



American Ornithologists' Union Department of Biology University of Southern Mississippi Hattiesburg, Mississippi 39406-5018

### Handbook of North American Birds Diurnal Raptors, Parts 1 and 2 Volumes 4 and $\varsigma$

#### edited by Ralph S. Palmer

The latest volumes in the distinguished Handbook of North American Birds series, a standard reference work for ornithologists and birdwatchers. These two volumes on diurnal birds of prey synthesize information on the physical appearance and life cycles of condors, vultures, kites, eagles, hawks, falcons, and allies that have occurred naturally in North America.

#### From reviews of earlier volumes:

"The Handbook series is destined to become a workhorse of professional ornithologists throughout the world." -Natural History

"One of the major ornithological productions of our times." — Times Literary Supplement

Each volume \$40.00

Yale University Press Dept. 923 92A Yale Station, New Haven, CT 06520



## Selected topics of interest in: Lovebirds, Cockatiels, Budgerigars: BEHAVIOR and EVOLUTION

by J. Lee Kavanau, UCLA

----origin and distribution of parrots---avian behavior & avian brain-relict egg care & primitive nesting habits-evol'y sequence of mechanisms of predation-evol'y transition to avian ovipositional modes---follicular maturation & recapitulation----transition to herbivory-----diver-gences in avian & mammalian lineages----synthesis of avian evolution

...highly informative volume ... actually several books under one cover .... [the author has] enormous experience with the raising of these birds ..... presenting a great deal of inter-Prof. Ernst Mayr, Harvard U. esting information, much of it new.

... unique, exhaustive laboratory studies of .. behavior .... insightful and remarkably comprehensive scenario of ...roigin & evolution of birds & .. roots of their behaviors .... must reading for all interested in avian behavior & reproduction .... wealth of information & con-Prof. E. C. Olson, UCLA cepts that will be of interest to all evolutionists.

.....enormous amount of information .... very important contribution to .. study of behavior of parrot birds, about which so little is known.... Prof. K. Immelmann, U. Bielefeld

....monumental in..scope...much fascinating reading...many intriguing subjects....enormous project ..... excellent reference for .. experimental behavior or evolutionary science .... looking forward to .. in-depth study & .. to apply [the author's] concepts to ... aviculture and avian G. J. Harrison, DVM, Bird World, Nov., 1987 veterinary medicine.

....offers an interesting synthesis of avian evolution, in general, tying together [the author's] views on evolutionary sequences involved in thermoregulation, insulation, egg care, care of young, mode of feeding, and degree of arboreality. Auk, July, 1988

\$49.95 xxvi + 1,001 pp., 7 indices, 1,455 refs., March, 1987, Prepay ck. or m/o. Add \$4 p/h (\$6 outside U.S.) + \$3.25 Calif. s/t. Science Software Systs., Monogrs., Box 241710, Los Angeles, CA 90024

# The Birds of British Columbia

Volume I, Parts 1 and 2: Introduction, Ornithological History, The Environment and Species Accounts —

### LOONS THROUGH WOODPECKERS

by R. Wayne Campbell, Neil K. Dawe, Ian McTaggart-Cowan, John M. Cooper, Gary W. Kaiser, and Michael C. E. McNall

Published by the **Royal British Columbia Museum**, Victoria, B.C., Canada in cooperation with the **Canadian Wildlife Service** 

This long-awaited treatment of the Province's birds will be the standard, indispensable reference for

decades to come. Seasonal status, habitat preferences, migration patterns, breeding biology, and a wealth of other life-history information are discussed for the 266 species recorded. Coloured maps illustrate the distribution and status of each species. The authors examined over a million records from both historical and modern sources, representing the efforts of over 4,000 contributors. Introductory chapters outline ornithological history, conservation and management activities, and the environment. Included are hundreds of tables, graphs, maps, and black-and-white photographs of birds and their habitats.

#### **PRE-PUBLICATION SALE**

In order to finance the printing of this large and important work, a pre-publication sale is underway. Until June 30, 1989, the two hardcover books comprising Volume I will be sold at \$49.95 for the set; after this, the price will be \$59.95. Publication will be in mid-1989. Volume II (Perching Birds) is scheduled for publication in mid-1992; the price is yet to be determined.

Those ordering at the pre-publication price will receive, by return mail, a card describing the book. This card acts as a receipt and can also serve as an attractive announcement to the recipient if the books are to be given as gifts. As soon as the books are printed, they will be shipped to the purchaser.

Volume I, two book set, approx. 1000 pages in total; illustrated,  $9'' \times 12''$  hardcover \$49.95 CAN pre-publication.

Please send orders with pre-payment to: Birds of B.C., c/o Jennifer Buscall, Friends of the Royal B.C. Museum, 675 Belleville St., Victoria, B.C., Canada V8V 1X4. Include \$2.00 for handling. VISA and Mastercard are welcome; please include number and expiry date.



## THE AUK

A Quarterly Journal of Ornithology

#### PUBLISHED BY THE AMERICAN ORNITHOLOGISTS' UNION

Editor: ALAN H. BRUSH, Department of Physiology and Neurobiology, University of Connecticut, Storrs, Connecticut 06268.

Copy Editor: GAIL W. HUNTER

Associate Editors: FRED E. LOHRER (Periodical Literature), M. Ross LEIN (Book Reviews)

THE AUK welcomes original reports dealing with the biology of birds, emphasizing the documentation, analysis, and interpretation of laboratory and field studies, theoretical or methodological developments, or reviews of existing information or ideas. Contributions are encouraged from throughout the world, but must be written in English.

SUGGESTIONS TO CONTRIBUTORS. Submit the typewritten original and two copies of the text, tables, and all other material to the Editor. Three copies of illustrations should be submitted. All typewritten material must be double-spaced on one side of numbered 8½ × 11 inch (21½ × 28 cm) good quality bond paper, with at least 1 inch (2½ cm) margins. Originals typed on erasable, light weight, or mimeo bond will not be considered, but copies may be clear reproductions. Number pages through the Literature Cited. Avoid footnotes. The style of manuscripts should conform to general usage in recent issues. A cover page should contain the full title, a shortened version of the title (not to exceed 35 characters in length) for use as a running head, and your address at the time the research was conducted. Your present address, if different, should be given at the bottom of the first text page. The cover page should include the name and full address of the individual to whom proof is to be sent.

Each article should be preceded by an Abstract not exceeding 5% of the length of the paper. The Abstract should recapitulate the findings of the paper, not describe the work done. Acknowledgments should follow the text and precede the Literature Cited. Scientific and English names of birds always should be given where first mentioned in the text, and should follow *The A.O.U. Checklist of North American Birds* and supplements or the appropriate equivalent unless departures are explained and defended. SI metric units should be used in all measurements. In general, abbreviations of statistical terms and mensural units should conform with the Council of Biology Editors' *CBE Style Manual*, 5th ed. Use the 24-hour clock (0800 and 2030) and "continental" dating (1 July 1971).

Tables, which must not duplicate material in either the text or illustrations, are typewritten (double-spaced throughout!) separately from the text. Each table should contain a short but complete heading, and must not contain vertical rulings. Illustrations (including labels of coordinates) should be on 8½ × 11 inch (21½ × 28 cm) sheets, and must be mailed flat. The name of the author and the figure number should be penciled on the back of each figure. Legends should be typed consecutively (double-spaced) on a separate page. Drawings should be drafted with undiluted india ink, and be large enough to permit 1/2 to 1/2 reduction to the size that they will appear in print. Graphs may be drafted on coordinate paper ruled with light blue lines; do not use coordinate paper ruled with green lines. Use mechanical lettering, pressure transfer letters, or calligraphy; typewritten lettering is not acceptable. Lettering should be large enough to be easily readable after 70% reduction of the figure, but not overly large. Lettering style should be uniform among all figures for a manuscript, as should the size of lettering following reduction. Photographs should be glossy prints of good contrast and sharpness, and should be approximately the same size as they will appear in print. Letters and arrows on photographs are best applied by pressure-sensitive materials. The Auk is published in a double-column format; give careful attention to designing your tables and illustrations accordingly.

Literature citations for all manuscripts are listed (double-spaced!) in a Literature Cited section following the text and Acknowledgments. Text citations should include author and year (e.g. Darwin 1858), or, if more than two authors are involved, the first author and year (Jones et al. 1947). If critical matter is cited or quoted directly from longer works, indicate the pertinent pages (e.g. MacArthur 1972: 204). Citations of two or more works on the same topic should be cited in chronological order (e.g. Meanley 1971, Dyer 1975). For abbreviations and forms of titles of serial publications, follow the BIOSIS List of Serials. Consult recent issues of The Auk and the CBE Style Manual for additional details.

A more detailed set of instructions for contributors appeared in The Auk, Vol. 105, No. 1 (January 1988), copies of which are available from the Editor.

## ORNITHOLOGICAL MONOGRAPHS

- No. 2. A Comparative Study of Some Social Communication Patterns in the Pelecaniformes, G. F. van Tets. 1965. \$2.50.
- No. 3. The Birds of Kentucky. R. M. Mengel. 1965. \$10.00.
- No. 6. Adaptations for Locomotion and Feeding in the Anhinga and the Double-crested Cormorant, O. T. Owre. 1967, \$3.00.
- A Distributional Survey of the Birds of Honduras. B. L. Monroe, Jr. 1968. \$7.00. No. 7.
- No. 10. The Behavior of Spotted Antbirds. E. O. Willis. 1972. \$4.00.
- No. 11. Behavior, Mimetic Songs and Song Dialects, and Relationships of the Parasitic Indigobirds (Vidua) of Africa. R. B. Payne. 1973. \$6.00.
- No. 12. Intra-island Variation in the Mascarene White-eye Zosterops borbonica. F. B. Gill. 1973. \$2.50.
- No. 13. Evolutionary Trends in the Neotropical Ovenbirds and Woodhewers. A. Feduccia. 1973. \$2.50.
- No. 14. A Symposium on the House Sparrow (Passer domesticus) and European Tree Sparrow (P. montanus) in North America. S. C. Kendeigh, Ed. 1973. \$3.00.
- No. 15. Functional Anatomy and Adaptive Evolution of the Feeding Apparatus in the Hawaiian Honeycreeper Genus Loxops (Drepanididae). L. P. Richards and W. J. Bock. 1973. \$5.00.
- No. 16. The Red-tailed Tropicbird on Kure Atoll. R. R. Fleet. 1974. \$3.00.
- No. 17. Comparative Behavior of the American Avocet and the Black-necked Stilt (Recurvirostridae), R. B. Hamilton. 1975. \$4.00.
- No. 18. Breeding Biology and Behavior of the Oldsquaw (Clangula hyemalis L.), R. M. Alison, 1975. \$2.50.
- No. 19. Bird Populations of Aspen Forests in Western North America. J. A. D. Flack. 1976. \$4.00.
- No. 20. Sexual Size Dimorphism in Hawks and Owls of North America. N. F. R. Snyder and J. W. Wiley. 1976. \$6.00.
- No. 21. Social Organization and Behavior of the Acorn Woodpecker in Central Coastal California. M. H. MacRoberts and B. R. MacRoberts. 1976. \$4.00.
- No. 22. Maintenance Behavior and Communication in the Brown Pelican. R. W. Schreiber. 1977. \$3.50.
- No. 23. Species Relationships in the Avian Genus Aimophila. L. L. Wolf. 1977, \$7.00.
- No. 24. Land Bird Communities of Grand Bahama Island: The Structure and Dynamics of an Avifauna. J. T. Emlen, 1977, \$5.00.
- No. 25. Systematics of Smaller Asian Night Birds Based on Voice. J. T. Marshall. 1978, \$4.00.
- No. 26. Ecology and Behavior of the Prairie Warbler Dendroica discolor. V. Nolan, Jr. 1978. \$15.00.
- No. 27. Ecology and Evolution of Lek Mating Behavior in the Long-tailed Hermit Hummingbird. F. G. Stiles and L. L. Wolf. 1979. \$4.50.
- No. 28. The Foraging Behavior of Mountain Bluebirds with Emphasis on Sexual Foraging Differences. H. W. Power. 1980. \$4.50.
- No. 29. The Molt of Scrub Jays and Blue Jays in Florida. G. T. Bancroft and G. E. Woolfenden. 1982, \$4.00.
- No. 30. Avian Incubation: Egg Temperature, Nest Humidity, and Behavioral Thermoregulation in a Hot Environment. G. S. Grant. 1982. \$5.00.
- No. 31. The Native Forest Birds of Guam. J. M. Jenkins. 1983. \$6.00.
- No. 32. The Marine Ecology of Birds in the Ross Sea, Antarctica. D. G. Ainley, E. F. O'Connor, and R. J. Boekelheide. x + 97 pp. 1984. \$9.00 (\$8.00).
- No. 33. Sexual Selection, Lek and Arena Behavior, and Sexual Size Dimorphism in Birds. R. B. Payne. viii + 52 pp. 1984. \$8.00 (\$6.50).
- No. 34. Pattern, Mechanism, and Adaptive Significance of Territoriality in Herring Gulls (Larus argentatus). J. Burger. xii + 92 pp. 1984. \$9.00 (\$7.00).
- No. 35. "Ecogeographical Variation in Size and Proportions of Song Sparrows (Melospiza melodia). J. W. Aldrich. + 134 pp. 1984. \$10.50 (\$8.50).

- No. 36. Neotropical Ornithology. P. A. Buckley et al., Eds. xi + 1,041 pp., 8 color plates. 1985. \$70.00. No. 37. Avian Monogamy. P. A. Gowaty and D. W. Mock, Eds. vi + 121 pp. 1985. \$11.00 (\$9.00). No. 38. An Analysis of Physical, Physiological, and Optical Aspects of Avian Coloration with Emphasis on Wood-Warblers. E. H. Burtt, Jr. x + 122 pp. 1986. \$15.00 (\$12.50).
- No. 39. The Lingual Apparatus of the African Grey Parrot, Psittacus erithacus Linné (Aves: Psittacidae): Description and Theoretical Mechanical Analysis. D. G. Homberger. xii + 236 pp. 1986. \$25.00 (\$20.00).
- No. 40. Patterns and Evolutionary Significance of Geographic Variation in the schistacea Group of the Fox Sparrow (Passerella iliaca). R. M. Zink. viii + 119 pp. 1986. \$15.00 (\$12.50).
- No. 41. Hindlimb Myology and Evolution of the Old World Suboscine Passerine Birds (Acanthisittidae, Pittidae, Philepittidae, Eurylaimidae). R. J. Raikow. viii + 81 pp. 1987. \$12.50 (\$9.50).
- No. 42. Speciation and Geographic Variation in Black-tailed Gnatcatchers. J. L. Atwood, viii + 74 pp. 1988. \$10.00 (\$8.00).

Order from: Frank R. Moore, Assistant to the Treasurer A.O.U., Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, Mississippi 39406. Orders must be prepaid, in U.S. dollars; add 5 percent (minimum \$1.50) handling and shipping charge. Make checks payable to American Ornithologists' Union. Prices in parentheses are for A.O.U. members.