Wildlife Abstracts 1976–80. A Bibliography and Index of the Abstracts and Citations in Wildlife Review Numbers 160–179. Terry N. Sexson and Paul C. Purdy, Compilers. United States Fish and Wildlife Service. (Available from The Government Printing Office, Superintendent of Documents, Washington DC 20402; stock number 024–010–8004–6; \$23.00)

One of the first problems facing a bander who is planning a new project or who wishes to publish his or her results is finding out what is already known about the subject or the species involved. The Bent life histories are an obvious place to start, but they are 20 to 50 years out of date. If you live near a university library, you can use the indices to *Biological Abstracts*, but searching two indices per calendar year gets tedious very rapidly and "keyword-in-context" indexing has disadvantages.

What other search options are available to banders? The Wildlife Abstracts are very useful tools and one of their major advantages is that, in contrast to other abstract indices, they can be used independently of the individual Wildlife Review issues since the index volumes contain the complete citations (author, title, periodical, etc.) to all articles covered. I sampled the coverage by looking up some of the articles in Vol. 5, No. 1 of NABB and some of the articles abstracted in the Recent Literature section of that issue; all 10 were there. In contrast to Biological Abstracts, Wildlife Abstracts covers many U.S. state journals, and foreign banding journals such as Corella from Australia. The coverage is up to date; 1980 articles are indexed in the 1976–80 volumes.

The index is in 4 parts: authors, geographical areas, general subjects and scientific names. For the U.S., the geographical index is divided into states and after general entries is subdivided by sections (central, northern, etc.), followed by another subdivision into counties; geographical features and parks, monuments and wildlife refuges. Many of the general subjects are classes (amphibians/reptiles, birds, etc.) with major subdivisions such as behavior, physiology, and migration. These are then subdivided again. The citations in the second volume are also grouped by subject: articles on mockingbirds and thrashers use 3/4 of a page of the 348 pages devoted to bird articles in the 802 page volume.

For the bulk of paper involved, two volumes 2 and 1/2 inches thick, \$23 is not excessive. The 1971–75 single volume cost \$13 and is probably still available. If you have the 1961–70 index, keep it; it is a valuable resource now probably out of print, as are earlier volumes.

**Bird Conservation** 1. Edited by Stanley A. Temple. 1983. University of Wisconsin Press, Madison. viii + 148 pp. \$12.95.

This first in a proposed series of annual yearbooks of the U.S. section of the International Council for Bird Preservation focuses primarily, but not entirely on raptors. Major papers review progress in management programs for Peregrine Falcons, Bald Eagles and California Condors (two papers). Shorter notes review recent legislation and international agreements, several raptor problems, current status of efforts on Whooping Cranes, parrots, woodpeckers and Dusky Seaside Sparrows, and effects of tropical defoliation on North American migrants. Thirteen pages of recent titles on species at risk and techniques used in studying them serve as an introduction to further literature.

Banding and telemetry are frequently used in assessing population status and in tracking individuals released from captive breeding programs. This is evident throughout this volume, especially in the reference list which includes several titles on band wear and other technical developments. The discussion by Barclay and Cade of various biases in band recovery data for Peregrines is relevant to studies of many other birds. Similarly, the important role of telemetry in determining various movement and life history features of the California Condor could be applied to other species, especially those which move long distances in short periods of time and/or are difficult to follow visually.

Papers in this first volume range from reviews or progress reports to proposed management plans. In general, the writing is of high quality, but Cade's strident tone in his note on eagle restoration is out of place in a scientific publication. Ogden's reasoned approach in answering critics of the condor program is much more convincing. The many slight typographical errors and incorrect citations should have been avoided by better proof-reading, but do not detract from the overall usefulness of this important contribution.

Flight of the Storm Petrel. Ronald M. Lockley. 1983. David and Charles, London & Paul S. Eriksson, Middlesex, Vermont. 192 pp. \$16.95.

R. M. Lockley's 1942 monograph on Manx's Shearwater is a long recognized classic in scientific nature writing, i.e. an in-depth natural history study written in narrative style. His present book on the Storm Petrel, Hydrobates pelagicus, and other members of the storm-petrel family, follows both the style and thoroughness of the earlier work. The book is based primarily on Lockley's long-term studies from 1927 to the present on the island of Skokholm, Wales, supplemented by information from the literature and visits to nesting areas of other petrels.

The first seven chapters detail the life history of the British species on Skokholm and elsewhere. Although written in narrative style, Lockley's statements are based on large sample sizes and his lapses into anthropormorphisms and speculations are clearly differentiated from facts and experiences. Details of pair fidelity, nest-site fidelity, times spent at sea, share of incubation by each sex, incubation period, fledgling period, time (year) of first nesting, and short-distance and migratory movements are all based on banding studies, probably the first on this family of birds. The lack of quantitative data will inevitably lessen the scientific value of the book, but this authoritative work will nevertheless remain the definitive treatise on this species for decades.

The thorough nature of the chapters on *H. pelagicus* makes the book well worth its price without further embellishment, but 4 additional chapters add a summary of current knowledge (or lack thereof) of all the other storm-petrels, based partly on the literature, and partly on Lockley's quests for these birds in Ireland, Iceland, New Zealand, Portugal, Antarctica, Alaska, and the Galapagos. As with the earlier chapters, these are written in narrative, non-quantitative but authoritative style. Two appendices (one a list, with ranges of the 21 species, including 3 not covered in the text; the other on predators and parasites), a brief "bibliography," and an index complete the book.

Lockley's writing is delightful and obviously based on a mixture of familiarity and enthusiasm for his subject. The text is enhanced by sketches of petrels and other creatures by Noel W. Cusa, and by distributional maps of each species. I found only one obvious typing error, and one reference (Turner 1980) cited in the text, but not listed in the "bibliography," plus a few minor discrepencies between literature citations in the text and those in the literature list. There is much of direct interest to banders in "Flight of the Storm Petrel," and even more of general interest to field ornithologists. Quantitative biologists will be frustrated at the lack of tables and graphs indicating sample sizes and ranges, but any biologist whose first love is field work will find this a fascinating and inspiring read and useful reference source.

Martin K. McNicholl

The Peacocks of Baboquivari: A journal written by Erma J. Fisk, 1983; 284 pp. W. W. Norton & Co., 500 Fifth Ave., New York, NY 10110; FPT 414.95.

Erma (Ionnie) Fisk's Journal of her winter and spring in a remote valley will be of interest to any reader who enjoys the outdoors, especially banders. Her assignment was to document birds on a property owned by the Nature Conservancy at the head of Thomas Canyon in southern Arizona. She set mist nets, banded birds, and dealt with resident peacocks, ground squirrels, and wandering cattle. She lived in a 16 $^{\prime}$   $\times$  20 $^{\prime}$  cabin without running water or electricity, packed in supplies on foot (2 miles), and coped with unexpected weather conditions. At age 73, Jonnie is fit, although no athlete. The Iournal tells of visits by friends, naturalists, and hikers (Mt. Baboquivari, sacred to the Papago Indians, attracts hardy backpackers); her own adventures; the paucity of bird species at times; and the sheer pleasure of being alive.

In a recent letter, Jonnie says that her banding permit goes back to 1950 (she thinks). Since then, she has banded from Canada to Ecuador, and in the 1980–83 period has done three population surveys, by banding, in southern Arizona. She used to be a frequent contributor to EBBA news, studying winter plumages in southern Florida when most EBBA banders had put their banding tools away until spring.

Throughout the book, Jonnie reminisces on how she got into banding, where it has led her, and of their friends in banding.

Royalties will go to The Nature Conservancy in the hope that the generation of banders succeeding her will find a few remote areas still left to be studied.

Wading Birds of the World. Eric Soothill and Richard Soothill. 1982. Blandford Press, Poole, Dorset, U. K. (Distributed in North America by Sterling, New York). 334 pp. \$29.95 U.S.; \$37.95 Can.

"Wading birds" in the context of this splendidly illustrated volume is not restricted to "waders" in the British sense (our shorebirds), but rather refers to birds of three orders (Ciconiiformes, some Gruiformes, some Charadriiformes) that spend much of their time wading. In the case of Pratincoles and Coursers, the only two species (of 17) included are those (Egyptian Plover, Australian Dotterel) that habitually wade, but in families composed predominately of waders, such generally upland forms as Mountain Plover and Upland Sandpiper are fortunately included.

The book consists of a brief (3 pp.) introduction, followed by species accounts of 2 paragraphs to 2 pages, arranged in 18 families. A one page "bibliography," a list of picture credits, and indices to Latin and "common" (English) names conclude the book. The Boat-billed Heron and Ibisbill, sometimes given monospecific families, are included within the heron-egret and avocet-stilt families respectively, but the phalaropes, now generally placed within the sandpipers, retain a separate family here. Where species have more than one English name in major regions (e.g. Grey vs. Black-bellied Plover; Grey vs. Red Phalarope), the European name is given in the table of contents and first in the text, but the alternate name generally appears also in the text, with both indexed. This applies even when the European name is vague (e.g. Night Heron-our Black-crowned; Turnstone—our Ruddy). An odd oversight in alternate names is the Buff-backed Heron for Cattle Egret.

Each species account consists of at least two paragraphs: Description and Distribution. For many, additional paragraphs are headed Characteristics and Behaviour, Habitat, Food, Voice, Display, and Breeding, and breeding distribution maps, sketches and color photographs of up to a full page often accompany the text. Shorter accounts sometimes indicate that no information is available on a particular topic, but not all shorter accounts involve poorly documented species. For example, both Whooping Cranes and American Golden Plovers receive the two-heading accounts, whereas much more is known about them. Occasional accounts include remarks on races or conservation (e.g. the effects of the millinery trade on egrets.)

In general, the accounts seem accurate within the confines of generalized accounts, but these result in inevitable omissions, such as raft nests of Black-crowned Night Herons and extralimital nestings in many species. The North American range of the Cattle Egret is much too restricted and the Whooping Crane's nesting area is incorrectly stated as central Mackenzie and northern Saskatchewan, instead of southern Mackenzie, with a few recent records in extreme north-eastern Alberta. The newly developed Idaho nesting area is not mentioned. Although the authors are British, they traveled widely and include personal information on many far-flung species. They generally avoid obvious British bias (apart from the names), but lapse into addressing European readers when they describe the breeding call of the Lapwing as "familiar to almost everyone." North American readers will have to hunt under Black-winged Stilt for the Black-necked, whose Latin name is listed there as a race. This will be no surprise to those up on systematic controversies, but the authors confuse the situation by describing the range under the racial name, then state that there is an additional "Black-necked variety."

"Waders of the World" provides a good world overview of the various families covered, with the added bonus of brief biological details on several species. Although there is no direct reference to banding, banders will find it a good general reference source. Unfortunately, the one page bibliography consists primarily of major avifaunal works, and does not list any of the journal literature or species monographs that would lead the reader to further detail. Its many high quality photographs and wide coverage justify its moderately steep price. Readers desirous of greater detail will need to look elsewhere, such as Johnsgard's recent treatments on shorebirds and cranes.

West Virginia birds. Distribution and ecology. George A. Hall. 1983. Spec. Publ., Carnegie Mus. of Nat. Hist. No. 7, Pittsburgh, Penn. vi + 180 pp, \$20.00.

Although West Virginia's rugged nature has prevented extensive urbanization (about 3% of its total area to date), environmental changes are occurring rapidly there, as elsewhere, and an understanding of these changes requires a benchmark data base of present recources for future comparison. George Hall set out to provide that data base for birds, and has succeeded admirably.

Introductory sections of the book describe the overall environment of this mountainous state, summarize the history of ornithology there, and analyze the avifauna as a whole according to nesting distribution in eight basic habitats. The bulk of the text consists of accounts ranging in length from a paragraph to about a page of 304 documented species (2 extinct), plus 14 of hypothetical occurrence. The accepted species include the enigmatic Sutton's Warbler, which may not be a valid species, but whose identification in the state cannot be disputed the first specimen was collected there in 1939. Species of hypothetical occurrence can be regarded as probable unsubstantiated records, rather than merely poorly documented reports. A brief section on exotics (introduced and escaped) concludes the species accounts, and the book is completed by a gazateer, lists of cited and uncited literature, and a species index.

Each species account consists of one or more section(s) describing status in the state, records of occurrence and seasonal populations, often followed by remarks on such factors as historical changes, hybridization, conservation problems, nomenclature, and the prehistoric or archeological record. Some large families (e.g. Anatidae, Accipitridae) and subfamilies (e.g. Parulinae) receive an additional general introductory account. Hall's treatment of species names and order of families is upto-date, with the sixth A. O. U. check-list cited (1983) as the authority.

Readers of the Appalachian region in the seasonal reports of American Birds will know that Hall often makes effective use of banding data in illustrating trends, and will not be surprised at his extensive use of banding data in these pages. Hall has used banding data and/or captured birds to indicate abundance, help sort out hybrids (and species in Empidonax), and help document hy-

brids. Perhaps the most remarkable record is the West Virginia recovery of a Dry Tortugas-banded Sooty Tern. simultaneously helping to establish the occurrence of an accidental species and determining its origin! Of greater importance, however, are the population trends indicated by banding data and data demonstrating unexpected abundance of such species as Gray-cheeked and Wood Thrushes, Philadelphia Vireo and Lincoln's Sparrow. Even the very common Song Sparrow has been shown to move through in greater numbers than otherwise believed. On the other hand, low capture rates of such common state species as Indigo Bunting, Chipping and White-throated Sparrows, and American Goldfinches at a mountain banding station help demonstrate their migration routes—or at least that they do not move along the mountain ridges. Returns, recoveries and recovery rates of West Virginia-banded birds have indicated that few released Canada Geese return to the site of liberation, that White-breasted Nuthatches are less sedentary than they appear, that some breeding Song Sparrows winter in the vicinity of their breeding area, that American Goldfinches spend little time at any one locality when not breeding, and that West Virginia's Cedar Waxwings are highly nomadic. None of 600 waxwings banded at Morgantown ever returned there, but one was recovered in Oaxaca, Mexico the same winter it was banded.

The book appears to be free of factual errors, although I found the comment that dowitchers can be separated in the field only by call note somewhat overstated. I found only four minor typographical errors, but a number of literature citations either are not listed or with text dates not matching those in the final list (E. A. Brooks 1908, p. 93; E. A. Brooks 1938, pp. 8, 161; Legg 1945, p. 58; Lunk 1945, p. 165; Rives 1897, p. 59; and Wetmore 1938, p. 58). Two other references (M. Brooks 1936, p. 26; Haller 1940, p. 68) could refer to more than one citation. These errors are not sufficiently significant to detract from the overall high quality of the book, which is further enhanced by black-and-white plates of habitats and of nesting birds, several line drawings of birds, breeding distribution maps of a few warblers, finches and one vireo species, and George M. Sutton's color frontispiece of "Sutton's" Warbler.

At \$20.00, buyers of this book receive both a high quality publication and a good bargain.