fornia's Outer Continental Shelf survey program. In particular, we wish to thank Robert L. Pitman and Ellen W. Chu for conducting many of the censuses reported herein. William Fitler assisted greatly in the development of data analysis and manipulation programs. We thank David G. Ainley for collating beachwalk data taken by observers from the Point Reyes Bird Observatory, and Kenneth F. Mais for allowing us to use unpublished data on distribution of anchovy biomass. Paul R. Kelly, Ralph W. Schreiber, and Daniel W. Anderson commented upon early drafts of this paper; their criticisms have aided us greatly.

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### Condor 83:15

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## **RECENT PUBLICATIONS**

Bird Community Dynamics in a Ponderosa Pine Forest.-Robert C. Szaro and Russell P. Balda. 1979. Studies in Avian Biology No. 3, Cooper Ornithological Society. 66 p. Paper cover. \$6.00 plus \$0.50 for postage and handling. Source: Allen Press, P.O. Box 368, Lawrence, KS 66044. Studies of the relationship between vegetation and populations of breeding birds have generally investigated communities offering a variety of microhabitats. This study, by contrast, examined a pure coniferous forest (in northern Arizona). It "was undertaken to measure and evaluate 1) the effects of differing foliage volume, foliage patterns, and densities of trees on the diversity, density, and behavior patterns of the breeding birds of ponderosa pine forest, and 2) the standing crop biomass, consuming biomass, and existence energy requirements of the breeding birds on each plot." The report is aimed at avian ecologists who are interested in how birds select and use forest habitats. Diagrams, graphs, references.

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Center for Coastal Marine Studies, University of California, Santa Cruz, California 95064 and Department of Ecology and Evolutionary Biology, University of California, Irvine, California 92717. Accepted for publication 15 November 1979.

The Avifauna of the South Farallon Islands, California.-David F. DeSante and David G. Ainley. 1980. Studies in Avian Biology No. 4, Cooper Ornithological Society. 104 p. Paper cover. Source: as above. The core of this monograph is an annotated list of the birds that have been recorded on the Farallones. It is based on a unique set of data, the daily censuses conducted over eight years by biologists at the Point Reves Bird Observatory. These and earlier published records are summarized and analyzed to show the status of each species. "From this record, quantitative descriptions are made of the migratory periods of California coastal migrants, and of the rates of visitation by landbirds to an offshore California island .... The breeding landbirds of the California islands are then reviewed relative to this pool of potential colonists." The report is not only an avifaunal catalog but also an important contribution to the study of the dynamics of island populations. References.

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# **RECENT PUBLICATIONS**

Bird Island in Antarctic Waters .- David F. Parmelee. 1980. University of Minnesota Press, Minneapolis. 140 p. \$18.95. After many years of studying sea birds in the Arctic, Parmelee turned his attention toward those at the opposite pole. He recounts here his experiences over two years at an island in the South Georgia group, far east of Tierra del Fuego. The character of these "tussock isles," their seals, penguins, albatrosses, and other birds—and the British biologists who study them-are described vividly. His style of interweaving scientific observations with personal narrative is like that of his mentor, George M. Sutton. Also an accomplished photographer and artist, he has provided many fine illustrations in monochrome and color. This is a fascinating and attractive book of ornithological adventures in one of the least-visited places on earth. Index.

Behavior of Marine Animals. Volume 4: Marine Birds.-Edited by Joanna Burger, Bori L. Olla, and Howard E. Winn. 1980. Plenum Press, New York. 515 p. \$45.00. "Among birds, the colonial marine species provide unusual opportunities to explore basic problems in behavior, ecology, and evolution. The overall aim of this volume is to provide a representative selection of the current research being performed on this group." Topics covered in eleven chapters are chemoreception, habitat selection, communication, distribution and orientation, and various aspects of reproductive behavior and ecology. Some articles cover many kinds of seabirds while others are confined to certain groups, notably larids. Within their limits, they are in the nature of reviews, providing syntheses of both original and published information. They are more comprehensive than the specific research papers often found in volumes of this kind. Maps, graphs, photographs (poorly reproduced), references, and indexes.

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# **RECENT PUBLICATIONS**

Papers in Avian Paleontology Honoring Hildegarde Howard.-Edited by Kenneth E. Campbell, Jr. 1980. Contributions in Science No. 330, Natural History Museum of Los Angeles County. 260 p. Paper cover. \$20.00 plus \$1.25 for handling and postage. Source: Bookshop, Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007. "Nineteen papers in avian paleontology—including theoretical aspects, faunal studies, reviews of specific groups, the description of several new forms, and archaeological studies-" are presented in this festschrift. Preceding these are appreciations of Hildegarde Howard by Theodore Downs, Jean Delacour, and Herbert Friedmann; the bibliography of Dr. Howard and an index to avian taxa that she described. Also included are the famous illustrations of avian osteology, drawn by Frieda Abernathy, from "The Avifauna of the Emeryville Shellmound," one of Howard's most important papers. The articles themselves have been contributed by most of today's leading paleornithologists, making the volume a fitting tribute to Dr. Howard and a significant collection for those who study the fossil history of birds. They are individually furnished with illustrations and references. Included among them is a description, by Campbell and E. P. Tonni, of a tremendous new teratom from the late Miocene of Argentina. With an estimated wingspan of 6.5 to 7.5 m, it was the largest flying bird known to science.

Relationships and Evolution of Flamingos (Aves: Phoenicopteridae).—Storrs L. Olson and Alan Feduccia. 1980. Smithsonian Contributions to Zoology No. 316, Smithsonian Institution Press, Washington, D.C. 73 p. Paper cover. This technical paper re-examines the problem of the ancestral relationship of the flamingos—whether to storks or ducks as long disputed, or to

shorebirds as recently suggested. Previous anatomical information is reviewed and the appendicular myology of the Australian Banded Stilt (Cladorhynchus leucocephalus) is described and discussed. Evidence from osteology, natal down, oology, parasitology, life history, and behavior is also considered. A new stilt-like flamingo from the early Middle Eocene, Juncitarsus gracillimus, is described and other aspects of paleontology of flamingos are discussed. The filter feeding apparatus of flamingos is shown to be entirely different from that of ducks and strikingly convergent toward that of baleen whales. Putting everything together, the authors conclude that the Phoenicopteridae are charadriiforms, most closely allied to the Recurvirostridae. Their case is carefully built from several directions and it appears to settle the question. Drawings, photographs, and references.

Presbyornis and the Origin of the Anseriformes (Aves: Charadriomorphae) .-- Storrs L. Olson and Alan Feduccia. 1980. Smithsonian Contributions to Zoology No. 323, Smithsonian Institution Press, Washington, D.C. 24 p. Paper cover. The authors discredit evidence purportedly allying the Anseriformes with the Galliformes. Instead, from an examination of the Eocene fossil Presbyornis, particularly its filter-feeding apparatus, they propose that the Anseriformes evolved from the Charadriiformes. Along the way, they show that screamers are highly derived anseriforms, suggest that the major subgroups of anatids may need rearrangement, and propose a scenario for anseriform evolution. Their argument appears to rest on a thorough analysis, so it is likely to be controversial among avian systematists and paleontologists. Drawings, photographs, and references.

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# **RECENT PUBLICATIONS**

A Complete Checklist of the Birds of the World.-Richard Howard and Alick Moore. 1980. Oxford University Press, New York. 701 p. \$49.50. For most families of birds, the ultimate authority on taxonomy, nomenclature, and distribution is the 15-volume Check-list of Birds of the World started by the late J. L. Peters and continued under several editors. Birders and most non-curatorial ornithologists, however, are content with a simpler reference, and indeed would prefer to have it as an affordable single volume. Several such works have been produced in recent years, among them those by Gruson and Forster (see Condor 78:279), Morony, Bock, and Farrand (see Condor 77:521), and Walters (see Condor 82:141). Here is yet another, perhaps overall the most useful one of the lot. It lists all living species of birds down to subspecific level and gives, briefly, the range of each subspecies. References are given for each family or subfamily, often in considerable numbers, inspiring confidence in the authors' ability to find their way through taxonomic jungles. Good typography and layout make for easy legibility, but one should watch for occasional misspellings. The index is a great asset because it includes specific names.

Edward Lear's Birds.—Susan Hyman. 1980. William Morrow and Co., New York. 96 p. \$37.95. Lear's artistic career has been overshadowed by his popularity as the author and illustrator of limericks and nonsense verse. A painter and lithographer, he contributed illustrations to many zoological works, including the monographs of John Gould. Thanks to his talent and significant in novations, he became one of the finest and most important bird artists in European culture. This side of his life is the subject of the present book. A handsome, oversize volume, it provides a long biographical essay, concentrating on Lear's career as a naturalist and artist. It is lavishly illustrated, not only with bird plates, but

- STEELE, R. W. 1977. A demographic study of *Microtus pennsylvanicus* in relation to habitat structure. M.S. thesis, Univ. Guelph, Guelph, Ontario.
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also drawings for limericks and nonsense—one can hardly believe that the same man did both, their styles are so different. The color reproduction is first-rate. This book should be seen by those who enjoy fine bird art or study its history. Bibliography, index.

Atlas of Breeding Birds of the London Area.—edited by David J. Montier. 1977. Batsford, North Pomfret, VT. 288 p. \$57.00. The summer distribution of all breeding birds in the London Area was mapped (on a  $2 \times 2$  km grid) by a large corps of birders in a five-year project organized by the London Natural History Society. The results of that uniquely intensive survey are presented here. Each of the 120 species found is devoted a full-page map and page of text that discusses past and present breeding status and distribution. All phases of the project appear to have been carried out carefully and thoroughly. While this volume will chiefly interest those who had a hand in the work, it should be seen as a model for similar surveys elsewhere. Appendixes, references, indexes.

**Birds of Karkar and Bagabag Islands, New Guinea.**— Jared M. Diamond and Mary LeCroy. 1979. Bulletin of the American Museum of Natural History, Vol. 164, Art. 4. New York. 65 p. Paper cover. \$4.30. Karkar and Bagabag are volcanic islands off the northeast coast of New Guinea. They "have been colonized by a very nonrandom sample of the New Guinea and Bismarck [Archipelago] avifaunas, and therefore afford an opportunity to obtain insight into the general problem of species differences in colonizing ability." This report first discusses the zoogeographic origin, species composition, species turnover, niche shifts, and other general features of the avifaunas. Species accounts then give measurements, information on habits, and remarks on taxonomy. The study is a valuable contribution to the ornithology of New Guinea. References. North America (Mader unpubl. data). In tropical areas a long fledgling dependency period may provide added parental care and increased chances of survival for small, infrequent broods.

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# **RECENT PUBLICATIONS**

The Birds of the Gambia/An annotated check-list and guide to localities in The Gambia .--- J. V. Jensen and J. Kirkeby. 1980. Aros Nature Guides. 284 p. Paper cover. D. kr. 148.00. Source: Aros Nature Guides, Skolebakken 5-4. tv., DK-8000, Aarhus C, Denmark. Situated at the extreme west of Africa, the Gambia is an enclave in Senegal, being essentially the valley of the lower River Gambia. Although the country is smaller than Connecticut, nearly 500 species of birds have been reported there. It is well suited for bird study, thanks to the variety of habitats and a fairly good system of roads. This manual describes first the country in general and then a number of birding localities. Most of the book is a systematic list, giving for each species its status, habitat, and breeding records, if any, within the Gambia. For each Ethiopian species, the range within the avifaunal zones of West Africa is also given. This book will be indispensable for birders in the region and may persuade more of them to visit there. Many maps and photographs, references, index.

The Breeding Seasons of East African Birds.--L. H. Brown and P. L. Britton. 1980. The East Africa Natural History Society, Nairobi. 164 p. \$15.00. Source: Secretary, E.A.N.H.S., P.O. Box 44486, Nairobi, Kenya. This monograph "attempts to bring together all that is known, to date, of the breeding seasons of East African birds, and to relate these, so far as possible, to the climatic factors (especially rainfall) controlling scarcity or abundance and seasonal changes of various foods." After a thorough introduction, there follows a systematic list of the species for which indicative or definite breeding records could be found. Given for each species is a summary and analysis of the records as far as they permit. The compilation of these data is an enormous accomplishment. In a long and meaty essay, the authors then discuss the factors affecting the breeding seasons of these birds and the seasonal availability of food. While the annotated list will be of use only to ornithologists working in East Africa, the discussion should be of wide interest to students of reproduction ecology. Maps, graphs, references.

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PATTERSON, I. J. 1965. Timing and spacing of broods

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# **RECENT PUBLICATIONS**

Woodpeckers and the Southern Pine Beetle.— James C. Kroll, Richard N. Conner, and Robert R. Fleet. [1980]. Agriculture Handbook 564, U.S. Dept. of Agriculture. 23 p. Paper cover. Source: Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402. Four species of woodpeckers are important predators of the southern pine beetle, which in turn attacks all species of southern pines. This booket describes the pertinent ecology of the birds and the beetle, and suggests forest management practices that would favor woodpecker populations. The use of birds as biological control agents and the consideration of non-game species in forest management represents a commendable new approach in forestry.

Relationships between hummingbirds and flowers in the Andes of Colombia.—David W. Snow and Barbara K. Snow. 1980. Bulletin of the British Museum (Natural History), Zoology series, Vol. 38, No. 2, 34 p. Paper cover. £ 5. Source: Publications, British Museum (N.H.), Cromwell Road, London SW7 5BD, U.K. This is a research report on the feeding ecology of hummingbirds in the subtropical and temperate forests of the Andes, where the greatest number and variety of species coexist. After presenting their observations at each of three study areas, the authors discuss ornithophily, coevolution between hummingbirds and flowers, and the foraging habits of hummingbirds. The article offers data and ideas in abundance. References.

**Evolution of Social Behavior: Hypotheses and Empirical Tests.**—edited by Hubert Markl. 1980. Dahlem Workshop Reports, Life Sciences Research Report No. in the Black-headed Gull (*Larus ridibundus*). Ibis 107:433–459.

- PEARSON, T. H. 1968. The feeding biology of sea-bird species breeding on the Farne Islands, Northumberland. J. Anim. Ecol. 37:521-552.
- RYDER, J. P. 1975. Egg-laying, egg-size and success in relation to immature-mature plumage of Ringbilled Gulls. Wilson Bull. 87:534-542.
- RYDER, J. P., AND T. R. CARROLL. 1978. Reproductive success of Herring Gulls on Granite Island, northern Lake Superior, 1975 and 1976. Can. Field-Nat. 92:51–54.
- RYDER, J. P., AND L. SOMPPI. 1977. Growth and development of known-age Ring-billed Gull embryos. Wilson Bull. 89:243-252.
- RYDER, J. P., AND L. SOMPPI. 1979. Female-female pairing in Ring-billed Gulls. Auk 96:1–5.
- TENAZA, R. 1971. Behavior and nesting success relative to nest location in Adelie Penguins (*Pygoscelis adeliae*). Condor 73:81–92.

Department of Biology, Lakehead University, Thunder Bay, Ontario, Canada P7B 5E1. Accepted for publication 3 June 1980.

18, Verlag Chemie, Weinheim. 255 p. Paper cover. \$22.50. Source: Verlag Chemie Int., Plaza Centre, Suite E, 1020 N. W. 6th St., Deerfield Beach, FL 33441. Here are the proceedings of a workshop on the evolution of sociality in animals, held in Berlin in 1980. Nine formal papers are followed by four group reports: Methodology and sociobiology modelling, mechanisms of kin-correlated behavior, measuring fitness in social systems, and genetics and social behavior. On the one hand are the views of theoreticians and specialists in mathematical modelling, while on the other are those of students of animal behavior in the laboratory or the field. Although only one of the papers specifically concerns birds, the volume offers many ideas of interest to avian sociologists. The book can be considered a state-of-the-art report, thanks to the eminence of its contributors and the alacrity with which it was published. References, limericks, and indexes.

Behavioral Mechanisms in Ecology.—Douglass H. Morse. 1980. Harvard University Press, Cambridge, Mass. 383 p. \$25.00. This is a textbook "about the relationships of animals to their resources and about their relationships to one another through those resources." In order, it considers foraging efficiency and economics, habitat selection, avoiding predation, behavioral thermoregulation, reproduction, competition of different kinds, and sociality. Birds are used for many examples, their behavioral ecology being among the most-studied of all animals. The writing is admirably clear, a notable accomplishment in a field where much of it is not. Most chapters contain a concluding synthesis and the last chapter itself indicates future directions for research. Graphs, references, index.

### EMBRYONIC DOUBLE MONSTER IN THE WEDGE-TAILED SHEARWATER

TED N. PETTIT

AND

### G. CAUSEY WHITTOW

During a study of embryonic respiration in the Wedgetailed Shearwater (Puffinus pacificus), an egg was collected and found to contain an embryonic duplicitas: a double monster or Siamese twin. This egg was collected on 7 August 1979 from Manana Island, Oahu, Hawaii and was  $40 \pm 1$  days old; the incubation period for this species averages 52 days. After respiratory data had been obtained, the egg was dissected and a double-monster embryo was found inside. The body of the embryo was completely duplicated except for a common head with one eve absent and the brain exposed on the left side. This embryo conformed to Ulshafer and Clavert's (J. Embryol. Exp. Morphol. 53:237-243, 1979) Group I classification of avian double monsters. The yolk-free mass of the abnormal embryo (10.3 g) equalled 47% of the yolk-free mass of normally developed shearwater embryos of the same age.

The incidence of malformation in Wedge-tailed Shearwaters is difficult to assess but in 170 eggs we have examined over a three-year period, this is the first embryonic anomaly found. This would place the incidence of malformation at 0.59%. Romanoff (Pathogenesis of the avian embryo, John Wiley and Sons, 1972) reported values of 0.8% to 0.06% for embryonic duplicitas in chicken eggs. In ducks the phenomenon is more common: about 2% of all fertilized eggs form double monsters. The effect is believed to be caused by changes in orientation of the egg within the shell gland during the critical period of symmetrization, resulting in the formation of two organizing centers (Ulshafer and Clavert 1979). Other teratogenic factors may include high levels of pesticides and mercury. Fisher (Pac. Sci. 27:220-225, 1973) reported high levels of toxic substances in the Laysan Albatross (Diomedea immutabilis) on Midway Atoll but we know of no such studies on other procellariiform birds.

This study was supported in part by the National Science Foundation (Grant #PCM-12351-AO1 to G. Causey Whittow) and the Leahi Trust Fund, Research Corporation of the University of Hawaii (Grant #1979 to Ted N. Pettit).

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# **RECENT PUBLICATIONS**

The Great Gray Owl/Phantom of the Northern Forest.-Robert W. Nero, photographs by Robert R. Taylor. 1980. Smithsonian Institution Press, Washington D.C. 167 p. \$17.50. For ten years, Nero and his colleagues have been pursuing and watching Great Gray Owls in the spruce-tamarack bogs of Manitoba and adjacent Minnesota. Coupling his observations with published findings, he presents here a good basic account of the natural history of his subject and its world. Its feeding, breeding behavior, and other habits are portrayed with much new information gained from intimate studies. At the same time, he tells of his experiences and feelings while hunting the hunter. Taylor's photographs are remarkably good, whether they are intended to be didactic or poetic, they complement, not simply illustrate, the text. One of the few books devoted to a single species of owl, this highly readable work should appeal to all those who like owls. References, index.

An Annotated Bibliography of Bald and Golden Eagles in Washington.—G. T. Allen, R. L. Knight, and M. V. Stalmaster. 1980. Washington Dept. of Game. 66 p. Paper cover. Source: Washington Dept. of Game, 600 North Capitol Way, Olympia, Wash. 98504. This catalog attempts to include all publications that refer, however slightly, to eagles in the State of Washington. It also offers a list of selected articles on Bald or Golden eagles in which the research was conducted elsewhere. The bibliography appears very comprehensive, yet not significantly more useful than those by Lincer, Clark, and LeFranc (1979. Noted in *Condor* 81:257) and by Knight (1979. Noted in *Condor* 82:290). Eagle biologists in Washington, Oregon, and British Columbia who may not have the latter work should get this one instead.

The Common Raven.—Richard L. Knight and Mayo W. Call. 1980. Technical Note #344, U.S. Dept. of the Interior, Bureau of Land Management. 61 p. Paper cover. Source: DSC, Federal Center Building 50, Denver, CO 80225. This report, apparently intended for BLM biologists, provides well-organized information on the populations, life history, and ecology of the Common Raven. Coverage is largely restricted to North America, although this is not stated. Brief chapters also give management recommendations, research methods, and a partial list of current investigations on the species. Findings have been studiously compiled from the literature without synthesis, critical evaluation, or interpretation. Errors exist at least in the sections on taxonomy and distribution. Photographs, references. Condor 83:94 © The Cooper Ornithological Society 1981

# NEWS AND NOTES

### FRANK M. CHAPMAN FUND

The Frank M. Chapman Memorial Fund gives grants in aid for ornithological research and also post-doctoral fellowships. While there is no restriction on who may apply, the Committee particularly welcomes and favors applications from graduate students; projects in game management and the medical sciences are seldom funded. Applications are due on 15 September and 15 February. Information on form and content of applications may be obtained from the Frank M. Chapman Memorial Fund Committee, The American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024.

### TRANSLATIONS OF WATERBIRD RESEARCH

The Pacific Seabird Group is compiling translations of foreign research on seabirds, shorebirds, and waterfowl. In order to aid researchers and prevent unwitting duplication of effort, we request all ornithologists who have translations to contact us. Originals sent to us will be copied and returned; copies will be deposited in the Josselyn van Tyne Memorial Library of the Wilson Ornithological Society for the use of all researchers. All translations sent will be cited in the PSG Bulletin. For more information, please contact: Douglas Siegel-Causey, PSG Committee on Foreign Research, Dept. of Ecology, University of Arizona, Tucson, Arizona 85721.

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## THE BULLETIN BOARD

WANTED: Surplus bird skins and skeletal materials (worldwide) to supplement a small but growing collection at the UNCC Zoological Museum. Please contact Richard D. Brown, Curator, Department of Biology, University of North Carolina at Charlotte, Charlotte, NC 28223.

WANTED: A Guide to the Birds of South America, by R. Meyer de Schauensee (1970). Victor Emanuel, P.O. Box 4429, Austin TX 78765.

WANTED: Life Histories of Central American Birds, Vol. 1, by Alexander Skutch (1954). Please send name, address, and asking price to Bob Righter, 1020-15th, Denver, CO 80202.

FOR SALE: *Iowa Bird Life*, Vols. 32 (1962) through 39 (1979). Make offer. Richard L. Knight, Washington Eagle Study, Washington Department of Game, 600 N. Capitol Way, Olympia WA 98504. Condor 83:94–95 © The Cooper Ornithological Society 1981

# **RECENT PUBLICATIONS**

The Peregrine Falcon.-Derek Ratcliffe. 1980. Buteo Books, Vermillion, South Dakota. 420 p. \$42.50. Written by an authority, this is a book about the natural history of the peregrine, mainly in Great Britain. Aspects of its habits as studied elsewhere are referred to, but the work is not intended as a comprehensive treatment of the species. On the contrary, British peregrines are examined in detail with regard to their populations and distribution, food and feeding habits, breeding, population regulation, and other aspects of their ecology. An especially valuable chapter recounts the pesticide story, in which Ratcliffe played an important part. In closing, he discusses conservation and the future of peregrines. The book is well organized and written in a clear, non-technical style. It is furnished with color paintings and black-and-white drawings by Donald Watson, and many photographs. Despite its limited scope, this book should be of wide and intense interest to all those who study or keep falcons. Graphs, many tables of data, references, index.

The Crows/A Study of the Corvids of Europe.-Franklin Coombs. [1978]. Batsford, North Pomfret, Vermont. 255 p. \$35.00. The author of this book has studied rooks and their allies in England and on the Continent for more than forty years. He describes here the habits of the eleven species of European corvids, drawing extensively on the literature as well as his own observations. Each species is treated as far as known about its appearance, distribution, behavior, voice, territoriality, nesting, food, predators, and mortality. A regrettably brief chapter makes some comparisons among these species. In closing, Coombs offers extracts from the journal of Lewis Harding, whose study of the rook, made in Cornwall in 1847-8, was perhaps the first intensive study of any single species of bird. The book is made attractive by maps, photographs, pen drawings, and four fine color plates, all by the author. This is a valuable source book on corvid biology, especially for its information and illustrations of their postures. References, table of measurements, index.

**Birds of Regina. Revised edition.**—Margaret Belcher. 1980. Special Publication No. 12, Saskatchewan Natural History Society, Regina, Sask. 151 p. Paper cover. \$5.00 plus 50<sup>e</sup> postage. Source: Blue Jay Bookshop, Box 1121, Regina, Sask. S4P 3B4. This is an annotated checklist of the birds recorded in the vicinity of Regina, completely revised and updated from the first edition (1961). The species accounts give the status, habitat and occurrence, including important records. A carefully prepared and useful reference for birders in its region. Photographs, sketches by F. W. Lahrman, references, index.

Birds of the Qu'Appelle, 1857-1979.—E. Manley Callin. [1980]. Special Publication No. 13, Saskatchewan Natural History Society, Regina, Sask. 168 p. Paper cover. \$7.00 plus 50<sup>e</sup> postage. Source: as above. This book treats the birdlife in the eastern half of the Qu'Appelle Valley, from a short distance east of Regina to the Manitoba border. The region's ornithological history spans 124 years, a remarkably high percentage of its residents having become interested in birds and kept records. The species accounts are based on records by the author and his brother, and supplemented by those of other observers. They give the status, localities, and occurrence, including dates of migration and nesting. While chiefly of value to birders in its region, the book may have wider interest because it documents changes in birdlife over an unusually long period. Maps, photographs, references, index.

Nature Saskatoon/An Account of the Saskatoon Natural History Society 1955–1980.—C. Stuart Houston. 1980. Saskatoon Natural History Society, Regina, Sask. 46 p. Paper cover. \$2.50 plus 50<sup>e</sup> postage. Source: as above. This history was prepared for the 25th anniversary of the S.N.H.S. Chapters cover the organization and activities of the Society, its contributions to scientific knowledge and local conservation, and its leading deceased members. The booklet will be meaningful for the Society's members and should encourage similar organizations to compile their own histories.

