, each is a new marvel. For me, better still was to come, for his finches and buntings are quite the best I can remember seeing. Small 'field-guide' illustrations complement points in the text, but inevitably fall short of the standard set by the major plates. Transpositions across facing pages occur for Sandwich/Roseate and Common/Arctic terns.

A section on rare birds yields 136 short descriptions and small plates, mostly good but often inadequate as a basis for checking out a suspected rarity. Plates for Little and Baillon's Crakes have been transposed. A similar section on ornamentals, escapees and introductions follows. Next are detailed and useful summaries of nature reserves, RSPB reserves, bird observatories, seabird colonies and reservoirs of major interest. Last is an outline of British law relating to birds, in which we are reminded that the shotgun harvest of Britain's only endemic bird (Red Grouse) still opens on the glorious 12th August, and that the Ptarmigan is fully protected in England (and Wales!) a century after its demise south of the border.

This is probably the most comprehensive, polished and satisfying popular reference available on the birds of Britain. Modestly priced, anyone with the slightest interest in the subject ought to be captivated by it.

Peter Curry

**A Synopsis of the Birds of India and Pakistan** (together with those of Nepal, Bhutan, Bangladesh and Sri Lanka) by S.D. Ripley II, 1982. Bombay: Bombay Natural History Society, 2nd Edition. Pp 653, Map 1. Price, not given.

The first edition of this highly important text was published in 1961 and has become the standard work on the taxonomy of birds of the Indian area. It formed the basis for the taxonomy used for Ali and Ripley's ten volume handbook on the birds of this area. Since 1961 there have been considerable political realignments and a number of new geographical names for regions. These are covered in the text. In general the format of the Synopsis has not been altered though some of the synonymy has been abridged for reasons of economy.

I examined the taxonomic names and distribution of a number of species of particular interest to me and found most accounts to be quite up to date both with nomenclature and range. This book is highly recommended to anyone with an interest in the area.

John L. Mckean

