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ORNITHOLOGICAL LITERATURE

GREAT AUK ISLANDS. A FIELD BIOLOGIST IN THE ARCTIC. By Tim Birkhead. T & A D Poyser, London. 1993: 275 pp., 1 color illustration, 36 black-and-white illustrations, 13 color photos, 25 numbered text figs, including easily interpreted maps, $22.—The title "Great Auk Islands" suggests that the British author's latest book is largely a history of the Great Auks which were depleted to extinction by humans in the past century. The reader soon discovers that, of the book's nine chapters, only one is devoted largely to Great Auks, simply because so very little was recorded on the species' life history, not only at sea, but also at its breeding colonies where slaughtering was wholesale. Many of our seafaring forbearers must have visited the breeding sites, but apparently none among them was curious enough to observe and record the habits of these birds. Not recorded were even the most rudimentary observations on egg-laying times and chick-rearing periods, although one hopes that undiscovered notes on the species will surface some day.

Tim Birkhead left no stone unturned in scrutinizing the literature on Great Auks. His findings, disappointing for lack of factual material, nevertheless capsulize nicely relevant records for the species, including accounts of its heartrending demise. But the main thrust, indeed the soul of the text, is about his scientific studies on the Great Auk's closest extant relatives, especially his beloved Common Murre (*Uria aalge*), called Common Guillemot by Britons. He studied these murres in several localities, but the setting in this book is on a cluster of little-visited "Gannet Islands" off the coast of Labrador, although no Gannets occupy them. After reading, and frequently rereading his findings, I am convinced that few wild birds are better suited to resolving certain biological enigmas. I was astounded to learn that the density of breeding Common Murres on flat terrain far exceeded anything I had witnessed, even among closely nesting penguins. Not in sheer numbers that may reach a million or more at some penguin colonies, but in closeness of incubating birds. An exception is the male Emperor Penguin (*Aptenodytes forsteri*) that holds a single egg on his feet while huddling close together with his neighbors during the frigid Antarctic winter. One of Birkhead's mind-boggling photos (p. 103) shows 76 murre eggs within a single square meter quadrate: the social implication of such densely packed incubating individuals is biologically intriguing. These are the sorts of problems that Birkhead tackles head-on, and about which he later relates his findings in a manner understandable to biologists and non-biologists alike.

Among many captivating topics presented by the author, one that stimulated my curiosity dealt with the shape of the murre's egg which is noted for its extremely pointed little end. Its shape supposedly allows it to spin like a top, rather than roll off a cliff ledge—hence the oft-quoted belief that the evolved shape is adapted to a narrow cliff ledge. Birkhead says one merely has to watch a murre accidently knock its egg and watch it roll into evolutionary oblivion, to realize that the spinning top theory is nonsense. Alas, many of us have perpetuated the myth, hopefully, no longer. This revelation is incentive enough to climb to a murre colony and from a blind experience firsthand these special birds and their eggs.

Conceivably the oddly shaped egg may be adapted to the unusual upright incubating position of the murres with their single central brood patch (fig. 9, p. 93). Razorbills (*Alca torda*), with a rounded egg and lateral brood patches, have a prone incubating posture. Birkhead speculates that the Great Auk, with its pointed egg and single central brood patch, also had an upright incubation posture. One can expand this hypothesis: Emperor Penguins (also the closely related King Penguins, [*Aptenodytes patagonicus*]) incubate upright and have pointed eggs dissimilar to those of other penguin species with prone incubation pos-

tures. Also, like the murres, but unlike most seabirds, the two penguins show alloparental behavior (caring for neighboring chicks), evidently a biological advantage in super densely crowded conditions.

One concludes from this study that murre biology must be among the best documented by field ornithologists to date. Tim Birkhead takes his murre study a step further by reconstructing the life history of the Great Auks through his extensive knowledge of the murres. The result is pure speculation but nonetheless is convincing and is likely to prove out should further records come to light. His clever reconstruction was the highlight of the book for me.

Non-biologists wishing to learn more about scientific methods used by field biologists would do well to read this book. In a delightful manner that most anyone can comprehend, Tim Birkhead introduces biological concepts rarely mentioned outside of scientific journals, e.g., breeding synchrony, egg and chick recognition, kin selection, sperm competition, ecological segregation, and DNA fingerprinting, often crediting pioneer studies to their authors. Considerable parts of the text with accompanying photo illustrations clarify logistical and personnel problems that are often encountered on field expeditions: old hat stuff to experienced field biologists, but probably useful and interesting to the inexperienced. The final chapter entitled "Changes" will fascinate all readers. Following an interval of nine years, Birkhead revisited the Gannet Islands only to find many of its bird colonies devastated by arctic foxes (*Alopex lagopus*). He, as with so many others in similar situations, was faced with an all too frequent dilemma. Should one eradicate the foxes to protect the bird colonies, or does one let nature take its course inasmuch as the foxes were not introduced by humans? No easy solution here.

The text is packed full of art illustrations from start to finish. All 36 black-and-white illustrations by David Quinn are superb and enhance the book immensely. The one of a puffin chick in its burrow (p. 72) is a masterpiece, a technique I found especially difficult to master in trying to illustrate petrels deep within nesting burrows.

The book has a few minor flaws. However, no fault of the author, who includes even the lists of local names of Labrador birds. The continuing problem of deciphering common bird names on both sides of the Atlantic is simply maddening, especially with seabirds. Interpreting what species is a murre or guillemot often becomes more troublesome than the meaningful description of the species itself. For ornithology's sake, Europe and North America should resolve this problem once and for all by agreeing on the common names of birds.

Perhaps, because I came from a United Kingdom ancestry, I am chagrined by Birkhead's insensitive remarks concerning North American women: "The female member—one of those frighteningly aggressive, no-nonsense sort of North American ladies that one occasionally encounters." I interpret this remark to be sexist and above all non-scientific. I also note that he exalts the British Royal Air Force while downgrading the U.S. Air Force. Strange that a first-rate scientist, who almost certainly can command an extraordinary North American audience, would engage in such unprofessional behavior. Other than these puzzling inclusions, I strongly recommend the book for the biologist and non-biologist alike.—DAVID F. PARMELEE.

NOMS FRANÇAIS DES OISEAUX DU MONDE. (French Names of Birds of the World). By Commission internationale des noms français des oiseaux. Éditions Multimonde Inc., 930 Pouliot, Sainte-Foy, Québec, Canada GIV 3N9. 1993: 452 pp. $39.95 CDN.—Under the co-presidentship of Pierre Devillers and Henri Ouellet, this volume is the first of its kind by an international commission on vernacular names and sets precedents to be followed in other languages, especially in English, where some cleanup of names is needed at the international level. Between 1976 and 1980, Devillers published a series of articles in *Le*

international level. Between 1976 and 1980, Devillers published a series of articles in *Le Gerfaut,* a Belgian ornithological journal, featuring proposals and justifications for french names of the birds of the world. This endeavor started with the ostrich family but never got past the accentors (Prunellidae) after nine articles, covering some two-thirds of the species. International interest on bird names resurfaced during the International Ornithological Congress in Ottawa, in 1986. An international commission was set up for the next meeting in New Zealand. Several years later, Normand David, one of the commission's members, took it upon himself to finish the list of some 3000 bird names missing from Devillers's list, including most passerines.

The commission is to be applauded for establishing standards for a list of vernacular bird names. A major effort was put into applying them with scrutiny. The rules set forth here are based upon uniformity and brevity using a two-level system as in scientific nomenclature. The rules at the generic level were especially emphasised and included the following: (1) A generic name should apply only to a group of related species; at least, names should not suggest false relationships between non related species of different groups; (2) Some broad generics are to be preferred to odd ones for uniformity; (3) Similar species from remote areas should bear generics that reflect their parental relationships; (4) No single name should apply to any two or more different species; (5) A name chosen for a species should apply to all populations of that species; and (6) Well known names should not be modified unless they convey an error or are misleading at the international level.

An effort was made to shorten the length of names and to reduce the number of names with adjectives like "common", which still appears 178 times in the index for English names.

The taxonomic order follows Storer (Avian Biol. 1:1–18, 1971) for non-passerines and Sibley and Monroe (Distribution and Taxonomy of Birds of the World, Yale Univ. Press, 1990) for passerines. The book is divided into three parts. The main listing includes scientific names, followed by French names, and a reference number without systematic value, but useful for cross references with indexes. These names are followed by a separate repertoire of 18,500 English equivalents. The listing ends with indexes for French and scientific names. In some cases up to eight English, five French, and three scientific names used as synonyms are given in the indexes. The repertoire of English names is presented in alphabetical order of the complete name of the birds, to avoid complicated cross references of frequent three level names, and because of the lack of standards for either the presentation of such lists or for the use of hyphenation. Names in English follow regional spelling—e.g., gray and colored in American bird names, grey and coloured in other regions. When several species have the same name in English, all references to their scientific or French counterparts are given.

Synonyms are labeled as such in the index of the French and scientific names. As complementary information, a French name was given to subspecies in some instances, when deemed appropriate.

In French, the need for such a list originated from the large influx from Europe of books on birds including North American species, that often included inappropriate translations of names. With the growing number of international commissions and agencies at all levels of governments, this list was also considered important, especially for agencies dealing with biodiversity and conservation. Even bird watchers traveling abroad must know proper names for birds in other countries. Finding an Arctic Warbler (*Phylloscopus borealis*) in Alaska close to a Wilson's Warbler (*Wilsonia pusilla*) can be misleading, because they belong to completely different families.

Many names still in use in English would not fit some of the rules set forth in this book. There are several species bearing a shared name (White-throated Bulbul for five different

species from three different genera—*Phyllastrephus albigularis, Criniger chloronotus, Alophoixus flaveolus, A. bres, A. phaeocephalus,* Yellow White-eye for four species—*Zosterops senegalensis, Z. nigrorum, Z. luteus, Z. flavifrons,* Rufous Flycatcher for three species—*Myiarchus semirufus, Ficedula strophiata, Neocossyphus fraseri,* including two from different families, Robin—*Petroica australis, Erithacus rubecula,* and Rock-loving Cisticola—*Cisticola emini, C. aberrans* for two species each), names with confusing parental relationships (White-tailed Robin, *Cinclidium leucurum,* a Saxicolinae not closely related to *Turdus*), long many leveled names (Black-billed Blue-spotted Wood Dove, *Turtur abyssinicus*), lack of uniformity in hyphenation (Finsch's Rufous-bellied Fruit Pigeon, *Ducula finschii* but Snowy-cheeked Laughingthrush, *Garrulax sukatschewi*), some generics applying to non-related genera or species (Warblers and Sparrows), some qualifiers (common, western) that may not apply throughout the range of some species. For some birders, names are as awkward in English (Umboi Myzomela, *Myzomela cineracea*) as others are in French (Gérygone soufrée, *Gerygone sulphurea*), since about one third of the vernacular names are adaptations in French or English of their scientific names.

International French names for birds might not be accepted readily for every day use, as would be the case in English, and much work is still needed for a standard list of names of birds of the world in other languages. This book is a must for anyone working at the international level with bird names, especially translators, and not only for users of names of birds in French but also in English or Latin, because of the usefulness of the many synonyms to be found in the indexes in all three languages.—ANDRÉ CYR.

SHOREBIRDS OF THE PACIFIC NORTHWEST. By Dennis Paulson, illus. by Jim Erckmann. Univ. of Washington Press, Seattle, Washington. 1993: xv + 406 pp., 98 color photographs, 52 numbered text figures, 36 tables, 10 distribution maps, 5 appendices. $40.00.—The author states that this book is intended to be a "fact book" that supplements field guides. Indeed, this book provides such a wealth of facts that it will be valuable anywhere in North America.

For this book, the Pacific Northwest is approximately a square covering Oregon, Washington, Idaho, western Montana, and southern British Columbia. All 62 shorebird species with at least one solid record in this region are given full treatment. Sixteen others receive lesser treatment because they might be found as vagrants in the region. The combined 78 species is more than are included in the "National Geographic Society Field Guide to the Birds of North America, Second Edition" (1987)! Paulson's exhaustive coverage of nearly all North American shorebirds transcends the geographic limits of the book's title.

Nevertheless, the focus is regional. The treatment of seasonal, distributional, and habitat occurrence of each species is very detailed for the region, with between one and two pages per species. Bar graphs summarize the seasonal status of every species, separately for the coast and interior subregions. Maps indicate the breeding range in the region for ten species.

Introductory and general chapters occupy 82 pages, versus only 20 in the superb "Shorebirds: An Identification Guide to the Waders of the World" by Hayman, Marchant, and Prater (1986). Although the earlier book is essential for any shorebird observer in the world and its introductory pages are useful and concise, "Shorebirds of the Pacific Northwest" provides a superior understanding of shorebirds and how to learn them. Innumerable valuable tips on finding and identifying shorebirds are interwoven with lucid explanations of shorebird ecomorphology and plumage colors and their consequences for identification. Paulson employs a multifaceted analytical approach that categorizes shorebirds in turn by size, shape, flight patterns (wing, tail, rump), other field marks, and distributional/seasonal groups. Good figures illustrate feather color patterns, degrees of primary projection, and the

relative occurrence of plumages classes through the year. A glossary of basic terms (e.g., rectrices) would have helped beginners. Sections on the shorebird's year and identification problems are particularly helpful. Paulson's insightful discussion of "jizz" should be required reading for all, especially anyone that believes that components making up "jizz" are indefinable or that "jizz" can confirm (versus suggest) the identity of a bird.

Species account lengths up to ten pages suggest the depth of treatment. Sections that are self-explanatory include Distribution, Habitat and Behavior, Subspecies, Identification, In Flight, and Voice. "Northwest Status" combines detailed narrative and bar graphs. Paulson lists many data for high counts and extreme dates, separately for adults and juveniles when possible. Some records accepted in the text are not shown in the seasonal bar graph. "Structure" relates the species' physique to the illustrated definitions in the introductory chapters. This includes consistent, well-illustrated use of primary projection, a revealing new generation field mark. "Plumage" supplements good descriptions with a bar graph showing the normal seasonal occurrence of each plumage in the Pacific Northwest. Many "Further Questions" suggest needed systematic quantitative observations on behaviors and age-specific patterns. "Notes" often challenge published statements or records that Paulson believes dubious or erroneous. He lists the location of photos published elsewhere, and corrects misidentifications of species or plumage in the cited work. The listing of references for each species and the 23-page Literature Cited are especially commendable in the face of the distressing tendency of bird guide authors to cite few literature sources.

There are modern, thorough treatments of identification for such groups as golden-plovers, stints, and dowitchers. I found a few errors in distribution. Paulson states that the only interior California records of Pacific Golden-Plover (*Pluvialis fulva*) are from the Salton Sea; it occurs in the Central Valley as well. Paulson writes that the subspecies *griseus* of the Short-billed Dowitcher (*Limnodromus griseus*) breeds in "the Maritime Provinces" instead of Quebec, and that this species "normally winters no farther north than southern California;" in fact it winters abundantly around San Francisco Bay.

Paulson doesn't use the Humphrey and Parkes plumage terminology because it is "unfamiliar to most users of field guides." But his book, filled with so many facts that transcend field guides, was exactly the sort of book that could reverse this unfamiliarity. He also perpetuates the myth that "juvenal" is only an adjective (see Eisenmann 1965 Auk 82:105).

The captions of the 98 color photos integrate them well with the text and increase their value. The 226 color photos in "The Facts on File Field Guide to North Atlantic Shorebirds" by R. J. Chandler (1989) remain a more comprehensive and comparative photo reference, though Paulson suggests refinements on the plumage labeling of a few of Chandler's photos. The many drawings by Jim Erckmann effectively illustrate the desired points. Erckmann's close-ups and silhouettes are his best renderings; some of his flight views look stiff and flat on the page, lacking the perspective of Peter Hayman's in "Shorebirds."

This book was well designed and produced. Its index is superior to that in "Shorebirds." Appendices summarize for all species their seasonal status, extreme dates, weights and measurements, and include a gazetteer of cited localities.

"Shorebirds of the Pacific Northwest" provides an abundance of high quality information in verbal, quantitative, and pictorial forms. It deserves a place beside "Shorebirds" on every North American's bookshelf, and Pacific Northwest observers may keep it in their cars for frequent use.—STEPHEN F. BAILEY.

THE PEREGRINE FALCON. 2nd ed. By Derek Ratcliffe. Illus. by Donald Watson. Academic Press, Inc., San Diego, CA 92101, 1993: 454 pp., 4 color plates, 57 black-and-white pho-

tographs, numerous drawings, 22 numbered figs., 31 tables. $39.95.—This classic remains, in the second edition, the best single way to learn what peregrines (*Falco peregrinus*) are all about. Format remains mainly unchanged except that the excellent photographs are now placed to correspond with the text. The book is indispensable as a scientific reference and as a source of interesting general information. The need for a second edition relates mainly in the unprecedented increase of peregrines in the United Kingdom beyond pre-WWII levels. Britain and Ireland now have at least 1600 pairs, 142% of the pre-war estimate. Only the lowlands of southeastern England lack breeding pairs. The general increase, as elsewhere, follows the reduction of pesticide use, but the unexpected surge owes largely to pigeon racing, which supplies nearly half the food to breeding pairs in certain districts, and to the earlier decline in gamekeeping. Ratcliffe acknowledges the increase is not over. In several districts the density of pairs has increased because territory size has decreased, allowing pairs to use poorer crags. Clutch and brood size are also decreasing.

The book focuses on the British bird but includes a great amount of data from other populations. The sections on disease, population dynamics and the role of pesticides are rewritten from the first edition. Ratcliffe remains convinced, based on chronological evidence, that the cyclodiene organochlorines such as dieldrin were more important than DDT in population decline in the 1960s. The new analysis of reverse sexual size dimorphism concludes none of the various hypotheses has resulted in blinding revelation.

Despite the massive increase of peregrines in most parts of Britain, and widespread gains worldwide, Ratcliffe is concerned for this celebrated species. Locally in coastal Britain, oiling by Fulmars (*Fulmarus glacialis*) was found in 26% of a trapped sample of peregrines. Oiling is known to cause peregrine mortality and might contribute to the poor population recovery in northern Scottish coastal areas. Gamekeeping seems on the rise and could become significant. Pigeon fanciers are more and more adamant that peregrines in some areas be reduced. Ratcliffe believes the species is too entangled in human affairs to avoid impact by the further onslaughts on our natural environment that surely lie ahead.—JAMES H. ENDERSON.