

**The birds of San Diego County.**—Philip Unitt. 1984. San Diego Society of Natural History, Memoir 13. xxiii + 276 pp., 12 color plates, 12 text figures, 129 maps. ISSN 0080-5920. Order from the Society, P.O. Box 1390, San Diego, California 92112 USA. Cloth, \$20.00; paper, \$14.00 (plus \$2.00 shipping; add 6% sales tax in California).—San Diego County, California is larger in area than 2 of the 50 states (combined), its geographic (and thus biological) diversity ranges from the seacoast across mountains of nearly 2,000 m elevation to extreme desert, it is the southwesternmost county of the contiguous U.S., and it is inhabited by dedicated birders whose observations have boosted the county list to more than 450 species. "The Birds of San Diego County" provides detailed information on the geographic, ecological, and temporal distribution and abundance of each of the 449 species of native birds reported in the county—for some, by subspecies. Maps of breeding distribution are presented for 129 of the 181 breeding species (of which 26 are considered to be extirpated or only occasional breeders). Ecological zones and terms of abundance are defined precisely, and the definitions are adhered to. Welcomely absent are long paragraphs of descriptive and generalized information.

An introductory section of 23 pages gives a historical overview, definitions, sources of information, comments on nomenclature, and, most importantly, describes and illustrates the geography and vegetation of the county. The body of the text (211 pages) consists of species accounts. This is followed by a list of 6 introduced species, a list of species inadequately or erroneously reported, a few pages of addenda, a systematic list of the species, the bibliography, and the index.

The species accounts begin with a summary statement of abundance in the various seasons and an analysis of habitats (ecological areas) in which the birds are found. For migrants, dates of early and late occurrence are mentioned, by area if the status differs markedly (as it sometimes does between desert and coastal lowlands, for example). Egg dates are mentioned for breeding species, and maps of present and past definite and probable nesting records are given. (The numbered maps are not referred to in the text.) Gaps in the present knowledge are pointed out, and differences in former and present distribution and abundance are discussed. If more than one subspecies occurs in the county, they are treated separately to the extent that information permits, and taxonomic problems or differences of opinion are discussed.

Most of the recent information is based on birders' observations, many published in *American Birds*. There are some hazards in relying so completely on information of this kind. Birders tend to look for the unusual, the rarity, and pay less attention to the common. This is reflected in the uneven treatment of the species. Common resident birds average much shorter accounts, with less detailed information, than rare migrants. Birders also tend to go to favored localities,

so that there are probably more records from the Tijuana River Valley than the entire desert region. The bias of concentration in the coastal zone is noted in the text. Species that are considered endangered or that are polytypic within the county receive the longest accounts.

The book apparently was completed in late 1981, considerably before its publication in 1984. An addendum gives important information received through December 1983, including records of 4 species and 2 subspecies new to the county (an indication of the rate of growth of the known avifauna), which did not make it into the main accounts or the summary List of Species. This publication lag overlapped publication of the 6th edition of the A.O.U. check-list, so the English and scientific names used by Unitt are a combination of those in the old 5th edition and more recent sources. The arrangement of the species of shorebirds and the sequence of passerine families does not follow either edition of the A.O.U. check-list, but the table of contents and index make it easy to find any species.

There are some unfortunate discrepancies between the species accounts and the Summary List. The California Gnatcatcher (*Polioptila "californica"*) is separated from the Black-tailed (*P. melanura*) as a species in the list, but only as a subspecies in the account. The Orchard and Northern orioles (*Icterus spurius* and *I. galbula*) are combined in the list, probably as the result of a typo. The Black-throated Sparrow (*Amphispiza bilineata*) is omitted from the list.

Users of this volume who are interested in subspecies may share some of my concerns about the taxonomy at that level. In discussing the Solitary Vireo (*Vireo solitarius*), Unitt allots the few breeding records and most migrants and winter visitors to the race *cassinii*; a few others he assigns to *plumbeus*, and some are considered to be *solitarius*. Noting that all records of *plumbeus* are since 1969, he suggests that the migratory habits of the subspecies may be changing. No similar suggestion is made for *solitarius*, whose records date only from 1971. No specimens of either of these more easterly races have been taken. I suggest that the recent reports of those subspecies (and of other subspecies throughout the book) may reflect the birders' growing awareness of geographic variation and the beginning of their assumption that accurate subspecific identification is possible in the field. I am not convinced that that assumption is valid, and note most such identifications with a degree of skepticism. In other instances, the subspecies occurring in the county in a given season (winter for *Certhia "familiaris,"* breeding for *Cistothorus palustris*) is purely speculative, for lack of documenting specimens. One cannot say categorically that any of these identifications is right or wrong, but these examples (among many) point out the need for judicious (or even wholesale) collecting of specimens. Unitt comments many times on the need for specimens. Their present lack probably reflects both the birders' gen-

eral reluctance to collect and the short-sighted permit-issuing policies at both the federal and state level. On the other hand, Unitt did not take advantage of all the specimens available. A. W. Anthony's collection, now in the Carnegie Museum, was not studied, and some material in the SDNHM was not identified to the subspecies level.

In a number of species accounts and in the list of species inadequately reported (a "hypothetical" list), published observations, mainly from *American Birds*, are questioned or considered to be erroneous. Unfortunately, the basis of the doubt is not always indicated, and often there is no indication of what species the record may actually refer to. The hypothetical list includes two introduced species of which the records are valid but the current status of the species is in doubt. A separate compilation of presumed invalid published records would provide useful information for workers who use records from *American Birds* for distributional and analytical studies.

This review cannot be complete without mention of the 12 color plates by Allan Brooks nestled in the center of the book. These plates are from previously unpublished watercolors rendered in the early part of the century; the originals are from the Ellen Browning Scripps collection now in the SDNHM. They are typically excellent Brooks paintings and are by themselves worth the price of the book.

In summary, I recommend this book as a companion to the state bird books in personal and institutional libraries. It will be a well-used reference for those interested in distribution, and it will serve as an example of what a dedicated corps of birders, and a dedicated compiler, can accomplish.—RICHARD C. BANKS.

#### ALSO RECEIVED

**Seasonal spermatogenesis in the Mute Swan (*Cygnus olor*).**—Haide Breucker. 1982. Würzburg, West Germany, Springer-Verlag. vii + 94 pp., 30 photographs. ISBN 0-387-11326-6. No price given.—The book opens with a brief introduction to reproductive biology and discusses the need for morphological studies in this field. A review of the literature on spermatogenesis in birds follows. The major chapters are devoted to a detailed morphological description of gonadal development and regression in the Mute Swan. The text is largely technical, and a basic understanding of anatomy and reproductive biology is required. However, the discussions at the end of each chapter are easier to understand, and the author does a good job of relating his research to other studies on avian reproduction. Those who have a particular interest in vertebrate reproduction will find this book most valuable.—NEIL SABINE.

**Historia natural del Curiquinque *Phalco* *boenus carunculatus* en los paramos.**—T. De Vries, J. Black, C. De Solis, and C. Hernandez. 1983. Quito, Ediciones de la Universidad Católica. Available from the senior author, Department of Biology, Universidad Católica, Apartado 2184, Quito, Ecuador. \$7.00 post-paid.—The life history of the Carunculated Caracara, one of the most conspicuous birds of the paramo of southern Colombia and Ecuador, was almost unknown before this study. The major previous reference dates from 1902.

The caracara lives in a windy, rainy, cold (8.5–12°C maximum air temperature) environment where food apparently is difficult to find. Parental neglect of eggs and young is common and reproductive success low in exposed nests. Number of feedings per hour ranges from 0.6 to 2.6, but average meal size is low, only 10–20 g. Earthworms form the bulk of the diet, although rodents, birds, and carrion also are important.

The authors review the role of the caracara in Ecuadorian folklore. This species is regarded as a good-luck talisman and sometimes is kept with domestic fowl, with which it is believed to interbreed, producing excellent fighting cocks!

The two-page discussion is disappointingly short. The authors could have discussed the caracara's adaptations to its severe climate and compared its life history with that of the other caracaras and the rest of the Falconidae. Nevertheless, this is a useful publication for anyone interested in caracaras or the ecology of the Andean paramo.—DAVID CAMERON DUFFY.

**A rage for falcons.**—Stephen Bodio; illustrations by Jonathan Wilde. 1984. New York, Nick Lyons/Schocken. 135 pp. ISBN 0-8052-3931-6. Cloth. \$16.50.—Not a *love* for falcons, nor even a *mania* for falcons, but *A Rage*. . . . The title is a giveaway; the reader is warned not to expect balance, nor should he seek accuracy—too often hyperbole holds sway. For example, "Pigeons carry so many hawk diseases that until recently a more delicate hawk living on them was playing Russian roulette." Pigeons don't carry many hawk diseases. The truth is that many pigeons carry two common hawk diseases: trichomoniasis and herpes virus.

This book is well written in a tough, sportswriter's tone. It contributes little to ornithology. It is written to entertain experienced falconers who know the lingo and can distinguish between a bewit and a long-winger. The pen-and-ink drawings by Jonathan Wilde are sensitive, and often exquisite.

There used to be a more or less unwritten rule that falconry books be privately printed and distributed almost exclusively to falconers. This lack of advertising was intended to preserve a limited resource—